The Honorable Kimberly D. Bose<br>Secretary<br>Federal Energy Regulatory Commission<br>888 First Street, N.E.<br>Washington, DC 20426

Re: El Paso Electric Company, Docket No. ER22-__-000 Revisions to Open Access Transmission Tariff

Dear Secretary Bose:
Pursuant to section 205 of the Federal Power Act ("FPA"), ${ }^{1}$ section 35.13 of the Federal Energy Regulatory Commission's ("Commission" or "FERC") regulations, ${ }^{2}$ and Order No. $714,{ }^{3}$ El Paso Electric Company ("EPE") hereby submits for filing revisions to its Open Access Transmission Tariff ("OATT"). These revisions include a formula rate template ("Template" or "Formula Rate Template") and implementation protocols ("Protocols") (collectively, "Formula Rate") to determine and recover the costs of EPE's investment in transmission facilities. The Formula Rate will be used to develop, on a forward-looking basis, EPE's annual transmission revenue requirement ("ATRR"), from which rates for network integration transmission service, point-to-point transmission service ("PTP Service"), and Schedule 1 (Scheduling, System Control and Dispatch) service will be derived.

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The proposed revisions are reflected in EPE's OATT as follows: (1) Table of Contents; (2) Section 34; (3) Schedules 1, 7, and 8; and (4) Attachment H. Additionally, EPE proposes new Attachments H-1 and H-2. EPE respectfully submits that its proposed Formula Rate and the rates derived therefrom are just, reasonable, and not unduly discriminatory, as demonstrated through this transmittal letter and the attached testimonies and exhibits. EPE requests that the Commission accept this filing effective January 1, 2022, without suspension or hearing.

## I. BACKGROUND

## A. El Paso Electric

EPE is a vertically integrated electric utility whose primary business is serving native load in west Texas and southern New Mexico, providing retail electric service to about 446,027 customers in an area of approximately 10,000 square miles. EPE is a wholly owned subsidiary of Sun Jupiter Holdings LLC. EPE owns distribution facilities through which it provides service to its customers at retail rates, and transmission facilities over which it offers service under its OATT.

## B. Summary and Purpose of Filing

EPE is submitting this filing because its existing stated transmission rates, established and approved by the Commission in 1998, fail to recover EPE's costs of providing transmission service. ${ }^{4}$ EPE witness Mr. James A. Schichtl testifies that, at the time EPE last filed rates for transmission service with the Commission in the mid-1990s, EPE's total transmission plant account balance was $\$ 238,822,547$, and that balance has

4 EPE's current transmission stated rates were established through a settlement accepted by letter order dated June 10, 1998, in Docket No. OA96-200.

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since grown to $\$ 572,495,263 .{ }^{5}$ As these figures demonstrate, EPE has made significant system improvements and anticipates continuing to do so in the future. ${ }^{6}$ Moving from outdated stated rates to a forward-looking formula rate will enable EPE to recover its capital investments in the system on a timely basis, thereby avoiding regulatory lag, and will more accurately reflect EPE's costs to provide transmission service. The Commission has long encouraged the use of formula rates for these very reasons. ${ }^{7}$

The Formula Rate includes a cost-of-service Template and Protocols modeled after formula rate templates and protocols accepted by the Commission. The Formula Rate Template and Protocols establish a forward-looking formula rate that recovers projected transmission costs on a yearly basis, with a true-up (with interest in accordance with section 35.19a of the Commission's regulations, 18 C.F.R. § 35.19a ("FERC Interest Rate")) to ensure that only actual costs are collected. The adoption of a forward-looking formula rate will help EPE maintain transmission rates that are just and reasonable on a prospective basis. ${ }^{8}$

## II. CONTENTS OF THIS FILING

In addition to this transmittal letter and tariff records, this filing also includes the following documents:

5 Direct Testimony of James A. Schichtl, Exhibit No. EPE-0002, at 4:10-13 ("Schichtl Testimony").

Direct Testimony of Bryn T. Davis, Exhibit No. EPE-0010, at 4:8-5:6.
7 Midwest Indep. Sys. Operator Corp., 117 FERC II 61,323, at P 12 (2006); Ne. Utils. Serv. Co., 105 FERC II 61,089, at P 23 (2003).

8 See Direct Testimony of John Wolfram, Exhibit No. EPE-0004, at 6:12-19 ("Wolfram Testimony").

Attachment A
Attachment B
Exhibit No. EPE-0001

Exhibit Nos. EPE-0002
through EPE-0003
Exhibit Nos. EPE-0004 through EPE-0009 (including EPE-0006X and EPE-0008X)

Exhibit Nos. EPE-0010 through EPE-0011

Exhibit Nos. EPE-0012 through EPE-0015

Exhibit Nos. EPE-0016 through EPE-0028

Exhibit Nos. EPE-0029
through EPE-0032
Attestation

Revised OATT Sheets (Clean)
Revised OATT Sheets (Marked)
Prepared Direct Testimony of David C. Hawkins (Overview and Transmission Service Provided)

Prepared Direct Testimony and Exhibit of James A. Schichtl (Transmission Investment)

Prepared Direct Testimony and Exhibits of John Wolfram (Formula Rate Template and Protocols)

Prepared Direct Testimony and Exhibit of Bryn T. Davis (Transmission Planning and New Projects)

Prepared Direct Testimony and Exhibits of Cynthia S. Prieto (Accounting and Taxes)

Prepared Direct Testimony and Exhibits of Adrien M. McKenzie (Capital Structure and Rate of Return on Equity)

Prepared Direct Testimony and Exhibits of John J. Spanos (Depreciation)

Attestation of Cynthia S. Prieto as to Books and Records

Mr. John Wolfram's exhibits include the following functional Excel spreadsheets required to satisfy Commission regulations:
$\begin{array}{ll}\text { Exhibit EPE-0006X } & \text { A functional Excel version of the unpopulated Formula Rate } \\ & \text { Template (Exhibit No. EPE-0006 is a PDF of the unpopulated } \\ \text { Formula Rate Template); and }\end{array}$
Exhibit EPE-0008X A functional Excel version of the populated Formula Rate Template for the first Rate Year (Exhibit No. EPE-0008 is a PDF of the populated Formula Rate Template).

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## III. THE FORMULA RATE AND ITS COMPONENTS

Mr. Wolfram describes the proposed Formula Rate Template and Protocols in his testimony. The proposed Formula Rate Template and Protocols are consistent with Commission-approved ratemaking methodologies and contain sufficient specificity to be administered and implemented in a non-discriminatory and transparent manner. The Formula Rate is just and reasonable and should be accepted for filing effective January 1, 2022.

## A. Formula Rate Design

As Mr. Wolfram explains in his testimony, the proposed Formula Rate Template is forward-looking, and is similar to numerous other forward-looking formula rates the Commission has accepted for other transmission owners. ${ }^{9}$

The Template will be used to calculate EPE's ATRR. EPE will annually project (referred to in the Protocols as the "Annual Projection") its net revenue requirement by populating the applicable cost components in the Template based on EPE's projected costs for the upcoming calendar year (each calendar year is a "Rate Year"). The resulting projected net revenue requirement from the populated Template will be charged to customers in accordance with the terms and conditions of the EPE OATT throughout that Rate Year.

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No later than June 15 following each Rate Year, EPE will calculate the difference between the actual OATT revenues recorded by EPE and EPE's actual net revenue requirement for the Rate Year calculated using the Template and EPE's actual cost inputs from the prior year's FERC Form 1 ("True-Up Amount"). EPE will then apply the TrueUp Amount to the next Rate Year's projected net revenue requirement and resultant rates ("True-Up Adjustment"). The True-Up Adjustment will include the FERC Interest Rate. This overall process, which will repeat every year, is detailed in the proposed Protocols.

The projected gross revenue requirement is determined using the established cost-of-service approach of summing Operation and Maintenance expenses, Administrative and General ("A\&G") expenses, depreciation and amortization expenses, taxes other than income taxes, income taxes, and return on rate base. Thereafter, the net revenue requirement is determined by adjusting the gross revenue requirement for revenue credits. In future Rate Years (but not in the initial 2022 Rate Year), the True-Up Adjustment is applied after the revenue credits to determine the "Net Revenue Requirement."

Rate base is calculated as the sum of the total net plant, adjustments to rate base, land held for future use, and total working capital. Net plant, in turn, is determined as the difference between gross plant (excluding asset retirement obligation costs) and accumulated depreciation and amortization. All plant balances are calculated based on thirteen-month averages. Transmission plant is allocated using the Transmission Plant allocator. General and Intangible Plant are allocated to transmission using the Wages and

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Salaries allocator. Mr. Wolfram describes the Template's adjustments to rate base in his testimony. ${ }^{10}$

## B. Formula Rate Protocols

Mr. Wolfram also describes the Protocols for populating and updating the Template. ${ }^{11}$ The Protocols provide transparency, are consistent with the Commission's guidance on protocols for forward-looking formula rates, ${ }^{12}$ and will provide EPE's customers and other interested parties with sufficient information and procedural safeguards to enable the annual review of the inputs to the Template. The Protocols include, among other things, mechanisms for: (i) advance notice of EPE's implementation of its Formula Rate through notifications and open meeting requirements; (ii) information exchange to enable interested parties to obtain information and supporting materials related to EPE's posted implementation of its Formula Rate; (iii) informal and formal challenges to EPE's Formula Rate implementation; and (iv) an informational filing to the Commission pertaining to EPE's implementation of its Annual Projection and True-Up Adjustment for the preceding Rate Year. The Protocols neither limit the rights of EPE to file changes to

10 Wolfram Testimony at 18:8-19:1; Exhibit No. EPE-0006 at 3.
11 Wolfram Testimony at 27:16-28:10.
12 See, e.g., Staff's Guidance on Formula Rate Updates, Federal Energy Regulatory Commission (July 17, 2014), https://www.ferc.gov/sites/default/files/2020-04/staff-guidance.pdf; Midwest Indep. Transmission Sys. Operator, Inc., 139 FERC II 61,127 (2012), order on investigation of formula rate protocols, 143 FERC II 61,149 (2013), reh'g denied, 146 FERC I[ 61,209, order on compliance, 146 FERC II 61,212 (2014), order on reh'g \& clarification, 150 FERC II 61,024, order on compliance, 150 FERC II 61,025 (2015); see also Transource Kan., LLC, 151 FERC II 61,010 (2015), order on reh'g \& compliance, 154 FERC II 61,011 (2016), appeal dismissed sub nom. Kan. Corp. Comm'n v. FERC, 881 F.3d 924 (D.C. Cir. 2018), reh'g denied en banc, 2018 U.S. App. LEXIS 9045 (D.C. Cir. Apr. 10, 2018).

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the Formula Rate pursuant to section 205 of the FPA, nor limit the rights of any party to file a complaint requesting changes to the Formula Rate pursuant to section 206 of the FPA.

## C. Pensions and Benefits Other than Payroll ("PBOP")

EPE proposes to recover PBOP costs as A\&G expense in the Formula Rate based on actual expense incurred. The PBOP amounts are supported by the actuarial report performed by an independent third party, attached to the Direct Testimony of Ms. Cynthia S. Prieto, Exhibit No. EPE-0013. The Formula Rate Template includes stated PBOP values, consistent with Commission policy requiring certain components of a formula rate to be stated components. The stated PBOP amounts may only be changed pursuant to a separate FPA section 205 or section 206 filing. This treatment is consistent with TransAllegheny Interstate Line Co., 124 FERC $\mathbb{I}$ 61,075 (2008).

## D. Rolled in Treatment of Palo Verde Facilities' Costs

In addition to EPE's transmission system in its west Texas and southern New Mexico service territory, EPE is a co-owner of certain transmission facilities located in Arizona, which include three 500 kV transmission lines that extend approximately 165 miles (in total) from the Palo Verde Generating Station ("Palo Verde") to the Westwing and Kyrene switching stations, both of which are near Phoenix, Arizona (EPE refers to its share of these lines as the "Palo Verde Facilities"). Two of the three 500 kV lines extend to Westwing, and the third line extends to Kyrene. All three lines are used to transmit energy from Arizona to EPE's service territory in New Mexico and Texas.

EPE's currently effective OATT provides three separate sets of stated rates for PTP services: one for PTP services within the EPE Balancing Authority Area; one for PTP

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services on the Palo Verde Facilities from Palo Verde to Westwing; and one for PTP services on the Palo Verde Facilities from Palo Verde to Jojoba (another switching station located between Palo Verde and Kyrene) or Kyrene. EPE proposes to roll the costs of the Palo Verde Facilities in with the costs of the rest of EPE's transmission plant and have a single set of PTP service rates derived from the Formula Rate Template.

Rolling in the costs of the Palo Verde Facilities to develop a single set of PTP service rates accords with Commission policy and precedent on the pricing of service on integrated transmission systems, which the Commission considers as forming a single system for which all customers should bear an appropriate share of costs. ${ }^{13}$ This policy was not fully established in the 1990s when EPE's initial OATT filing was settled, but for those utilities whose initial OATT rates were litigated rather than settled at that time, the Commission would rule in favor of a single rate. ${ }^{14}$

In Buckeye, the Commission found that as long as the transmission facilities in question meet the test established in Mansfield Municipal Electric Department v. New England Power Co., Opinion No. 454, 97 FERC I[ 61,134, at 61,613 (2001) (the "Mansfield test"), to establish whether transmission facilities comprise a single, integrated system, the costs of those transmission facilities should be rolled into a single system-wide rate. ${ }^{15}$ The

13 See, e.g., Buckeye Power, Inc. v. Am. Transmission Sys., Inc., Opinion No. 533, 148 FERC $\mathbb{T} 61,174$, at P 12 (2014) ("Buckeye") ("Commission policy favors a roll-in of rates on integrated transmission systems, absent special circumstances.").

See Entergy Servs., Inc., 91 FERC $\mathbb{I}$ 61,153, at 61,588 (2000) (summarily affirming the administrative law judge's findings that Entergy's bifurcated rate has not been shown to be just and reasonable and that a single system rolled-in rate is consistent with Commission precedent).

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Mansfield test establishes that transmission facilities are integrated with the larger transmission system if any one of the following are true: (1) the facilities are looped back into the transmission system, rather than being radial; (2) energy flows on the facilities in both directions, from transmission system to customers and from customers back to the transmission system; (3) the transmission provider is able to provide transmission service to itself or other transmission customers over the facilities in question; (4) the facilities provide benefits to the transmission grid in terms of capability or reliability; (5) the facilities can be relied on for coordinated operation of the grid; and (6) an outage on the facilities would affect the transmission system. ${ }^{16}$

The Palo Verde Facilities are integrated with the rest of EPE's transmission system. As EPE witness Mr. David C. Hawkins testifies, EPE provides open access transmission service on the Palo Verde Facilities, just as it does on the rest of its transmission system. ${ }^{17}$ Mr. Hawkins also explains how the Palo Verde Facilities provide benefits to the rest of EPE's system, and how an outage of the Palo Verde Facilities affects the rest of EPE's system. ${ }^{18}$ Thus, the Palo Verde Facilities meet the Mansfield test for integration with the rest of EPE's transmission system. ${ }^{19}$

16 Mansfield Mun. Elec. Dep 't, 97 FERC II 61,134, at 61,613-14.
17 Direct Testimony of David C. Hawkins, Exhibit No. EPE-0001, at 10:24-25.
$I d$. at 9:22-10:21.
19 With the exception of EPE, the other public utility co-owners of the Palo Verde Facilities use a rolled-in rate design, i.e., each public utility co-owner rolls the costs of its share of the Palo Verde Facilities into the costs of the rest of its transmission facilities. Thus, EPE's proposal is consistent with how the other co-owners recover their respective shares of the Palo Verde Facilities' costs.

## E. Rate Year 2022 Implementation of the Formula Rate

EPE requests an effective date of January 1, 2022, so that it may implement the Formula Rate with calendar year 2022 as its first Rate Year. Mr. Wolfram is sponsoring a fully populated Formula Rate Template, Exhibit Nos. EPE-0008 and EPE-0008X (a working Excel file), that develops EPE's projected ATRR for 2022. This filing provides transparency with regard to EPE's 2022 projected ATRR comparable to that provided by the Protocols and demonstrates that EPE has properly implemented its proposed Formula Rate Template for Rate Year 2022. EPE also notes that the projected net revenue requirement for Rate Year 2022 will be subject to the true-up procedures set forth in the Protocols, including applying the FERC Interest Rate to any over or under-recovery.

## IV. COST OF CAPITAL AND RATE OF RETURN ON EQUITY

EPE requests a base rate of return on equity ("ROE") of $10.38 \%$. The attached Direct Testimony of Mr. Adrien M. McKenzie, CFA, supports this request, as well as the derivation of EPE's overall cost of capital, including the capital structure and ROE, to be applied in EPE's Formula Rate Template. ${ }^{20}$ The ROE will be a stated value in the Formula Rate Template.

Mr. McKenzie explains the independent analyses that he performed to determine that this value is a just and reasonable ROE for EPE. ${ }^{21}$ Consistent with the Commission's current ROE methodology, ${ }^{22}$ his analyses include applications of the two-step Discounted

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Cash Flow model, the Capital Asset Pricing Model, and the Risk Premium method. ${ }^{23}$ Mr. McKenzie refers to his analysis as the "Three-Model Approach." ${ }^{24}$ The McKenzie Testimony recommends supplementing the Three-Model Approach to include the results of the Expected Earnings approach, which Mr. McKenzie collectively refers to as the "Four-Model Approach." 25 Mr. McKenzie also presents alternative benchmarks that should be considered as additional reference points in evaluating a just and reasonable ROE. ${ }^{26}$

Mr. McKenzie describes EPE's capital structure of 47.97\% long-term debt and 52.03\% common equity, and explains why it is appropriate to use the Company's actual capitalization to develop in the Template the weighted cost of capital on which the company's transmission service rates will be based. ${ }^{27}$ Mr. McKenzie testifies that this capitalization, which represents EPE's actual capital structure at December 31, 2020, is consistent with industry benchmarks and should be approved. ${ }^{28}$ Like other elements of the ATRR, the cost of capital will be adjusted annually to reflect changes in EPE's capital structure and weighted average cost of debt.

[^3]
## V. TAX CUTS AND JOBS ACT OF 2017 ("TCJA") AND ORDER NO. 864

The TCJA reduced the federal corporate income tax rate from a maximum of $35 \%$ under the graduated rate structure, to a flat $21 \%$ rate, effective January 1, 2018. This change resulted in excess Accumulated Deferred Income Tax ("ADIT") balances for EPE and many other public utilities subject to the Commission's jurisdiction. At the time the TCJA was enacted, EPE had stated rates and therefore was subject to a Commission order to show cause why its transmission rates should not be revised to reflect the reduced federal income tax rate. ${ }^{29}$ EPE demonstrated that since its transmission rates were adopted in 1998, EPE has experienced a significant increase in its transmission plant, such that even after reflecting the tax rate reduction resulting from the TCJA, a reduction in EPE's transmission rates was not justified. ${ }^{30}$ The Commission found that no revisions were needed to EPE's stated transmission rates, and terminated the show cause proceeding by order issued November 15, 2018, in Docket No. EL18-95-000. ${ }^{31}$

Now that EPE is filing a formula transmission rate, it must comply with Public Utility Transmission Rate Changes to Address Accumulated Deferred Income Taxes, Order

29 Alcoa Power Generating Inc.--Long Sault Division, 162 FERC II 61,224 (2018) ("Stated Rate Order to Show Cause"). The Commission found that EPE's stated transmission rates appear to be unjust, unreasonable, and unduly discriminatory or preferential, or otherwise unlawful. As such, the Commission directed EPE to either: (1) propose revisions to its stated transmission rate under its tariff on file with the Commission to reflect the reduced tax rate and describe the methodology used for making those revisions; or (2) show cause why it should not be required to do so. Stated Rate Order to Show Cause at PP 2-3.

Response of El Paso Electric Company to the Commission's Order to Show Cause, Docket No. RL18-95-000, at 2-3 (May 14, 2018).

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No. 864, 169 FERC ๆI 61,139 (2019), order on reh'g \& clarification, Order No. 864-A, 171 FERC II 61,033 (2020). Although EPE demonstrates in this filing that its proposed Formula Rate Template will, once effective, comply with Order No. 864, EPE also will submit within the next ten to fifteen days a separate filing under FPA section 206 to demonstrate its compliance with Order No. 864. EPE will propose making the ADIT worksheets and related components of this Formula Rate filing subject to the outcome of the Order No. 864 compliance filing, and will make any necessary revisions to its Formula Rate resulting from the Commission's review of the Order No. 864 compliance filing.

EPE witness Ms. Prieto explains that, consistent with Order No. 864, EPE has included in its Formula Rate Template the following components: (1) a mechanism to decrease or increase the income tax allowance by any amortized excess or deficient ADIT, respectively; (2) a mechanism to deduct any excess ADIT from, or add any deficient ADIT to, its rate base; and (3) permanent worksheets that will annually track information related to excess or deficient ADIT. ${ }^{32}$ The permanent worksheets are also discussed in the Wolfram Testimony, Exhibit No. EPE-0004, and in the Formula Rate Template, Exhibit No. EPE-0006, Actual Attachment H, page 5, Note W.

To address the amortization of the excess ADIT related to the TCJA and excess/deficient ADIT related to other rate changes on an on-going basis, the Formula Rate Template reflects the ADIT adjustment to the income tax allowance on line 24 (under Income Taxes) on Projected Attachment H, page 3. ${ }^{33}$ The ADIT calculations on

32 Direct Testimony of Cynthia S. Prieto, Exhibit No. EPE-0012, at 9:22 - 10:3 ("Prieto Testimony").

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Worksheets P6-1 and P6-2 support the ADIT adjustment on line 24. These calculations are further supported by Exhibit No. EPE-0015, EDIT Worksheets. By adding line 24 and the related worksheets to the Formula Rate Template, EPE has adopted the general approach that the Commission accepted in 2018 to resolve this same issue for International Transmission Company (d/b/a ITC Transmission), Michigan Electric Transmission Company, LLC, and ITC Midwest LLC in Docket No. ER16-208-000, and for Ameren Services Company in Docket No. ER17-2323-000. ${ }^{34}$ The approach is also consistent with the principles set forth by the Commission in Order No. 864.

Decreases in income tax rates such as the TCJA also require reducing the net temporary income tax savings, recorded as ADIT. This results in a regulatory liability, which is subtracted from rate base. Until the net excess ADIT regulatory liability is refunded to customers via amortization reducing deferred income tax expense, excess ADIT will be reflected as a reduction to rate base. The adjustment to rate base for excess ADIT is included in Projected Attachment H, page 2, line 13, and is supported by Worksheets P6-1 and P6-2. ${ }^{35}$

EPE's proposed Formula Rate Template also includes the permanent worksheet to track information concerning excess/deficient ADIT on an annual basis, as required by Order No. 864, but the information is spread across more than one worksheet. Ms. Prieto and Mr. Wolfram identify in their testimonies the Formula Rate Template worksheets that provide additional detail on the breakdown of excess/deficient ADIT included in Accounts
$34 \quad$ Prieto Testimony at 10:16-22.
35 See Exhibit No. EPE-0006 at 35, 52-54.

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182.3 and 254.3 for the test year ended December 31, 2020, and are configured to accommodate specific excess deferred tax items recorded in Accounts 182.3 and 254 as reported in the FERC Form 1 in future years, including any items recorded due to subsequent changes in federal or state income tax law. ${ }^{36}$ Ms. Prieto also describes the worksheets that provide details of excess/deficient ADIT contained in each account, including how the worksheets are organized and the adjustments reflected in them. ${ }^{37}$

## VI. DEPRECIATION RATES

The Direct Testimony of Mr. John J. Spanos, Gannett Fleming Valuation and Rate Consultants, LLC ("Gannett Fleming"), Exhibit No. EPE-0029, describes the Depreciation Study prepared for EPE by Gannett Fleming for the year ending December 31, 2019 ("Depreciation Study"). EPE proposes to utilize in the Template the calculated annual depreciation accrual rates for transmission plant by account at December 31, 2019, that are recommended in, and supported by, the Depreciation Study, Exhibit No. EPE-0031. The proposed depreciation rates appropriately reflect the rates at which EPE's transmission assets should be depreciated over their useful lives, and are based on the most commonly used methods and procedures for determining depreciation rates.

## VII. REVENUE AND RATE CHANGE IMPACTS

To illustrate the impact of the Formula Rate, EPE has calculated its projected transmission revenue requirement for Rate Year 2022 using the Formula Rate Template, and compared the resulting rates to its currently effective stated OATT rates.

[^4]Exhibit No. EPE-0009 shows EPE's currently effective stated ATRR and stated PTP service rates, the proposed rates under the Formula Rate for Rate Year 2022, and the dollar and percentage increase from stated rates to the Formula Rate.

Given the increase in EPE's transmission plant noted in the Schichtl Testimony and the length of time since EPE's currently effective transmission service rates were established, the indicated rate increase under the Formula Rate for the first Rate Year, 2022, is both foreseeable and justified.

## VIII. PROPOSED EFFECTIVE DATE AND REQUEST FOR WAIVERS

EPE respectfully requests that the Commission accept the Template and Protocols with an effective date of January 1, 2022. In the event the Commission decides to suspend EPE's proposed rates and set this matter for hearing, EPE respectfully requests that the Commission impose no more than a nominal suspension of this filing. Because EPE's rates are based on projected costs that will be trued up to actual costs, with interest, the Formula Rate will not result in unjust and unreasonable or substantially excessive rates under the Commission's West Texas policy. ${ }^{38}$

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In transmission formula rate filings, the Commission routinely allows waivers of the requirements of section 35.13 of the Commission's regulations, 18 C.F.R. § 35.13. ${ }^{39}$ This is because the statements required by that section typically are not needed where the proposed rates are formulary and will be based on actual costs, as reflected in the applicant's audited books and records.

Accordingly, EPE respectfully requests waiver of the requirements of section 35.13 to the extent such requirements are not satisfied by the testimony and exhibits submitted by EPE. In addition, EPE requests waiver of any other applicable requirement of 18 C.F.R. part 35 for which waiver is not specifically requested for the Commission to accept EPE's Formula Rate with an effective date of January 1, 2022.

## IX. INFORMATION REQUIRED BY SECTION 35.13 OF THE COMMISSION'S REGULATIONS

## 1. List of Documents Submitted, Section 35.13(b)(1)

See supra Section II.

## 2. Requested Effective Date, Section 35.13(b)(2)

EPE requests an effective date of January 1, 2022, for its Formula Rate. See supra Section VIII.

## 3. Names and Addresses of Persons to Whom a Copy of this Filing Has Been Provided, Section 35.13(b)(3)

See infra Section X.

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4. Brief Description of the Rate Change, Section 35.13(b)(4)

See supra Sections I.B and III through VI.

## 5. Statement of Reasons for the Rate Change, Section 35.13(b)(5)

See supra Sections I.B and III.D.
6. $\quad$ Showing Regarding Requisite Agreement to the Rate Change, Section
$\operatorname{35.13(b)(6)}$

No requisite agreement from any entity is required for the OATT changes EPE proposes in this filing.

## 7. Statement about Expenses or Costs Included, Section 35.13(b)(7)

EPE represents that there are no expenses or costs included in this filing that have been alleged or judged in any administrative or judicial proceeding to be illegal, duplicative, or unnecessary costs that are demonstrably the product of discriminatory employment practices.
8. Information Relating to the Effect of the Rate Change, Section 35.13(c)

Information required by section 35.13 (c) relating to revenues under the proposed Formula Rate is included in Exhibit No. EPE-0009. There are no specifically assignable facilities that have been or will be installed or modified to make the change from stated transmission service rates to the Formula Rate proposed in this filing.

## 9. Attestation - Section 35.13(d)(6)

EPE is providing with this filing the attestation of Ms. Prieto, as required by 18 C.F.R. § 35.13(d)(6).

## 10. Testimony and Exhibits

To provide support for the Formula Rate proposed herein, EPE submits the testimony and exhibits of seven witnesses, as listed in Section II and described in this

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transmittal letter. In accordance with 18 C.F.R. § 35.13(e)(2), the materials submitted in Exhibit Nos. EPE-0001 through EPE-0032 are intended to serve as EPE's pre-filed written direct testimony to the extent this matter is set for hearing.

## X. COMMUNICATIONS AND SERVICE

EPE requests that all communications regarding this filing be directed to the following individuals and that their names be entered on the official service list maintained by the Secretary ${ }^{40}$ for this proceeding:

| Cynthia Henry | Michael Thompson |
| :---: | :---: |
| El Paso Electric Company | Wendy Warren |
| P.O. Box 982 | Wright \& Talisman, P.C. |
| El Paso, Texas 79960-0982 | 1200 G Street, N.W., Suite 600 |
| (915) 351-4201 | Washington, DC 20005-3898 |
| cynthia.henry@epelectric.com | (202) 393-1200 |
|  | thompson@wrightlaw.com warren@wrightlaw.com |
| Matthew P. Loftus | Robin M. Nuschler, Esq. |
| El Paso Electric Company | P.O. Box 3895 |
| P.O. Box 982 | Fairfax, VA 22038-3895 |
| El Paso, TX 79960-0982 | Phone: 202-487-4412 |
| (915) 449-2323 | fercsolutions@aol.com |
| matthew.loftus@epelectric.com |  |

EPE has emailed links to locations on its OASIS and company website where a copy of this filing may be found to each of its OATT transmission service customers. To the extent that customers have not provided EPE a contact email, EPE has sent notice by U.S. mail of this filing and links to locations on its OASIS and company website where a copy of this filing may be found.

40 To the extent necessary, EPE requests waiver of Rule 203(b)(3) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.203(b)(3), to permit all of the persons listed to be placed on the official service list for this proceeding.

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EPE has also mailed or emailed links to locations on its OASIS and company website where a copy of this filing may be found to the Public Utility Commission of Texas and the New Mexico Public Regulation Commission.

## XI. CONCLUSION

For the reasons set forth above, EPE respectfully requests that the Commission accept the Formula Rate and the OATT revisions proposed in this filing, without hearing, modification, condition, or suspension, with an effective date of January 1, 2022.

Respectfully submitted,

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Attorneys for El Paso Electric Company

## UNITED STATES OF AMERICA

BEFORE THE

## FEDERAL ENERGY REGULATORY COMMISSION

## El Paso Electric Company

)
)
)

Docket No. ER22- -000
Docket No. ER22

## ATTESTATION

Cynthia S. Prieto attests that she is the Controller for El Paso Electric Company and that, to the best of her knowledge, information and belief, the cost of service materials and supporting data submitted as part of this filing are true, accurate, and current representations of El Pas Electric Company's books, budgets or other corporate documents.


Cynthia S. Prieto

SUBSCRIBED AND SWORN to before me on this $29^{\text {th }}$ day of October 2021


Notary Public
My commission expires:

EL PASO ELECTRIC COMPANY OPEN ACCESS TRANSMISSION TARIFF

FERC ELECTRIC TARIFF

VOLUME NO. 1

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## III. NETWORK INTEGRATION TRANSMISSION SERVICE

## 34 Rates and Charges

The Network Customer shall pay the Transmission Provider for any Direct Assignment Facilities, Ancillary Services, and applicable study costs, consistent with Commission policy, along with the following:

### 34.1 Monthly Demand Charge:

The Network Customer shall pay a monthly Demand Charge specified in Attachment H-1, tab "Projected Attachment H," line 12 multiplied by the Network Customer's Monthly Network Load.

### 34.2 Determination of Network Customer's Monthly Network Load:

The Network Customer's monthly Network Load is its hourly load (including its designated Network Load not physically interconnected with the Transmission Provider under Section 31.3) coincident with the Transmission Provider's Monthly Transmission System Peak.

### 34.3 Determination of Transmission Provider's Monthly Transmission System Load:

The Transmission Provider's monthly Transmission System load is the Transmission Provider's Monthly Transmission System Peak minus the coincident peak usage of all Firm Point-To-Point Transmission Service customers pursuant to Part II of this Tariff plus the Reserved Capacity of all Firm Point-To-Point Transmission Service customers.

### 34.4 Redispatch Charge:

The Network Customer shall pay a Load Ratio Share of any redispatch costs allocated between the Network Customer and the Transmission Provider pursuant to Section 33. To the extent that the Transmission Provider incurs an obligation to the Network Customer for redispatch costs in accordance with Section 33, such amounts shall be credited against the Network Customer's bill for the applicable month.

### 34.5 Stranded Cost Recovery:

The Transmission Provider may seek to recover stranded costs from the Network Customer pursuant to this Tariff in accordance with the terms, conditions and procedures set forth in FERC Order No. 888. However, the Transmission Provider must separately file any proposal to recover stranded costs under Section 205 of the Federal Power Act.

## SCHEDULE 1

## Scheduling, System Control and Dispatch Service

This service is required to schedule the movement of power through, out of, within, or into a Control Area. This service can be provided only by the operator of the Control Area in which the transmission facilities used for transmission service are located. Scheduling, System Control and Dispatch Service is to be provided directly by the Transmission Provider (if the Transmission Provider is the Control Area operator) or indirectly by the Transmission Provider making arrangements with the Control Area operator that performs this service for the Transmission Provider's Transmission System. The Transmission Customer must purchase this service from the Transmission Provider or the Control Area operator. The charges for Scheduling, System Control and Dispatch Service are to be based on the rates described further below. To the extent the Control Area operator performs this service for the Transmission Provider, charges to the Transmission Customer are to reflect only a pass-through of the costs charged to the Transmission Provider by that Control Area operator.

The Transmission Customer will be allowed to use dynamic scheduling when it is feasible and reliable. Dynamic scheduling involves the arrangement for moving load or generation served within one Control Area such that the load or generation is recognized in the real-time control and dispatch of another Control Area. If a Transmission Customer requests that the Transmission Provider perform dynamic scheduling, the Transmission Provider will provide this service at negotiated rates, terms and conditions. Such negotiated rates, terms and conditions will be subject to Commission approval.

The Transmission Customer must secure adequate transmission arrangements to support this service.

## Transmission Customers Obligated to Acquire Scheduling, System Control and Dispatch Service:

All Transmission Customers purchasing Long-Term Firm Point-to-Point Transmission Service, Short-Term Firm Point-to-Point Transmission Service, Non-Firm Point-to-Point Transmission Service, or Network Integration Transmission Service from the Transmission Provider shall be required to acquire Scheduling, System Control and Dispatch Service from the Transmission Provider.

## Charge for Scheduling, System Control and Dispatch Service:

All Transmission Customers required to acquire Scheduling, System Control and Dispatch Service shall pay a charge invoiced monthly for Scheduling, System Control and Dispatch Service equal to the amount set forth below. The rates on which such charges are determined shall be calculated on an annual basis using an annual Schedule 1 revenue requirement identified in Attachment H-1, tab "Schedule 1," line 22. Annual updates to the Schedule 1 rates shall follow the procedures set forth in Attachment H-2.

1) For Yearly Service, the demand charge identified in Attachment H-1, tab "Schedule 1," line 28 multiplied by either: (a) the amount of Reserved Capacity per year for Point-to-Point Transmission Service or (b) the Monthly Network Load calculated pursuant to Section 34.2 of the Tariff for Network Integration Transmission Service.
2) For Monthly Service, the demand charge identified in Attachment H-1, tab
"Schedule 1," line 29 multiplied by the amount of Reserved Capacity per month.
3) For Weekly Service, the demand charge identified in Attachment H-1, tab "Projected Schedule 1," line 30 multiplied by the amount of Reserved Capacity per week.
4) For Daily On-Peak Service, the demand charge identified in Attachment H-1, tab "Schedule 1," line 31 multiplied by the amount of Reserved Capacity per day during on-peak periods.
5) For Daily Off-Peak Service, the demand charge identified in Attachment H-1, tab "Schedule 1," line 32 multiplied by the amount of Reserved Capacity per day during off-peak periods.
6) For Hourly On-Peak Service, the demand charge identified in Attachment H-1, tab "Schedule 1 ," line 33 multiplied by the amount of Reserved Capacity per hour during on-peak periods.
7) For Hourly Off-Peak Service, the demand charge identified in Attachment H-1, tab "Schedule 1," line 34 multiplied by the amount of Reserved Capacity per hour during off-peak periods.

The total charge in any day, pursuant to a reservation for Hourly delivery, shall not exceed the Daily Rate pursuant to this Schedule 1 times the highest amount in megawatts of Reserved Capacity in any hour during such day. In addition, the total charge in any week, pursuant to a reservation for Hourly or Daily delivery, shall not exceed the Weekly Rate pursuant to this Schedule 1 times the highest amount in megawatts of Reserved Capacity in any hour during such week.

## SCHEDULE 7

## Long-Term Firm and Short-Term Firm Point-To-Point Transmission Service

## A.

The following rates apply to Firm Point-To-Point Transmission Service between any Point of Receipt and any Point of Delivery on the Transmission System. In addition, the terms and conditions set forth in Section B of this Schedule 7 apply to services in this Section A.

The Transmission Customer shall compensate the Transmission Provider each month for Reserved Capacity at the sum of the applicable charges set forth below:

1) Yearly delivery: the Annual Demand Charge multiplied by the amount of Reserved Capacity per year. The Annual Demand Charge for a calendar year is identified in Attachment H-1, tab "Projected Attachment H," line 11.
2) Monthly delivery: the demand charge identified in Attachment H-1, tab "Projected Attachment H," line 12 multiplied by the amount of Reserved Capacity per month.
3) Weekly delivery: the demand charge identified in Attachment $\mathrm{H}-1$, tab "Projected Attachment H," line 13 multiplied by the amount of Reserved Capacity per week.
4) Daily delivery: On-peak, the demand charge identified in Attachment H-1, tab "Projected Attachment H," line 14 multiplied by the amount of Reserved Capacity per day during on-peak periods. Off-peak, the demand charge identified in Attachment H-1, tab "Projected Attachment H," line 15 multiplied by the amount
of Reserved Capacity per day during off-peak periods. The total demand charge in any week, pursuant to a reservation for Daily delivery, shall not exceed the rate specified in section $A(3)$ above times the highest amount in kilowatts of Reserved Capacity in any day during such week.
5) Hourly delivery: On-peak, the demand charge identified in Attachment $\mathrm{H}-1$, tab "Projected Attachment H," line 16 multiplied by the Reserved Capacity per hour during on-peak periods. Off-peak, the demand charge in Attachment H-1, tab "Projected Attachment H," line 17 multiplied by the Reserved Capacity per hour during off-peak periods. The total demand charge in any day, pursuant to a reservation for Hourly delivery, shall not exceed the rate specified in section $A(4)$ times the highest amount in kilowatts of Reserved Capacity in any hour during such day.

## B. Terms and Conditions Applicable to Section A of this Schedule 7

1) Ancillary Services: If applicable, provided pursuant to Schedules 1 through 6 and 9 of this Tariff.
2) Direct Assignment Facilities Charges: If applicable.
3) Real Power Losses: Provided pursuant to Schedule 10 of this Tariff.
4) Peak/Off-Peak Periods: For hourly service, the on-peak period extends from hour ending (HE) 0700 through HE 2200, Daylight Saving Time, at the location where service is provided, at such times when Daylight Saving Time is the prevailing time, and extends from HE 0800 through HE 2300, Standard Time, at the location where service is provided, at such times when Standard Time is the prevailing
time, in each case Monday through Saturday, exclusive of NERC holidays. All other hours are off-peak periods for the purpose of determining hourly service rates. For daily service, on-peak periods are Monday through Saturday, exclusive of NERC holidays. Off-peak daily rates apply on Sundays and NERC holidays. Discounts: Three principal requirements apply to discounts for transmission service as follows (1) any offer of a discount made by the Transmission Provider must be announced to all Eligible Customers solely by posting on the OASIS, (2) any customer-initiated requests for discounts (including requests for use by one's wholesale merchant or an Affiliate's use) must occur solely by posting on the OASIS, and (3) once a discount is negotiated, details must be immediately posted on the OASIS. For any discount agreed upon for service on a path, from point(s) of receipt to point(s) of delivery, the Transmission Provider must offer the same discounted transmission service rate for the same time period to all Eligible Customers on all unconstrained transmission paths that go to the same point(s) of delivery on the Transmission System.
5) Resales: The rates and rules governing charges and discounts stated above shall not apply to resales of transmission service, compensation for which shall be governed by section 23.1 of the Tariff.

## SCHEDULE 8

## Non-Firm Point-To-Point Transmission Service

The following rates apply to Non-Firm Point-To-Point Transmission Service between any Point of Receipt and any Point of Delivery on the Transmission System.

The Transmission Customer shall compensate the Transmission Provider for Non-Firm Point-To-Point Transmission Service at the sum of the applicable charges set forth below:

1) Monthly delivery: the demand charge identified in Attachment H-1, tab "Projected Attachment H," line 12 multiplied by the amount of Reserved Capacity per month.
2) Weekly delivery: the demand charge identified in Attachment H-1, tab "Projected Attachment H," line 13 multiplied by the amount of Reserved Capacity per week.
3) Daily delivery: On-peak, the demand charge identified in Attachment H-1, tab "Projected Attachment H," line 14 multiplied by the amount of Reserved Capacity per day during on-peak periods. Off-peak, the demand charge identified in Attachment H-1, tab "Projected Attachment H," line 15 multiplied by the amount of Reserved Capacity per day during off-peak periods. The total demand charge in any week, pursuant to a reservation for Daily delivery, shall not exceed the rate specified in section $\mathrm{A}(2)$ above times the highest amount in kilowatts of Reserved Capacity in any day during such week.
4) Hourly delivery: On-peak, the demand charge identified in Attachment H-1, tab "Projected Attachment H," line 16 multiplied by the amount of Reserved Capacity per hour during on-peak periods. Off-peak, the demand charge identified in

Attachment H-1, tab "Projected Attachment H," line 17 multiplied by the amount of Reserved Capacity per hour during off-peak periods. The total demand charge in any day, pursuant to a reservation for Hourly delivery, shall not exceed the rate specified in section $A$ (3) above times the highest amount in kilowatts of Reserved Capacity in any hour during such day. In addition, the total demand charge in any week, pursuant to a reservation for Hourly or Daily delivery, shall not exceed the rate specified in section $\mathrm{A}(2)$ above times the highest amount in kilowatts of Reserved Capacity in any hour during such week.

## A. Terms and Conditions Applicable to Section A of this Schedule 8

1) Ancillary Services: If applicable, provided pursuant to Schedules 1 through 6 and 9 of this Tariff.
2) Direct Assignment Facilities Charges: If applicable.
3) Real Power Losses: Provided pursuant to Schedule 10 of this Tariff.
4) Peak/Off-Peak Periods: For hourly service, the on-peak period extends from hour ending (HE) 0700 through HE 2200, Daylight Saving Time, at the location where service is provided, at such times when Daylight Saving Time is the prevailing time, and extends from HE 0800 through HE 2300, Standard Time, at the location where service is provided, at such times when Standard Time is the prevailing time, in each case Monday through Saturday, exclusive of NERC holidays. All other hours are off-peak periods for the purpose of determining hourly service rates. For daily service, on-peak periods are Monday through Saturday, exclusive of NERC holidays. Off-peak daily rates apply on Sundays and NERC holidays.

Discounts: Three principal requirements apply to discounts for transmission service as follows (1) any offer of a discount made by the Transmission Provider must be announced to all Eligible Customers solely by posting on the OASIS, (2) any customer-initiated requests for discounts (including requests for use by one's wholesale merchant or an Affiliate's use) must occur solely by posting on the OASIS, and (3) once a discount is negotiated, details must be immediately posted on the OASIS. For any discount agreed upon for service on a path, from point(s) of receipt to point(s) of delivery, the Transmission Provider must offer the same discounted transmission service rate for the same time period to all Eligible Customers on all unconstrained transmission paths that go to the same point(s) of delivery on the Transmission System.
6) Resales: The rates and rules governing charges and discounts stated above shall not apply to resales of transmission service, compensation for which shall be governed by section 23.1 of the Tariff.

## ATTACHMENT H

## Annual Transmission Revenue Requirement and Formula Rate Template and Protocols

1. This Attachment H contains the Formula Rate Template and Protocols pursuant to which rates for Network Integration Transmission Service and Point-to-Point Transmission Services are developed and identified. The Template is found in Attachment H-1. The Annual Transmission Revenue Requirement is identified in Attachment H-1, tab "Projected Attachment H," page 1.
2. The formula rates are subject to true-up and adjusted prospectively in the manner set forth in the Formula Rate Implementation Protocols. The Protocols are found in Attachment $\mathrm{H}-2$.

# Attachment H-1 <br> El Paso Electric Company ("EPE") <br> Transmission Formula Rate Template 

Table of Contents

## Overview

The formula is calculated in two steps. The first step is to fill out the A tabs, and the Actual Attachment H tab with data from the previous year's Form 1 information. This information is used to update the formulas in the Actual Net Rev Req tab to calculate the Actual Revenue Requirement (Actual ATRR) for the previous year.

The TU (True-up) tab uses the revenue requirement from the Actual Attachment H tab and compares it to the revenue requirement from the Projected Attachment H tab that customers were billed for the same period. Interest is added to the difference and the amount is added to the Projected Attachment H tab via the True Up Adjustment line.
The projected O\&M and plant balances are calculated on the P Tabs. These sheets feed into the Projected Attachment H tab for determining the Projected Annual Transmission Revenue Requirement. The EPE tariff rates are calculated based on the EPE Revenue Requirements and the specific point-to-point charges are shown on the same tab.

Cells highlighted in yellow are data input cells, however, some cells may reference the results from other worksheets in the formula. Such cell references may change from year to year requiring manual adjustment of the reference or the direct entry of the proper value.

Cells highlighted in green signify that the data is sourced from other worksheets in the formula and that the reference is static.

## Schedule/Worksheet

Tab
Designation
Description

| Act Att-H | Actual Attachment H | Actual Annual Transmission Revenue Requirements for most <br> recent calendar year |
| :--- | :--- | :--- |
| A1-RevCred | Worksheet A1 | Actual Revenue Credits |
| A2-O\&M | Worksheet A2 | Actual O\&M Expense supporting data |
| A3-1-ADIT | Worksheet A3-1 | Actual Accumulated Deferred Income Tax Calculation |
| A3-2-ADIT-ITC Details | Worksheet A3-2 | Actual Accumulated Deferred Income Tax \& Investment Tax |


| A4-Rate Base | Worksheet A4 | Actual Rate Base data |
| :--- | :--- | :--- |
| A5-Depr | Worksheet A5 | Depreciation Rates |
| A6-Divisor | Worksheet A6 | Actual Transmission Load Data for Calculating Rate Divisors |
| A7-IncentPlant | Worksheet A7 | Actual Incentive Plant |
| A8-1 EDIT | Worksheet A8-1 | Actual Excess / Deficient Deferred Income Tax calculation |
| A8-2 EDIT Details | Worksheet A8-2 | Actual Excess / Deficient Deferred Income Tax data |
| A9- Cost of Capital | Worksheet A9 | Actual Cost of Capital Calculations |
| TU-TrueUp | Worksheet TU | True-up Adjustment and Interest Calculation <br> Projected Annual Transmission Revenue Requirements for next <br> calendar year |
| Proj Att-H | Worksheet P1 | Projected transmission plant for next calendar year |
| P1-Trans Plant | Worksheet P2 | Projected O\&M expenses for next calendar year |
| P3-Divisor | Worksheet P4 P3 | Projected transmission load for next calendar year |
| P4-IncentPlant | Projected Incentive Plant |  |
| P5-1 ADIT | Projected Accumulated Deferred Income Tax Calculation |  |
| P5-2 ADIT ITC Details | Worksheet P5-2 | Projected Accumulated Deferred Income Tax \& Investment Tax <br> Credits data |
| P6-1 EDIT | Worksheet P6-1 | Projected Excess / Deficient Deferred Income Tax calculation |
| P6-2 EDIT Details | Wrojected Excess / Deficient Deferred Income Tax data |  |
| P7-Adj to Rate Base | Worksheet P7 | Projected Adjustments to Rate Base |
| Schedule 1 | Schedule 1 | Ancillary Services, Schedule No. 1 - Scheduling System Control <br> and Dispatch Service |



| 15 | Daily Off-Peak |  | \$ | /kW-day |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 7 days/week | \$ |  |
|  |  |  |  |  |
| 16 | Hourly On-Peak | 16 hours/day | - | /MW-hour |
|  |  |  | \$ |  |
| 17 | Hourly Off-Peak | 24 hours/day | - | /MW-hour |

Formula Rate - Non-Levelized
(1)

Line
No. RATE BASE: (Note A, V)
GROSS PLANT IN SERVICE (Note A)

5

1 Production

4 General \& Intangible

6 TOTAL GROSS PLANT

ACCUMULATED
DEPRECIATION (Note A)
$7 \quad$ Production
8 Transmission
9 Distribution
Transmission
Distribution

Common

## El Paso Electric Company

Rate Formula Template

Utilizing FERC Form 1 Data

Form No. 1

## Page, Line, Col.

| Worksheet A4, Page 1, (Line |  |
| :--- | :--- |
| $14-28)$, Col. (b) | - |
| Worksheet A4, Page 1, (Line <br> 14-28), Col. (c) | - |
| Worksheet A4, Page 1, (Line | - |
| $14-28)$, Col. (d) |  |
| Worksheet A4, Page 1, (Line |  |
| 14-28), Cols. (e ) + (f) |  |
| Worksheet A4, Page 1, (Line |  |
| $14-28), ~ C o l . ~(h) ~$ |  |

(Sum of Lines 1 through 5)
Worksheet A4, Page 2, (Line
$14+28-42$ ), Col. (b)
Worksheet A4, Page 2, (Line
$14+28-42$ ), Col. (c)
Worksheet A4, Page 2, (Line

Company Total
(4)

Allocator
(5)

## Transmission

Norksheet A4, Page 2, (Line

NA
TP
NA

Actuals - For the 12 months ended
12/31/yyyy

Actual Attachment H

|  |  | 14+28-42), Col. (d) | - |  |  | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10 | General \& Intangible | Worksheet A4, Page 2, (Line $14+28-42$ ), Col.s (e ) + (f) Worksheet A4, Page 2, (Line | - | W/S | 0.00000 | - |
| 11 | Common | 14+28-42), Col. (h) | - | CE | 0.00000 | - |
|  | TOTAL ACCUM. |  |  |  |  |  |
| 12 | DEPRECIATION | (Sum of Lines 7 through 11) | - |  |  | - |
|  | NET PLANT IN SERVICE |  |  |  |  |  |
| 13 | Production | (Line 1 - Line 7) | - |  |  | - |
| 14 | Transmission | (Line 2 - Line 8) | - |  |  | - |
| 15 | Distribution | (Line 3 - Line 9) | - |  |  | - |
| 16 | General \& Intangible | (Line 4 - Line 10) | - |  |  | - |
| 17 | Common | (Line 5 - Line 11) | - |  |  | - |
| 18 | TOTAL NET PLANT | (Sum of Lines 13 through 17) | - | $\mathrm{NP}=$ | 0.00000 | - |
| 19 | CWIP Approved by FERC Order | Worksheet A4, Page 3, Line 14, Col. (d) (Note Q) | - | DA | 1.00000 | - |
|  | ADJUSTMENTS TO RATE |  |  |  |  |  |
|  | BASE |  |  |  |  |  |
|  | Accumulated Deferred |  |  |  |  |  |
| 20 | Income Taxes (Accounts 190, 281-283) | Worksheet A3-1, Page 3, Line 82, Col. (n) (Note F) | - | DA | 1.00000 | - |
|  | Accumulated Deferred Investment Tax Credit (Account | Worksheet A3-2, Page 4, Line |  |  |  |  |
| 21 | 255) | 138, Col. (g) | - | DA | 1.00000 | - |
|  | Excess / Deficient Deferred | Worksheet A8-1, Line 27, Col. |  |  |  |  |
| 22 | Income Taxes <br> Unamortized Regulatory | (n) Worksheet A4, Page 3, Line | - | DA | 1.00000 | - |
| 23 | Asset | 14, Col. (b) (Notes P \& U) | - | DA | 1.00000 | - |
|  | Unamortized Abandoned | Worksheet A4, Page 3, Line |  |  |  |  |
| 24 | Plant | 14, Col. (c) (Notes T, N \& U) | - | DA | 1.00000 | - |
|  |  | Worksheet A4, Page 4, Line |  |  |  |  |
| 25 | Unfunded Reserves | 10, Col. (d) (Note R) | - | DA | 1.00000 | - |
| 25a | Hold Harmless Adjustment | Company Records (Note V) | - | DA | 1.00000 | - |

$\left.\begin{array}{llllll}26 & \text { TOTAL ADJUSTMENTS } & \text { (Sum of Lines 20 through 25a) } & - & & \\ & \text { LAND HELD FOR FUTURE } & \text { Worksheet A4, Page 3, Line } \\ \text { (14, Col. (e) (Note G) }\end{array}\right)$


## Transmission




| 8 | Included transmission expenses | (Line 6 less Line 7) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9 | \% of transmission expenses after adjustment | (Line 8 divided by Line 6) |  |  |  |  | 0.00000 |  |
| 10 | \% of transmission plant included in wholesale Rates | (Line 5) |  |  |  | TP | 0.00000 |  |
| 11 | \% of transmission expenses included in wholesale Rates | (Line 9 times Line 10) |  |  |  | $\mathrm{TE}=$ | 0.00000 |  |
|  | WAGES \& SALARY ALLOCATOR (W\&S) |  |  |  |  |  |  |  |
|  |  | Form 1 Reference | \$ | TP | Allocation |  |  |  |
| 12 | Production | 354.20.b | - | 0.00 | 0 |  |  |  |
| 13 | Transmission | 354.21.b | - | 0.00 | 0 |  |  |  |
| 14 | Distribution | 354.23.b | - | 0.00 | 0 |  | W\&S Allocator |  |
| 15 | Other | 354.24, 25, 26.b | - | 0.00 | 0 |  | (\$ / Allocation) |  |
| 16 | Total | (Sum of Lies 12-15) | - |  | 0 | = | 0.00000 | WS |
|  | COMMON PLANT ALLOCATOR (CE) |  | \$ |  | \% Electric |  | W\&S Allocator |  |
| 17 | Electric | 200.3.c | - |  | line 20) |  | (line 16) | CE |
| 18 | Gas | 201.3.d | - |  | 0.00000 | * | 0.00000 | 0.00000 |
| 19 | Other | 201.3.e | - |  |  |  |  |  |
| 20 | Total | (Sum of Lines 17-19) | - |  |  |  |  |  |
|  | RETURN (R) |  |  |  |  |  | \$ |  |
| 21 | Long Term Interest | 117, Col. c, Lines $62+63+64-65-66+67$ |  |  |  |  |  |  |
| 22 | Preferred Dividends | 118.29.c (positive number) |  |  |  |  |  |  |
|  | Development of Common Stock: |  |  |  |  |  |  |  |
| 23 | Proprietary Capital | Worksheet A9 Line 14, Col. (e) |  |  |  |  |  |  |


| 24 | Less Preferred Stock | Worksheet A9 Line 14, Col. (b) (enter negative) |  |  |  | - |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 25 | Less Other Comprehensive Income | Worksheet A9 Line 14, Col. (d) (enter negative) |  |  |  | - |  |
| 26 | Less Account 216.1 | Worksheet A9 Line 14, Col. (c) (enter negative) |  |  |  | - |  |
| 27 | Common Stock | (Sum of Lines 23-26) |  |  |  | - |  |
|  |  |  | \$ | \% | $\begin{gathered} \text { Cost } \\ (\text { Notes } \mathrm{C} \\ \& \mathrm{O}) \\ \hline \end{gathered}$ | Weighted |  |
| 28 | Long Term Debt | Worksheet A9 Line 28, Col. (k) | - | 0.00\% | - | - | =WCLTD |
| 29 | Preferred Stock | 112.3.c | - | 0.00\% | - | - |  |
| 30 | Common Stock | Line 27 | - | 0.00\% | 0.1038 | - |  |
| 31 | Total | (Sum of Lines 28-30) | - |  |  | - | $=\mathrm{R}$ |
|  |  |  |  |  |  | \$ |  |
| 32 | Incentive Return | Worksheet A7, Col. (e) |  |  |  | - |  |

# Actual Attachment H 

## El Paso Electric Company

Rate Formula Template

Actuals - For the 12 months ended

12/31/yyyy

General Note: References to pages in this formulary rate are indicated as: (page\#, line\#, col.\#)

References to data from FERC Form 1 are indicated as:
\#.y.x (page, line, column)

## Note

Letter
A Plant in Service, Accumulated Depreciation, and Depreciation Expense amounts exclude Asset Retirement Obligation amounts unless authorized by FERC.
B Workpapers for this calculation will be included in supporting documentation.
C Debt cost rate $=$ long-term interest (line 21) / long term debt (line 28). Preferred cost rate $=$ preferred dividends (line 22) / preferred outstanding (line 29).
D Includes only FICA, unemployment, highway, property, gross receipts, and other assessments charged in the current year. Taxes related to income are excluded.
E Removes dollar amount of transmission expenses included in the OATT ancillary services rates. FERC 561 accounts are not included in this line as they are separately removed from O\&M.
F The balances in Accounts 190, 281, 282 and 283, as adjusted by any amounts associated with tax-related regulatory assets and liabilities other than excess / deficient deferred income taxes ("EDIT"). EDIT is calculated in schedules A8-1 and A8-2 and presented in Att-H separately from ADIT.
G Identified in Form 1 as being only transmission related.
H Cash Working Capital assigned to transmission is one-eighth of O\&M allocated to transmission at Page 3, Line 7, Column 5. Prepayments are the electric related prepayments booked to Account No. 165 and reported on Page 111 Line 57 in the Form 1.
I EPRI expenses listed in Form 1 at 352.f, all Regulatory Commission Expenses itemized at 350.d, and non-safety-related advertising included in Account 930.1.

J Depreciation rates and Post-Employment Benefits Other than Pensions (PBOP) are fixed amounts that can be changed only through a Section 205 filing. The fixed PBOP expense will be used in lieu of the actual PBOP expense incurred in the year absent an appropriate filing with FERC. The Company reviews internal records and identifies the PBOP expenses to be removed from A\&G.
K The currently effective income tax rate, where FIT is the Federal income tax rate; SIT is the State income tax rate, and $\mathrm{p}=$ "the percentage of federal income tax deductible for state income taxes". Since the utility is taxed in more than one state it shall attach a work paper showing the name of each state and how the blended or composite SIT was developed.

| Inputs Required: | FIT $=$ | $0.000 \%$ | (Federal Income Tax Rate) <br> (Composite State Income Tax |
| :--- | :--- | :--- | :--- |
|  | $\mathrm{SIT}=$ | $0.000 \%$ | $0.000 \%$ | | Rate) |
| :---: |
| (Percent of federal income tax |

L Removes transmission plant determined by Commission order to be state-jurisdictional according to the seven-factor test (until Form 1 balances are adjusted to reflect application of seven-factor test).

M Removes dollar amount of generation step-up facilities, which are deemed to be included in OATT ancillary services. For these purposes, generation step-up facilities are those facilities at a generator substation on which there is no through-flow when the generator is shut down.
N Unamortized Abandoned Plant and Amortization of Abandoned Plant will be zero until the Commission accepts or approves recovery of the cost of abandoned plant. Utility must submit a Section 205 filing to recover the cost of abandoned plant.
O No change in ROE may be made absent a filing with FERC.
P Recovery of any regulatory assets requires authorization from the Commission.
Q AFUDC ceases when CWIP is included in rate base. No CWIP will be included in rate base on line 19 absent FERC authorization.
R The Formula Rate shall include a credit to rate base for all unfunded reserves within accounts 228.2, 242, and 253 (funds collected from customers that (1) have not been set aside in a trust, escrow or restricted account; (2) whose balance are collected from customers through cost accruals to accounts that are recovered under the Formula Rate; and (3) exclude the portion of any balance offset by a balance sheet account). Reserves can be created by capital contributions from customers, by debiting the reserve and crediting a liability, or a combination of customer capital contribution and offsetting liability. Only the portion of a reserve that was created by customer contributions should be a reduction to rate base. Amounts will be calculated on 13-month average balances. See Worksheet A4, Note G.
S The revenues credited shall include only the amounts received directly for service under this tariff reflecting EPE's integrated transmission facilities provided that revenue credits shall not include revenues associated with transmission service for which loads are included in the rate divisor on Actual Attachment H, page 1, line 8. They do not include revenues associated with FERC annual charges, gross receipts taxes, ancillary services, facilities not included in this template (e.g., direct assignment facilities and GSUs) that are not recovered under this Rate Formula Template.
T Page 2 Line 24 includes any unamortized balances related to the recovery of abandoned plant costs approved by FERC under a separate docket. Page 3, Line 11 b includes the Amortization expense of abandonment costs. These are shown in the workpapers required pursuant to the Annual Rate Calculation and True-up Procedures.
U Calculate using 13 month average balance, reconciling to FERC Form No. 1 by Page, Line, and Column as shown in Worksheet A4 for inputs on page 2 of 5 above.
V If applicable, a separate workpaper will be provided and posted with other supporting documentation.
W Includes the amortization of any excess/deficient deferred income taxes resulting from changes to income tax laws, income tax rates (including changes in apportionment) and other actions taken by a taxing authority. Excess and deficient deferred income taxes will reduce or increase tax expense by the amount of the excess or deficiency multiplied by (1/1-T).
X Includes the annual income tax cost or benefits due to permanent differences between expenses or revenues recognized for ratemaking purposes and for income tax purposes and depreciation of amounts capitalized to plant for book purposes related to the accrual of the Allowance for Other Funds Used During Construction. T multiplied by the amount of permanent differences and depreciation expense associated with Allowance for Other Funds Used During Construction will increase or decrease tax expense by the amount of the expense or benefit included on line 25 multiplied by ( $1 / 1-\mathrm{T}$ ).

## El Paso Electric Company <br> Worksheet A1 <br> Revenue Credits <br> Actuals - For the 12 months ended 12/31/yyyy

Page 1 of 2

## ACCOUNT 454 (RENT FROM

## ELECTRIC PROPERTY)



## ACCOUNT 456.1

(OTHER ELECTRIC
REVENUES) (Note B)

| Line \# | Type | Description | Service Type | $\begin{gathered} \text { PTP } \\ \text { Trans } \\ \text { Sched } 7 \& 8 \\ \hline \end{gathered}$ | Network <br> Transm <br> Sched 9 | Ancillary Services | Other | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) |  |
| 1 |  |  |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |  |  |  |
| 10 |  |  |  |  |  |  |  |  |  |
| 11 |  |  |  |  |  |  |  |  |  |
| 12 |  |  |  |  |  |  |  |  |  |
| 13 |  | Total |  | 0 | 0 | 0 | 0 |  | 0 |
|  |  |  |  |  |  |  |  | 300.22.b |  |
| 14 | Summarized by Type: |  |  |  |  |  |  |  |  |
| 15 | Credit |  |  | 0 | 0 | 0 | 0 |  | 0 |
| 16 | Divisor |  |  | 0 | 0 | 0 | 0 |  | 0 |
| 17 | Ancillary |  |  | 0 | 0 | 0 | 0 |  | 0 |
| 18 | Other |  |  | 0 | 0 | 0 | 0 |  | 0 |
| 19 | Total |  |  | 0 | 0 | 0 | 0 |  | 0 |

## Revenue Types:

Ancillary
Divisor
Credit
Ancillary services includes regulation \& frequency, control \& dispatch, voltage control, reactive, spinning reserve, and scheduling; no revenue credit.
Load associated with these revenues are included in the formula divisor; no revenue credit.
Revenue credit because the load is not included in divisor.

Each FERC 0454 item is categorized into 1 of 5 categories. The selected category will determine the Allocator applied to the FERC 0454
bance.

1) Prod: The FERC 0454 balance is $100 \%$ related to production of electricity and the NA Allocator is applied.
2) Retail: The FERC 0454 balance is $100 \%$ related to retail operations and the NA Allocator is applied.
3) ONT: Other $100 \%$ Non-Transmission (Items other than Prod \& Retail) related FERC 0454 for which the NA Allocator is applied.
4) Trans: The FERC 0454 balance is $100 \%$ related to transmission operations and the DA Allocator is applied.
5) Labor: The FERC 0454 balance is labor or general and intangible plant related, and the W/S Allocator is applied.

## El Paso Electric Company

Worksheet A2
Actual Operation and Maintenance Expenses

## Actuals - For the 12 months ended 12/31/yyyy

| Line <br> No. | (a) | (b) |  |
| :---: | :---: | :---: | :---: |
|  |  | Form No. 1 |  |
|  | Item | Page, Line, Col. | Company Total |
|  |  |  | \$ |
| 1 | EPRI Annual Membership Dues | 353.x.f (Note C) | - |
|  |  |  | \$ |
| 2 | Regulatory Commission Expenses | 350.46.d | - |
|  |  |  | \$ |
| 3 | Account No. 930.1 | 323.191.b | - |
|  |  |  | \$ |
| 4 | Less: Safety Related Advertising | Company Records (Note A) | - |
|  |  |  | \$ |
| 5 | Account No. 930.1 less Safety Related Advertising | Line 3 - Line 4 | - |
|  |  |  | \$ |
| 6 | EPRI \& Reg. Comm. Exp. \& Non-safety Ad. | Sum of Lines 1, 2, \& 5 | - |
| 7 |  |  |  |
| 8 | Transmission Related Regulatory Expense | (Note B) |  |
| 9 |  |  |  |
|  |  |  | \$ |
| 10 | Reserved for use in the event of transmission rate filings | Company Records | - |
|  |  |  | \$ |
| 11 | Transmission Related Reg. Comm. Exp. | 350.x.d | - |
|  |  |  | \$ |
| 12 | Transmission Related Regulatory Expense | Sum of Lines 10-11 | - |
| 13 |  |  |  |
| 14 | Actual Ancillary Expenses |  |  |
|  |  |  | \$ |
| 15 | 561.1 Load Dispatch-Reliability | 321.85.b | - |
|  |  |  | \$ |
| 16 | 561.2 Load Dispatch-Monitor and Operate Transmission System | 321.86.b | - |
|  |  |  | \$ |
| 17 | 561.3 Load Dispatch-Transmission Service and Scheduling | 321.87.b | - |
|  |  |  | \$ |
| 18 | 561.4 Scheduling, System Control and Dispatch Services | 321.88.b | - |

561.5 Reliability, Planning and Standards Development
321.89.b
561.6 Transmission Service Studies
321.90.b
561.7 Generation Interconnection Studies
561.8 Reliability, Planning and Standards Development

Total Ancillary Expenses

### 321.91.b

321.92.b

Sum of Lines 15-22
\$
\$
\$

A For FERC account no. 930.1, the Company reviews all entries and identifies those that are safety related advertising.
B Limited to Transmission-related regulatory expenses itemized from total amounts on FERC Form No. 1 page 350-351.
C Limited to amounts in O\&M accounts that are included in the formula rate.

## El Paso Electric Company

## Worksheet A3-1

Accumulated Deferred Income Taxes
Actuals - For the 12 months ended 12/31/yyyy

Proration Used for Projected Revenue Requirement Calculation

| Days in Period |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| (a) | (b) | (c) | (d) | (e) |
| Month | Days <br> in <br> the <br> Mon <br> th | Number <br> of Days <br> Remaini <br> ng in <br> Year <br> After <br> Month's <br> Accrual <br> of <br> Deferred <br> Taxes | Total <br> Days in <br> Future <br> Portion <br> of Test <br> Period <br> (Line 18, <br> Col B) | Prorat ion Amou nt (Line s 6 to 17, Col c / Col d) |


| Projection - Proration of Deferred Tax Activity |  |  |
| :---: | :---: | :---: |
| (f) | (g) | (h) |
| Projected <br> Monthly <br> Activity <br> ((Line 24 <br> Col h - <br> Line 21 <br> Col <br> h)/12) <br> (See Note <br> 7.) | Prorated <br> Projected <br> Monthly <br> Activity <br> (Lines 6 <br> to 17 , <br> Col ex <br> Col f) | Prorated <br> Projected <br> Balance (Line 5, Col h plus Cumulati ve Sum of Colg ) |

4
December 31st balance Prorated Items (Worksheet P5-1.5.h)

$-$

## Average Balance

(See Note 6.)
Reserv
ed
Amount for
Attachment H

Line $17 \mathrm{ColN}+($ Lines
$20+23(\mathrm{Col} \mathrm{N}) / 2$
(Line 25
less line
26)

Page
2 of 4

Accou
nt 282
True-up Adjustment - Proration of Projected Deferred Tax Activity and



| Projection - Proration of <br> Deferred Tax Activity <br> $(\mathbf{f})$ <br>  <br> (g) <br> Project |  |  |  |  | (h) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ed |  | Prorat |  |  |  |
| Monthl |  | ed |  |  |  |
| y |  | Proje |  |  |  |
| Activit | Prorated | cted |  |  |  |
| y | Projected | Balan |  |  |  |
| ((Line | Monthly | ce |  |  |  |
| 24 Col | Activity | (Line |  |  |  |
| h- | (Lines 6 | Col |  |  |  |
| Line 21 | to 17, | plus |  |  |  |
| Col | Col ex | Cumu |  |  |  |
| h)/12) | Col f) | lative |  |  |  |
| (See |  | Sum |  |  |  |
| Note |  | of |  |  |  |
| 7.$)$ |  | Col |  |  |  |
|  |  | g) |  |  |  |

December 31st balance Prorated Items (Worksheet A3-2.79.f)


| 53 | Reser <br> ved |  | Reserv ed |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | (Line 52 less line | Amount for | (Line 52 less |
| 54 | Amount for Attachment H | 53) | Attachment H | line 53) |


| 55 | Account 283 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 56 | Days in Period |  |  |  |  |
|  | (a) | (b) | (c) | (d) | (e) |
|  | Month | Days in the Mont h | Number of Days Remaini ng in Year After <br> Month's <br> Accrual of Deferre d Taxes | Total <br> Days in <br> Future Portion of Test Period (Line 18, Col B) | Prorati on Amou nt (Lines 6 to 17, Col c / Col d) |

59 (Worksheet P5-1.59.h) \begin{tabular}{llllr}
<br>
60 \& January \& 31 \& 335 \& 365

 

91.78 <br>
$\%$
\end{tabular}



## Account



December 31st balance Prorated
Items (Worksheet A3-2.126.f)


## NOTES

1) Column J is the difference between projected monthly and actual monthly activity (Column I minus

Column F). Specifically, if projected and actual activity are both positive, a negative in Column J
represents over-projection (amount of projected activity that did not occur) and a positive in Column J
represents under-projection (excess of actual activity over projected activity). If projected and actual
activity are both negative, a negative in Column $J$ represents under-projection (excess of actual activity
over projected activity) and a positive in Column J represents over-projection (amount of projected activity that did not occur).
2) Column $K$ preserves proration when actual monthly and projected monthly activity are either both increases or decreases. Specifically, if Column J is over-projected, enter Column G x [Column I/Column F]. If Column J is under-projected, enter the amount from Column $G$ and complete Column $L$ ). In other situations, enter zero.
3) Column $L$ applies when (1) Column $J$ is under-projected AND (2) actual monthly and projected monthly activity are either both increases or decreases. Enter the amount from Column J. In other situations, enter zero.
4) Column $M$ applies when (1) projected monthly activity is an increase while actual monthly activity is a decrease OR (2) projected monthly activity is a decrease while actual monthly activity is an increase.
Enter actual monthly activity ( Col I ). In other situations, enter zero.
5) Column N is computed by adding the prorated monthly activity, if any, from Column K to 50 percent of the portion of monthly activity, if any, from Column $L$ or $M$ to the balance at the end of the prior month. The activity in columns L and M is multiplied by 50 percent to reflect averaging of rate base to the extent that the proration requirement has not been applied to a portion of the monthly activity.
6) For the non-property-related component of the balance, the Average Balance is computed using the average of beginning of year and end of year balance. For the property-related component of the balance, the Average Balance is computed as described in Note 5.
7) Projected and Actual monthly activity is computed based on the annual
activity for the period, divided by 12 months.

## El Paso Electric Company

Worksheet A3-2
Accumulated Deferred Income Taxes/Accumulated Deferred Investment Tax Credits - Details
Actuals - For the 12 months ended 12/31/yyyy
Page 1 of 5

| No. | (a) | $\begin{aligned} & \text { mmm-ууууу } \\ & \text { (b) } \\ & \hline \end{aligned}$ | $\begin{gathered} \text { mmm-уууу } \\ \text { (c) } \\ \hline \end{gathered}$ | (e) | $\begin{gathered} \text { mmm-yyyyy } \\ \text { (f) } \\ \hline \end{gathered}$ | $\begin{gathered} \text { mmm-уууу } \\ (\mathrm{g}) \\ \hline \end{gathered}$ | (h) | (i) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Line No. | Item | BOY Balance (Note A) | EOY Balance <br> (Note B) | Allocator | BOY Allocated Amount | EOY Allocated Amount | Prorated <br> (Yes/No) <br> (Note E) | Explanation <br> (Note D) |
|  | ACCOUNT 190 ACCUMULATED DEFERRED INCOME TAXES |  |  |  |  |  |  |  |
| 1 | Reserved |  |  | 0.000\% | - | - |  |  |
| 2 | Reserved |  |  | 0.000\% | - | - |  |  |
| 3 | Reserved |  |  | 0.000\% | - | - |  |  |
| 4 | Reserved |  |  | 0.000\% | - | - |  |  |
| 5 | Reserved |  |  | 0.000\% | - | - |  |  |
| 6 | Reserved |  |  | 0.000\% | - | - |  |  |
| 7 | Reserved |  |  | 0.000\% | - | - |  |  |
| 8 | Reserved |  |  | 0.000\% | - | - |  |  |
| 9 | Reserved |  |  | 0.000\% | - | - |  |  |
| 10 | Reserved |  |  | 0.000\% | - | - |  |  |
| 11 | Reserved |  |  | 0.000\% | - | - |  |  |
| 12 | Reserved |  |  | 0.000\% | - | - |  |  |
| 13 | Reserved |  |  | 0.000\% | - | - |  |  |


| 14 | Reserved | 0.000\% |
| :---: | :---: | :---: |
| 15 | Reserved | 0.000\% |
| 16 | Reserved | 0.000\% |
| 17 | Reserved | 0.000\% |
| 18 | Reserved | 0.000\% |
| 19 | Reserved | 0.000\% |
| 20 | Reserved | 0.000\% |
| 21 | Reserved | 0.000\% |
| 22 | Reserved | 0.000\% |
| 23 | Reserved | 0.000\% |
| 24 | Reserved | 0.000\% |
| 25 | Reserved | 0.000\% |
| 26 | Reserved | 0.000\% |
| 27 | Reserved | 0.000\% |
| 28 | Reserved | 0.000\% |
| 29 | Reserved | 0.000\% |
| 30 | Reserved | 0.000\% |
| 31 | Reserved | 0.000\% |
| 32 | Reserved | 0.000\% |

## El Paso Electric Company

Worksheet A3-2

## Accumulated Deferred Income Taxes/Accumulated Deferred Investment Tax Credits - Details

Actuals - For the 12 months ended 12/31/yyyy


| 47 | Reserved | 0.000\% | - | - |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 48 | Reserved | 0.000\% | - | - |  |  |
| 49 | Reserved | 0.000\% | - | - |  |  |
| 50 | Reserved | 0.000\% | - | - |  |  |
| 51 | Reserved | 0.000\% | - | - |  |  |
| 52 | Reserved | 0.000\% | - | - |  |  |
| 53 | Reserved | 0.000\% | - | - |  |  |
| 54 | Reserved | 0.000\% | - | - |  |  |
| 55 | Total Account 190 (234.8.b\&c) |  | - | - |  |  |
|  | Tax Reg Asset / Liab Adjustments (Note C) |  |  |  |  |  |
| 56 | Reserved | 0.000\% | - | - | No |  |
| 57 | Reserved | 0.000\% | - | - | No |  |
| 58 | Total Account 190 After Adjustments |  | 0 | - | - | - |
| 59 | Prorated Balances |  | - | - |  |  |
| 60 | Tax Reg Asset / Liab Adjustments |  | - | - |  |  |
| 61 | Prorated Account 190 Balances After Adjustments |  | - | - |  |  |
| 62 | Non-Prorated Balances |  | - | - |  |  |
| 63 | Tax Reg Asset / Liab Adjustments <br> Non-Prorated Account 190 Balances After |  | - | - |  |  |
| 64 | Adjustments |  |  | - |  |  |

## El Paso Electric Company

Worksheet A3-2
Accumulated Deferred Income Taxes/Accumulated Deferred Investment Tax Credits - Details
Actuals - For the 12 months ended 12/31/yyyy
Page 3 of 5


80 Non-Prorated Balances

81 Tax Reg Asset / Liab Adjustments

## Non-Prorated Account 282 Balances After

82 Adjustments

|  | ACCOUNT 283 ACCUMULATED DEFERRED INCOME TAXES - OTHER (Enter Negative) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 83 | Reserved | 0.000\% | - | - |
| 84 | Reserved | 0.000\% | - | - |
| 85 | Reserved | 0.000\% | - | - |
| 86 | Reserved | 0.000\% | - | - |
| 87 | Reserved | 0.000\% | - | - |
| 88 | Reserved | 0.000\% | - | - |
| 89 | Reserved | 0.000\% | - | - |
| 90 | Reserved | 0.000\% | - | - |
| 91 | Reserved | 0.000\% | - | - |
| 92 | Reserved | 0.000\% | - | - |
| 93 | Reserved | 0.000\% | - | - |
| 94 | Reserved | 0.000\% | - | - |
| 95 | Reserved | 0.000\% | - | - |
| 96 | Reserved | 0.000\% | - | - |
| 97 | Reserved | 0.000\% | - | - |
| 98 | Reserved | 0.000\% |  | - |

## 99 Reserved

$0.000 \%$
100 Reserved
$0.000 \%$

## Worksheet A3-2

## Accumulated Deferred Income Taxes/Accumulated Deferred Investment Tax Credits - Details

## Actuals - For the 12 months ended 12/31/yyyy

| No. | (a) | $\begin{gathered} \text { mm-yyyy } \\ \text { (b) } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Dec-2020 } \\ \text { (c) } \\ \hline \end{gathered}$ | (e) | $\begin{gathered} \text { mm-yyyy } \\ \text { (f) } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Dec-2020 } \\ (\mathrm{g}) \\ \hline \end{gathered}$ | (h) | 4 of 5 <br> (i) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 101 | Reserved |  |  | 0.000\% | - | - |  |  |
| 102 | Reserved |  |  | 0.000\% | - | - |  |  |
| 103 | Reserved |  |  | 0.000\% | - | - |  |  |
| 104 | Reserved |  |  | 0.000\% | - | - |  |  |
| 105 | Reserved |  |  | 0.000\% | - | - |  |  |
| 106 | Reserved | - | - | 0.000\% | - | - |  |  |
| 107 | Reserved | - | - | 0.000\% | - | - |  |  |
| 108 | Reserved | - | - | 0.000\% | - | - |  |  |
| 109 | Reserved | - | - | 0.000\% | - | - |  |  |
| 110 | Reserved | - | - | 0.000\% | - | - |  |  |
| 111 | Reserved | - | - | 0.000\% | - | - |  |  |
| 112 | Reserved | - | - | 0.000\% | - | - |  |  |
| 113 | Reserved | - | - | 0.000\% | - | - |  |  |
| 114 | Reserved | - | - | 0.000\% | - | - |  |  |
| 115 | Reserved | - | - | 0.000\% | - | - |  |  |
| 116 | Reserved | - | - | 0.000\% | - | - |  |  |
| 117 | Reserved | - | - | 0.000\% | - | - |  |  |
| 118 | Reserved |  |  | 0.000\% |  |  |  |  |

Reserved
Total Account 283 (276.9.b \& 277.9.k)

Tax Reg Asset / Liab
Adjustments (Note C)
Reserved
Reserved
Total Account 283 After
Adjustments

Prorated Balances
Tax Reg Asset / Liab
Adjustments
Prorated Account 283 Balances After
Adjustments

Non-Prorated Balances
Tax Reg Asset / Liab
Non-Prorated Account 283 Balances After Adjustments

ACCOUNT 255: ACCUMULATED DEFERRED INVESTMENT TAX CREDITS (Enter Negative) (Note F)
Intangible
Production
Transmission
Distribution
General Plant
Total Account 255 (266.8.b \&
267.8.h)

Unrealized ITC Adjustment
Account 255 balance after
$\square$

- 

$0.000 \%$ -
$0.000 \%$
$\qquad$
$\qquad$
$\qquad$
W/S $0.000 \%$
NA $0.000 \%$NA $0.000 \%$

W/S $\quad 0.000 \%$


## El Paso Electric Company <br> Worksheet A3-2 <br> Accumulated Deferred Income Taxes/Accumulated Deferred Investment Tax Credits - Details Actuals - For the $\mathbf{1 2}$ months ended 12/31/yyyy

Notes:
A Beginning of Year ("BOY") balance is end of previous year balance per FERC Form No. 1.
B End of Year ("EOY") balance is end of current year balance per FERC Form No. 1.
C The balances in Accounts 190, 281, 282 and 283, as adjusted by any amounts associated with tax-related regulatory assets and liabilities other than excess / deficient deferred income taxes ("EDIT"). EDIT is calculated in schedules A8-1 and A8-2 and presented in Att-H separately from ADIT.
D Each ADIT item is categorized into 1 of 7 categories. The selected category will determine the Allocator applied to the ADIT balance.

1) Prod: The ADIT balance is $100 \%$ related to production of electricity and the NA Allocator is applied.
2) Retail: The ADIT balance is $100 \%$ related to retail operations and the NA Allocator is applied.
3) ONT: Other $100 \%$ Non-Transmission (Items other than Prod \& Retail) related ADIT for which the NA Allocator is applied. Such items shall include: - ADIT related to the Income Tax Regaultory Assets and Liabilities

- Any other ADIT if not separately removed in other categories that relates to regulatory assets and liabilities that are not included in rate base.

4) Trans: The ADIT balance is $100 \%$ related to transmission operations and the DA Allocator is applied.
5) Plant: The ADIT balance is related to Property, Plant, \& Equipment "PP\&E" and the NP Allocator is applied.
6) NPO: ADIT balances other than PP\&E where the NP Allocator is applied.
7) Labor: The ADIT balance is labor related and the W/S Allocator is applied.

E Each ADIT Item must be categorized into balances that require proration and those that do not. ADIT items with a "Plant" Explanation code will be designated "Yes" for proration treatment and all other Items will be designated "No".
F The Company has elected and applied the second option for accounting for investment tax credits ("ITC") under Internal Revenue Code 46(f) and the regulations thereunder to apply a cost of service adjustment to reduce tax expense no more rapidly than ratably. Under option 2 , there is no rate base reduction for the unamortized balance of the ITC.

I Paso Electric Company
Page 1 of 4
Worksheet A4
Rate Base Worksheet
Actuals - For the 12 months ended 12/31/yyyy

| $\begin{gathered} \text { Line } \\ \text { No } \end{gathered}$ | Month <br> (a) | Gross Plant In Service |  |  |  |  |  | Common <br> (h) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Production <br> (b) | Transmission <br> (c) | Distribution <br> (d) | General <br> (e) | Intangible <br> (f) | Total Plant (g) |  |
|  | FN1 Reference for Dec | 205.46.g | 207.58.g | 207.75.g | 207.99.g | 205.5.g | 207.100.g | 356.1 |
| 1 | December Prior <br> Year |  |  |  |  |  |  |  |
| 2 | January |  |  |  |  |  |  |  |
| 3 | February |  |  |  |  |  |  |  |
| 4 | March |  |  |  |  |  |  |  |
| 5 | April |  |  |  |  |  |  |  |
| 6 | May |  |  |  |  |  |  |  |
| 7 | June |  |  |  |  |  |  |  |
| 8 | July |  |  |  |  |  |  |  |
| 9 | August |  |  |  |  |  |  |  |
| 10 | September |  |  |  |  |  |  |  |
| 11 | October |  |  |  |  |  |  |  |
| 12 | November |  |  |  |  |  |  |  |
| 13 | December |  |  |  |  |  |  |  |
|  | Average of the 13 |  |  |  |  |  |  |  |
| 14 | Monthly Balances | - |  |  |  |  | - | - |
|  |  |  | Gross | In Service - A | ement Costs |  |  |  |
|  | Month <br> (a) | Production <br> (b) | Transmission <br> (c) | Distribution <br> (d) | General <br> (e) | Reserved <br> (f) | Total Plant (g) | Common <br> (h) |
|  | FN1 Reference for Dec <br> December Prior | 205.15.g+205.44.g | 207.57.g | 207.74.g | 207.98.g |  |  |  |
| 15 | Year |  |  |  |  |  |  |  |
| 16 | January |  |  |  |  |  |  |  |
| 17 | February |  |  |  |  |  |  |  |
| 18 | March |  |  |  |  |  |  |  |


| 19 | April |
| :--- | :--- |
| 20 | May |
| 21 | June |
| 22 | July |
| 23 | August |
| 24 | September |
| 25 | October |
| 26 | November |
| 27 | December |

Average of the 13
Monthly Balances
(
$\qquad$



Page 3 of 4
El Paso Electric Company
Worksheet A4
Rate Base Worksheet
Actuals - For the 12 months ended 12/31/yyyy

| $\begin{gathered} \text { Line } \\ \text { No } \end{gathered}$ | Month <br> (a) | Adjustments to Rate Base |  | CWIP | LHFFU |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Unamortized Regulatory Asset (b) | Unamortized Abandoned Plant (c) | CWIP (Note C) <br> (d) | Land Held for Future Use (Note D) (e) |
|  | FN1 Reference for Dec | (Note A) | $($ Notes B \& F) | 216.x.b | 214.x.d |
| 1 | December Prior Year | - |  |  |  |
| 2 | January | - |  |  |  |
| 3 | February | - |  |  |  |
| 4 | March | - |  |  |  |
| 5 | April | - |  |  |  |
| 6 | May | - |  |  |  |
| 7 | June | - |  |  |  |
| 8 | July | - |  |  |  |
| 9 | August | - |  |  |  |
| 10 | September | - |  |  |  |
| 11 | October | - |  |  |  |
| 12 | November | - |  |  |  |
| 13 | December | - |  |  |  |
| 14 | Average of the 13 Monthly Balances - | - | - |  | - |


| Line No |  | Working Capital |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Month <br> (a) | Materials \& Supplies: Transmission Plant <br> (b) | Materials \& Supplies: Stores Expense Undistributed (c) | Materials \& Supplies: Construction <br> (d) | Materials \& Supplies <br> (e) | Prepayments <br> (f) |
|  | FN1 Reference for Dec | 227.8.c | 227.16.c | 227.5.c | Total (Note E) | 111.57.c |
|  | Allocator | 1.00000 | - | - |  |  |
| 15 | December Prior Year |  |  | - | - |  |
| 16 | January |  |  |  | - |  |
| 17 | February |  |  |  | - |  |
| 18 | March |  |  |  | - |  |
| 19 | April |  |  |  | - |  |
| 20 | May |  |  |  | - |  |
| 21 | June |  |  |  | - |  |
| 22 | July |  |  |  | - |  |
| 23 | August |  |  |  | - |  |
| 24 | September |  |  |  | - |  |
| 25 | October |  |  |  | - |  |
| 26 | November |  |  |  | - |  |
| 27 | December |  |  |  | - |  |
| 28 | Average of the 13 Monthly Balances - | - | - | - | - | - |

Page 4 of 4

## El Paso Electric Company

## Worksheet A4

Rate Base Worksheet

## Actuals - For the 12 months ended 12/31/yyyy

$\left.\begin{array}{ccccc|}\hline & & & \text { Unfunded Reserves } & \text { (Note F) }\end{array}\right]$

Recovery of any regulatory asset is limited to such regulatory assets authorized by FERC.
B Recovery of abandoned plant is limited to any abandoned plant recovery authorized by FERC and will be zero until the Commission accepts or approves recovery of the cost of abandoned plant.
C Includes only CWIP authorized by the Commission for inclusion in rate base. The annual report filed pursuant to the Protocols will include for each project under construction (i) the CWIP balance eligible for inclusion in rate base; (ii) the CWIP balance ineligible for inclusion in rate base; and (iii) a demonstration that AFUDC is only applied to the CWIP balance that is not included in rate base. The annual report will reconcile the project-specific CWIP balances to the total Account 107 CWIP balance reported on p. 216.b of the FERC Form 1. The demonstration in (iii) above will show that
monthly debts and credits do not contain entries for AFUDC for each CWIP project in rate base.

D Transmission related only.
E M\&S allocation: Direct Assign 227.8.c at $100 \%$, plus 227.1.c and 227.5.c allocated on Labor (W/S) from Actual Attachment H page 4 line 16.
F The Formula Rate shall include a credit to rate base for unfunded reserves within accounts 228.2, 242, and 253 (funds collected from customers that (1) have not been set aside in a trust, escrow or restricted account; (2) whose balance are collected from customers through cost accruals to accounts that are recovered under the Formula Rate; and (3) exclude the portion of any balance offset by a balance sheet account). Each unfunded reserve will be included on lines 1-9 above. The allocator in Col. (c) will be the same allocator used in the formula for the cost accruals to the account that is recovered under the Formula Rate. Reserves can be created by capital contributions from customers, by debiting the reserve and crediting a liability, or a combination of customer capital contribution and offsetting liability. Only the portion of a reserve that was created by customer contributions should be a reduction to rate base. Amounts will be calculated on 13-month average balances.

## El Paso Electric Company <br> Worksheet A5 <br> Depreciation Rates

| Line <br> No. |
| :---: |
| 1 |
| 2 |
| 3 |
| 4 |
| 5 |
| 6 |
| 7 |
| 8 |


| Plant Type |  | Rates |
| :---: | :---: | :---: |
| Transmission Plant |  |  |
| 350.00 | Land Rights | 0.99\% |
| 352.00 | Structures and Improvements | 1.33\% |
| 353.00 | Station Equipment | 1.00\% |
| 354.00 | Towers and Fixtures | 1.29\% |
| 355.00 | Poles and Fixtures | 1.76\% |
| 356.00 | Overhead Conductors \& Devices | 1.36\% |
| 359.00 | Roads and Trails | 1.05\% |
| General Plant |  |  |
| 390.00 | Structures and Improvements-Other | 1.06\% |
| 390.00 | Stanton Tower | 1.80\% |
| 390.00 | System Operations Building | 2.29\% |
| 390.00 | Eastside Operations Center | 1.74\% |
| 391.00 | Office Furniture and Equipment | 1.71\% |
| 391.20 | Network Equipment | 20.00\% |
| 392-C0 | Transportation Equipment - Remotes | 10.37\% |
| 392.C1 | Transportation Equipment - C1 0-8,500 LBS | 10.37\% |
| 392.C2 | Transportation Equipment - C2 8,500-10,000 LBS | 10.37\% |
| 392.C3 | Transportation Equipment-C3 10,001-14,000 LBS | 10.37\% |
| 392.C4 | Transportation Equipment -C4 14,001-16,000 LBS | 10.37\% |
| 392.C5 | Transportation Equipment - C5 16,001-19,500 LBS | 10.37\% |
| 392.C6 | Transportation Equipment - C6 19,501-26,000 LBS | 10.37\% |
| 392.C7 | Transportation Equipment - C7 26,001-33,000 LBS | 10.37\% |
| 392.C8 | Transportation Equipment - C8 over 33,000 | 10.37\% |
| 392.C9 | Transportation Equipment - C9 Trailers | 10.37\% |
| 393.00 | Stores Equipment | 3.96\% |
| 394.00 | Tools, Shop and Garage Equipment | 3.83\% |
| 395.00 | Laboratory Equipment | 6.47\% |
| 396.00 | Power Operated Equipment | 4.58\% |
| 397.20 | Telecommunication Equipment | 6.48\% |
| 398.00 | Miscellaneous Equipment | 6.65\% |

El Paso Electric Company
Worksheet A6
Divisor - Network Transmission Load Actuals - For the 12 months ended 12/31/2020

| Line | Month | Transmission System Peak Load (MW) | Firm Network for Self (MW) | Firm Network Service for Others (MW) | Long-Term Firm Point to Point <br> Reservations (MW) | Other Long-Term Firm Service (MW) | $\qquad$ | Other <br> Service <br> (MW) | $\begin{gathered} \text { 12-CP } \\ \text { Average } \\ \text { (MW) } \\ \text { (Note A) } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (a) | (b) | (e) | (f) | (g) | (h) | (i) | (j) | (k) |
|  | FN1 |  |  |  |  |  |  |  |  |
|  | Total | through (j) | 400.17.e | 400.17.f | 400.17.g | 400.17.h | 400.17.i | 400.17.j | (i) |
| 1 | January | 0 |  |  |  |  |  |  | 0 |
| 2 | February | 0 |  |  |  |  |  |  | 0 |
| 3 | March | 0 |  |  |  |  |  |  | 0 |
| 4 | April | 0 |  |  |  |  |  |  | 0 |
| 5 | May | 0 |  |  |  |  |  |  | 0 |
| 6 | June | 0 |  |  |  |  |  |  | 0 |
| 7 | July | 0 |  |  |  |  |  |  | 0 |
| 8 | August | 0 |  |  |  |  |  |  | 0 |
| 9 | September | 0 |  |  |  |  |  |  | 0 |
| 10 | October | 0 |  |  |  |  |  |  | 0 |
| 11 | November | 0 |  |  |  |  |  |  | 0 |
| 12 | December | 0 |  |  |  |  |  |  | 0 |
| 13 | Total | - | - | - | - | - | - | - | 0 |
| 14 | 12-CP |  |  |  |  |  |  |  | - |

12-CP average includes all but Short Term Firm


|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15 | - | - | - | - | - | - | - | - | - | - | - | - |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 16 | - | - | - | - | - | - | - | - | - | - | - | - |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 17 | - | - | - | - | - | - | - | - | - | - | - | - |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 18 | - | - | - | - | - | - | - | - | - | - | - | - |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 19 | - | - | - | - | - | - | - | - | - | - | - | - |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 20 | - | - | - | - | - | - | - | - | - | - | - | - |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 21 | - | - | - | - | - | - | - | - | - | - | - | - |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 22 | - | - | - | - | - | - | - | - | - | - | - | - |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 23 | - | - | - | - | - | - | - | - | - | - | - | - |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 24 | - | - | - | - | - | - | - | - | - | - | - | - |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 25 | - | - | - | - | - | - | - | - | - | - | - | - |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 26 | - | - | - | - | - | - | - | - | - | - | - | - |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 27 | - | - | - | - | - | - | - | - | - | - | - | - |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 28 | - | - | - | - |  | - | - | - | - | - | - | - |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 29 | - | - | - | - | - | - | - | - | - | - | - | - |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 30 | - | - | - | - | - | - | - | - | - | - | - | - |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 31 | - | - | - | - | - | - | - | - | - | - | - | - |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 32 | - | - | - | - | - | - | - | - | - | - | - | - |

## Notes

A Special depreciation rates may be utilized for specific incentive transmission projects if approved by the FERC.
B Incentive ROE requires authorization by the Commission

## El Paso Electric Company

Worksheet A8-1
Excess / Deficient Deferred Income Taxes ('EDIT")
Actuals - For the 12 months ended 12/31/yyyy

Page 1 of 2

Proration Used for Projected Revenue Requirement Calculation

## EDIT included within

3

| Days in Period |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| (a) | (b) | (c) | (d) | (e) |
| Month | Days <br> in the <br> Mont <br> h | Number of Days Remainin $g$ in Year After Month's Accrual of Deferred Taxes | Total <br> Days <br> in <br> Futur <br> Portio n of <br> Test <br> Perio <br> d <br> (Line 18, Col <br> b) | Prorat ion Amou nt (Line s 6 to 17, Col c / Col d) |


| Projection - Proration of Deferred Tax Activity |  |  |
| :---: | :---: | :---: |
| (f) | (g) | (h) |
|  | Prorate <br> d | Prorated |
| Projected Monthly Activity | Project <br> ed | Projecte <br> d |
| ((Line 24 | Monthl $y$ | Balance <br> (Line 5, |
| Col h- | Activit | Colh |
| Line 21 Col | , | plus |
| h)/12) | (Lines | Cumula |
| (See | 6 to | tiv |
| Note 7.) | 17, Col | Sum of |
|  | f) |  |

December 31st balance Prorated Items

| (Worksheet P6-1.5h) |  |  |  |
| :--- | ---: | ---: | ---: |
| January | 31 | 335 | 365 |
| Februar |  |  |  |



1

| Ending |  |  |
| :--- | :--- | :--- |
| Balance-Total | Worksheet P6-1.22.h | - |
| Ending Balance-Not Subject <br> to Proration | Worksheet P6-1.23.h | - |
| Ending Balance-Subject to <br> Proration <br> Average <br> Balance (See <br> Note 6.) | Worksheet P6-1.24.h | Ending Balance-Total |

Worksh
eet
A8-2.62
.i
Worksh
eet
A8-2.55
.i
Worksh
eet
A8-2.61
.i
Line $17 \mathrm{Col} \mathrm{N}+$
(Lines $20+23 \mathrm{Col}$
N)/2

Reserve
d
(Line 25
less line
26)

Column J is the difference between projected monthly and actual monthly activity (Column I minus Column F). Specifically, if projected and actual activity are both positive, a negative in Column J represents over-projection (amount of projected activity that did not occur) and a positive in Column J represents under-projection (excess of actual activity over projected activity). If projected and actual activity are both negative, a negative in Column $\mathbf{J}$ represents under-projection (excess of actual activity over projected activity) and a positive in Column J represents over-projection (amount of projected activity that did not occur).
Column K preserves proration when actual monthly and projected monthly activity are either both increases or decreases. Specifically, if Column J is
2 over-projected, enter Column G x [Column I/Column F]. If Column J is under-projected, enter the amount from Column G and complete Column L). In other situations, enter zero.
Column L applies when (1) Column J is under-projected AND (2) actual monthly and projected monthly activity are either both increases or decreases.
3 Enter the amount from Column J. In other situations, enter zero.
Column M applies when (1) projected monthly activity is an increase while actual monthly activity is a decrease OR (2) projected monthly activity is a
4 decrease while actual monthly activity is an increase. Enter actual monthly activity ( Col I ). In other situations, enter zero.
Column N is computed by adding the prorated monthly activity, if any, from Column K to 50 percent of the portion of monthly activity, if any, from
5 Column $L$ or $M$ to the balance at the end of the prior month. The activity in columns $L$ and $M$ is multiplied by 50 percent to reflect averaging of rate base to the extent that the proration requirement has not been applied to a portion of the monthly activity.
For the non-property-related component of the balance, the Average Balance is computed using the average of beginning of year and end of year balance.

Projected and Actual monthly activity is computed based on the annual activity for the period, divided by 12 months.

## El Paso Electric Company

Worksheet A8-2
Accumulated Excess / Deficient Deferred Income Taxes ('EDIT")
Actuals - For the 12 months ended 12/31/yyyy


$\left.\begin{array}{llrl}12 & \text { Reserved } & 0.000 & - \\ 13 & \% & - & - \\ 14 & \text { Reserved } & 0.000 & - \\ \hline & \% & - & - \\ 15 & \text { Reserved } & 0.000 & - \\ \hline\end{array}\right)$


## El Paso Electric Company

Worksheet A8-2

## Accumulated Excess / Deficient Deferred Income Taxes ('EDIT")

Actuals - For the 12 months ended 12/31/yyyy

|  |  | Dec-20 |  |  |  | Dec-20 Page 2 of 2 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Dec-2019 | 2020 | 2020 | 20 |  | Dec-2019 | 2020 | 20 |  |  |  |
| No. | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) | (1) |


| Line No. | Item | BOY <br> Balance <br> (Note D) | Current Period Amortization | Current <br> Period <br> Other <br> Activity <br> (Note C) | EOY <br> Balance (Note D) | Allocator | BOY <br> Allocated <br> Amount | Amorti zation Allocat ed | EOY <br> Allocat <br> ed <br> Amoun <br> t | Prorat ed (Yes/N o) (Note B) | Amort <br> Period or Method | Expla nation (Note A) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| 41 | Reserved | $0.000 \%$ |
| :--- | :--- | :--- |
| 42 | Reserved | $0.000 \%$ |
| 43 | Reserved | $0.000 \%$ |
| 44 | Reserved | $0.000 \%$ |
| 45 | Reserved | $0.000 \%$ |
| 46 | Reserved | $0.000 \%$ |
| 47 | Reserved | $0.000 \%$ |
| 48 | Reserved | $0.000 \%$ |
| 53 | Reserved | $0.000 \%$ |
| 54 | Reserved | $0.000 \%$ |

Total Non
Plant
Unprotect
55 ed


Each EDIT item is categorized into 1 of 7 categories. The selected category will will determine the Allocator applied to the EDIT balance

1) Prod: The EDIT balance is $100 \%$ related to production of electricity and the NA Allocator is applied.
2) Retail: The EDIT balance is $100 \%$ related to retail operations and the NA Allocator is applied.
3) ONT: Other 100\% Non-Transmission (Items other than Prod \& Retail) related EDIT for which the NA Allocator is applied. Such items shall include:

## - EDIT related to Pension and PBOP

- Any other EDIT if not separately removed in other categories that relates to regulatory assets and liabilities that are not included in rate base.

4) Trans: The EDIT balance is $100 \%$ related to transmission operations and the DA Allocator is applied.
5) Plant: The EDIT balance is related to Property, Plant, \& Equipment "PP\&E" and the NP Allocator is applied.
6) NPO: EDIT balances other than PP\&E where the NP Allocator is applied.
7) Labor: The EDIT balance is labor related and the W/S Allocator is applied.

Each EDIT Item must be categorized into balances that require proration and those that do not. EDIT items with a "Plant" Explanation code will be designated "Yes" for proration treatment and all other Items will be designated "No".
Includes the impact of tax rate changes enacted during the period.
EDIT balances exclude income tax gross-ups recorded to accounts 182.3 and 254

## El Paso Electric Company

Worksheet A9
Cost of Capital Worksheet
Actuals - For the 12 months ended 12/31/yyyy

PROPRIETARY CAPITAL


## LONG TERM DEBT

$\left.\begin{array}{cccccc} \\ & & \text { Total Long Term } \\ \text { Debt }(\mathbf{2 2 1}-\mathbf{2 2 2}+\end{array}\right)$


## El Paso Electric Company <br> Worksheet TU <br> True-Up Adjustment <br> Actuals - For the $\mathbf{1 2}$ months ended 12/31/yyyy



Page 1 of 3

| Year | Action |
| :---: | :---: |
| Year 0 | EPE populates the formula rate using projected costs for Year 1 |
|  | Post results |
| Year 0 | of Step 1 |
|  | Results of Step 2 go |
| Year 1 | into effect. <br> EPE populates the formula rate using |
| Year 1 | projected costs for Year 2 |
| Year 1 | Post results of Step 4 |
|  | Results of Step 5 go |
| Year 2 | into effect. |
| Year 2 | EPE populates the formula rate using actual costs for Year 1 |
| Year 2 | EPE compiles actual formula rate revenues booked for Year 1 |
| Year 2 | Calculate the difference between the formula rate calculated in Step 7 and Step 8 |
|  | Post results from |
| Year 2 | Step 8 and Step 9 |
| Year 2 Year 2 | EPE populates the formula rate using projected costs for Year 3, including True-Up Adj for Year 1 <br> Post results <br> of Step 11 |


| $n$ |  |
| :--- | :---: |
| Notes A and | $\$$ |
| E | - |
| Notes B and | $\$$ |
| E | - |
| Notes $C$ and | $\$$ |


|  |  | E | - |
| :---: | :---: | :---: | :---: |
|  |  | Line 17 - Line18 + | \$ |
| 20 | True-up Amount (before Interest) | Line 19 | - |
| 21 |  |  |  |
| 22 | True Up Adjustment |  |  |
| 23 |  |  |  |
|  |  |  | \$ |
| 24 | True-Up Amount before Interest | Line 20 | - |
| 25 | Interest on True-up Amount | Line 70 | - |
|  |  | Line 20 + | \$ |
| 26 | True-Up Adjustment | Line 70 | - |

## El Paso Electric Company <br> Worksheet TU <br> True-Up Adjustment <br> Actuals - For the 12 months ended 12/31/yyyy



FERC


# El Paso Electric Company <br> Worksheet TU <br> True-Up Adjustment <br> Actuals - For the 12 months ended 12/31/yyyy 

Line
\#

| 55 |  |  | $\begin{gathered} \text { True Up } \\ \text { plus } \\ \text { Interest } \end{gathered}$ | Interest Rate | Total Interest | Amoritization | Balance Due/Owed |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | \$ |  | \$ | \$ | \$ |
| 56 | yyyy | January | - | 0.00\% | - | - | - |
|  |  |  | \$ |  | \$ | \$ | \$ |
| 57 | уууу | February | - | 0.00\% | - | - | - |
|  |  |  | \$ |  | \$ | \$ | \$ |
| 58 | yyyy | March | - | 0.00\% | - | - | - |
|  |  |  | \$ |  | \$ | \$ | \$ |
| 59 | yуyy | April | - | 0.00\% | - | - | - |
|  |  |  | \$ |  | \$ | \$ | \$ |
| 60 | уууу | May | - | 0.00\% | - | - | - |
|  |  |  | \$ |  | \$ | \$ | \$ |
| 61 | уууу | June | - | 0.00\% | - | - | - |
|  |  |  | \$ |  | \$ | \$ | \$ |
| 62 | yyyy | July | - | 0.00\% | - | - | - |
|  |  |  | \$ |  | \$ | \$ | \$ |
| 63 | уууу | August | - | 0.00\% | - | - | - |
|  |  |  | \$ |  | \$ | \$ | \$ |
| 64 | yyyy | September | - | 0.00\% | - | - | - |
|  |  |  | \$ |  | \$ | \$ | \$ |
| 65 | ууyy | October | - | 0.00\% | - | - | - |
|  |  |  | \$ |  | \$ | \$ | \$ |
| 66 | уууу | November | - | 0.00\% | - | - | - |
|  |  |  | \$ |  | \$ | \$ | \$ |
| 67 | yyyy | December | - | 0.00\% | - | - | - |
|  |  |  |  |  | \$ |  |  |
| 6869 |  |  |  |  | - |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  | Line $52+$ Line $54+$ | \$ |  |  |
| 70 |  |  |  | Line 68 | - |  |  |

Notes
A Actual Net Revenue Requirement for rate year subject to True Up from Actual Attachment H, line 7.

B Actual Revenues for transmission service as booked, including amounts noted on FERC Form No. 1, pages 328-330, and other amounts included in supporting documentation.

C Prior Period Adjustment, if any, is calculated to the same timing basis as balance of true up (i.e. before interest applied on line for the Prior Period Adjustment calculation will be included in supporting documentation.
D Interest rates posted by FERC; this section to be completed each year for most recent four quarters
E If Rate Year 1 is a partial rate year, the Actual Revenue Requirement, Actual Revenues, Prior Period Adjustment (if any), and Levelized True Up before Interest will reflect only those months for which the rate was in effect. Otherwise, these amounts will all reflect a full 12 month period.

## El Paso Electric Company <br> Rate Formula Template

Formula Rate -
Non-Levelized

Estimated - For the 12 months ended $12 / 31 /$ yyyy

## Line

## GROSS

REVENUE
REQUIREMENT
Allocated
(page 3, line 29)

|  |  | Allocated <br> Amount |  |
| :---: | :---: | :---: | :---: |
|  |  | \$ |  |
| Allocator |  |  |  |
| TP | 0.00000 | - |  |
| TP | 0.00000 | - |  |
| TP | 0.00000 | - |  |
| TP | 0.00000 | - |  |
|  |  | - |  |
|  |  | - |  |
|  |  |  | \$ |
|  |  |  | - |


| 7a | Net Revenue |  |  |  |  | \$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Requirement without True Up | (Line 7 minus Line |  |  |  |  |
|  |  |  |  |  |  | - |
| DIVISOR |  |  |  |  |  |  |
| 8 | Divisor (kW) | Worksheet P3, Line $15 \times 1000$ |  |  | - |  |
| 9 ( 9 |  |  |  |  |  |  |
| 10 | RATES |  |  |  |  |  |
|  |  |  | \$ |  |  |  |
| 11 | Annual |  | - | /kW-year |  |  |
|  |  |  | \$ |  |  |  |
| 12 | Monthly | 12 months/year | - | /kW-month |  |  |
|  |  |  | \$ |  |  |  |
| 13 | Weekly | 52 weeks/year | - | /kW-week |  |  |
|  |  |  | \$ |  |  |  |
| 14 | Daily On-Peak | 6 days/week | - | /kW-day |  |  |
|  |  |  | \$ |  |  |  |
| 15 | Daily Off-Peak | 7 days/week | - | /kW-day |  |  |
|  | Hourly |  | \$ |  |  |  |
| 16 | On-Peak | 16 hours/day | - | /MW-hour |  |  |
|  | Hourly |  | \$ |  |  |  |
| 17 | Off-Peak | 24 hours/day | - | /MW-hour |  |  |

## El Paso Electric

Company
Formula Rate -Non-Levelized
(1)

Rate Formula
Template

|  | (1) | $\begin{array}{c}\text { (2) } \\ \text { Reference }\end{array}$ | $\begin{array}{c}\text { (3) } \\ \text { Company } \\ \text { Line }\end{array}$ |
| :---: | :--- | :--- | :--- |
| No. | RATE BASE: |  |  |$)$

(4)

Allocator
TP 0.00000

W/S 0.00000

| 10 | CWIP Approved by FERC Order | Worksheet P7, <br> Page 1, Line 14, <br> Col. (d) | - | DA | 1.00000 | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ADJUSTMENTS |  |  |  |  |  |
|  | TO RATE BASE <br> Accumulated |  |  |  |  |  |
|  | Deferred Income Taxes (Accounts 190, 281-283) | Worksheet P5-1, Page 3, Line 82, |  |  |  |  |
| 11 | $190,281-283)$ <br> Accumulated <br> Deferred Investment Tax |  | - | DA | 1.00000 | - |
|  | Credit (Account | Worksheet P5-2, |  |  |  |  |
| 12 | 255) <br> Excess / | Line 138, Col. (g) | - | DA | 1.00000 | - |
| 13 | Deficient Deferred Income Taxes | Worksheet P6-1, <br> Line 27, Col. (h) | - | DA | 1.00000 | - |
|  |  | Worksheet P7, |  |  |  |  |
| 14 | Unamortized Regulatory Asset | Page 1, Line 14, Col. (b) | - | DA | 1.00000 | - |
|  |  | Worksheet P7, |  |  |  |  |
|  | Unamortized | Page 1, Line 14, |  |  |  |  |
| 15 | Abandoned Plant Unfunded | Col. (c) | - | DA | 1.00000 | - |
| 16 | Reserves (enter negative) | Act Att-H, Page 2, Line 25, Col. (3) | - | DA | 1.00000 | - |
|  | Hold Harmless | Act Att-H, Page 2, |  |  |  |  |
| 17 | Adjustment | Line 25a, Col. (3) | - | DA | 1.00000 | - |
|  | TOTAL | (Sum of Lines |  |  |  |  |
| 18 | ADJUSTMENTS | 11-17) | - |  |  | - |
|  | LAND HELD | Worksheet A4, |  |  |  |  |
|  | FOR FUTURE | Page 3, Line 14, |  |  |  |  |
| 19 | USE | Col. (e) | - | TP | 0.00000 | - |
|  | WORKING |  |  |  |  |  |
|  | CAPITAL |  |  |  |  |  |
|  |  | 1/8*(Page 3, Line |  |  |  |  |
| 20 | CWC | 7) | - |  |  | - |
|  | Materials \& | Act Att-H, Page 2, |  |  |  |  |
| 21 | Supplies | Line 29, Col. (3) | - | TP | 0.00000 | - |
|  | Prepayments | Act Att-H, Page 2, |  |  |  |  |
| 22 | (Account 165) | Line 30, Col. (3) | - | GP | 0.00000 | - |




TAXES OTHER
THAN INCOME
TAXES
LABOR
RELATED

Worksheet P2,
Page 1, Line 15,
Payroll
Highway and vehicle PLANT
RELATED
Worksheet P2,
Page 1, Line 16,
Col. (e)

Worksheet P2,
Page 2, Line 3, Col.
Property
Gross
Receipts

Other

Payments
in lieu of taxes
TOTAL OTHER
TAXES
INCOME TAXES
$\mathrm{T}=1-\{[(1-$
SIT) $*(1-\mathrm{FIT})] /$
(1-SIT * FIT *
p) $\}=$
$\mathrm{CIT}=(\mathrm{T} / 1-\mathrm{T})$

* (1-(WCLTD/R))
=
where
WCLTD=(page 4,
line 28 ) and $\mathrm{R}=$
(page 4, line 31)
and FIT,
SIT \& p are as
given in Note A.
$1 /(1-\mathrm{T})=$



## El Paso Electric

Company
Rate Formula
Template
(2)
(3)
(4)

SUPPORTING CALCULATIONS AND NOTES

TRANSMISSION
PLANT
INCLUDED IN
No. RATES
Total transmission Actual Attachment
1 plant
H, Page 4, Line 1
Less transmission
plant excluded
from Wholesale
Actual Attachment
Less transmission plant included in OATT Ancillary
3 Services
included in (Line 1 less Lines 2
4 Wholesale Rates \& 3)
Percentage of
transmission plant
included in
(Line 4 divided by
5 Wholesale Rates Line 1)
TRANSMISSION
EXPENSES
Total transmission (Page 3, Line 1,
6 expenses
Col. 3)
Less transmission Actual Attachment

Estimated - For the 12 months ended 12/31/yyyy
(5)

$\mathrm{TP}=$
0.00000

| expenses included <br> in OATT <br> Ancillary Services | H, Page 4, Line 7 |
| :--- | :--- | :--- | :--- |
| Included <br> transmission <br> expenses | (Line 6 less Line 7) |



## Projected

## Attachment H

Page 5 of

## El Paso Electric

Company

|  | Estimated <br>  <br>  <br>  <br>  <br> Formula Rate - For the <br> Non-Levelized | Rate Formula |
| :--- | ---: | ---: |
| 12 months |  |  |
| ended |  |  |
|  | Template | $12 / 31 / y y y y$ |

(1)

## Line

(4)

Allocator

GROSS PLANT
ALLOCATOR
(GP)
\$
$\left.\left.\begin{array}{lllll}1 & \text { Production } & \begin{array}{l}\text { Company Records } \\ \text { Worksheet P1, Line }\end{array} & - & \\ 2 & \text { Transmission } & \begin{array}{l}\text { 30, Col. (c) }\end{array} & - & \\ 3 & \text { Distribution } & \begin{array}{l}\text { Company Records } \\ \text { General \& }\end{array} & \begin{array}{l}\text { Actual Attachment }\end{array} & \\ \text { H, Page 2, Line 4 }\end{array}\right)-\begin{array}{l}\text { Actual Attachment }\end{array}\right)$

NET PLANT
ALLOCATOR
(NP)
\$

| 8 | Transmission | Worksheet P1, Line 30, Col. (g) | - | TP | 0.00000 | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9 | Distribution | Company Records | - | NA |  |  |
|  | General \& | Actual Attachment |  |  |  |  |
| 10 | Intangible | H, Page 2, Line 16 | - | W/S | 0.00000 | - |
|  |  | Actual Attachment |  |  |  |  |
| 11 | Common | H, Page 2, Line 17 | - | CE | 0.00000 | - |
|  |  | (Sum of Lines |  |  |  |  |
| 12 | Total | 7-11) | 0 | $\mathrm{NP}=$ | 0.00000 | - |

General Note: References to pages in
this formulary rate are indicated as:
(page\#, line\#, col.\#)

Note
Letter
A The currently effective income tax rate, where FIT is the Federal income tax rate; SIT is the State income tax rate, and $p=$ "the percentage of federal income tax deductible for state income taxes". If the utility is taxed in more than one state it must attach a work paper showing the name of each state and how the blended or composite SIT was developed.

| Inputs |  | $0.000 \%$ |
| :--- | :--- | :--- |
| Required: | FIT $=$ |  |
|  | SIT $=$ | $0.000 \%$ |
|  | p $=$ | $0.000 \%$ |

(Federal Income Tax Rate)
(State Income Tax Rate or Composite SIT)
(percent of federal income tax deductible for state purposes)

## El Paso Electric Company

Worksheet P1
Projected Transmission Plant
Estimated - For the 12 months ended 12/31/yyyy
Page 1 of 2

| Line | Month <br> \&Year | Projected Plant Additions | Plant in Service | $\begin{gathered} \text { Plant } \\ \text { Depreciation } \\ \text { Accrual (Note B) } \end{gathered}$ | Depr Rate (Note A) | Plant <br> Accumulated <br> Depreciation | Net Projected Plant |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (a) | (b) | (c) <br> Wkst A4, Page 1, <br> Lines 13 minus 27 | (d) | (e) | (f) <br> Wkst A4, Page 2, Lines $13+27$ $\text { - } 41$ | (g) |
| 1 |  |  | - |  |  | - | - |
| 2 |  |  | \$ | \$ |  |  | \$ |
| 3 |  |  | \$ | \$ |  | - | $\$$ |
| 4 |  |  | \$ | \$ |  |  | \$ |
| 5 |  |  | \$ | \$ |  | - | \$ |
| 6 |  |  | \$ | \$ |  | - | \$ |
| 7 |  |  | \$ | \$ |  | - | \$ |
| 8 |  |  | \$ | \$ |  | - | \$ |
| 9 |  |  | \$ | \$ |  | - | \$ |
| 10 |  |  | \$ | \$ |  | - | \$ |
| 11 |  |  | \$ | \$ |  | - | \$ |
| 12 |  |  | \$ | \$ |  | - | \$ |
| 13 |  |  | \$ | \$ |  | - | \$ |
| 14 |  |  | \$ | \$ |  |  | \$ |



Notes:
A In periods where the company will use the actual depreciation rate, enter "A". The actual depreciation rate is calculated as follows: -Actual Attachment H, page 3, line 8) divided by actual transmission plant in service (Actual Attachment H, page 2, line 2) divided by 12 months.

In periods where the company has submitted new depreciation rates for FERC approval, enter " N ". The new depreciation rate is calculated as follows:
The annual composite transmission depreciation rate developed within a new depreciation study, divided by 12 months.

| Current Depreciation Rate (A) | $0.0000 \%$ |
| ---: | :--- |
| New Depreciation Rate (N) | $0.0000 \%$ |

B The depreciation accrual is based on the average of the current and prior month Plant in Service, times the actual "A" or new "N" depreciation rate.
In the initial year rates are set, use Lines 26 and 28, thereafter use Lines 27 and 29, calculated on line 30.
Yes If initial year rates are effective enter Yes, otherwise enter No
El Paso Electric Company

## Worksheet P2

Projected Expenses
Estimated - For the $\mathbf{1 2}$ months ended 12/31/yyyy
Page 1 of 2
(a)
(b)
(c)
(d)
(e)



## El Paso Electric Company <br> Worksheet P2 <br> Projected Expenses <br> Estimated - For the 12 months ended 12/31/yyyy

Page 2 of 2
(a)
(b)
(c)
(d)
(e)

## PROPERTY TAXES

Item $\quad$ Reference $\quad$ Actual $\quad$| Charge |
| :--- |
| Factor |$\quad$ Projected

## PROPERTY TAXES

1 Net Plant in Service for Actual (Note C) 200.15.b
2 Net Plant in Service for Projected (Note C)
200.15.b

Actual Attachment H, Page 3, Line
3 Property Taxes
16 $\square$

## NOTES:

A Charge Factor: Actual O\&M expenses \& Other Taxes divided by total actual net plant from Actuals Attachment H. This is used as one of the basis to calculate projected O\&M costs and projected Other Taxes.
B -When the Net Plant Change \% falls within a minimum or maximum threshold, Projected Costs = Row 2, Col. (f) times Col. (d)
-When the Net Plant Change \% is greater than the maximum threshold, Projected Costs = Col. (c ) times Maximum Percentage
-When the Net Plant Change \% is less than the minimum threshold, Projected Costs $=$ Col. (c ) times Minimum Percentage

Net Plant Change \%
Maximum percentage change applied

Minimum percentage change applied

Property tax expenses relate to plant balances as of December 31, 2 Years prior to the
C expense period.

## FERC Form 1 Reporting Period for Actual

FERC Form 1 Reporting Period for Projected

|  | Use Calculated Factors in column |
| :--- | :--- |
| $0.0 \%$ | 4 |
| $0.0 \%$ | Use Maximum Percentage Change |
|  | Use |
|  | Minimum |
|  | Percentage |
| $0.0 \%$ | Change |

Use Maximum Percentage Change

## Result:

Transmission rate case cost amortization balance is the remaining balance of total projected rate case costs
D amortized over a 3 year period.

## El Paso Electric Company <br> Worksheet P3 <br> Projected Divisor - Network Transmission Load

Page 1 of 1
Line No.

1
Peak Network Load (MW) During:

| a | b | c | d |
| :---: | :---: | :---: | :---: |
| Month | Actual Transmission Network Load (Worksheet A-6) | Percentage of Maximum Transmission Network Load | Projected Transmission Network Load (Col c x Line 1) |
| January | - | 0.00\% | - |
| February | - | 0.00\% | - |
| March | - | 0.00\% | - |
| April | - | 0.00\% | - |
| May | - | 0.00\% | - |
| June | - | 0.00\% | - |
| July | - | 0.00\% | - |
| August | - | 0.00\% | - |
| September | - | 0.00\% | - |
| October | - | 0.00\% | - |
| November | - | 0.00\% | - |
| December | - | 0.00\% | - |
| Total | - |  | - |

## El Paso Electric Company

## Worksheet P4

Projected Incentive Plant Worksheet
Estimated - For the 12 months ended 12/31/yyyy

| $\underline{\text { Line }}$ |  |  |  |  |  | Projects |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  |  |  |  |  | Project: | Project 1 |  |  | Project: | Project 2 |  |  |
| 2 |  |  |  |  |  | Proj. ID | n/a |  |  | Proj. ID | n/a |  |  |
| 3 |  |  |  |  |  | Deprec. <br> Rate/Month: |  |  | (Note <br> A) | Deprec. |  |  | (Note |
| 3 |  |  |  |  |  |  | 0.00\% |  | A) <br> (Note |  | 0.00\% |  | A) <br> (Note |
| 4 |  |  |  |  |  | ROE Adder | 0.00\% |  | B) | ROE Adder | 0.00\% |  | B) |
| 5 |  |  |  |  |  | Weighted ROE Adder: | 0.00\% |  |  | Weighted ROE Adder: | 0.00\% |  |  |
| 6 |  |  |  |  |  | Beginning <br> Bal: | - |  |  | Beginning <br> Bal: | - |  |  |
| 7 |  |  |  |  |  | Beginning |  |  |  | Beginning |  |  |  |
|  |  |  |  |  |  | Beginnin |  |  |  | Beginning |  |  |  |
| 8 |  |  | Tota |  |  | Year: |  |  |  | Year: |  |  |  |
|  | Mon/Yr <br> (a) | Gross Plant <br> (b) | $\begin{gathered} \text { Depreciation } \\ \text { (c ) } \\ \hline \end{gathered}$ | Accum. Dep. <br> (d) | Incentive <br> Ret <br> (e) | Gross Plant (f) | $\begin{gathered} \text { Depreciation } \\ (\mathrm{g}) \\ \hline \end{gathered}$ | Accum. Dep. (h) | Net Plant <br> (i) | Gross Plant (j) $\qquad$ | $\begin{gathered} \text { Depreciation } \\ (\mathbf{k}) \\ \hline \end{gathered}$ | Accum. Dep. | Net Plant $\qquad$ <br> (m) |
|  |  |  |  |  |  | \$ |  |  |  | \$ |  |  |  |
|  |  |  |  |  |  | \$ | \$ | \$ | \$ | \$ |  | \$ |  |
| 9 | Jan-00 | - | - | - |  | - | - | - | - | - | - | \$ | - |
|  |  | \$ | \$ | \$ |  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 10 | Jan-00 | - | - | - |  | - | - | - | - | - | - | - | - |
|  |  | \$ | \$ | \$ |  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 11 | Jan-00 | - | - | - |  | - | - | - | - | - | - | - | - |
|  |  | \$ | \$ | \$ |  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 12 | Jan-00 | - | - | - |  | - | - | - | - | - | - | - | - |
|  |  | \$ | \$ | \$ |  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 13 | Jan-00 | - | - | - |  | - | - | - | - | - | - | - | - |
|  |  | \$ | \$ | \$ |  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 14 | Jan-00 | - | - | - |  | - | - | - | - | - | - | - | - |
| 15 | Jan-00 | \$ | \$ | \$ |  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |


$\square$
Notes
A Special depreciation rates may be utilized for specific incentive transmission projects if approved by the FERC.
B Incentive ROE requires authorization by the Commission

## El Paso Electric Company <br> Worksheet P5-1

Projected Accumulated Deferred Income Taxes
Estimated - For the 12 months ended 12/31/yyyy
Page 1 of 3

| 1 | Account 190 |  |  |  |  | Averaging with Proration - Projected |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | Days in Period |  |  |  |  |  |  |  |
| 3 | (a) <br> Month | (b) <br> Days in the Month | (c) <br> Number of Days Prorated | (d) <br> Total Days in Future Portion of Test Period | (e) <br> Proration Amount (c /d) | (f) <br> Projected Monthly Activity | (g) <br> Prorated <br> Projected <br> Monthly <br> Activity (e x f) | (h) <br> Prorated <br> Projected <br> Balance (Cumulative Sum of g) |
| 4 |  |  |  |  |  |  |  |  |
| 5 | December 31st balance Prorated Items (P5-2.61.f) |  |  |  |  |  |  | - |
| 6 | January | 31 | 335 | 365 | 91.78\% | - | - | - |
| 7 | February | 28 | 307 | 365 | 84.11\% | - | - | - |
| 8 | March | 31 | 276 | 365 | 75.62\% | - | - | - |
| 9 | April | 30 | 246 | 365 | 67.40\% | - | - | - |
| 0 | May | 31 | 215 | 365 | 58.90\% | - | - | - |
| 1 | June | 30 | 185 | 365 | 50.68\% | - | - | - |
| 2 | July | 31 | 154 | 365 | 42.19\% | - | - | - |
| 13 | August | 31 | 123 | 365 | 33.70\% | - | - | - |


| 14 | September 30 | 93 | 365 | 25.48\% | - | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15 | October 31 | 62 | 365 | 16.99\% | - | - |
| 16 | November 30 | 32 | 365 | 8.77\% | - - | - |
| 17 | December 31 | 1 | 365 | 0.27\% | - - | - |
| 18 | Total 365 |  |  | - | - |  |
| 19 | Beginning Balance-Total |  |  | Worksheet P5-2.58.f |  | - |
| 20 | Beginning Balance-Not Subject to Proration |  |  | Worksheet P5-2.64.f |  | - |
| 21 | Beginning Balance-Subject to Proration |  |  | (Line 5, Col H) |  | - |
| 22 | Ending Balance-Total |  |  | Worksheet P5-2.58.g |  | - |
| 23 | Ending Balance-Not Subject to Proration |  |  | Worksheet P5-2.64.g |  | - |
| 24 | Ending Balance-Subject to Proration |  |  | Worksheet P5-2.61.g |  | - |
| 25 | Average Balance |  |  | Line $17 \mathrm{ColN}+($ Lines $20+23 \mathrm{Col} \mathrm{N}) / 2$ |  | - |
| 26 | Reserved |  |  |  |  | - |
| 27 | Amount for Attachment H |  |  | (Line 25 less line 26) |  | - |

## El Paso Electric Company <br> Worksheet P5-1 <br> Projected Accumulated Deferred Income Taxes <br> Estimated - For the 12 months ended 12/31/yyyy

Page 2 of 3

| 28 | Account 282 |  |  |  |  | Averaging with Proration - Projected |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 29 | Days in Period |  |  |  |  |  |  |  |
| 30 | (a) <br> Month | (b) <br> Days in the Month | (c) <br> Number of Days Prorated | (d) <br> Total Days in Future Portion of Test Period | (e) <br> Proration Amount (c /d) | (f) <br> Projected <br> Monthly <br> Activity | (g) <br> Prorated <br> Projected <br> Monthly <br> Activity (e x f) | (h) <br> Prorated <br> Projected <br> Balance (Cumulative Sum of g) |
| 32 | December 31st balance Prorated Items (P5-2.79.f) |  |  |  |  |  |  |  |
| 33 | January | 31 | 335 | 365 | 0.918 | - |  | - |
| 34 | February | 28 | 307 | 365 | 0.841 | - |  | - |
| 35 | March | 31 | 276 | 365 | 0.756 | - |  | - |
| 36 | April | 30 | 246 | 365 | 0.674 | - |  | - |
| 37 | May | 31 | 215 | 365 | 0.589 | - |  | - |
| 38 | June | 30 | 185 | 365 | 0.507 | - |  | - |
| 39 | July | 31 | 154 | 365 | 0.422 | - |  | - |
| 40 | August | 31 | 123 | 365 | 0.337 | - |  | - |
| 41 | September | 30 | 93 | 365 | 0.255 | - |  | - |
| 42 | October | 31 | 62 | 365 | 0.170 | - |  | - |
| 43 | November | 30 | 32 | 365 | 0.088 | - |  | - |
| 44 | December | 31 | 1 | 365 | 0.003 | - |  | - |
| 45 | Total | 365 |  |  |  |  |  |  |


| 46 | Beginning Balance-Total |
| :--- | :--- |
| 47 | Beginning Balance-Not Subject to Proration |
| 48 | Beginning Balance-Subject to Proration |
| 49 | Ending Balance-Total |
| 50 | Ending Balance-Not Subject to Proration |
| 51 | Ending Balance-Subject to Proration |
| 52 | Average Balance |
| 53 | Reserved |
| 54 | Amount for Attachment H |

Worksheet P5-2.76.f
Worksheet P5-2.82.f
(Line 32, ColH H$)$
Worksheet P5-2.76.g
Worksheet P5-2.82.g
Worksheet P5-2.79.g
Line $44 \mathrm{Col} \mathrm{H}+($ Lines $47+50 \mathrm{ColH}) / 2$
(Line 52 less line 53)


# El Paso Electric Company <br> Worksheet P5-1 <br> Projected Accumulated Deferred Income Taxes <br> Estimated - For the 12 months ended 12/31/yyyy 

Page 3 of 3


| 73 | Beginning Balance-Total | Worksheet P5-2.123.f | - |
| :---: | :---: | :---: | :---: |
| 74 | Beginning Balance-Not Subject to Proration | Worksheet P5-2.129.f | - |
| 75 | Beginning Balance-Subject to Proration | (Line 59, Col H ) | - |
| 76 | Ending Balance-Total | Worksheet P5-2.123.g | - |
| 77 | Ending Balance-Not Subject to Proration | Worksheet P5-2.129.g | - |
| 78 | Ending Balance-Subject to Proration | Worksheet P5-2.126.g | - |
| 79 | Average Balance | Line $71 \mathrm{Col} \mathrm{H}+($ Lines $74+77 \mathrm{ColH}) / 2$ | - |
| 80 | Reserved |  |  |
| 81 | Amount for Attachment H | (Line 79 less line 80) | - |
|  | Total Amount for Projected Attachment H | (Lines 27+54+81) | - |

## El Paso Electric Company

Worksheet P5-2
Projected Accumulated Deferred Income Taxes/Accumulated Deferred Investment Tax Credits - Details
Estimated - For the 12 months ended 12/31/yyyy

| No. | (a) | $\begin{gathered} \text { mmm-yyyy } \\ \text { (b) } \\ \hline \end{gathered}$ | $\begin{gathered} \text { mmm-уууу } \\ \text { (c) } \\ \hline \end{gathered}$ | (e) | $\begin{aligned} & \text { mmm-yyyy } \\ & \text { (f) } \\ & \hline \end{aligned}$ | $\begin{gathered} \text { mmm-yyyy } \\ (\mathrm{g}) \\ \hline \end{gathered}$ | (h) | (i) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Line <br> No. | Item | BOY <br> Balance | EOY Balance | Allocator | BOY <br> Allocated <br> Amount | EOY <br> Allocated <br> Amount | Prorated <br> (Yes/No) <br> (Note C) | Explanation <br> (Note B) | Projection Classification (Note D) |


| 1 | Reserved | - | - | 0.000\% |
| :---: | :---: | :---: | :---: | :---: |
| 2 | Reserved | - | - | 0.000\% |
| 3 | Reserved | - | - | 0.000\% |
| 4 | Reserved | - | - | 0.000\% |
| 5 | Reserved | - | - | 0.000\% |
| 6 | Reserved | - | - | 0.000\% |
| 7 | Reserved | - | - | 0.000\% |
| 8 | Reserved | - | - | 0.000\% |
| 9 | Reserved | - | - | 0.000\% |
| 10 | Reserved | - | - | 0.000\% |
| 11 | Reserved | - | - | 0.000\% |
| 12 | Reserved | - | - | 0.000\% |
| 13 | Reserved | - | - | 0.000\% |
| 14 | Reserved | - | - | 0.000\% |


| 15 | Reserved | - | - | 0.000\% | - | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 16 | Reserved | - | - | 0.000\% | - | - |
| 17 | Reserved | - | - | 0.000\% | - | - |
| 18 | Reserved | - | - | 0.000\% | - | - |
| 19 | Reserved | - | - | 0.000\% | - | - |
| 20 | Reserved | - | - | 0.000\% | - | - |
| 21 | Reserved | - | - | 0.000\% | - | - |
| 22 | Reserved | - | - | 0.000\% | - | - |
| 23 | Reserved | - | - | 0.000\% | - | - |
| 24 | Reserved | - | - | 0.000\% | - | - |
| 25 | Reserved | - | - | 0.000\% | - | - |
| 26 | Reserved | - | - | 0.000\% | - | - |
| 27 | Reserved | - | - | 0.000\% | - | - |
| 28 | Reserved | - | - | 0.000\% | - | - |
| 29 | Reserved | - | - | 0.000\% | - | - |
| 30 | Reserved | - | - | 0.000\% | - | - |
| 31 | Reserved | - | - | 0.000\% | - | - |
| 32 | Reserved | - | - | 0.000\% | - | - |
| 33 | Reserved | - | - | 0.000\% | - | - |
| 34 | Reserved | - | - | 0.000\% | - | - |
| 35 | Reserved | - | - | 0.000\% | - | - |
| 36 | Reserved | - | - | 0.000\% |  | - |


| 37 | Reserved | - | $0.000 \%$ | - | - |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 38 | Reserved | - | - | $0.000 \%$ | - | - |
| 39 | Reserved | - | - | $0.000 \%$ | - | - |
| 40 | Reserved | - | - | $0.000 \%$ | - | - |
| 41 | Reserved | - | - | $0.000 \%$ | - | - |
| 42 | Reserved | - | - | $0.000 \%$ | - | - |
| 43 | Reserved | - | - | $0.000 \%$ | - | - |
| 44 | Reserved | - | - | $0.000 \%$ | - | - |
| 45 | Reserved | - | - | $0.000 \%$ | - | - |

## El Paso Electric Company

## Worksheet P5-2

Projected Accumulated Deferred Income Taxes/Accumulated Deferred Investment Tax Credits - Details
Estimated - For the 12 months ended 12/31/yyyy

| No. | (a) | mmm-yyyy <br> (b) | $\begin{aligned} & \text { mmm-yyyy } \\ & \text { (c) } \\ & \hline \end{aligned}$ | (e) | $\begin{aligned} & \text { mmm-уууу } \\ & \text { (f) } \\ & \hline \end{aligned}$ | $\begin{gathered} \text { mmm-yyyy } \\ (\mathrm{g}) \\ \hline \end{gathered}$ | (h) | (i) | (j) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Line <br> No. | Item | BOY <br> Balance | EOY <br> Balance | Allocator | BOY <br> Allocated <br> Amount | EOY <br> Allocated <br> Amount | Prorated <br> (Yes/No) <br> (Note C) | Explanation <br> (Note B) | Projection Classification (Note D) |
| 46 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 47 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 48 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 49 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 50 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 51 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 52 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 53 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 54 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 55 | Total Account 190 <br> Tax Reg Asset / Liab <br> Adjustments (Note A) | - | - |  | - | - |  |  |  |
| 56 | Reserved |  |  | 0.000\% | - | - |  |  |  |
| 57 | Reserved |  |  | 0.000\% | - | - |  |  |  |
| 58 | Total Account 190 After Adjustments |  |  |  | - | - |  |  |  |
| $\begin{aligned} & 59 \\ & 60 \end{aligned}$ | Prorated Balances Tax Reg Asset / Liab |  |  |  | - | - |  |  |  |



80 Non-Prorated Balances
Tax Reg Asset / Liab
81 Adjustments
Non-Prorated Account 282
82 Balances After Adjustments

El Paso Electric Company
Worksheet P5-2

Projected Accumulated Deferred Income Taxes/Accumulated Deferred Investment Tax Credits - Details
Estimated - For the $\mathbf{1 2}$ months ended 12/31/yyyy

| No. | (a) | mmm-yyyy <br> (b) | mmm-yyyy <br> (c) | (e) | mmm-yyyy <br> (f) | mmm-yyyy <br> (g) | (h) | (i) | (j) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Line <br> No. | Item | BOY <br> Balance | EOY <br> Balance | Allocator | BOY <br> Allocated <br> Amount | EOY <br> Allocated <br> Amount | Prorated (Yes/No) (Note C) | Explanation <br> (Note B) | Projection Classification (Note D) |


|  | ACCOUNT 283 ACCUMULATED DEFERRED INCOME TAXES - OTHER (Enter Negative) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 83 | Reserved |  | - | 0.000\% | - | - |  |
| 84 | Reserved | - | - | 0.000\% | - | - |  |
| 85 | Reserved | - | - | 0.000\% | - | - |  |
| 86 | Reserved | - | - | 0.000\% | - | - |  |
| 87 | Reserved | - | - | 0.000\% | - | - |  |
| 88 | Reserved | - | - | 0.000\% | - | - |  |
| 89 | Reserved | - | - | 0.000\% | - | - |  |
| 90 | Reserved | - | - | 0.000\% | - | - |  |
| 91 | Reserved | - | - | 0.000\% | - | - |  |
| 92 | Reserved | - | - | 0.000\% | - | - |  |
| 93 94 | Reserved <br> Reserved | - | - | $\begin{aligned} & 0.000 \% \\ & 0.000 \% \end{aligned}$ | - | - |  |


| 95 | Reserved | - | - | 0.000\% |
| :---: | :---: | :---: | :---: | :---: |
| 96 | Reserved | - | - | 0.000\% |
| 97 | Reserved | - | - | 0.000\% |
| 98 | Reserved | - | - | 0.000\% |
| 99 | Reserved | - | - | 0.000\% |
| 100 | Reserved | - | - | 0.000\% |
| 101 | Reserved | - | - | 0.000\% |
| 102 | Reserved | - | - | 0.000\% |
| 103 | Reserved | - | - | 0.000\% |
| 104 | Reserved | - | - | 0.000\% |
| 105 | Reserved | - | - | 0.000\% |
| 106 | Reserved | - | - | 0.000\% |
| 107 | Reserved | - | - | 0.000\% |
| 108 | Reserved | - | - | 0.000\% |
| 109 | Reserved | - | - | 0.000\% |
| 110 | Reserved | - | - | 0.000\% |
| 111 | Reserved | - | - | 0.000\% |
| 112 | Reserved | - | - | 0.000\% |
| 113 | Reserved | - | - | 0.000\% |
| 114 | Reserved | - | - | 0.000\% |
| 115 | Reserved | - | - | 0.000\% |
| 116 | Reserved |  |  | 0.000\% |


| 117 | Reserved | - | - | $0.000 \%$ | - |
| :--- | :--- | :---: | :---: | :---: | :---: |

## El Paso Electric Company

Worksheet P5-2
Projected Accumulated Deferred Income Taxes/Accumulated Deferred Investment Tax Credits - Details Estimated - For the 12 months ended 12/31/yyyy

| No. | (a) | mmm-yyyy <br> (b) | mmm-yyyy <br> (c) | (e) | mmm-уууу (f) | $\begin{gathered} \text { mmm-уууу } \\ (\mathrm{g}) \\ \hline \end{gathered}$ | (h) | (i) | (j) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Line <br> No. | Item | BOY <br> Balance | EOY Balance | Allocator | BOY Allocated Amount | EOY <br> Allocated <br> Amount | Prorated <br> (Yes/No) <br> (Note C) | Explanation <br> (Note B) | Projection Classification (Note D) |

Tax Reg Asset /
Liab Adjustments
(Note A)
121 Reserved

122 Reserved
$0.000 \%$ -
Total Account 283
123 After Adjustments

124 Prorated Balances
Tax Reg Asset /
125 Liab Adjustments
Prorated Account
283 Balances After
Adjustments
$\qquad$

Non-Prorated
127 Balances
128 Tax Reg Asset /

7) Labor: The ADIT balance is labor related and the W/S Allocator is applied.

Each ADIT Item must be categorized into balances that require proration and those that do not. ADIT items with a "Plant" Explanation code will be designated "Yes" for proration treatment and all other Items will be designated "No". A=Actuals from most recent FERC Form 1 are used. $\mathrm{P}=\mathrm{A}$ projection of the ADIT balance is calculated.
E The balance in Account 255 is directly allocated among types of depreciable plant based the amount of investment tax credit (ITC) allowed for each type of property. In accordance with the normalization requirements applicable to utilities, the Company has elected to reduce rate base by unamortized ITC rather than to reduce income tax expense by ITC amortization. Rate base is not reduced by unamortized ITC until the ITC has been utilized by the Company on its tax return.

## El Paso Electric Company <br> Worksheet P6-1 <br> Excess / Deficient Deferred Income Taxes ('EDIT'')

Page 1 of 1
Proration Used for Projected Revenue Requirement Calculation

EDIT included within Accounts 182.3 \& 254

| Days in Period |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (a) | (b) | (c ) | (d) | (e) |  |
| Month | Days in <br> the <br> Month | Number of Days <br> Remaining in <br> Year After <br> Month's Accrual <br> of Deferred Taxes | Total Days <br> in Future <br> Portion of <br> Test Period <br> (Line 18, <br> Col b) | Proration <br> Amount <br> (Lines 6 <br> to 17, Col <br> c / Col d) |  |


| Projection - Proration of Deferred Tax Activity |  |  |
| :---: | :---: | :---: |
| (f) | (g) | (h) |
| Projected Monthly | Prorated |  |
| Activity ((Line 24 | Monthly | Prorated Projected |
| Col h - Line 21 | Activity | Col h plus 5, |
| Col h)/12) (See | (Lines 6 to | Cumulative Sum |
| Note 7.) | 17, Col e x | of Col g) |
|  | Col f) |  |

December 31st balance Prorated Items (Worksheet P6-2.61.g)

| January | 31 | 335 | 365 | $91.78 \%$ |
| :--- | :--- | :--- | :--- | :--- |
| February | 28 | 307 | 365 | $84.11 \%$ |
| March | 31 | 276 | 365 | $75.62 \%$ |
| April | 30 | 246 | 365 | $67.40 \%$ |
| May | 31 | 215 | 365 | $58.90 \%$ |
| June | 30 | 185 | 365 | $50.68 \%$ |
| July | 31 | 154 | 365 | $42.19 \%$ |
| August | 31 | 123 | 365 | $33.70 \%$ |
| September | 30 | 93 | 365 | $25.48 \%$ |
| October |  |  |  | $16.99 \%$ |


| 15 | 31 | 62 | 365 | - | - | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 16 | November 30 | 32 | 365 | 8.77\% | - | - |
| 17 | December 31 | 1 | 365 | 0.27\% | - | - |
| 18 | Total (sum of Lines 6-17) |  |  | - - | - |  |
| 19 | Beginning Balance-Total |  |  | Worksheet P6-2.62.g |  | - |
| 20 | Beginning Balance-Not Subject to Proration |  |  | Worksheet P6-2.55.g (Line 5, Col |  | - |
| 21 | Beginning Balance-Subject to Proration |  |  | H) |  | - |
| 22 | Ending Balance-Total |  |  | Worksheet P6-2.62.i |  | - |
| 23 | Ending Balance-Not Subject to Proration |  |  | Worksheet P6-2.55.i |  | - |
| 24 | Ending Balance-Subject to Proration |  |  | Worksheet P6-2.61.i |  | - |
| 25 | Average Balance |  |  | $\mathrm{Col} \mathrm{~N}) / 2$ |  | - |
| 26 | Reserved |  |  | Reserved |  |  |
| 27 | Amount for Attachment H |  |  | (Line 25 less line 26) |  | - |

## El Paso Electric Company

Worksheet P6-2
Accumulated Excess / Deficient Deferred Income Taxes ("EDIT")
Estimated - For the 12 months ended 12/31/yyyy
Page 1 of 2
mmm-y
ууу

| (b) | (c) | $(\mathrm{d})$ | $(\mathrm{e})$ | $(\mathrm{f})$ | $(\mathrm{g})$ | $(\mathrm{h})$ | $(\mathrm{i})$ | $(\mathrm{j})$ | (k) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| Line <br> No. | Item | BOY <br> Balance <br> (Note D) | Current Period Amortization | Current <br> Period <br> Other <br> Activity <br> (Note <br> C) | EOY <br> Balance (Note D) | Allocator | BOY <br> Allocated <br> Amount | Amorti zation <br> Allocat ed | EOY <br> Allocat <br> ed <br> Amoun <br> t | Prorat ed (Yes/N o) (Note B) | Amort <br> Period <br> or <br> Metho <br> d | Explanation <br> (Note A) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

NON-PLANT UNPROTECTED EDIT INCLUDED WITHIN ACCOUNTS 182.3 \& 254

| 1 | Reserved | - | - | - | NA | 0.000\% | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | Reserved | - | - | - | NA | 0.000\% | - |
| 3 | Reserved | - | - | - | NA | 0.000\% | - |
| 4 | Reserved | - | - | - | NA | 0.000\% | - |
| 5 | Reserved | - | - | - | NA | 0.000\% | - |
| 6 | Reserved | - | - | - | NA | 0.000\% | - |
| 7 | Reserved | - | - | - | NA | 0.000\% | - |
| 8 | Reserved | - | - | - | NA | 0.000\% | - |
| 9 | Reserved | - | - | - | NA | 0.000\% | - |
| 10 | Reserved | - | - | - | NA | 0.000\% | - |
| 11 | Reserved | - | - | - | NA | 0.000\% | - |
| 12 | Reserved | - | - | - | NA | 0.000\% | - |


| No | - | - |
| :--- | :--- | :--- |
| No | - | - |
| No | - | - |
| No | - | - |
| No | - | - |
| No | - | - |
| No | - | - |
| No | - | - |
| No | - | - |
| No | - | - |
| No | - | - |
| No | - | - |


| 13 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 14 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 15 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 16 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 17 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 18 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 19 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 20 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 21 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 22 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 23 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 24 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 25 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 26 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 27 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 28 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 29 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 30 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 31 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 32 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 33 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 34 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |


| 35 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 36 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 37 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 38 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 39 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 40 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 41 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 42 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |

## El Paso Electric Company

Worksheet P6-2

## Accumulated Excess Deferred Income Taxes/Accumulated Deferred Investment Tax Credits - Details

Estimated - For the 12 months ended 12/31/yyyy


| Line <br> No. | Item | BOY <br> Balance <br> (Note <br> D) | Current Period Amortization | Current Period Other Activity (Note C) | EOY <br> Balance (Note D) | Allocator | BOY <br> Allocated <br> Amount | Amortization Allocated | EOY <br> Allocated <br> Amount | Prorated <br> (Yes/No) <br> (Note B) | Amort <br> Period or <br> Method | Expla natio <br> n (Note A) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |



## PLANT EDIT INCLUDED WITHIN ACCOUNTS 182.3 \& 254

| 56 | Reserved | - | - | $0.000 \%$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 57 | Reserved | - |  | - | $0.000 \%$ |
| 58 | Reserved | - | - | - | $0.000 \%$ |

59 Reserved
60 Reserved
Total
Excess/Deficient
Deferred
Income Taxes
Notes:
A Each EDIT item is categorized into 1 of 7 categories. The selected category will will determine the Allocator applied to the EDIT balance.

1) Prod: The EDIT balance is 100\% related to production of electricity and the NA Allocator is applied.
2) Retail: The EDIT balance is 100\% related to retail operations and the NA Allocator is applied.
3) ONT: Other 100\% Non-Transmission (Items other than Prod \& Retail) related EDIT for which the NA Allocator is applied. Such items shall
include:

- EDIT related to Pension and PBOP
- Any other EDIT if not separately removed in other categories that relates to regulatory assets and liabilities that are not included in rate base.

4) Trans: The EDIT balance is 100\% related to transmission operations and the DA Allocator is applied.
5) Plant: The EDIT balance is related to Property, Plant, \& Equipment "PP\&E" and the NP Allocator is applied.
6) NPO: EDIT balances other than PP\&E where the NP Allocator is applied.
7) Labor: The EDIT balance is labor related and the W/S Allocator is applied.
Each EDIT Item must be categorized into balances that require proration and those that do not. EDIT items with a "Plant" Explanation code will be
designated "Yes" for proration treatment and all other Items will be designated "No".
Includes the impact of tax rate changes enacted during the period.

E | EDIT balances exclude income tax gross-ups recorded to accounts 182.3 and 254 |
| :--- |

## El Paso Electric Company

Worksheet P7
Projected Adjustments to Rate Base
Estimated - For the $\mathbf{1 2}$ months ended 12/31/yyyy

| $\begin{gathered} \text { Line } \\ \text { No } \end{gathered}$ | Month <br> (a) | Unamortized Regulatory Asset (b) | Unamortized Abandoned Plant (c) | CWIP <br> (d) |
| :---: | :---: | :---: | :---: | :---: |
| 1 | December Prior Year | - | - | - |
| 2 | January | - | - | - |
| 3 | February | - | - | - |
| 4 | March | - | - | - |
| 5 | April | - | - | - |
| 6 | May | - | - | - |
| 7 | June | - | - | - |
| 8 | July | - | - | - |
| 9 | August | - | - | - |
| 10 | September | - | - | - |
| 11 | October | - | - | - |
| 12 | November | - | - | - |
| 13 | December | - | - | - |
| 14 | Average of the 13 Monthly Balances | - | - | - |

## El Paso Electric Company

## Schedule 1

## Ancillary Services, Schedule No. 1 - Scheduling System Control and Dispatch Service

Estimated - For the 12 months ended 12/31/yyyy


|  |  | 12 |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| 20 | True-up Adjustment | Line 17 + Line 19 |  |  |
| 21 |  |  |  |  |
|  |  | Line 12 + Line 20 (Note | \$ |  |
| 22 | Net Schedule 1 Annual Rev Req | A) | - |  |
| 23 |  |  |  |  |
| 24 | Divisor |  |  |  |
| 25 | Divisor (kW) | (Worksheet P3, Line 15) | - |  |
| 26 |  |  |  |  |
| 27 | Rates |  |  |  |
|  |  | \$ |  |  |
| 28 | Annual |  | - | /kW-year |
|  |  | \$ |  |  |
| 29 | Monthly | 12 months/year | - | /kW-month |
|  |  | \$ |  |  |
| 30 | Weekly | 52 weeks/year | - | /kW-week |
|  |  | \$ |  |  |
| 31 | Daily On-Peak | 6 days/week | - | /kW-day |
|  |  | \$ |  |  |
| 32 | Daily Off-Peak | 7 days/week | - | /kW-day |
|  |  | \$ |  |  |
| 33 | Hourly On-Peak | 16 hours/day | - | /MW-hour |
|  |  |  | \$ |  |
| 34 | Hourly Off-Peak | 24 hours/day | - | /MW-hour |

A Net Schedule 1 Annual Revenue Requirement projection is set to Actual amount from previous year plus Sch 1 True Up Adjustment
Explanatory comment(s) for Originally Projected Sch 1 Rev Req without True Up Adjustment from Previous Filing:

# ATTACHMENT H-2 <br> El Paso Electric Company Formula Rate Implementation Protocols <br> Projections are for Rate Years - January-December <br> True-Ups are for Calendar Years - January-December 

## I. Applicability

The following procedures (the "Protocols") shall apply to El Paso Electric Company's ("EPE") calculations under its Formula Rate Template set forth in Tariff Attachment H-1 ("Formula Rate Template").

For purposes of these Protocols, the term "Interested Party" means a transmission customer of EPE, a state commission in a state where EPE serves retail customers, any entity having standing in a Federal Energy Regulatory Commission ("Commission" or "FERC") proceeding investigating the Formula Rate (as defined in Section II.1, below), and staff of FERC.

## II. Annual Updates

1. The Formula Rate Template, which includes Schedule 1 - Scheduling System Control and Dispatch Service as Appendix B to Attachment H-1, and these Protocols together comprise the Transmission Provider's filed rate (collectively, the "Formula Rate") for Transmission Service under the Tariff or transmission agreements incorporating Tariff rates. The Transmission Provider will follow the instructions specified in the Formula Rate to annually calculate (project and subsequently true up as applicable) its Annual Transmission Revenue Requirement ("ATRR") and long-term firm loads to develop rates for Network Integration Transmission Service and Point-to-Point Transmission Service for posting by the Transmission Provider (hereinafter the projection and true-up process is referred to as the "Annual Update").
2. The Formula Rate shall be applicable to service on and after January 1 of a given calendar year through December 31 of the same calendar year ("Rate Year"), subject to review, challenge, and refunds or surcharges with interest, as provided herein. The Formula Rate shall initially be the effective date established by the Commission.
3. Each calendar year, the Transmission Provider shall:
(a) By June 15 of the current year, calculate the projected ATRR, and transmission rates for the next Rate Year ("Projection") and Schedule 1 rates for the next Rate Year in accordance with the Formula Rate. The Formula Rate specifies in detail the manner in which the immediately preceding calendar year FERC Form No. 1 data and actual data from the Transmission Provider's books and records shall be used as inputs to the Formula Rate.
(b) By June 15 of the current year, calculate the true-up of the Projection for the preceding calendar year in accordance with the Formula Rate ("True-Up Adjustment"). The True-Up Adjustment shall use the actual data for such preceding calendar year to calculate the actual charges for that calendar year. As part of the True-Up Adjustment, the Transmission Provider shall calculate the under- or over-collection of the revenue requirement for all customers taking service pursuant to the Formula Rate, as follows:
i. At the time of the Annual Update, the Transmission Provider shall calculate the amount of under- or over-collection of its actual net
revenue requirement during the preceding Rate Year after the FERC Form No. 1 data for that Rate Year has been filed with the Commission.
ii. The True-Up Adjustment shall be calculated in the following manner. The projected net revenue requirement on the Projected Attachment H for the Rate Year will be compared to the actual net revenue requirement for the same Rate Year as determined by the population of the Formula Rate Template with actual data.
iii. Interest on any over-recovery of the actual net revenue requirement shall be determined based on the Commission's regulation at 18 C.F.R. § 35.19a. Interest on any under-recovery of the actual net revenue requirement shall be determined using the interest rate determined based on the Commission's regulation at 18 C.F.R § 35.19a. An average interest rate shall be used to calculate the interest payable for the twenty-four (24) months during which the over or under recovery in the revenue requirement exists. The interest rate determined based on the Commission's regulation at 18 C.F.R § 35.19a will be determined using the average of the posted quarterly rates for the last four available quarters available at the time of posting.
iv. The True-Up Adjustment, as calculated on Worksheet TU of the Template, shall be included in the Transmission Provider's subsequent projected net revenue requirement determination.
(c) Include with the Annual Update an identification and explanation of each material change ("Material Change"). A Material Change is: (i) any change in the Transmission Provider's accounting policies, practices or procedures (including changes resulting from revisions to FERC's Uniform System of Accounts and/or FERC Form No. 1 reporting requirements and inter-company cost allocation methodologies) from those in effect during the calendar year upon which the most recent actual ATRR was based and that, in the Transmission Provider's reasonable judgment, could impact the Formula Rate, including impact to the ATRR or load divisor; and (ii) any change in the classification of any transmission facility that has been directly assigned and the dollar value of the change that the Transmission Provider has made in the applicable Projection or True-Up Adjustment; and
(d) Post such Annual Update on its OASIS by June 15, or if June 15 is a Saturday, Sunday or Federal holiday, the first business day thereafter, as well as a populated Formula Rate Template in fully functional spreadsheets showing the calculation of such Annual Update with documentation supporting such calculation and information supporting the Projection as described in Section II.3(a), above, which information shall include a narrative, and worksheets where appropriate, explaining the source and derivation of any data input to the Formula that is not drawn directly from the Transmission Provider's FERC Form No. 1, as well as the following information for all transmission facilities included in the
expected transmission plant additions: (i) expected date of completion; (ii) percent completion status as of the date of the Annual Update; (iii) a one-line diagram of facilities exceeding $\$ 5$ million in cost; (iv) the estimated total installed cost of the facility; and (v) the reason for the facility addition;
(e) File such Annual Update with the Commission as an informational filing ("Informational Filing") on the Publication Date; and
(f) On the Publication Date, notify Interested Parties by email (using the last known email addresses provided to the Transmission Provider) of the website address where the Annual Update posting is located. The Transmission Provider shall use the email list developed from the most recent Annual Update and any other email addresses of individuals who have requested to be included in the Annual Update distribution list.
4. A change to the Formula Rate inputs related to unamortized abandoned plant, construction work in progress (which is currently set to zero), return on equity incentives, extraordinary property losses, return on equity, depreciation rates for each regulatory jurisdiction that are used to calculate the composite rates applied in the Formula Rate, or Post Employment Benefits Other than Pensions may not be made absent a filing with the Commission pursuant to Federal Power Act ("FPA") Sections 205 or 206.

## III. Annual Review Procedures

Each Annual Update shall be subject to the following review procedures ("Annual Review Procedures"). If any of the dates provided for herein fall on a Saturday, Sunday or Federal holiday, then the due date shall be the first business day thereafter:

1. Each year, with at least fifteen (15) calendar days written notice, the Transmission Provider shall convene at least one meeting, which shall include at the Transmission Provider's option either video conferencing or webinar/internet conferencing, among Interested Parties ("Customer Meeting") during which the Transmission Provider shall present details about its Annual Update. The Customer Meeting shall provide Interested Parties the chance to seek information and clarifications from the Transmission Provider about the Annual Update. The first Customer Meeting of a Rate Year shall take place between within forty-five (45) calendar days from the Publication Date at a date and time convenient for a majority of the parties and posted on the Transmission Provider's internet website. The Transmission Provider shall also schedule subsequent Customer Meetings as appropriate ("Subsequent Meetings"). The date and time of such Subsequent Meetings shall be posted on the Transmission Provider's internet website and shall include at the Transmission Provider's option either video conferencing or webinar/internet conferencing.
2. Immediately following the Publication Date, Interested Parties may submit requests for information supporting the Annual Update. Interested Parties will have one-hundred and twenty (120) calendar days after the Publication Date to serve reasonable information requests to the Transmission Provider ("Information Request Period"). Such information requests shall be limited to that which is necessary to determine: (1) if the Transmission Provider has properly calculated the Formula Rate for the Annual Update under review; (2) whether the inputs to the True-Up Adjustment are correct and otherwise appropriate costs and revenue
credits and have been accounted for and recorded appropriately; and (3) whether there have been any Material Changes that affect the Formula Rate calculations.
3. The Transmission Provider shall make reasonable efforts to respond to information requests pertaining to the Annual Update within ten (10) business days of receipt of such requests. Such data responses shall be served on all Interested Parties identifying themselves to the Transmission Provider (as set forth in Section II.3(f)). Information requests received after 4 p.m. Mountain Prevailing Time shall be considered received the next business day. In the event the Transmission Provider believes it cannot respond within the ten (10) business day timeframe, it shall notify the requesting party and shall provide an estimate of when the Transmission Provider will provide the requested information.
4. The Transmission Provider shall make available in a central electronic location all information requests received and all responses to such requests. Each information request received by the Transmission Provider shall become available in the central electronic location within one business day of receipt of such request. Each response by the Transmission Provider shall become available in the central electronic location within one business day of distribution of such response to the party that submitted the information request.
5. To the extent the Transmission Provider and any Interested Party(ies) are unable to resolve disputes related to information requests submitted during the Information Request Period in accordance with these Protocols, the Transmission Provider or any Interested Party may petition FERC to appoint an Administrative Law Judge as a discovery master after reasonable attempts to resolve the disputes
have been made by the Transmission Provider and any Interested Parties. The discovery master shall have the authority to issue binding orders to resolve discovery disputes and compel the production of discovery, as appropriate, in accordance with the Protocols and consistent with FERC's discovery rules.
6. At any time throughout the Information Request Period and up to thirty (30) calendar days after the later of: (i) the close of the Information Request Period, or (ii) receipt of all responses to information requests submitted during the Information Request Period, any Interested Party may review the calculations ("Review Period") and notify the Transmission Provider in writing of any specific challenges to the application of the Formula Rate ("Preliminary Challenge"). Notice of such Preliminary Challenges shall be promptly posted (at the same location as the Annual Update) by the Transmission Provider.
7. Challenges to the Formula Rate itself shall not be considered within the scope of these Annual Review Procedures. Modifications to the Formula Rate itself can only be made pursuant to Sections 205 and 206 of the Federal Power Act, as set out in Article VI below.

## IV. Resolution of Annual Update Challenges

1. If the Transmission Provider and any Interested Party have not resolved a Preliminary Challenge to an Annual Update within sixty (60) calendar days after written notification of a Preliminary Challenge, senior management of the Interested Parties and the Transmission Provider may attempt to resolve any outstanding issues ("Senior Management Review"). If the Transmission Provider and any Interested Party's (or Parties') senior management are unable to
resolve all issues raised in such Preliminary Challenge within thirty (30) calendar days after the Senior Management Review process begins, the Interested Party or Parties may, at any time thereafter, file a formal challenge with the Commission for a period up to three-hundred sixty five (365) calendar days after the Customer Meeting for a particular Annual Update ("Formal Challenge"). An Interested Party may not file a Formal Challenge thereafter. However, any Party may at any time within the period specified above, with or without prior Senior Management Review or submission of a Preliminary Challenge, file a Formal Challenge with the Commission regarding the Annual Update. For avoidance of doubt and as provided in Article IV hereof, nothing in this section is intended to limit the rights of any Interested Party to file a complaint under the FPA outside the Formal Challenge procedures provided by these Protocols.
2. The Transmission Provider shall promptly post notice of resolution of a Preliminary Challenge (at the same location as the notice of Preliminary Challenges) and shall notify all Interested Parties of such resolution, consistent with the procedures set forth in Section III.4, above.
3. Any and all information produced pursuant to these Protocols may be included in any proceeding concerning the El Paso Electric Company Formula Rate initiated at FERC pursuant to the FPA, including, but not limited to, a Formal Challenge. Information produced pursuant to these Protocols designated as confidential information and not otherwise publicly available shall be treated as confidential in any such proceeding referenced herein; provided that confidential treatment shall
be subject to a later determination by the presiding authority that the material is, in whole or in part, not entitled to confidential treatment.
4. Any Formal Challenge shall be served on the Transmission Provider by electronic service on the date of such filing.
5. There shall be no need for an Interested Party to make a separate Formal Challenge with respect to any action initiated by the Commission sua sponte regarding an Annual Update, to participate in any resulting Commission proceeding.
6. Failure to make a Preliminary Challenge or Formal Challenge as to any Annual Update shall not act as a bar to a Preliminary Challenge or Formal Challenge related to any subsequent Annual Update. However, no Preliminary Challenge to an Annual Update shall be permitted after the deadline for written notification of Preliminary Challenges, described in Section III.6.
7. Failure to make a Preliminary Challenge or Formal Challenge with respect to a Material Change as to any Annual Update shall not act as a bar to a Preliminary Challenge or Formal Challenge related to that Material Change in any subsequent Annual Update.
8. Any changes or adjustments to the True-Up Adjustment or projected ATRR resulting from the Information Exchange and Informal Challenge processes that are agreed to by El Paso Electric Company wll be reported in the Informational Filing required pursuant to Section II of these Protocols. Any such changes or adjustments agreed to by El Paso Electric Company on or before December 1 will be reflected in the projected ATRR for the upcoming Rate Year. Any changes or
adjustments agreed to by El Paso Electric Company after December 1 will be reflected in the following year's True-Up Adjustment, as discussed in Section V.

## V. Changes to True-Up Adjustment or Projection

1. Except as provided in Section IV. 8 of these Protocols, any changes to the data inputs, including but not limited to revisions to El Paso Electric Company's FERC Form 1, or as the result of any FERC proceeding to consider the Annual True-Up Adjustment or projected net ATRR, or as a result of the procedures set forth herein, shall be incorporated into the formula rate and the charges produced by the formula rate in the projected net ATRR for the next Rate Year. This reconciliation mechanism shall apply in lieu of mid-Rate Year adjustments. Except as otherwise specified pursuant to a Commission order, all refunds or surcharges shall be determined with interest calculated in accordance with 18 C.F.R. § 35.19a.

## VI. Party's Rights and Burden of Proof

1. Nothing in these Protocols affects any rights the Transmission Provider, FERC, or any Interested Party may have under the FPA, including the right of the Transmission Provider to file a change in rates under Section 205 of the FPA or the right of an Interested Party to file a complaint that is not a Formal Challenge at any time under Section 206 of the FPA or other Commission regulation, or for an Interested Party to participate in any Commission proceeding relating to the Formula Rate. Nothing in these Protocols affects or modifies in any manner the procedural and substantive requirements, including requirements relating to the burden of proof, that are otherwise applicable under Commission precedent,
regulations, and statute, in such a proceeding. The provisions of these Protocols addressing review and challenge of the Annual Update shall not be construed as limiting the Transmission Provider's, FERC's, or any Interested Party's rights under any applicable provision of the FPA.
2. Failure to have made a Preliminary Challenge or Formal Challenge pursuant to these Protocols shall neither, in any manner, be asserted against a complainant in a proceeding instituted under Section 206 of the FPA nor prejudice or otherwise limit the complainant's right to relief that may be granted pursuant to Section 206 of the Federal Power Act.
3. Nothing herein is intended to alter the established burden(s) of going forward or burden(s) of proof as applied by the FERC at the time of any proceeding. Notwithstanding and without limiting the foregoing, in any proceeding ordered by FERC in response to a Formal Challenge raised under these Protocols or a proceeding initiated sua sponte by the Commission, the Transmission Provider shall have the ultimate burden of proof to establish that: (i) it reasonably applied the Formula Rate; (ii) it reasonably calculated the challenged Annual Update pursuant to the Formula Rate; and (iii) it reasonably adopted and applied any Material Change.

EL PASO ELECTRIC COMPANY OPEN ACCESS TRANSMISSION TARIFF

FERC ELECTRIC TARIFF

VOLUME NO. 1

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The Network Customer shall pay the Transmission Provider for any Direct Assignment Facilities, Ancillary Services, and applicable study costs, consistent with Commission policy, along with the following:

### 34.1 Monthly Demand Charge:

The Network Customer shall pay a monthly Demand Charge, which shall bedetermined by multiplying its Load Ratio Share times one twelfth (1/12) of the Transmission Provider's Annual Transmission Revenue Requirement_ specified in Attachment H-1, tab "Projected Attachment H," line 12 multiplied by the Network Customer's Monthly Network Load.

### 34.2 Determination of Network Customer's Monthly Network Load:

The Network Customer's monthly Network Load is its hourly load (including its designated Network Load not physically interconnected with the Transmission Provider under Section 31.3) coincident with the Transmission Provider's Monthly Transmission System Peak.

### 34.3 Determination of Transmission Provider's Monthly Transmission System Load:

The Transmission Provider's monthly Transmission System load is the Transmission Provider's Monthly Transmission System Peak minus the coincident peak usage of all Firm Point-To-Point Transmission Service customers pursuant to Part II of this Tariff plus the Reserved Capacity of all

Firm Point-To-Point Transmission Service customers.

### 34.4 Redispatch Charge:

The Network Customer shall pay a Load Ratio Share of any redispatch costs allocated between the Network Customer and the Transmission Provider pursuant to Section 33. To the extent that the Transmission Provider incurs an obligation to the Network Customer for redispatch costs in accordance with Section 33, such amounts shall be credited against the Network Customer's bill for the applicable month.

### 34.5 Stranded Cost Recovery:

The Transmission Provider may seek to recover stranded costs from the Network Customer pursuant to this Tariff in accordance with the terms, conditions and procedures set forth in FERC Order No. 888. However, the Transmission Provider must separately file any proposal to recover stranded costs under Section 205 of the Federal Power Act.

## SCHEDULE 1

## Scheduling, System Control and Dispatch Service

This service is required to schedule the movement of power through, out of, within, or into a Control Area. This service can be provided only by the operator of the Control Area in which the transmission facilities used for transmission service are located. Scheduling, System Control and Dispatch Service is to be provided directly by the Transmission Provider (if the Transmission Provider is the Control Area operator) or indirectly by the Transmission Provider making arrangements with the Control Area operator that performs this service for the Transmission Provider's Transmission System. The Transmission Customer must purchase this service from the Transmission Provider or the Control Area operator. The charges for Scheduling, System Control and Dispatch Service are to be based on the rates set forthdescribed further below. To the extent the Control Area operator performs this service for the Transmission Provider, charges to the Transmission Customer are to reflect only a pass-through of the costs charged to the Transmission Provider by that Control Area operator.

Rate per \$/KW Year:\$0.843
Rate per \$/KW Month:\$0.070
Rate per \$/KW Week:\$0.0162
Rate per \$/KW Day:\$0.0023
Rate per \$/KW Hour:\$0.000096
The Transmission Customer will be allowed to use dynamic scheduling when it is feasible and reliable. Dynamic scheduling involves the arrangement for moving load or
generation served within one Control Area such that the load or generation is recognized in the real-time control and dispatch of another Control Area. If a Transmission Customer requests that the Transmission Provider perform dynamic scheduling, the Transmission Provider will provide this service at negotiated rates, terms and conditions. Such negotiated rates, terms and conditions will be subject to Commission approval. The Transmission Customer must secure adequate transmission arrangements to support this service.

## Transmission Customers Obligated to Acquire Scheduling, System Control and Dispatch Service:

All Transmission Customers purchasing Long-Term Firm Point-to-Point Transmission Service, Short-Term Firm Point-to-Point Transmission Service, Non-Firm Point-to-Point Transmission Service, or Network Integration Transmission Service from the Transmission Provider shall be required to acquire Scheduling, System Control and Dispatch Service from the Transmission Provider. Charge for Scheduling, System Control and Dispatch Service: All Transmission Customers required to acquire Scheduling, System Control and Dispatch Service shall pay a charge invoiced monthly for Scheduling, System Control and Dispatch Service equal to the amount set forth below. The rates on which such charges are determined shall be calculated on an annual basis using an annual Schedule 1 revenue requirement identified in Attachment H-1, tab "Schedule 1," line 22. Annual updates to the Schedule 1 rates shall follow the procedures set forth in Attachment H-2.

1) For Yearly Service, the demand charge identified in Attachment H-1, tab
"Schedule 1, ," line 28 multiplied by either: (a) the amount of Reserved Capacity per year for Point-to-Point Transmission Service or (b) the Monthly Network Load calculated pursuant to Section 34.2 of the Tariff for Network Integration Transmission Service.
2) For Monthly Service, the demand charge identified in Attachment H-1, tab "Schedule 1," line 29 multiplied by the amount of Reserved Capacity per month.
3) For Weekly Service, the demand charge identified in Attachment H-1, tab "Projected Schedule 1," line 30 multiplied by the amount of Reserved Capacity per week.
4) For Daily On-Peak Service, the demand charge identified in Attachment H-1, tab "Schedule 1, " line 31 multiplied by the amount of Reserved Capacity per day during on-peak periods.
5) For Daily Off-Peak Service, the demand charge identified in Attachment H-1, tab "Schedule 1," line 32 multiplied by the amount of Reserved Capacity per day during off-peak periods.
6) For Hourly On-Peak Service, the demand charge identified in Attachment H-1, tab "Schedule 1," line 33 multiplied by the amount of Reserved Capacity per hour during on-peak periods.
7) For Hourly Off-Peak Service, the demand charge identified in Attachment H-1, tab "Schedule 1, " line 34 multiplied by the amount of Reserved Capacity per hour during off-peak periods.

The total charge in any day, pursuant to a reservation for Hourly delivery, shall not of Reserved Capacity in any hour during such day. In addition, the total charge in any week, pursuant to a reservation for Hourly or Daily delivery, shall not exceed the Weekly Rate pursuant to this Schedule 1 times the highest amount in megawatts of Reserved Capacity in any hour during such week.

## SCHEDULE 7

## Long-Term Firm and Short-Term Firm Point-To-Point Transmission Service

A. For Service On Facilities Within the Transmission Provider's Control Area The following rates apply to Firm Point-To-Point Transmission Service between any Point of Receipt and any Point of Delivery on the Transmission System-within (including intercomnections with) the Transmission Provider's Control Area (its"Internal" system). In addition, the terms and conditions set forth in Section D $\underline{B}$ of this Schedule 7 apply to services in this Section A.

The Transmission Customer shall compensate the Transmission Provider each month for Reserved Capacity at the sum of the applicable charges set forth below:

1) Yearly delivery: ene twelfth of the demand charge of $\$ 27.72 / \mathrm{KW}$ the Annual Demand Charge multiplied by the amount of Reserved Capacity per year. The Annual Demand Charge for a calendar year is identified in Attachment H-1, tab "Projected Attachment H," line 11.
2) Monthly delivery: $\$ 2.31 / \mathrm{KW}$ the demand charge identified in Attachment $\mathrm{H}-1$, tab "Projected Attachment H," line 12 multiplied by the amount of Reserved Capacity per month.
3) Weekly delivery: $\$ 0.53 / \mathrm{KW}$ the demand charge identified in Attachment $\mathrm{H}-1$, tab "Projected Attachment H," line 13 multiplied by the amount of Reserved Capacity per week.
4) Daily delivery: $\$ 0.08885 / \mathrm{KW}$ On-peak, the demand charge identified in

Attachment H-1, tab "Projected Attachment H," line 14 multiplied by the amount of Reserved Capacity per day during on-peak periods. Off-peak, $\$ 0.07615 / \mathrm{KW}$ the demand charge identified in Attachment H-1, tab "Projected Attachment H," line 15 multiplied by the amount of Reserved Capacity per day during off-peak periods. The total demand charge in any week, pursuant to a reservation for Daily delivery, shall not exceed the rate specified in section A-(3) above times the highest amount in kilowatts of Reserved Capacity in any day during such week.
5) Hourly delivery: $\$ 0.00555 / \mathrm{KW}$ On-peak, the demand charge identified in Attachment H-1, tab "Projected Attachment H," line 16 multiplied by the of Reserved Capacity per hour during on-peak periods. $\$ 0.00317 / \mathrm{KW}$ Off-peak, the demand charge in Attachment H-1, tab "Projected Attachment H," line 17 multiplied by the-هf Reserved Capacity per hour during off-peak periods. The total demand charge in any day, pursuant to a reservation for Hourly delivery, shall not exceed the rate specified in section A-(4) times the highest amount in kilowatts of Reserved Capacity in any hour during such day.
B. For Service On The Palo Verde Facilities Connecting Palo-Verde andWestwing

The following rates apply to Firm Point to-Point Transmission Service betweenany Point of Receipt and any Point of Delivery on the portion of the Palo Verde Facilities(also referred to as the Transmission Provider's "External" system) connecting PaloVerde and Westwing. The following are each a Point of Receipt and a Point of Delivery served by the Transmission Provider on these facilities: PALOVERDE500 and-

WESTWING500. In addition, the terms and conditions set forth in Section D of thisSchedule 7 apply to services in this Section B.

The Transmission Customer shall compensate the Transmission Provider each month for Reserved Capacity at the sum of the applicable charges set forth below:-

1) Yearly delivery: one twelfth of the demand charge of $\$ 4.06 / \mathrm{KW}$ of Reserved Capacity per year.
2) Monthly delivery: $\$ 0.34 / \mathrm{KW}$ of Reserved Capacity per month.
3) Weekly delivery: $\$ 0.07811 / \mathrm{KW}$ of Reserved Capacity per week.
4) Daily delivery: $\$ 0.01301 / \mathrm{KW}$ of Reserved Capacity per day during peak periods. $\$ 0.01115 / \mathrm{KW}$ of Reserved Capacity per day during off peak periods. The total demand charge in any week, purstant to a reservation for Daily delivery, shall not exceed the rate specified in section B.(3) above times the highest amount in kilowatts of Reserved Capacity in any day during such week.
5) Hourly delivery: $\$ 0.00081 / \mathrm{KW}$ of Reserved Capacity per hour during peak periods. $\$ 0.00046 / \mathrm{KW}$ of Reserved Capacity per hour during off peak periods. The total demand charge in any day, purstant to a reservation for Hourly delivery, shall not exceed the rate specified in section B.(4) above times the highest amount in kilowatts of Reserved Capacity in any hour during such day.

## C. For Service On The Palo Verde Facilities ("External") Connecting PaloVerde and Kyrene-

The following rates apply to Firm Point to-Point Transmission Service between any Point of Receipt and any Point of Delivery on the portion of the Palo Verde Facilities
("External") connecting Palo Verde and Kyrene. The following are each a Point of Receipt and a Point of Delivery served by the Transmission Provider on these facilities: PALOVERDE500, KYRENE500, and JOJOBA500. In addition, the terms andeonditions set forth in Section D of this Schedule 7 apply to services in this Section C. The Transmission Customer shall compensate the Transmission Provider each month for Reserved Capacity at the sum of the applicable charges set forth below:1) Yearly delivery: one twelfth of the demand charge of $\$ 10.40 / \mathrm{KW}$ of Reserved Capacity per year.
z) Monthly delivery: $\$ 0.87 / \mathrm{KW}$ of Reserved Capacity per month.
3) Weekly delivery: $\$ 0.20004 / \mathrm{KW}$ of Reserved Capacity per week.
4) Daily delivery: $\$ 0.03334 / \mathrm{KW}$ of Reserved Capacity per day during peak periods. $\$ 0.02858 / \mathrm{KW}$ of Reserved Capacity per day during off peak periods. The totat demand charge in any week, purstant to a reservation for Daily delivery, shall not exceed the rate specified in section C.(3) above times the highest amount in kilowatts of Reserved Capacity in any day during such week.
5) Hourly delivery: $\$ 0.00208 / \mathrm{KW}$ of Reserved Capacity per hour during on peak periods. $\$ 0.00119 / \mathrm{KW}$ of Reserved Capacity per hour during off peak periods. The total demand charge in any day, purstant to a reservation for Hourly delivery, shall not exceed the rate specified in section C.(4) above times the highest amount in kilowatts of Reserved Capacity in any hour during such day.
D.B. Terms and Conditions Applicable to Sections A through C of this Schedule 7

1) Sections B and C of this Schedule 7 are established to provide Firm Point to Point

Transmission Customers the opporttnity to use Transmission Capacity over thePalo Verde Facilities to the extent the capacity is available pursuant to theprovisions of this Tariff. The annwal revenue requirement for Palo Verde toWestwing facilities is $\$ 1,927,975$; the anmat revente requirement for the PaloVerde to Kyrene facilities is $\$ 2,475,678$. The rates listed in Sections $\Lambda, B$ and $C$ above include generator supplied VARs and are provided as "up-to" or "ceiling" rates. The rates listed in Sections $A, B$ and $C$ above will apply to customers taking service solely under each such section. For customers taking service under morethan one section of this Schedule 7 and/or Schedule 8 the charges listed in each section will be in addition to the those charges listed in such other sections.
2)1) Ancillary Services: If applicable, provided pursuant to Schedules 1 through 6 and 9 of this Tariff.
3)2) Direct Assignment Facilities Charges: If applicable.
4)3) Real Power Losses: Provided pursuant to Schedule 10 of this Tariff.
5)4) Peak/Off-Peak Periods: For hourly service, the on-peak period extends from hour ending (HE) 0700 through HE 2200, Mountain-Daylight Saving Time, at the $\underline{\text { location where service is provided, at such times when Mountain-Daylight Saving }}$ Time is the prevailing time-in El Pase, Texas, and extends from HE 0800 through HE 2300, Mountain-Standard Time, at the location where service is provided, at such times when Mountain-Standard Time is the prevailing time-in El Paso, Texas, in each case Monday through Saturday, exclusive of NERC holidays. All other hours are off-peak periods for the purpose of determining hourly service rates. For
daily service, on-peak periods are Monday through Saturday, exclusive of NERC holidays. Off-peak daily rates apply on Sundays and NERC holidays.
6)5) Discounts: Three principal requirements apply to discounts for transmission service as follows (1) any offer of a discount made by the Transmission Provider must be announced to all Eligible Customers solely by posting on the OASIS, (2) any customer-initiated requests for discounts (including requests for use by one's wholesale merchant or an Affiliate's use) must occur solely by posting on the OASIS, and (3) once a discount is negotiated, details must be immediately posted on the OASIS. For any discount agreed upon for service on a path, from point(s) of receipt to point(s) of delivery, the Transmission Provider must offer the same discounted transmission service rate for the same time period to all Eligible Customers on all unconstrained transmission paths that go to the same point(s) of delivery on the Transmission System.
7)6) Resales: The rates and rules governing charges and discounts stated above shall not apply to resales of transmission service, compensation for which shall be governed by section 23.1 of the Tariff.

## SCHEDULE 8

Non-Firm Point-To-Point Transmission Service
A. For Service On Facilities Within the Transmission Provider's Control Area

The following rates apply to Non-Firm Point-To-Point Transmission Service between any Point of Receipt and any Point of Delivery on the Transmission Systemwithin (including interconnections with) the Transmission Provider's Control Area (its"Internal" system). In addition, the terms and conditions set forth in Section D of thisSchedule 8 apply to services in this Section A.-

The Transmission Customer shall compensate the Transmission Provider for NonFirm Point-To-Point Transmission Service atup to the sum of the applicable charges set forth below:

1) Monthly delivery: $\$ 2.31 / \mathrm{KW}$ of Reserved Capacity per monththe demand charge identified in Attachment H-1, tab "Projected Attachment H," line 12 multiplied by the amount of Reserved Capacity per month.
2) Weekly delivery: $\$ 0.53 / \mathrm{KW}$ of Reserved Capacity per weekthe demand charge identified in Attachment H-1, tab "Projected Attachment H," line 13 multiplied by the amount of Reserved Capacity per week.
3) Daily delivery: $\$ 0.08885 / \mathrm{KW}$ of Reserved Capacity per day during peak periods. $\$ 0.07615 / \mathrm{KW}$ of Reserved Capacity per day during off peak periods On-peak, the demand charge identified in Attachment H-1, tab "Projected Attachment H," line 14 multiplied by the amount of Reserved Capacity per day during on-peak periods. Offpeak, the demand charge identified in Attachment H-1, tab "Projected Attachment H,"
line 15 multiplied by the amount of Reserved Capacity per day during off-peak periods. The total demand charge in any week, pursuant to a reservation for Daily delivery, shall not exceed the rate specified in section $\mathrm{A}-(2)$ above times the highest amount in kilowatts of Reserved Capacity in any day during such week.
4) Hourly delivery: The basic charge shall be that agreed upon by the Parties at the time this service is reserved and in no event shall exceed $\$ 0.00555 / \mathrm{KWH}$ (peak) or $\$ 0.00317 / \mathrm{KWH}$ (off peak) On-peak, the demand charge identified in Attachment H-1, tab "Projected Attachment H," line 16 multiplied by the amount of Reserved Capacity per hour during on-peak periods. Off-peak, the demand charge identified in Attachment $\mathrm{H}-1$, tab "Projected Attachment H," line 17 multiplied by the amount of Reserved Capacity per hour during off-peak periods. The total demand charge in any day, pursuant to a reservation for Hourly delivery, shall not exceed the rate specified in section A-(3) above times the highest amount in kilowatts of Reserved Capacity in any hour during such day. In addition, the total demand charge in any week, pursuant to a reservation for Hourly or Daily delivery, shall not exceed the rate specified in section A-(2) above times the highest amount in kilowatts of Reserved Capacity in any hour during such week.
[^6]WESTWING500. In addition, the terms and conditions set forth in Section D of this Schedule 8 apply to services in this Section B.

The Transmission Customer shall compensate the Transmission Provider each month for Non Firm Point To Point Transmission Service up to the sum of the applicable eharges set forth below:

1) Monthly delivery: $\$ 0.34 / \mathrm{KW}$ of Reserved Capacity per month.
2) Weekly delivery: $\$ 0.07811 / \mathrm{KW}$ of Reserved Capacity per week.
3) Daily delivery: $\$ 0.01301 / \mathrm{KW}$ of Reserved Capacity per day during peak periods. $\$ 0.01115 / \mathrm{KW}$ of Reserved Capacity per day during off peak periods. The total demand charge in any week, purstant to a reservation for Daily delivery, shall not exceed the rate specified in section B.(2) above times the highest amount in kilowatts of Reserved Capacity in any day during such week.
4) Hourly delivery: The basic charge shall be that agreed upon by the Parties at thetime this service is reserved and in not event shall exceed $\$ 0.00081 / \mathrm{KWH}$ (peak) or $\$ 0.00046 / \mathrm{KWH}$ (off peak). The total demand charge in any day, pursuant to areservation for Hourly delivery, shall not exceed the rate specified in section B.(3) above times the highest amount in kilowatts of Reserved Capacity in any hour during such day. In addition, the total demand charge in any week, pursuant to areservation for Hourly or Daily delivery, shall not exceed the rate specified in section B.(2) above times the highest amount in kilowatts of Reserved Capacity in any hour during such week.

# C. For Service On The Palo Verde Facilities ("External") Connecting PaloVerde and Kyrene- <br> -The following rates apply to Non Firm Point to Point Transmission Service 

 between any Point of Receipt and any Point of Delivery on the portion of the Palo VerdeFacilities ("External") connecting Palo Verde and Kyrene. The following are each a Point of Receipt and a Point of Delivery served by the Transmission Provider on thesefacilities: PALOVERDE500, KYRENE500, and JOJOBA500. In addition, the terms andeonditions set forth in Section $D$ of this Sehedule 8 apply to services in this Section $C$. ——he Transmission Customer shall compensate the Transmission Provider each month for Non Firm Point To Point Transmission Service at the sum of the applicableeharges set forth below:-1) Monthly delivery: $\$ 0.87 / \mathrm{KW}$ of Reserved Capacity per month.
2) Weekly delivery: $\$ 0.20004 / \mathrm{KW}$ of Reserved Capacity per week.
3) Daily delivery: $\$ 0.03334 / \mathrm{KW}$ of Reserved Capacity per day during peak periods. $\$ 0.02858 / \mathrm{KW}$ of Reserved Capacity per day during off peak periods. The totaldemand charge in any week, pursuant to a reservation for Daily delivery, shall not exceed the rate specified in section C.(2) above times the highest amount in kilowatts of Reserved Capacity in any day during such week.
4) Hourly delivery: The basic charge shall be that agreed upon by the Parties at thetime this service is reserved and in no event shall exceed $\$ 0.00208 / \mathrm{KWH}$ (peak) or $\$ 0.00119 / \mathrm{KWH}$ (off peak). The total demand charge in any day, pursuant to a reservation for Hourly delivery, shall not exceed the rate specified in section C.(3) above times the highest amount in kilowatts of Reserved Capacity in any hour-
during such day. In addition, the total demand charge in any week, pursuant to a reservation for Hourly or Daily delivery, shall not exceed the rate specified int section C.(2) above times the highest amount in kilowatts of Reserved Capacity in any hour during such week.

## D.A. Terms and Conditions Applicable to Sections A through C of this Schedule 8

1) Sections B and $C$ of this Schedule 8 are established to provide Non-Firm Point-toPoint Transmission Customers the opportunity to use Transmission Capacity over the Palo-Verde Facilities to the extent the capacity is available pursuant to the provisions of this Tariff. The annual revenue requirement for Palo Verde toWestwing facilities is $\$ 1,927,975$; the annwal revenue requirement for the PaloVerde to Kyrene facilities is $\$ 2,475,678$. The rates listed in Sections A, B and C above include generator supplied VARs and are provided as "up to" or "ceiling" rates. The rates listed in Sections A, B and C above will apply to customers taking service solely under each such section. For customers taking service under morethan one section of this Schedule 8 and/or Schedule 7 the charges listed in each section will be in addition to the charges listed in such other sections.
2)1) Ancillary Services: If applicable, provided pursuant to Schedules 1 through 6 and 9 of this Tariff.
3)2) Direct Assignment Facilities Charges: If applicable.
4)3)_Real Power Losses: Provided pursuant to Schedule 10 of this Tariff.
5)4)_Peak/Off-Peak Periods: For hourly service, the on-peak period extends from hour ending (HE) 0700 through HE 2200, Mountain-Daylight Saving Time, at the
location where service is provided, at such times when Mountain-Daylight Saving Time is the prevailing time-in E1 Paso, Texas, and extends from HE 0800 through HE 2300, Mountain-Standard Time, at the location where service is provided, at such times when Momntain-Standard Time is the prevailing time-in El Pase, Texas, in each case Monday through Saturday, exclusive of NERC holidays. All other hours are off-peak periods for the purpose of determining hourly service rates. For daily service, on-peak periods are Monday through Saturday, exclusive of NERC holidays. Off-peak daily rates apply on Sundays and NERC holidays.
6)5) Discounts: Three principal requirements apply to discounts for transmission service as follows (1) any offer of a discount made by the Transmission Provider must be announced to all Eligible Customers solely by posting on the OASIS, (2) any customer-initiated requests for discounts (including requests for use by one's wholesale merchant or an Affiliate's use) must occur solely by posting on the OASIS, and (3) once a discount is negotiated, details must be immediately posted on the OASIS. For any discount agreed upon for service on a path, from point(s) of receipt to point(s) of delivery, the Transmission Provider must offer the same discounted transmission service rate for the same time period to all Eligible Customers on all unconstrained transmission paths that go to the same point(s) of delivery on the Transmission System.
7)6) Resales: The rates and rules governing charges and discounts stated above shall not apply to resales of transmission service, compensation for which shall be governed by section 23.1 of the Tariff.

## ATTACHMENT H

## Annual Transmission Revenue Requirement <br> and Formula Rate Template and ProtocolsFor Network Integration TransmissionService

1. This Attachment H contains the Formula Rate Template and Protocols pursuant to which rates for e Annual Transmission Revenue Requirement for purposes of theNetwork Integration Transmission Service and Point-to-Point Transmission Services are developed and identifiedshall be $\$ 31,300,000$. The Template is found in Attachment H-1. The Annual Transmission Revenue Requirement is identified in Attachment H-1, tab "Projected Attachment H," page 1.
2. The formula rates are subject to true-up and adjusted prospectively in the manner set forth in the Formula Rate Implementation Protocolsamount in (1) shall beeffective until amended by the Transmission Provider or modified by theCommission. The Protocols are found in Attachment H-2 .

# Attachment H-1 <br> El Paso Electric Company ("EPE") <br> Transmission Formula Rate Template 

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## Overview

The formula is calculated in two steps. The first step is to fill out the A tabs, and the Actual Attachment H tab with data from the previous year's Form 1 information. This information is used to update the formulas in the Actual Net Rev Req tab to calculate the Actual Revenue Requirement (Actual ATRR) for the previous year.

The TU (True-up) tab uses the revenue requirement from the Actual Attachment H tab and compares it to the revenue requirement from the Projected Attachment H tab that customers were billed for the same period. Interest is added to the difference and the amount is added to the Projected Attachment H tab via the True Up Adjustment line.
The projected O\&M and plant balances are calculated on the P Tabs. These sheets feed into the Projected Attachment H tab for determining the Projected Annual Transmission Revenue Requirement. The EPE tariff rates are calculated based on the EPE Revenue Requirements and the specific point-to-point charges are shown on the same tab.

Cells highlighted in yellow are data input cells, however, some cells may reference the results from other worksheets in the formula. Such cell references may change from year to year requiring manual adjustment of the reference or the direct entry of the proper value.

Cells highlighted in green signify that the data is sourced from other worksheets in the formula and that the reference is static.

## Schedule/Worksheet

Tab
Designation
Description

| Act Att-H | Actual Attachment H | Actual Annual Transmission Revenue Requirements for most <br> recent calendar year |
| :--- | :--- | :--- |
| A1-RevCred | Worksheet A1 | Actual Revenue Credits |
| A2-O\&M | Worksheet A2 | Actual O\&M Expense supporting data |
| A3-1-ADIT | Worksheet A3-1 | Actual Accumulated Deferred Income Tax Calculation |
| A3-2-ADIT-ITC Details | Worksheet A3-2 | Actual Accumulated Deferred Income Tax \& Investment Tax |


| A4-Rate Base | Worksheet A4 | Actual Rate Base data |
| :--- | :--- | :--- |
| A5-Depr | Worksheet A5 | Depreciation Rates |
| A6-Divisor | Worksheet A6 | Actual Transmission Load Data for Calculating Rate Divisors |
| A7-IncentPlant | Worksheet A7 | Actual Incentive Plant |
| A8-1 EDIT | Worksheet A8-1 | Actual Excess / Deficient Deferred Income Tax calculation |
| A8-2 EDIT Details | Worksheet A8-2 | Actual Excess / Deficient Deferred Income Tax data |
| A9- Cost of Capital | Worksheet A9 | Actual Cost of Capital Calculations |
| TU-TrueUp | Worksheet TU | True-up Adjustment and Interest Calculation <br> Projected Annual Transmission Revenue Requirements for next <br> calendar year |
| Proj Att-H | Worksheet P1 | Projected transmission plant for next calendar year |
| P1-Trans Plant | Worksheet P2 | Projected O\&M expenses for next calendar year |
| P3-Divisor | Worksheet P4 P3 | Projected transmission load for next calendar year |
| P4-IncentPlant | Projected Incentive Plant |  |
| P5-1 ADIT | Projected Accumulated Deferred Income Tax Calculation |  |
| P5-2 ADIT ITC Details | Worksheet P5-2 | Projected Accumulated Deferred Income Tax \& Investment Tax <br> Credits data |
| P6-1 EDIT | Worksheet P6-1 | Projected Excess / Deficient Deferred Income Tax calculation |
| P6-2 EDIT Details | Wrojected Excess / Deficient Deferred Income Tax data |  |
| P7-Adj to Rate Base | Worksheet P7 | Projected Adjustments to Rate Base |
| Schedule 1 | Schedule 1 | Ancillary Services, Schedule No. 1 - Scheduling System Control <br> and Dispatch Service |



|  |  | day |  |  |
| :--- | :--- | :--- | :--- | :--- |
| 16 | Hourly On-Peak | 16 hours/day | $\$$ | $-\quad / \mathrm{MW}-\mathrm{hour}$ |
| 17 | Hourly Off-Peak | 24 hours/day | $\$$ | $-\quad / \mathrm{MW}-\mathrm{hour}$ |

Formula Rate - Non-Levelized

Line
No. RATE BASE: (Note A, V) GROSS PLANT IN SERVICE
(Note A)

| Production | 14-28), Col. (b) |
| :---: | :---: |
|  | Worksheet A4, Page 1, (Line |
| Transmission | 14-28), Col. (c) |
|  | Worksheet A4, Page 1, (Line |
| Distribution | 14-28), Col. (d) |
|  | Worksheet A4, Page 1, (Line |
| General \& Intangible | 14-28), Cols. (e) + (f) |
|  | Worksheet A4, Page 1, (Line |
| Common | 14-28), Col. (h) |
| TOTAL GROSS PLANT | (Sum of Lines 1 through 5) |
| ACCUMULATED |  |
| DEPRECIATION (Note A) |  |
|  | Worksheet A4, Page 2, (Line |
| Production | 14+28-42), Col. (b) |
|  | Worksheet A4, Page 2, (Line |
| Transmission | 14+28-42), Col. (c) |
|  | Worksheet A4, Page 2, (Line |
| Distribution | 14+28-42), Col. (d) |
|  | Worksheet A4, Page 2, (Line |
| General \& Intangible | 14+28-42), Col.s (e) + (f) |

(2)

Form No. 1
Page, Line, Col.
(3)

## Company Total



Allocator
(4)

| NA |  | - |
| :---: | :---: | :---: |
| TP | 0.00000 | - |
| NA |  | - |
|  |  | - |
| W/S | 0.00000 |  |
| CE | 0.00000 | - |
| GP= | 0.00000 |  |

## (5)

Transmission (Col 3 times Col 4 )

| - | NA |  |  |
| :---: | :---: | :---: | :---: |
| - | TP | 0.00000 | - |
| - | NA |  | - |
| - | W/S | 0.00000 | - |

NA
W/S 0.00000

## Actual Attachment H

## Page 2 of 5

Actuals - For the 12 months ended
12/31/yyyy

| 11 | Common | Worksheet A4, Page 2, (Line $14+28-42$ ), Col. (h) | - | CE | 0.00000 | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | TOTAL ACCUM. |  |  |  |  |  |
| 12 | DEPRECIATION | (Sum of Lines 7 through 11) | - |  |  | - |
|  | NET PLANT IN SERVICE |  |  |  |  |  |
| 13 | Production | (Line 1 - Line 7) | - |  |  | - |
| 14 | Transmission | (Line 2 - Line 8) | - |  |  | - |
| 15 | Distribution | (Line 3 - Line 9) | - |  |  | - |
| 16 | General \& Intangible | (Line 4 - Line 10) | - |  |  | - |
| 17 | Common | (Line 5 - Line 11) | - |  |  | - |
| 18 | TOTAL NET PLANT | (Sum of Lines 13 through 17) | - | $\mathrm{NP}=$ | 0.00000 | - |
| 19 | CWIP Approved by FERC Order | Worksheet A4, Page 3, Line 14, Col. (d) (Note Q) | - | DA | 1.00000 | - |
|  | ADJUSTMENTS TO RATE |  |  |  |  |  |
|  | BASE |  |  |  |  |  |
|  | Accumulated Deferred Income | Worksheet A3-1, Page 3, Line |  |  |  |  |
| 20 | Taxes (Accounts 190, 281-283) Accumulated Deferred | 82, Col. (n) (Note F) | - | DA | 1.00000 | - |
|  | Investment Tax Credit (Account | Worksheet A3-2, Page 4, Line |  |  |  |  |
| 21 | 255) | 138, Col. (g) | - | DA | 1.00000 | - |
| 22 | Excess / Deficient Deferred Income Taxes | Worksheet A8-1, Line 27, Col. (n) | - | DA | 1.00000 | - |
| 2 |  | Worksheet A4, Page 3, Line |  | DA | 1.0000 |  |
| 23 | Unamortized Regulatory Asset | 14, Col. (b) (Notes P \& U) Worksheet A4, Page 3, Line | - | DA | 1.00000 | - |
| 24 | Unamortized Abandoned Plant | 14, Col. (c) (Notes T, N \& U) Worksheet A4, Page 4, Line | - | DA | 1.00000 | - |
| 25 | Unfunded Reserves | 10, Col. (d) (Note R) | - | DA | 1.00000 | - |
| 25a | Hold Harmless Adjustment | Company Records (Note V) | - | DA | 1.00000 | - |
| 26 | TOTAL ADJUSTMENTS | (Sum of Lines 20 through 25a) | - |  |  | - |
| 27 | LAND HELD FOR FUTURE | Worksheet A4, Page 3, Line | - | TP | 0.00000 |  |
| 27 | USE | 14, Col. (e) (Note G) | - | TP | 0.00000 | - |
|  | WORKING CAPITAL | (Note H) |  |  |  |  |
| 28 | Cash Working Capital | 1/8*(Page 3, Line 7) | - |  |  | - |
| 29 | Materials \& Supplies | Worksheet A4, Page 3, Line 28 , Col. (e ) | - | TP | 0.00000 | - |


| 30 | Prepayments (Account 165) | Worksheet A4, Page 3, Line 28, Col. (f) | - | GP | 0.00000 | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31 | TOTAL WORKING CAPITAL | (Sum of Lines 28 through 30) | - |  |  | - |
| 32 | RATE BASE | (Sum Lines 18, 19, 26, 27, \& 31) | - |  |  | - |



| 10 | Common | 336.11.f-336.11.c | - | CE | 0.00000 | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11a | Amortization of Regulatory Asset | Company Records (Note P) | - | DA | 1.0000 | - |
| 11b | Amortization of Abandoned Plant TOTAL DEPRECIATION \& | Company Records (Note N) | - | DA | 1.0000 | - |
| 12 | AMORTIZATION | (Sum of Lines 8 through 11) | - |  |  | - |
|  | TAXES OTHER THAN INCOME TAXES (Note D) <br> LABOR RELATED |  |  |  |  |  |
| 13 | Payroll | 263.1 | - | W/S | 0.00000 | - |
| 14 | Highway and vehicle | 263.1 | - | W/S | 0.00000 | - |
| 15 | PLANT RELATED |  |  |  |  |  |
| 16 | Property | 263.i | - | NP | 0.00000 | - |
| 17 | Gross Receipts | 263.1 | - | NA | 0.00000 | - |
| 18 | Other | 263.1 | - | GP | 0.00000 | - |
| 19 | reserved |  | - |  |  |  |
| 20 | TOTAL OTHER TAXES | (Sum of Lines 13 through 19) | - |  |  | - |
|  | INCOME TAXES $\mathrm{T}=1-\{[(1-\mathrm{SIT}) *(1-\mathrm{FIT})] /$ | (Note K) |  |  |  |  |
| 21 | $\begin{aligned} & (1-\mathrm{SIT} * \mathrm{FIT} * \mathrm{p})\}= \\ & \quad \text { CIT }=(\mathrm{T} / 1-\mathrm{T}) *(1-(\mathrm{WCLTD} / \mathrm{R})) \end{aligned}$ |  | 0.000\% |  |  |  |
| 22 | ```= and FIT, SIT & p are as given in Note K. Income Tax Gross Up Rate: 1/``` |  | 0.000\% |  |  |  |
| 23 | $(1-\mathrm{T})=($ from line 21$)$ |  | - |  |  |  |
|  | Excess / Deficient Deferred | Worksheet A8.2, Line 62, |  |  |  |  |
| 24 | Income Taxes Amortization Excess / Deficient Deferred | Col. (c) (Note W) | - |  |  |  |
| 24a | Income Tax Adjustment | (Line 23 times Line 24) | - | DA | 1.00000 | - |
| 25 | Permanent Differences Permanent Differences Tax | Company Records (Note X) <br> (Line 21 times 23 times | - |  |  |  |
| 25a | Adjustment | Line 25) | - | NP | - | - |
|  | Income Tax on Equity and Incentive Return |  |  |  |  |  |
| 26 | Incentive Return | (Line 22 times Line 28) <br> (Sum of Lines 24a, 25a, | - |  |  | - |
| 27 | Total Income Taxes | 25c, 26) | - |  |  | - |
|  | RETURN <br> Rate Base * Rate of Return plus | (Page 2, Line 32, Col. (3) x |  |  |  |  |
| 28 | Incentive Return | Page 4, Line 31, Col. (5)) + | - |  |  | - |

Formula Rate - Non-Levelized

## (1)

Page 4, Line 32
(Sum of Lines 7, 12, 20, 27,
28)

## El Paso Electric Company

Rate Formula Template
Utilizing FERC Form 1 Data
(2)

SUPPORTING

## CALCULATIONS AND

 NOTESLine
TRANSMISSION PLANT
No. INCLUDED IN RATES
1 Total transmission plant Less transmission plant excluded from
2 Wholesale Rates
Less transmission plant included in
3 OATT Ancillary Services
Transmission plant included in
4 Wholesale Rates
Percentage of transmission plant

## TRANSMISSION EXPENSES

6 Total transmission expenses
Less transmission expenses included
7 in OATT Ancillary Services
Included transmission expenses (Line 6 less Line 7)
$\%$ of transmission expenses after
9 adjustment
$\%$ of transmission plant included in
10 wholesale Rates
\% of transmission expenses included
11 in wholesale Rates
WAGES \& SALARY ALLOCATOR (W\&S)

12 Production
13 Transmission
(Line 8 divided by Line 6)
(Line 5)
(Page 2, Line 2, Col. 3)
Company Records (Note L)
Company Records (Note M)
(Line 1 less Lines 2 \& 3)
(Line 4 divided by Line 1)
(Page 3, Line 1, Col. 3)
Company Records (Note E)
(Line 9 times Line 10)

Actual Attachment H
Page 4 of 5
Actuals - For the 12 months ended 12/31/yyyy
(5)

-
$\mathrm{TP}=$
0.00000
0.00000
0.00000
0.00000

| Form 1 Reference | $\$$ |  | TP |  |
| :--- | :--- | :--- | :--- | ---: |
| $354.20 . \mathrm{b}$ |  | - | 0.00 |  |
| 354.21.b | - | 0.00 | 0 |  |


| 14 15 | Distribution Other | $\begin{aligned} & 354.23 . b \\ & 354.24,25,26 . b \end{aligned}$ |  | - | $\begin{aligned} & 0.00 \\ & 0.00 \end{aligned}$ | 0 |  | W\&S Allocator (\$ / Allocation) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 16 | Total | (Sum of Lies 12-15) |  | - |  | 0 | $=$ | 0.00000 | $=\mathrm{WS}$ |
|  | COMMON PLANT ALLOCATOR (CE) |  | \$ |  |  | \% Electric |  | W\&S Allocator |  |
| 17 | Electric | 200.3.c |  | - |  | line 20) |  | (line 16) | CE |
| 18 | Gas | 201.3.d |  | - |  | 0.00000 | * | 0.00000 | $=0.00000$ |
| 19 | Other | 201.3.e |  | - |  |  |  |  |  |
| 20 | Total | (Sum of Lines 17-19) |  |  |  |  |  |  |  |
|  | RETURN (R) |  |  |  |  |  |  | \$ |  |
| 21 | Long Term Interest | 117, Col. c, Lines 62+63+64-65-66+67 |  |  |  |  |  | - |  |
| 22 | Preferred Dividends | 118.29.c (positive number) |  |  |  |  |  | - |  |
|  | Development of Common Stock: |  |  |  |  |  |  |  |  |
| 23 | Proprietary Capital | Worksheet A9 Line 14, Col. (e) Worksheet A9 Line 14, Col. (b) |  |  |  |  |  | - |  |
| 24 | Less Preferred Stock | (enter negative) |  |  |  |  |  | - |  |
| 25 26 | Less Other Comprehensive Income Less Account 216.1 | Worksheet A9 Line 14, Col. (d) (enter negative) <br> Worksheet A9 Line 14, Col. (c) (enter negative) |  |  |  |  |  | - |  |
| 27 | Common Stock | (Sum of Lines 23-26) |  |  |  |  |  | - |  |
|  |  |  | \$ |  | \% | $\begin{gathered} \text { Cost } \\ (\text { Notes } \mathrm{C} \\ \& \mathrm{O}) \\ \hline \end{gathered}$ |  | Weighted |  |
| 28 | Long Term Debt | Worksheet A9 Line 28, Col. (k) |  | - | 0.00\% | - |  | - | $=$ WCLTD |
| 29 | Preferred Stock | 112.3.c |  | - | 0.00\% | - |  | - |  |
| 30 | Common Stock | Line 27 |  | - | 0.00\% | 0.1038 |  | - |  |
| 31 | Total | (Sum of Lines 28-30) |  | - |  |  |  | - | $=\mathrm{R}$ |
|  |  |  |  |  |  |  |  | \$ |  |
| 32 | Incentive Return | Worksheet A7, Col. (e) |  |  |  |  |  |  |  |

# Actual Attachment H 

## El Paso Electric Company

Rate Formula Template

## Actuals - For the

 12 months ended12/31/yyyy

General Note: References to pages in this formulary rate are indicated as: (page\#, line\#, col.\#)

References to data from FERC Form 1 are indicated as: \#.y.x
(page, line, column)

A Plant in Service, Accumulated Depreciation, and Depreciation Expense amounts exclude Asset Retirement Obligation amounts unless authorized by FERC.
B Workpapers for this calculation will be included in supporting documentation.
C Debt cost rate $=$ long-term interest (line 21) / long term debt (line 28). Preferred cost rate $=$ preferred dividends (line 22) / preferred outstanding (line 29).
D Includes only FICA, unemployment, highway, property, gross receipts, and other assessments charged in the current year. Taxes related to income are excluded.
E Removes dollar amount of transmission expenses included in the OATT ancillary services rates. FERC 561 accounts are not included in this line as they are separately removed from O\&M.
F The balances in Accounts 190, 281, 282 and 283, as adjusted by any amounts associated with tax-related regulatory assets and liabilities other than excess / deficient deferred income taxes ("EDIT"). EDIT is calculated in schedules A8-1 and A8-2 and presented in Att-H separately from ADIT.
G Identified in Form 1 as being only transmission related.
H Cash Working Capital assigned to transmission is one-eighth of O\&M allocated to transmission at Page 3, Line 7, Column 5. Prepayments are the electric related prepayments booked to Account No. 165 and reported on Page 111 Line 57 in the Form 1.
I EPRI expenses listed in Form 1 at 352 .f, all Regulatory Commission Expenses itemized at 350 .d, and non-safety-related advertising included in Account 930.1.

J Depreciation rates and Post-Employment Benefits Other than Pensions (PBOP) are fixed amounts that can be changed only through a Section 205 filing. The fixed PBOP expense will be used in lieu of the actual PBOP expense incurred in the year absent an appropriate filing with FERC. The Company reviews internal records and identifies the PBOP expenses to be removed from A\&G.
K The currently effective income tax rate, where FIT is the Federal income tax rate; SIT is the State income tax rate, and $p=$ "the percentage of federal income tax deductible for state income taxes". Since the utility is taxed in more than one state it shall attach a work paper showing the name of each state and how the blended or composite SIT was developed.

| Inputs Required: | $\mathrm{FIT}=$ | $0.000 \%$ | (Federal Income Tax Rate) |
| :--- | :--- | :--- | :--- |
|  | $\mathrm{SIT}=$ | $0.000 \%$ | (Composite State Income Tax Rate) |
|  | $\mathrm{p}=$ | $0.000 \%$ | (Percent of federal income tax |
| deductible for state purposes) |  |  |  |

L Removes transmission plant determined by Commission order to be state-jurisdictional according to the seven-factor test (until Form 1 balances are adjusted to reflect application of seven-factor test).

M Removes dollar amount of generation step-up facilities, which are deemed to be included in OATT ancillary services. For these purposes, generation stepup facilities are those facilities at a generator substation on which there is no through-flow when the generator is shut down.
N Unamortized Abandoned Plant and Amortization of Abandoned Plant will be zero until the Commission accepts or approves recovery of the cost of abandoned plant. Utility must submit a Section 205 filing to recover the cost of abandoned plant.
O No change in ROE may be made absent a filing with FERC.
P Recovery of any regulatory assets requires authorization from the Commission.
Q AFUDC ceases when CWIP is included in rate base. No CWIP will be included in rate base on line 19 absent FERC authorization.
R The Formula Rate shall include a credit to rate base for all unfunded reserves within accounts 228.2, 242, and 253 (funds collected from customers that (1) have not been set aside in a trust, escrow or restricted account; (2) whose balance are collected from customers through cost accruals to accounts that are recovered under the Formula Rate; and (3) exclude the portion of any balance offset by a balance sheet account). Reserves can be created by capital contributions from customers, by debiting the reserve and crediting a liability, or a combination of customer capital contribution and offsetting liability. Only the portion of a reserve that was created by customer contributions should be a reduction to rate base. Amounts will be calculated on 13-month average balances. See Worksheet A4, Note G.
S The revenues credited shall include only the amounts received directly for service under this tariff reflecting EPE's integrated transmission facilities provided that revenue credits shall not include revenues associated with transmission service for which loads are included in the rate divisor on Actual Attachment H, page 1, line 8. They do not include revenues associated with FERC annual charges, gross receipts taxes, ancillary services, facilities not included in this template (e.g., direct assignment facilities and GSUs) that are not recovered under this Rate Formula Template.
T Page 2 Line 24 includes any unamortized balances related to the recovery of abandoned plant costs approved by FERC under a separate docket. Page 3, Line 11b includes the Amortization expense of abandonment costs. These are shown in the workpapers required pursuant to the Annual Rate Calculation and True-up Procedures.
U Calculate using 13 month average balance, reconciling to FERC Form No. 1 by Page, Line, and Column as shown in Worksheet A4 for inputs on page 2 of 5 above.
V If applicable, a separate workpaper will be provided and posted with other supporting documentation.
W Includes the amortization of any excess/deficient deferred income taxes resulting from changes to income tax laws, income tax rates (including changes in apportionment) and other actions taken by a taxing authority. Excess and deficient deferred income taxes will reduce or increase tax expense by the amount of the excess or deficiency multiplied by ( $1 / 1-\mathrm{T}$ ).
X Includes the annual income tax cost or benefits due to permanent differences between expenses or revenues recognized for ratemaking purposes and for income tax purposes and depreciation of amounts capitalized to plant for book purposes related to the accrual of the Allowance for Other Funds Used During Construction. T multiplied by the amount of permanent differences and depreciation expense associated with Allowance for Other Funds Used During Construction will increase or decrease tax expense by the amount of the expense or benefit included on line 25 multiplied by (1/1-T).

## El Paso Electric Company <br> Worksheet A1 <br> Revenue Credits <br> Actuals - For the 12 months ended 12/31/yyyy

Page 1 of 2

## ACCOUNT 454 (RENT FROM

## ELECTRIC PROPERTY)



## ACCOUNT 456.1

(OTHER ELECTRIC
REVENUES) (Note B)

| Line \# | Type | Description | Service Type | $\begin{gathered} \text { PTP } \\ \text { Trans } \\ \text { Sched } 7 \& 8 \\ \hline \end{gathered}$ | Network <br> Transm <br> Sched 9 | Ancillary Services | Other | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) |  |
| 1 |  |  |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |  |  |  |
| 10 |  |  |  |  |  |  |  |  |  |
| 11 |  |  |  |  |  |  |  |  |  |
| 12 |  |  |  |  |  |  |  |  |  |
| 13 |  | Total |  | 0 | 0 | 0 | 0 |  | 0 |
|  |  |  |  |  |  |  |  | 300.22.b |  |
| 14 | Summarized by Type: |  |  |  |  |  |  |  |  |
| 15 | Credit |  |  | 0 | 0 | 0 | 0 |  | 0 |
| 16 | Divisor |  |  | 0 | 0 | 0 | 0 |  | 0 |
| 17 | Ancillary |  |  | 0 | 0 | 0 | 0 |  | 0 |
| 18 | Other |  |  | 0 | 0 | 0 | 0 |  | 0 |
| 19 | Total |  |  | 0 | 0 | 0 | 0 |  | 0 |

## Revenue Types:

Ancillary
Divisor
Credit
Ancillary services includes regulation \& frequency, control \& dispatch, voltage control, reactive, spinning reserve, and scheduling; no revenue credit.
Load associated with these revenues are included in the formula divisor; no revenue credit.
Revenue credit because the load is not included in divisor.

Each FERC 0454 item is categorized into 1 of 5 categories. The selected category will determine the Allocator applied to the FERC 0454
bance.

1) Prod: The FERC 0454 balance is $100 \%$ related to production of electricity and the NA Allocator is applied.
2) Retail: The FERC 0454 balance is $100 \%$ related to retail operations and the NA Allocator is applied.
3) ONT: Other $100 \%$ Non-Transmission (Items other than Prod \& Retail) related FERC 0454 for which the NA Allocator is applied.
4) Trans: The FERC 0454 balance is $100 \%$ related to transmission operations and the DA Allocator is applied.
5) Labor: The FERC 0454 balance is labor or general and intangible plant related, and the W/S Allocator is applied.

PTP Revenue credits from Line 15, Column (h) populate Actual Attachment H, page 1, line 3.

## El Paso Electric Company <br> Worksheet A2 <br> Actual Operation and Maintenance Expenses <br> Actuals - For the 12 months ended 12/31/yyyy

Page 1 of 1

| Line No. | (a) | (b) |  | (c) |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Form No. 1 |  |  |
|  | Item | Page, Line, Col. | Company Total |  |
| 1 | EPRI Annual Membership Dues | 353.x.f (Note C) | \$ | - |
| 2 | Regulatory Commission Expenses | 350.46.d | \$ | - |
| 3 | Account No. 930.1 | 323.191.b | \$ | - |
| 4 | Less: Safety Related Advertising | Company Records (Note A) | \$ | - |
| 5 | Account No. 930.1 less Safety Related Advertising | Line 3 - Line 4 | \$ | - |
| 6 | EPRI \& Reg. Comm. Exp. \& Non-safety Ad. | Sum of Lines 1, 2, \& 5 | \$ | - |
| 7 |  |  |  |  |
| 8 | Transmission Related Regulatory Expense | (Note B) |  |  |
| 9 |  |  |  |  |
| 10 | Reserved for use in the event of transmission rate filings | Company Records | \$ | - |
| 11 | Transmission Related Reg. Comm. Exp. | 350.x.d | \$ | - |
| 12 | Transmission Related Regulatory Expense | Sum of Lines 10-11 | \$ | - |
| 13 |  |  |  |  |
| 14 | Actual Ancillary Expenses |  |  |  |
| 15 | 561.1 Load Dispatch-Reliability | 321.85.b | \$ | - |
| 16 | 561.2 Load Dispatch-Monitor and Operate Transmission System | 321.86.b | \$ | - |
| 17 | 561.3 Load Dispatch-Transmission Service and Scheduling | 321.87.b | \$ | - |
| 18 | 561.4 Scheduling, System Control and Dispatch Services | 321.88.b | \$ | - |
| 19 | 561.5 Reliability, Planning and Standards Development | 321.89.b | \$ | - |
| 20 | 561.6 Transmission Service Studies | 321.90.b | \$ | - |
| 21 | 561.7 Generation Interconnection Studies | 321.91.b | \$ | - |
| 22 | 561.8 Reliability, Planning and Standards Development | 321.92.b | \$ | - |
| 23 | Total Ancillary Expenses | Sum of Lines 15-22 | \$ | - |

[^7]For FERC account no. 930.1, the Company reviews all entries and identifies those that are safety related advertising.

## El Paso Electric Company

## Worksheet A3-1

Accumulated Deferred Income Taxes
Actuals - For the $\mathbf{1 2}$ months ended 12/31/yyyy

Proration Used for Projected Revenue Requirement Calculation


4
December 31st balance Prorated Items (Worksheet
P5-1.5.h)
January




| 55 | Account 283 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 56 | Days in Period |  |  |  |  |
|  | (a) | (b) | (c) | (d) | (e) |
|  | Month | Days in the Mont h | Number of Days Remaini ng in Year After <br> Month's <br> Accrual of Deferre d Taxes | Total <br> Days in <br> Future Portion of Test Period (Line 18, Col B) | Prorati on Amou nt (Lines 6 to 17, Col c / Col d) |


| 59 | (Worksheet P5-1.59.h) |  |  |  | 91.78$\%$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 60 | January | 31 | 335 | 365 |  |
|  | Februar |  |  |  | 84.11 |
| 61 | y | 28 | 307 | 365 | \% |
|  | March |  |  |  | 75.62 |
| 62 |  | 31 | 276 | 365 | \% |
|  | April |  |  |  | 67.40 |



## Account



December 31st balance Prorated
Items (Worksheet A3-2.126.f)


## NOTES

1) Column $J$ is the difference between projected monthly and actual monthly activity (Column I minus

Column F). Specifically, if projected and actual activity are both positive, a negative in Column J
represents over-projection (amount of projected activity that did not occur) and a positive in Column J
represents under-projection (excess of actual activity over projected activity). If projected and actual activity are both negative, a negative in Column $J$ represents under-projection (excess of actual activity over projected activity) and a positive in Column J represents over-projection (amount of projected activity that did not occur).
2) Column $K$ preserves proration when actual monthly and projected monthly activity are either both increases or decreases. Specifically, if Column J is over-projected, enter Column G x [Column I/Column F]. If Column J is under-projected, enter the amount from Column $G$ and complete Column L). In other situations, enter zero.
3) Column $L$ applies when (1) Column $J$ is under-projected AND (2) actual monthly and projected monthly activity are either both increases or decreases. Enter the amount from Column J. In other situations, enter zero.
4) Column $M$ applies when (1) projected monthly activity is an increase while actual monthly activity is a decrease OR (2) projected monthly activity is a decrease while actual monthly activity is an increase.
Enter actual monthly activity ( Col I ). In other situations, enter zero.
5) Column N is computed by adding the prorated monthly activity, if any, from Column K to 50 percent of the portion of monthly activity, if any, from Column L or M to the balance at the end of the prior month. The activity in columns $L$ and $M$ is multiplied by 50 percent to reflect averaging of rate base to the extent that the proration requirement has not been applied to a portion of the monthly activity.
6) For the non-property-related component of the balance, the Average Balance is computed using the average of beginning of year and end of year balance. For the property-related component of the balance, the Average Balance is computed as described in Note 5.
7) Projected and Actual monthly activity is computed based on the annual
activity for the period, divided by 12 months.

## El Paso Electric Company

Worksheet A3-2
Accumulated Deferred Income Taxes/Accumulated Deferred Investment Tax Credits - Details
Actuals - For the 12 months ended 12/31/yyyy
Page 1 of 5

| No. | (a) | $\begin{gathered} \text { mmm-ууууу } \\ \text { (b) } \\ \hline \end{gathered}$ | $\begin{gathered} \text { mmm-уууу } \\ \text { (c) } \\ \hline \end{gathered}$ | (e) | $\begin{gathered} \text { mmm-ууууу } \\ \text { (f) } \\ \hline \end{gathered}$ | $\begin{gathered} \text { mmm-уууу } \\ (\mathrm{g}) \\ \hline \end{gathered}$ | (h) | (i) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Line <br> No. | Item | BOY Balance (Note A) | EOY Balance <br> (Note B) | Allocator | BOY Allocated Amount | EOY Allocated Amount | Prorated <br> (Yes/No) <br> (Note E) | Explanation <br> (Note D) |
|  | ACCOUNT 190 ACCUMULATED DEFERRED INCOME TAXES |  |  |  |  |  |  |  |
| 1 | Reserved |  |  | 0.000\% | - | - |  |  |
| 2 | Reserved |  |  | 0.000\% | - | - |  |  |
| 3 | Reserved |  |  | 0.000\% | - | - |  |  |
| 4 | Reserved |  |  | 0.000\% | - | - |  |  |
| 5 | Reserved |  |  | 0.000\% | - | - |  |  |
| 6 | Reserved |  |  | 0.000\% | - | - |  |  |
| 7 | Reserved |  |  | 0.000\% | - | - |  |  |
| 8 | Reserved |  |  | 0.000\% | - | - |  |  |
| 9 | Reserved |  |  | 0.000\% | - | - |  |  |
| 10 | Reserved |  |  | 0.000\% | - | - |  |  |
| 11 | Reserved |  |  | 0.000\% | - | - |  |  |
| 12 | Reserved |  |  | 0.000\% | - | - |  |  |
| 13 | Reserved |  |  | 0.000\% | - | - |  |  |


| 14 | Reserved | $0.000 \%$ | - |
| :--- | :--- | :--- | :--- |
| 15 | Reserved | $0.000 \%$ | - |
| 16 | Reserved | $0.000 \%$ | - |
| 17 | Reserved | $0.000 \%$ | - |
| 18 | Reserved | $0.000 \%$ | - |
| 19 | Reserved | $0.000 \%$ | - |
| 20 | Reserved | $0.000 \%$ | - |
| 21 | Reserved | $0.000 \%$ | - |
| 22 | Reserved | $0.000 \%$ | - |
| 23 | Reserved | $0.000 \%$ | - |
| 24 | Reserved | $0.000 \%$ | - |
| 25 | Reserved | $0.000 \%$ | - |
| 26 | Reserved | $0.000 \%$ | - |
| 27 | Reserved | $0.000 \%$ | - |
| 28 | Reserved | $0.000 \%$ | - |
| 29 | Reserved | Reserved | $0.000 \%$ |
| 30 | Reserved | $0.000 \%$ | - |
| 32 | Reserved | $0.000 \%$ | - |
| 10 |  |  |  |

## El Paso Electric Company

## Worksheet A3-2

## Accumulated Deferred Income Taxes/Accumulated Deferred Investment Tax Credits - Details

 Actuals - For the 12 months ended 12/31/yyyy

| 46 | Reserved | 0.000\% | - | - |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 47 | Reserved | 0.000\% | - | - |  |  |
| 48 | Reserved | 0.000\% | - | - |  |  |
| 49 | Reserved | 0.000\% | - | - |  |  |
| 50 | Reserved | 0.000\% | - | - |  |  |
| 51 | Reserved | 0.000\% | - | - |  |  |
| 52 | Reserved | 0.000\% | - | - |  |  |
| 53 | Reserved | 0.000\% | - | - |  |  |
| 54 | Reserved | 0.000\% | - | - |  |  |
| 55 | Total Account 190 (234.8.b\&c) |  | - | - |  |  |
|  | Tax Reg Asset / Liab Adjustments (Note C) |  |  |  |  |  |
| 56 | Reserved | 0.000\% | - | - | No |  |
| 57 | Reserved | 0.000\% | - | - | No |  |
| 58 | Total Account 190 After Adjustments |  | 0 | - | - | - |
| 59 | Prorated Balances |  | - | - |  |  |
| 60 | Tax Reg Asset / Liab Adjustments |  | - | - |  |  |
| 61 | Prorated Account 190 Balances After Adjustments |  | - | - |  |  |
| 62 | Non-Prorated Balances |  | - | - |  |  |
| 63 | Tax Reg Asset / Liab Adjustments |  | - | - |  |  |
| 64 | Non-Prorated Account 190 Balances After Adjustments |  | - |  |  |  |

## El Paso Electric Company

Worksheet A3-2
Accumulated Deferred Income Taxes/Accumulated Deferred Investment Tax Credits - Details
Actuals - For the 12 months ended 12/31/yyyy

| No. | (a) | mmmуууу <br> (b) | mmmуууу <br> (c) | (e) | $\begin{gathered} \text { mmm-yyyy } \\ \text { (f) } \\ \hline \end{gathered}$ | $\begin{gathered} \text { mmm- } \\ \text { уууу } \\ (\mathrm{g}) \\ \hline \end{gathered}$ | (h) | 3 of 5 <br> (i) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ACCOUNT 282 ACCUMULATED DEFERRED INCOME TAXES - OTHER PROPERTY (Enter Negative) |  |  |  |  |  |  |  |
| 65 | Reserved |  |  | 0.000\% | - | - |  |  |
| 66 | Reserved |  |  | 0.000\% | - | - |  |  |
| 67 | Reserved |  |  | 0.000\% | - | - |  |  |
| 68 | Reserved |  |  | 0.000\% | - | - |  |  |
| 69 | Reserved |  |  | 0.000\% | - | - |  |  |
| 70 | Reserved |  |  | 0.000\% | - | - |  |  |
| 71 | Reserved |  |  | 0.000\% | - | - |  |  |
| 72 | Reserved |  |  | 0.000\% | - | - |  |  |
| 73 | Total Account 282 (274.2.b \& 275.2.k) | - | - |  | - | - |  |  |
|  | Tax Reg Asset / Liab Adjustments (Note C) |  |  |  |  |  |  |  |
| 74 | Reserved |  |  | 0.000\% | - | - |  |  |
| 75 | Reserved | - | - | 0.000\% | - | - |  |  |
| 76 | Total Account 282 After Adjustments Items |  |  |  | - | - |  |  |
| 77 | Prorated Balances |  |  |  | - | - |  |  |
| 78 | Tax Reg Asset / Liab Adjustments |  |  |  | - | - |  |  |

81 Tax Reg Asset / Liab Adjustments


Non-Prorated Account 282 Balances After
82 Adjustments

## ACCOUNT 283 ACCUMULATED DEFERRED INCOME TAXES - OTHER (Enter Negative)

| 83 | Reserved |
| :--- | :--- |
| 84 | Reserved |
| 85 | Reserved |
| 86 | Reserved |
| 87 | Reserved |
| 88 | Reserved |
| 89 | Reserved |
| 90 | Reserved |
| 91 | Reserved |
| 92 | Reserved |
| 93 | Reserved |
| 94 | Reserved |
| 95 | Reserved |
| 96 | Reserved |
| 97 | Reserved |
| 98 | Reserved |

```
0.000% -
0.000%
0.000% -
0.000% -
0.000%
0.000%
0.000%
0.000%
0.000%
0.000% -
0.000%
0.000%
0.000%
0.000%
0.000%
0.000% -
```


## 99 Reserved

100 Reserved

## Worksheet A3-2

## Accumulated Deferred Income Taxes/Accumulated Deferred Investment Tax Credits - Details

## Actuals - For the 12 months ended 12/31/yyyy

| No. | (a) | $\begin{gathered} \text { mm-yyyy } \\ \text { (b) } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Dec-2020 } \\ \text { (c) } \\ \hline \end{gathered}$ | (e) | $\begin{gathered} \text { mm-yyyy } \\ \text { (f) } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Dec-2020 } \\ (\mathrm{g}) \\ \hline \end{gathered}$ | (h) | 4 of 5 <br> (i) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 101 | Reserved |  |  | 0.000\% | - | - |  |  |
| 102 | Reserved |  |  | 0.000\% | - | - |  |  |
| 103 | Reserved |  |  | 0.000\% | - | - |  |  |
| 104 | Reserved |  |  | 0.000\% | - | - |  |  |
| 105 | Reserved |  |  | 0.000\% | - | - |  |  |
| 106 | Reserved | - | - | 0.000\% | - | - |  |  |
| 107 | Reserved | - | - | 0.000\% | - | - |  |  |
| 108 | Reserved | - | - | 0.000\% | - | - |  |  |
| 109 | Reserved | - | - | 0.000\% | - | - |  |  |
| 110 | Reserved | - | - | 0.000\% | - | - |  |  |
| 111 | Reserved | - | - | 0.000\% | - | - |  |  |
| 112 | Reserved | - | - | 0.000\% | - | - |  |  |
| 113 | Reserved | - | - | 0.000\% | - | - |  |  |
| 114 | Reserved | - | - | 0.000\% | - | - |  |  |
| 115 | Reserved | - | - | 0.000\% | - | - |  |  |
| 116 | Reserved | - | - | 0.000\% | - | - |  |  |
| 117 | Reserved | - | - | 0.000\% | - | - |  |  |
| 118 | Reserved |  |  | 0.000\% |  |  |  |  |



## El Paso Electric Company <br> Worksheet A3-2 <br> Accumulated Deferred Income Taxes/Accumulated Deferred Investment Tax Credits - Details Actuals - For the $\mathbf{1 2}$ months ended 12/31/yyyy

Notes:
A Beginning of Year ("BOY") balance is end of previous year balance per FERC Form No. 1.
B End of Year ("EOY") balance is end of current year balance per FERC Form No. 1.
C The balances in Accounts 190, 281, 282 and 283, as adjusted by any amounts associated with tax-related regulatory assets and liabilities other than excess / deficient deferred income taxes ("EDIT"). EDIT is calculated in schedules A8-1 and A8-2 and presented in Att-H separately from ADIT.
D Each ADIT item is categorized into 1 of 7 categories. The selected category will determine the Allocator applied to the ADIT balance.

1) Prod: The ADIT balance is $100 \%$ related to production of electricity and the NA Allocator is applied.
2) Retail: The ADIT balance is $100 \%$ related to retail operations and the NA Allocator is applied.
3) ONT: Other $100 \%$ Non-Transmission (Items other than Prod \& Retail) related ADIT for which the NA Allocator is applied. Such items shall include:

- ADIT related to the Income Tax Regaultory Assets and Liabilities
- Any other ADIT if not separately removed in other categories that relates to regulatory assets and liabilities that are not included in rate base.

4) Trans: The ADIT balance is $100 \%$ related to transmission operations and the DA Allocator is applied.
5) Plant: The ADIT balance is related to Property, Plant, \& Equipment "PP\&E" and the NP Allocator is applied.
6) NPO: ADIT balances other than PP\&E where the NP Allocator is applied.
7) Labor: The ADIT balance is labor related and the W/S Allocator is applied.

E Each ADIT Item must be categorized into balances that require proration and those that do not. ADIT items with a "Plant" Explanation code will be designated "Yes" for proration treatment and all other Items will be designated "No".
F The Company has elected and applied the second option for accounting for investment tax credits ("ITC") under Internal Revenue Code 46(f) and the regulations thereunder to apply a cost of service adjustment to reduce tax expense no more rapidly than ratably. Under option 2, there is no rate base reduction for the unamortized balance of the ITC.

## El Paso Electric Company

Page 1 of 4
Worksheet A4
Rate Base Worksheet
Actuals - For the 12 months ended 12/31/yyyy


| 19 | April |
| :--- | :--- |
| 20 | May |
| 21 | June |
| 22 | July |
| 23 | August |
| 24 | September |
| 25 | October |
| 26 | November |
| 27 | December |

Average of the 13
Monthly Balances

|  |
| :--- | :--- | :--- | :--- | :--- |




El Paso Electric Company
Worksheet A4
Rate Base Worksheet
Actuals - For the 12 months ended 12/31/yyyy


| $\begin{gathered} \text { Line } \\ \text { No } \end{gathered}$ |  | Working Capital |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Month <br> (a) | Materials \& Supplies: Transmission Plant <br> (b) | Materials \& Supplies: Stores Expense Undistributed (c) | Materials \& Supplies: Construction <br> (d) | Materials \& Supplies <br> (e) | Prepayments <br> (f) |
|  | FN1 Reference for Dec | 227.8.c | 227.16.c | 227.5.c | Total (Note E) | 111.57.c |
|  | Allocator | 1.00000 | - | - |  |  |
| 15 | December Prior Year |  |  | - | - |  |
| 16 | January |  |  |  | - |  |
| 17 | February |  |  |  | - |  |
| 18 | March |  |  |  | - |  |
| 19 | April |  |  |  | - |  |
| 20 | May |  |  |  | - |  |
| 21 | June |  |  |  | - |  |
| 22 | July |  |  |  | - |  |
| 23 | August |  |  |  | - |  |
| 24 | September |  |  |  | - |  |
| 25 | October |  |  |  | - |  |
| 26 | November |  |  |  | - |  |
| 27 | December |  |  |  | - |  |
| 28 | Average of the 13 Monthly Balances - |  | - | - | - | - |

## El Paso Electric Company <br> Worksheet A4 <br> Rate Base Worksheet <br> Actuals - For the 12 months ended 12/31/yyyy

|  | Unfunded Reserves (Note F) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | (a) |  | (b) Amount | (c) <br> Allocation (Plant or Labor Allocator) | (d) <br> Amount Allocated, col. (b) x col.(c) |
| 2 |  | - |  | 0.000\% | - |
| 3 |  |  | - | 0.000\% | - |
| 4 |  |  | - | 0.000\% | - |
| 5 |  | - |  | 0.000\% | - |
| 6 |  | - |  | 0.000\% | - |
| 7 |  |  | - | 0.000\% | - |
| 8 |  | - |  | 0.000\% | - |
| 9 |  | - |  | 0.000\% | - |

Recovery of any regulatory asset is limited to such regulatory assets authorized by FERC.
B Recovery of abandoned plant is limited to any abandoned plant recovery authorized by FERC and will be zero until the Commission accepts or approves recovery of the cost of abandoned plant.
C Includes only CWIP authorized by the Commission for inclusion in rate base. The annual report filed pursuant to the Protocols will include for each project under construction (i) the CWIP balance eligible for inclusion in rate base; (ii) the CWIP balance ineligible for inclusion in rate base; and (iii) a demonstration that AFUDC is only applied to the CWIP balance that is not included in rate base. The annual report will reconcile the project-specific CWIP balances to the total Account 107 CWIP balance reported on p. $216 . b$ of the FERC Form 1. The demonstration in (iii) above will show that monthly debts and credits do not contain entries for AFUDC for each CWIP project in rate base.

E M\&S allocation: Direct Assign 227.8.c at $100 \%$, plus 227.1.c and 227.5.c allocated on Labor (W/S) from Actual Attachment H page 4 line 16.
F The Formula Rate shall include a credit to rate base for unfunded reserves within accounts 228.2, 242, and 253 (funds collected from customers that (1) have not been set aside in a trust, escrow or restricted account; (2) whose balance are collected from customers through cost accruals to accounts that are recovered under the Formula Rate; and (3) exclude the portion of any balance offset by a balance sheet account). Each unfunded reserve will be included on lines 1-9 above. The allocator in Col. (c) will be the same allocator used in the formula for the cost accruals to the account that is recovered under the Formula Rate. Reserves can be created by capital contributions from customers, by debiting the reserve and crediting a liability, or a combination of customer capital contribution and offsetting liability. Only the portion of a reserve that was created by customer contributions should be a reduction to rate base. Amounts will be calculated on 13-month average balances.

## El Paso Electric Company <br> Worksheet A5 <br> Depreciation Rates

Page 1 of 1

| Line <br> No. |
| :---: |
| 1 |
| 2 |
| 3 |
| 4 |
| 5 |
| 6 |
| 7 |
| 8 |


| Plant Type |  | Rates |
| :---: | :---: | :---: |
| Transmission Plant |  |  |
| 350.00 | Land Rights | 0.99\% |
| 352.00 | Structures and Improvements | 1.33\% |
| 353.00 | Station Equipment | 1.00\% |
| 354.00 | Towers and Fixtures | 1.29\% |
| 355.00 | Poles and Fixtures | 1.76\% |
| 356.00 | Overhead Conductors \& Devices | 1.36\% |
| 359.00 | Roads and Trails | 1.05\% |
| General Plant |  |  |
| 390.00 | Structures and Improvements-Other | 1.06\% |
| 390.00 | Stanton Tower | 1.80\% |
| 390.00 | System Operations Building | 2.29\% |
| 390.00 | Eastside Operations Center | 1.74\% |
| 391.00 | Office Furniture and Equipment | 1.71\% |
| 391.20 | Network Equipment | 20.00\% |
| 392-C0 | Transportation Equipment - Remotes | 10.37\% |
| 392.C1 | Transportation Equipment - C1 0-8,500 LBS | 10.37\% |
| 392.C2 | Transportation Equipment - C2 8,500-10,000 LBS | 10.37\% |
| 392.C3 | Transportation Equipment - C3 10,001-14,000 LBS | 10.37\% |
| 392.C4 | Transportation Equipment -C4 14,001-16,000 LBS | 10.37\% |
| 392.C5 | Transportation Equipment - C5 16,001-19,500 LBS | 10.37\% |
| 392.C6 | Transportation Equipment - C6 19,501-26,000 LBS | 10.37\% |
| 392.C7 | Transportation Equipment - C7 26,001-33,000 LBS | 10.37\% |
| 392.C8 | Transportation Equipment - C8 over 33,000 | 10.37\% |
| 392.C9 | Transportation Equipment - C9 Trailers | 10.37\% |
| 393.00 | Stores Equipment | 3.96\% |
| 394.00 | Tools, Shop and Garage Equipment | 3.83\% |
| 395.00 | Laboratory Equipment | 6.47\% |
| 396.00 | Power Operated Equipment | 4.58\% |
| 397.20 | Telecommunication Equipment | 6.48\% |
| 398.00 | Miscellaneous Equipment | 6.65\% |

## El Paso Electric Company

Worksheet A6
Divisor - Network Transmission Load
Actuals - For the 12 months ended 12/31/2020

| Line | Month | Transmission System Peak Load (MW) | Firm Network for Self (MW) | Firm <br> Network <br> Service for Others (MW) | Long-Term Firm Point to Point Reservations (MW) | Other <br> Long- <br> Term Firm Service (MW) | Short Term Firm Point to Point Reservation (MW) | Other Service (MW) | 12-CP <br> Average <br> (MW) <br> (Note A) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (a) <br> FN1 <br> Reference for Total | (b) <br> Sum Colm's (e) through (j) | (e) 400.17.e | (f) 400.17.f | (g) 400.17.g | (h) 400.17.h | (i) 400.17.i | (j) 400.17.j | (k) <br> Colm (b) - <br> (i) |
| 1 | January | 0 |  |  |  |  |  |  | 0 |
| 2 | February | 0 |  |  |  |  |  |  | 0 |
| 3 | March | 0 |  |  |  |  |  |  | 0 |
| 4 | April | 0 |  |  |  |  |  |  | 0 |
| 5 | May | 0 |  |  |  |  |  |  | 0 |
| 6 | June | 0 |  |  |  |  |  |  | 0 |
| 7 | July | 0 |  |  |  |  |  |  | 0 |
| 8 | August | 0 |  |  |  |  |  |  | 0 |
| 9 | September | 0 |  |  |  |  |  |  | 0 |
| 10 | October | 0 |  |  |  |  |  |  | 0 |
| 11 | November | 0 |  |  |  |  |  |  | 0 |
| 12 | December | 0 |  |  |  |  |  |  | 0 |
| 13 | Total | - | - | - | - | - | - | - | 0 |
| 14 | $12-\mathrm{CP}$ |  |  |  |  |  |  |  | - |

12-CP average includes all but Short Term Firm


|  | \$ | \$ | \$ | \$ | \$ |  | \$ | \$ | \$ | \$ | \$ | \$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15 | - | - | - | - | - | - | - | - | - | - | - | - |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 16 | - | - | - | - | - |  | - | - | - | - | - | - |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 17 | - | - | - | - | - | - | - | - | - | - | - | - |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 18 | - | - | - | - | - | - | - | - | - |  | - | - |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 19 | - | - | - | - | - | - | - | - | - | - | - | - |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 20 | - | - | - | - | - | - | - | - | - | - | - | - |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 21 | - | - | - | - | - | - | - | - | - | - | - | - |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 22 | - | - | - | - | - | - | - | - | - | - | - | - |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 23 | - | - | - | - | - | - | - | - | - | - | - | - |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 24 | - | - | - | - | - | - | - | - | - | - | - | - |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 25 | - | - | - | - | - | - | - | - | - | - | - | - |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 26 | - | - | - | - | - | - | - | - | - | - | - | - |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 27 | - | - | - | - | - | - | - | - | - | - | - | - |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 28 | - | - | - | - | - | - | - | - | - | - | - | - |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 29 | - | - | - | - | - | - | - | - | - | - | - | - |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 30 | - | - | - | - | - | - | - | - | - | - | - | - |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 31 | - | - | - | - | - | - | - | - | - | - | - | - |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 32 | - | - | - | - | - | - | - | - | - | - | - | - |

## Notes

A Special depreciation rates may be utilized for specific incentive transmission projects if approved by the FERC.
B Incentive ROE requires authorization by the Commission

## El Paso Electric Company

Worksheet A8-1
Excess / Deficient Deferred Income Taxes ('EDIT")
Actuals - For the 12 months ended 12/31/yyyy

Page 1 of 2

Proration Used for Projected Revenue Requirement Calculation

## EDIT included within

3

| Days in Period |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| (a) | (b) | (c) | (d) | (e) |
| Month | Days <br> in the <br> Mont <br> h | Number of Days Remainin $g$ in Year After Month's Accrual of Deferred Taxes | Total <br> Days <br> in <br> Futur <br> Portio n of <br> Test <br> Perio <br> d <br> (Line 18, Col <br> b) | Prorat ion Amou nt (Line s 6 to 17, Col c / Col d) |



December 31st balance Prorated Items

| (Worksheet P6-1.5h) |  |  |  |
| :--- | ---: | ---: | ---: |
| January | 31 | 335 | 365 | | 91.78 |
| ---: |
| Februar |



| Total |  | - |  | eet A8- | - |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Ending Balance-Not Subject to Proration | Worksheet P6-1.23.h | - | Ending Balance-Not Subject to Proration | Worksh eet A82.55.i <br> Worksh |  |
| Ending Balance-Subject to Proration | Worksheet P6-1.24.h | - | Ending Balance- <br> Subject to Proration | $\begin{aligned} & \text { eet A8- } \\ & \text { 2.61.i } \end{aligned}$ |  |
| Average |  |  |  | Line $17 \mathrm{Col} \mathrm{N} \mathrm{+}$ |  |
| Balance (See | Line $17 \mathrm{Col} \mathrm{N} \mathrm{+} \mathrm{(Lines} 20+23$ |  | Average Balance (See | (Lines $20+23 \mathrm{Col}$ |  |
| Note 6.) | ColN )/2 |  | Note 6.) | N)/2 |  |
| Reserve <br> d | Reser ved |  | Reserved | Reserve <br> d |  |
|  |  |  |  | (Line 25 |  |
| Amount for |  |  | Amount for | less line |  |
| Attachment H | (Line 25 less line 26) | - | Attachment H | 26) | - |

Page 2 of 2

## NOTES

Column J is the difference between projected monthly and actual monthly activity (Column I minus Column F). Specifically, if projected and actual activity under-projection (excess of actual activity over projected activity) and a positive in Column J represents over-projection (amount of projected activity that did not occur)
Column K preserves proration when actual monthly and projected monthly activity are either both increases or decreases. Specifically, if Column J is overprojected, enter Column G x [Column I/Column F]. If Column J is under-projected, enter the amount from Column G and complete Column L). In other situations, enter zero
Column L applies when (1) Column J is under-projected AND (2) actual monthly and projected monthly activity are either both increases or decreases.
3 Enter the amount from Column J. In other situations, enter zero.
Column M applies when (1) projected monthly activity is an increase while actual monthly activity is a decrease OR (2) projected monthly activity is a

Column N is computed by adding the prorated monthly activity, if any, from Column K to 50 percent of the portion of monthly activity, if any, from
5 Column $L$ or $M$ to the balance at the end of the prior month. The activity in columns $L$ and $M$ is multiplied by 50 percent to reflect averaging of rate base to the extent that the proration requirement has not been applied to a portion of the monthly activity.
For the non-property-related component of the balance, the Average Balance is computed using the average of beginning of year and end of year balance.

Projected and Actual monthly activity is computed based on the annual activity for the period, divided by 12 months.

## El Paso Electric Company

Worksheet A8-2
Accumulated Excess / Deficient Deferred Income Taxes ('EDIT")
Actuals - For the 12 months ended 12/31/yyyy


$\left.\begin{array}{llrl}12 & \text { Reserved } & 0.000 & - \\ 13 & \% & - & - \\ 14 & \text { Reserved } & 0.000 & - \\ \hline & \% & - & - \\ 15 & \text { Reserved } & 0.000 & - \\ \hline\end{array}\right)$


## El Paso Electric Company

Worksheet A8-2

## Accumulated Excess / Deficient Deferred Income Taxes ('EDIT")

Actuals - For the 12 months ended 12/31/yyyy

Page 2 of 2


| Line No. | Item | BOY <br> Balance <br> (Note D) | Current Period Amortization | Current <br> Period <br> Other <br> Activity <br> (Note C) | EOY <br> Balance (Note D) | Allocator | BOY <br> Allocated <br> Amount | Amorti zation Allocat ed | EOY <br> Allocat <br> ed <br> Amoun <br> t | Prorat ed (Yes/N o) (Note B) | Amort <br> Period or Method | Expla nation (Note A) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| 41 | Reserved | $0.000 \%$ |
| :--- | :--- | :--- |
| 42 | Reserved | $0.000 \%$ |
| 43 | Reserved | $0.000 \%$ |
| 44 | Reserved | $0.000 \%$ |
| 45 | Reserved | $0.000 \%$ |
| 46 | Reserved | $0.000 \%$ |
| 47 | Reserved | $0.000 \%$ |
| 48 | Reserved | $0.000 \%$ |
| 53 | Reserved | $0.000 \%$ |
| 54 | Reserved | $0.000 \%$ |

Total Non
Plant
Unprotect
55 ed

## PLANT EDIT INCLUDED WITHIN ACCOUNTS 182.3 \& 254

|  | PLANT EDIT INCLUDED WITHIN ACCOUNTS 182.3 \& 254 |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Reserved |  | $0.000 \%$ | - | - | - |  |
| Reserved |  | $0.000 \%$ | - | - | - |  |
| Reserved |  | $0.000 \%$ | - | - | - |  |
| Reserved |  | $0.000 \%$ | - | - | - |  |
| Reserved |  |  | $0.000 \%$ | - | - | - |
| Total |  |  | - | - | - |  |

## Total

Excess/Def
icient
Deferred
Income
Taxes

Each EDIT item is categorized into 1 of 7 categories. The selected category will will determine the Allocator applied to the EDIT balance.

1) Prod: The EDIT balance is $100 \%$ related to production of electricity and the NA Allocator is applied.
2) Retail: The EDIT balance is $100 \%$ related to retail operations and the NA Allocator is applied.
3) ONT: Other 100\% Non-Transmission (Items other than Prod \& Retail) related EDIT for which the NA Allocator is applied. Such items shall include:

- EDIT related to Pension and PBOP
- Any other EDIT if not separately removed in other categories that relates to regulatory assets and liabilities that are not included in rate base.

4) Trans: The EDIT balance is $100 \%$ related to transmission operations and the DA Allocator is applied.
5) Plant: The EDIT balance is related to Property, Plant, \& Equipment "PP\&E" and the NP Allocator is applied.
6) NPO: EDIT balances other than PP\&E where the NP Allocator is applied.
7) Labor: The EDIT balance is labor related and the W/S Allocator is applied.

Each EDIT Item must be categorized into balances that require proration and those that do not. EDIT items with a "Plant" Explanation code will be designated "Yes" for proration treatment and all other Items will be designated "No".
Includes the impact of tax rate changes enacted during the period.
EDIT balances exclude income tax gross-ups recorded to accounts 182.3 and 254

## El Paso Electric Company

Worksheet A9
Cost of Capital Worksheet
Actuals - For the 12 months ended 12/31/yyyy

| PROPRIETARY CAPITAL |  | Preferred Stock Issued (204) <br> (b) <br> 112.3.c | Unappropriated Undistributed Subsidiary Earnings (216.1) <br> (c) <br> 112.12.c | of $1 \quad$ Page 1 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { Line } \\ \text { No } \end{gathered}$ | Month <br> (a) |  |  |  |  |
|  |  |  |  | Accumulated Other Comprehensive Income (219) <br> (d) <br> 112.15.c | Total Proprietary Capital <br> (e) |
|  |  |  |  |  | 112.16.c |
| 1 | December Prior Year |  | - |  |  |
| 2 | January |  |  |  |  |
| 3 | February |  |  |  |  |
| 4 | March |  |  |  |  |
| 5 | April |  |  |  |  |
| 6 | May |  |  |  |  |
| 7 | June |  |  |  |  |
| 8 | July |  |  |  |  |
| 9 | August |  |  |  |  |
| 10 | September |  |  |  |  |
| 11 | October |  |  |  |  |
| 12 | November |  |  |  |  |
| 13 | December |  |  |  |  |
|  | Average of the |  |  |  |  |
| 14 |  |  | - | - | - |

## LONG TERM DEBT

$\left.\begin{array}{cccccc} \\ & & \text { Total Long Term } \\ \text { Debt }(\mathbf{2 2 1}-\mathbf{2 2 2}+\end{array}\right)$


## El Paso Electric Company <br> Worksheet TU <br> True-Up Adjustment <br> Actuals - For the $\mathbf{1 2}$ months ended 12/31/yyyy



Page 1 of 3

| Year | Action |
| :---: | :---: |
| Year 0 | EPE populates the formula rate using projected costs for Year 1 |
|  | Post results |
| Year 0 | of Step 1 |
|  | Results of Step 2 go |
| Year 1 | into effect. |
| Year 1 | EPE populates the formula rate using projected costs for Year 2 |
|  | Post results |
| Year 1 | of Step 4 |
|  | Results of Step 5 go |
| Year 2 | into effect. |
| Year 2 | EPE populates the formula rate using actual costs for Year 1 |
|  | EPE compiles actual formula rate revenues |
| Year 2 | booked for Year 1 |
| Year 2 | Calculate the difference between the formula rate calculated in Step 7 and Step 8 |
|  | Post results from |
| Year 2 | Step 8 and Step 9 |
| Year 2 | EPE populates the formula rate using projected costs for Year 3, including True-Up Adj for Year 1 |
| Year 2 | Post results of Step 11 |


|  |  |
| :--- | :---: |
| Notes A and | $\$$ |
| E | - |
| Notes B and | $\$$ |
| E | - |
| Notes $C$ and | $\$$ |



# El Paso Electric Company <br> Worksheet TU <br> True-Up Adjustment <br> Actuals - For the 12 months ended 12/31/yyyy 

## Interest Calculation



An over or under collection will be recovered pro-rata over year collected, held for one year, and returned prorata over next year:


|  |  |  |  |  |  | \$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 45 | yyyy | June | - | 0.00\% | 7 | - |  |
|  |  |  |  |  |  |  |  |
| 46 | уууу | July | - | 0.00\% | 6 | \$ |  |
|  |  |  |  |  |  |  |  |
| 4 | уууу | August | - | 0.00\% | 5 | \$ |  |
|  |  |  |  |  |  |  |  |
| 48 | yyyy | September | - | 0.00\% | 4 | \$ |  |
|  |  |  |  |  |  |  |  |
| 49 | yyyy | October | - | 0.00\% | 3 | - |  |
|  |  |  |  |  |  |  |  |
| 50 | yyyy | November | - | 0.00\% | 2 | \$ |  |
|  |  |  |  |  |  |  |  |
| 51 | yyyy | December | - | 0.00\% | 1 | - |  |
|  |  |  |  |  |  | \$ | \$ |
| 52 |  |  |  |  |  | - | - |
| 53 |  |  |  |  |  |  |  |
|  |  |  |  |  |  | \$ | \$ |
| 54 | yyyy | Jan-Dec |  | 0.00\% | 12 | - | - |

## El Paso Electric Company <br> Worksheet TU <br> True-Up Adjustment <br> Actuals - For the 12 months ended 12/31/yyyy

| Line |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \# |  |  | $\begin{gathered} \text { True Up } \\ \text { plus } \\ \text { Interest } \end{gathered}$ | Interest Rate | Page 3 of 3 |  |  |
|  |  |  |  |  | Total Interest | Amoritization | Balance Due/Owed |
| 55 |  |  | \$ |  | \$ | \$ | \$ |
| 56 | yyyy | January | - | 0.00\% | - | - | - |
|  |  |  | \$ |  | \$ | \$ | \$ |
| 57 | yyyy | February | - | 0.00\% | - | - | - |
|  |  |  | \$ |  | \$ | \$ | \$ |
| 58 | yyyy | March | - | 0.00\% | - | - | - |
|  |  |  | \$ |  | \$ | \$ | \$ |
| 59 | yyyy | April | - | 0.00\% | - | - | - |
|  |  |  | \$ |  | \$ | \$ | \$ |
| 60 | yyyy | May | - | 0.00\% | - | - | - |
|  |  |  | \$ |  | \$ | \$ | \$ |
| 61 | yyyy | June | - | 0.00\% | - | - | - |
|  |  |  | \$ |  | \$ | \$ | \$ |
| 62 | yyyy | July | - | 0.00\% | - | - | - |
|  |  |  | \$ |  | \$ | \$ | \$ |
| 63 | yyyy | August | - | 0.00\% | - | - | - |
|  |  |  | \$ |  | \$ | \$ | \$ |
| 64 | yyyy | September | - | 0.00\% | - | - | - |
|  |  |  | \$ |  | \$ | \$ | \$ |
| 65 | yyyy | October | - | 0.00\% | - | - | - |
|  |  |  | \$ |  | \$ | \$ | \$ |
| 66 | yyyy | November | - | 0.00\% | - | - | - |
|  |  |  | \$ |  | \$ | \$ | \$ |
| 67 | yyyy | December | - | 0.00\% | - | - | - |
|  |  |  |  |  | \$ |  |  |
| 68 |  |  |  |  | - |  |  |
| 69 |  |  |  |  |  |  |  |
|  |  |  |  | Line $52+$ Line 54 + | \$ |  |  |
| 70 |  |  |  | Line 68 | - |  |  |

[^8]A Actual Net Revenue Requirement for rate year subject to True Up from Actual Attachment H, line 7.

B Actual Revenues for transmission service as booked, including amounts noted on FERC Form No. 1, pages 328-330, and other amounts included in supporting documentation.

C Prior Period Adjustment, if any, is calculated to the same timing basis as balance of true up (i.e. before interest applied on line for the Prior Period Adjustment calculation will be included in supporting documentation.
D Interest rates posted by FERC; this section to be completed each year for most recent four quarters
E If Rate Year 1 is a partial rate year, the Actual Revenue Requirement, Actual Revenues, Prior Period Adjustment (if any), and Levelized True Up before Interest will reflect only those months for which the rate was in effect. Otherwise, these amounts will all reflect a full 12 month period.

## El Paso Electric Company

Formula Rate
Non-Levelized

Line
No

GROSS
REVENUE
REQUIREMENT
1 (page 3, line 29)


Allocated
Amount

| Allocator |  |  |
| :---: | :---: | :---: |
| TP | 0.00000 | - |
| TP | 0.00000 | - |
| TP | 0.00000 | - |
| TP | 0.00000 | - |

Estimated - For the 12 months ended 12/31/yyyy

|  | without True Up <br> Adjustment |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | DIVISOR | Worksheet P3, <br> Line $15 \times 1000$ |  |  |
| 8 | Divisor (kW) |  |  |  |
| 9 |  |  |  |  |
| 10 | RATES |  |  |  |
|  | Annual |  | \$ |  |
| 11 |  |  | - | /kW-year |
|  |  |  | \$ |  |
| 12 | Monthly | 12 months/year | - | /kW-month |
|  |  |  | \$ |  |
| 13 | Weekly | 52 weeks/year | - | /kW-week |
|  |  |  | \$ |  |
| 14 | Daily On-Peak | 6 days/week | - | /kW-day |
|  |  |  | \$ |  |
| 15 | Daily Off-Peak | 7 days/week | - | /kW-day |
|  |  |  | \$ |  |
| 16 | Hourly On-Peak | 16 hours/day | - | /MW-hour |
|  |  |  | \$ |  |
| 17 | Hourly Off-Peak | 24 hours/day | - | /MW-hour |

# Projected Attachment H 

## El Paso Electric

## Company

Formula Rate -
Non-Levelized
(1)

| Line | (1) | (2) | (3) |
| :---: | :---: | :---: | :---: |
|  |  | Reference | Company Total |
|  |  | Page, Line, Col. |  |
| No. | RATE BASE: GROSS PLANT |  |  |
|  |  |  |  |
|  |  |  |  |
| 1 |  | Worksheet P1, Line | - |
|  | Transmission | 30, Col. (c) |  |
|  | General \& | Act Att-H, Page 2, | - |
| 2 | Intangible | Line 4, Col. (3) |  |
|  | TOTAL GROSS | (Sum Lines 1 and | - |
| 3 | PLANT | 2) |  |
|  | ACCUMULATED |  |  |
|  | DEPRECIATION |  |  |
| 4 |  | Worksheet P1, Line | - |
|  | Transmission | 30, Col. (f) |  |
|  | General \& | Act Att-H, Page 2, |  |
| 5 | Intangible | Line 10, Col. (3) | - |
|  | TOTAL ACCUM. | (Sum Lines 4 and | - |
| 6 | DEPRECIATION | 5) |  |
|  | NET PLANT IN |  |  |
|  | SERVICE |  |  |
| 7 | Transmission | (Line 1 - Line 4) | - |
|  | General \& |  |  |
| 8 | Intangible | (Line 2 - Line 5) | - |
|  | TOTAL NET | (Sum Lines 7 and | - |
| 9 | PLANT | 8) |  |
|  | CWIP Approved | Worksheet P7, |  |
| 10 | by FERC Order | Page 1, Line 14, | - |

(4)

Allocator
TP $\quad 0.00000$

W/S $\quad 0.00000$ $\qquad$
Estimated - For
the 12 months
ended $12 / 31$ /yyyy

## Transmission

(Col 3 times Col 4 )
TP 0.00000
W/S 0.00000
$\qquad$





|  | Amortization |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Deficient / <br> (Excess) Deferred Income Tax | (Line |  |  |  |  |
| 24a | Adjustment | 24) | - | DA | 1.00000 | - |
|  | Permanent | Actual Attachment |  |  |  |  |
| 25 | Differences | H, Page 3, Line 25 | - |  |  |  |
|  | Tax Effect of Permanent | (Line 21 times 23 |  |  |  |  |
| 25a | Differences | times Line 25) | - | NP | - | - |
|  | Income Tax on Equity and | (Line 22 times Line |  |  |  |  |
| 26 | Incentive Return | 28) | - |  |  | - |
| 27 | Total Income Taxes | $\begin{aligned} & \text { (Sum of Lines 24a, } \\ & 25 \mathrm{a}, 26 \text { ) } \end{aligned}$ | - |  |  | - |
|  | RETURN |  |  |  |  |  |
| 28 | Rate Base * Rate of Return + Incentive Return | (Page 2, Line 24 x Page 4, Line 31, Col. (5)) + Page 4, Line 32 | - |  |  | - |
| 29 | REV. <br> REQUIREMENT | $\begin{aligned} & \text { (Sum of Lines 7, } \\ & 12,20,27,28 \text { ) } \end{aligned}$ | - |  |  | - |

## Projected Attachment H

## El Paso Electric

Company
Rate Formula
Template

Formula Rate -
Non-Levelized
(1)
(2)
(3)
(4)

## SUPPORTING CALCULATIONS AND NOTES

## Line

TRANSMISSION
PLANT
INCLUDED IN
No. RATES
Total transmission Actual Attachment
1 plant
Less transmission
plant excluded
from Wholesale
2 Rates
Actual Attachment
Less transmission plant included in OATT Ancillary
3 Services $\quad$ H, Page 4, Line 3

Transmission plant
included in
(Line 1 less Lines 2
4 Wholesale Rates \& 3)

Percentage of
transmission plant
included in
(Line 4 divided by
5 Wholesale Rates Line 1)
TRANSMISSION
EXPENSES
Total transmission (Page 3, Line 1,
expenses
Col. 3)
Less transmission Actual Attachment

Estimated - For the 12 months ended $12 / 31 /$ yyyy
(5)


TP=
0.00000



# Projected Attachment $\mathbf{H}$ 

## El Paso Electric <br> Company

| Formula Rate - | Rate Formula | 12 months |
| :--- | :---: | ---: |
| Non-Levelized | Template | ended |
|  | $12 / 31 / y y y y$ |  |


|  | (1) | (2) | (3) |  | ) | (5) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Line |  |  |  |  |  | Transmission |
| No. |  | Reference | Company Total | Allocator |  | $(\mathrm{Col} 3$ times Col 4$)$ |
|  | GROSS PLANT |  |  |  |  |  |
|  | ALLOCATOR |  |  |  |  |  |
|  | (GP) |  | \$ |  |  |  |
| 1 | Production | Company Records | - | NA |  |  |
| 2 | Transmission | Worksheet P1, Line 30, Col. (c) | - | TP | 0.00000 | - |
| 3 | Distribution General \& | Company Records Actual Attachment | - | NA | 0.00000 | - |
|  |  |  |  |  |  |  |
| 4 | Intangible | H, Page 2, Line 4 Actual Attachment | - | W/S |  |  |
| 5 | Common | H, Page 2, Line 5 | - | CE | 0.00000 | - |
| 6 | Total | (Sum of Lines 1-5) | 0 | GP= | 0.00000 | - |
|  | NET PLANT |  |  |  |  |  |
|  | ALLOCATOR |  |  |  |  |  |
|  | (NP) |  | \$ |  |  |  |
| 7 | Production | Company Records | - | NA |  |  |
| 8 | Transmission | Worksheet P1, Line |  | TP | 0.00000 | - |



General Note: References to pages in
this formulary rate are indicated as:
(page\#, line\#, col.\#)

Note
Letter
A The currently effective income tax rate, where FIT is the Federal income tax rate; SIT is the State income tax rate, and $\mathrm{p}=$ "the percentage of federal income tax deductible for state income taxes". If the utility is taxed in more than one state it must attach a work paper showing the name of each state and how the blended or composite SIT was developed.

| Inputs |  | $0.000 \%$ |  |
| :--- | :--- | :--- | :--- |
| Required: | FIT $=$ |  | (Federal Income Tax Rate) |
|  | $\mathrm{SIT}=$ | $0.000 \%$ | (State Income Tax Rate or Composite SIT) |
|  | $\mathrm{p}=$ | $0.000 \%$ | (percent of federal income tax deductible for state purposes) |

## El Paso Electric Company

Worksheet P1
Projected Transmission Plant
Estimated - For the 12 months ended 12/31/yyyy
Page 1 of 2

| Line | Month <br> \&Year | Projected Plant Additions | Plant in Service | Plant <br> Depreciation <br> Accrual (Note B) | Depr Rate <br> (Note A) | Plant <br> Accumulated <br> Depreciation | Net Projected Plant |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (a) | (b) | Wkst A4, Page 1, Lines 13 minus 27 | (d) | (e) | (f) <br> Wkst A4, Page 2, Lines $13+27$ - 41 | (g) |
| 1 |  |  | - |  |  | - | - |
| 2 |  |  | \$ | \$ |  | - | \$ |
| 3 |  |  | \$ | \$ |  | - | \$ |
| 4 |  |  | \$ | \$ |  | - | \$ |
| 5 |  |  | \$ | \$ |  | - | \$ |
| 6 |  |  | \$ | \$ |  | - | \$ |
| 7 |  |  | \$ | \$ |  | - | \$ |
| 8 |  |  | \$ | \$ |  | - | \$ |
| 9 |  |  | \$ | \$ |  | - | \$ |
| 10 |  |  | \$ | \$ |  | - | \$ |
| 11 |  |  | \$ | \$ |  | - | \$ |
| 12 |  |  | \$ | \$ |  | - | \$ |
| 13 |  |  | \$ | \$ |  | - | \$ |
| 14 |  |  | \$ | \$ |  |  | \$ |


|  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| 15 | - | - | - |
| 16 | $\$$ | $\$$ | - |

Page 2 of 2

Notes:
A In periods where the company will use the actual depreciation rate, enter "A". The actual depreciation rate is calculated as follows: -Actual Attachment H, page 3, line 8) divided by actual transmission plant in service (Actual Attachment H, page 2, line 2) divided by 12 months.

In periods where the company has submitted new depreciation rates for FERC approval, enter "N". The new depreciation rate is calculated as follows:
-The annual composite transmission depreciation rate developed within a new depreciation study, divided by 12 months.

| Current Depreciation Rate (A) | $0.0000 \%$ |
| ---: | :--- |
| New Depreciation Rate (N) | $0.0000 \%$ |

The depreciation accrual is based on the average of the current and prior month Plant in Service, times the actual "A" or new "N" depreciation rate. In the initial year rates are set, use Lines 26 and 28, thereafter use Lines 27 and 29, calculated on line 30.


| 12 | Less: Actual PBOP expense | Actual Attachment H, Page 3, Line 4e | - |
| :---: | :---: | :---: | :---: |
|  |  | Actual Attachment H, Page 3, Line |  |
| 13 | Common | 5 | - |
|  |  | Actual Attachment H, Page 3, Line |  |
| 14 | Hold Harmless Expense Adjustment | 6 | - |
| OTHER TAXES (Excluding Property Taxes) |  |  |  |
| LABOR RELATED |  |  |  |
|  |  | Actual Attachment H, Page 3, Line |  |
| 15 | Payroll | $13$ | - |
|  |  | Actual Attachment H, Page 3, Line14 |  |
| 16 | Highway and vehicle |  | - |
| 17 | PLANT RELATED |  |  |
|  | Gross Receipts | Actual Attachment H, Page 3, Line |  |
| 18 |  |  | - |
|  |  | Actual Attachment H, Page 3, Line |  |
| 19 | Other | 18 | - |
|  |  | Actual Attachment H, Page 3, Line |  |
| 20 | Payment in Lieu of Taxes | 19 | - |

## El Paso Electric Company <br> Worksheet P2 <br> Projected Expenses <br> Estimated - For the 12 months ended 12/31/yyyy

Page 2 of 2
(a)
(b)
(c)
(d)
(e)

PROPERTY TAXES

Item $\quad$ Reference $\quad$ Actual $\quad$| Charge |
| :--- |
| Factor |$\quad$ Projected

## PROPERTY TAXES

1 Net Plant in Service for Actual (Note C)
200.15.b
200.15.b
Actual Attachment H, Page 3, Line
16
$\square$


## NOTES:

A Charge Factor: Actual O\&M expenses \& Other Taxes divided by total actual net plant from Actuals Attachment H. This is used as one of the basis to calculate projected O\&M costs and projected Other Taxes.
B -When the Net Plant Change \% falls within a minimum or maximum threshold, Projected Costs = Row 2, Col. (f) times Col. (d)
-When the Net Plant Change \% is greater than the maximum threshold, Projected Costs $=$ Col. (c) times Maximum Percentage
-When the Net Plant Change \% is less than the minimum threshold, Projected Costs $=$ Col. (c ) times Minimum Percentage

Net Plant Change \%
Maximum percentage change applied

Minimum percentage change applied

Property tax expenses relate to plant balances as of December 31, 2 Years prior to the
C expense period.
FERC Form 1 Reporting Period for Actual yyyy
FERC Form 1 Reporting Period for Projected

|  | Use Calculated Factors in column |
| :--- | :--- |
| $0.0 \%$ | 4 |
| $0.0 \%$ | Use Maximum Percentage Change |
|  | Use |
|  | Minimum |
|  | Percentage |
| $0.0 \%$ | Change |

Use Maximum Percentage Change

## Result:

Transmission rate case cost amortization balance is the remaining balance of total projected rate case costs
D amortized over a 3 year period.

## El Paso Electric Company

Worksheet P3
Projected Divisor - Network Transmission Load
Page 1 of 1
Line No.

Peak Network Load (MW) During:

| a | b | c | d |
| :---: | :---: | :---: | :---: |
| Month | Actual Transmission Network Load (Worksheet A-6) | Percentage of Maximum Transmission Network Load | Projected Transmission Network Load (Col c x Line <br> 1) |
| January | - | 0.00\% | - |
| February | - | 0.00\% | - |
| March | - | 0.00\% | - |
| April | - | 0.00\% | - |
| May | - | 0.00\% | - |
| June | - | 0.00\% | - |
| July | - | 0.00\% | - |
| August | - | 0.00\% | - |
| September | - | 0.00\% | - |
| October | - | 0.00\% | - |
| November | - | 0.00\% | - |
| December | - | 0.00\% | - |
| Total | - |  | - |
| 12-CP | - |  | - |

Note:
Maximum Transmission Network Load is the maximum hourly load measured on the system for the listed year at the time of the Projection.

## El Paso Electric Company

## Worksheet P4

Projected Incentive Plant Worksheet
Estimated - For the 12 months ended 12/31/yyyy

| Line |  |  |  |  |  | Projects |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  |  |  |  |  | Project: | Project 1 |  |  | Project: | Project 2 |  |  |
| 2 |  |  |  |  |  | Proj. ID n/a |  |  |  | Proj. ID | n/a |  |  |
|  |  |  |  |  |  | Deprec. <br> Rate/Month: |  |  |  | Deprec. <br> Rate/Month: |  |  |  |
| 3 |  |  |  |  |  |  | 0.00\% |  | A) (Note |  | 0.00\% |  | A) (Note |
| 4 |  |  |  |  |  | ROE Adder <br> Weighted | 0.00\% |  | B) | ROE Adder Weighted | 0.00\% |  | B) |
| 5 |  |  |  |  |  | Weighted ROE Adder: Beginning | 0.00\% |  |  | Weighted ROE Adder: Beginning | 0.00\% |  |  |
| 6 |  |  |  |  |  | Beginning <br> Bal: | - |  |  | Beginning <br> Bal: | - |  |  |
| 7 |  |  |  |  |  | Beginning <br> Dep: | - |  |  | Beginning <br> Dep: | - |  |  |
| 8 |  |  | Tota |  |  | Beginning Year: |  |  |  | Beginning Year: |  |  |  |
|  | Mon/Yr <br> (a) | Gross Plant (b) | $\begin{gathered} \text { Depreciation } \\ \text { (c ) } \\ \hline \end{gathered}$ | Accum. Dep. (d) | Incentive Ret (e) | Gross Plant (f) | Depreciation (g ) | Accum. Dep. (h) | Net Plant <br> (i) | Gross Plant ( j ) | Depreciation <br> (k) | Accum. Dep. <br> (1) | Net Plant (m ) |
|  |  |  |  |  |  | \$ |  |  |  | \$ |  |  |  |
|  |  | \$ | \$ | \$ |  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 9 | Jan-00 | - | - | - |  | - | - | - | - | - | - | - | - |
|  |  | \$ | \$ | \$ |  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 10 | Jan-00 | - | - | - |  | - | - | - | - | - | - | - | - |
|  |  | \$ | \$ | \$ |  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 11 | Jan-00 | - | - | - |  | - | - | - | - | - | - | - | - |
|  |  | \$ | \$ | \$ |  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 12 | Jan-00 | - | - | - |  | - | - | - | - | - | - | - | - |
|  |  | \$ | \$ | \$ |  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 13 | Jan-00 | - | - | - |  | - | - | - | - | - | - | - | - |
|  |  | \$ | \$ | \$ |  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 14 | Jan-00 | - | - | - |  | - | - | - | - | - | - | - | - |
| 15 | Jan-00 | \$ | \$ | \$ |  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |


$\square$
Notes
A Special depreciation rates may be utilized for specific incentive transmission projects if approved by the FERC.
B Incentive ROE requires authorization by the Commission

## El Paso Electric Company <br> Worksheet P5-1

Projected Accumulated Deferred Income Taxes
Estimated - For the 12 months ended 12/31/yyyy
Page 1 of 3

| 1 | Account 190 |  |  |  |  | Averaging with Proration - Projected |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | Days in Period |  |  |  |  |  |  |  |
| 3 | (a) <br> Month | (b) <br> Days in the Month | (c) <br> Number of Days Prorated | (d) <br> Total Days in Future Portion of Test Period | (e) Proration Amount (c/d) | (f) <br> Projected Monthly Activity | (g) <br> Prorated <br> Projected <br> Monthly <br> Activity (e x f) | (h) <br> Prorated <br> Projected <br> Balance (Cumulative Sum of g) |
| 4 |  |  |  |  |  |  |  |  |
| 5 | December 31st balance Prorated Items (P5-2.61.f) |  |  |  |  |  |  | - |
| 6 | January | 31 | 335 | 365 | 91.78\% |  | - | - |
| 7 | February | 28 | 307 | 365 | 84.11\% | - | - | - |
| 8 | March | 31 | 276 | 365 | 75.62\% | - | - | - |
| 9 | April | 30 | 246 | 365 | 67.40\% | - | - | - |
| 10 | May | 31 | 215 | 365 | 58.90\% | - | - | - |
| 11 | June | 30 | 185 | 365 | 50.68\% | - | - | - |
| 12 | July | 31 | 154 | 365 | 42.19\% | - | - | - |
| 13 | August | 31 | 123 | 365 | 33.70\% | - | - | - |


| 14 | September 30 | 93 | 365 | 25.48\% | - |  | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15 | October 31 | 62 | 365 | 16.99\% | - | - | - |
| 16 | November 30 | 32 | 365 | 8.77\% | - | - | - |
| 17 | December 31 | 1 | 365 | 0.27\% | - | - | - |
| 18 | Total 365 |  |  |  | - | - |  |
| 19 | Beginning Balance-Total |  |  | Worksheet P5-2.58.f |  |  | - |
| 20 | Beginning Balance-Not Subject to Proration |  |  | Worksheet P5-2.64.f |  |  | - |
| 21 | Beginning Balance-Subject to Proration |  |  | (Line 5, Col H) |  |  | - |
| 22 | Ending Balance-Total |  |  | Worksheet P5-2.58.g |  |  | - |
| 23 | Ending Balance-Not Subject to Proration |  |  | Worksheet P5-2.64.g |  |  | - |
| 24 | Ending Balance-Subject to Proration |  |  | Worksheet P5-2.61.g |  |  | - |
| 25 | Average Balance |  |  | Line $17 \mathrm{ColN}+($ Lines $20+23 \mathrm{Col} \mathrm{N}) / 2$ |  |  | - |
| 26 | Reserved |  |  |  |  |  | - |
| 27 | Amount for Attachment H |  |  | (Line 25 less line 26) |  |  | - |

# El Paso Electric Company <br> Worksheet P5-1 <br> Projected Accumulated Deferred Income Taxes <br> Estimated - For the 12 months ended 12/31/yyyy 

Page 2 of 3

| $\begin{aligned} & 28 \\ & 29 \end{aligned}$ | Account 28 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Days in Period |  |  |  |  |
|  | (a) <br> Month | (b) <br> Days in the Month | (c) <br> Number of Days Prorated | (d) <br> Total Days in Future Portion of Test Period | (e) <br> Proration Amount (c /d) |
| 31 |  |  |  |  |  |
| 32 | December 31st balance Prorated Items (P5-2.79.f) |  |  |  |  |
| 33 | January | 31 | 335 | 365 | 0.918 |
| 34 | February | 28 | 307 | 365 | 0.841 |
| 35 | March | 31 | 276 | 365 | 0.756 |
| 36 | April | 30 | 246 | 365 | 0.674 |
| 37 | May | 31 | 215 | 365 | 0.589 |
| 38 | June | 30 | 185 | 365 | 0.507 |
| 39 | July | 31 | 154 | 365 | 0.422 |
| 40 | August | 31 | 123 | 365 | 0.337 |
| 41 | September | 30 | 93 | 365 | 0.255 |
| 42 | October | 31 | 62 | 365 | 0.170 |
| 43 | November | 30 | 32 | 365 | 0.088 |
| 44 | December | 31 | 1 | 365 | 0.003 |
| 45 | Total | 365 |  |  |  |


| Averaging with Proration - Projected |  |  |
| :---: | :---: | :---: |
| (f) | (g) | (h) |
|  | Prorated | Prorated |
| Projected | Projected | Projected |
| Monthly | Monthly | Balance |
| Activity | Activity (e x f) | (Cumulative |
|  | Sum of g) |  |

December 31st balance Prorated Items (P5-2.79.f)

| 46 | Beginning Balance-Total |
| :--- | :--- |
| 47 | Beginning Balance-Not Subject to Proration |
| 48 | Beginning Balance-Subject to Proration |
| 49 | Ending Balance-Total |
| 50 | Ending Balance-Not Subject to Proration |
| 51 | Ending Balance-Subject to Proration |
| 52 | Average Balance |
| 53 | Reserved |
| 54 | Amount for Attachment H |

Worksheet P5-2.76.f
Worksheet P5-2.82.f
(Line 32, ColH H$)$
Worksheet P5-2.76.g
Worksheet P5-2.82.g
Worksheet P5-2.79.g
Line $44 \mathrm{Col} \mathrm{H}+($ Lines $47+50 \mathrm{ColH}) / 2$
(Line 52 less line 53)


# El Paso Electric Company <br> Worksheet P5-1 <br> Projected Accumulated Deferred Income Taxes <br> Estimated - For the 12 months ended 12/31/yyyy 

Page 3 of 3

| $\begin{aligned} & 55 \\ & 56 \end{aligned}$ | Account 28 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Days in Period |  |  |  |  | Averaging with Proration - Projected |  |  |
|  | (a) <br> Month | (b) <br> Days in the Month | (c) <br> Number of Days Prorated | (d) <br> Total Days in Future Portion of Test Period | (e) <br> Proration Amount (c /d) | (f) <br> Projected <br> Monthly <br> Activity | (g) <br> Prorated <br> Projected <br> Monthly Activity <br> (exf) | (h) <br> Prorated Projected <br> Balance (Cumulative Sum of g) |
| 58 |  |  |  |  |  |  |  |  |
|  | December 31st balance Prorated Items (P5-2.126.f) |  |  |  |  |  |  |  |
| 60 | January | 31 | 334 | 365 | 0.915 |  | - | - |
| 61 | February | 28 | 306 | 365 | 0.838 |  | - | - |
| 62 | March | 31 | 275 | 365 | 0.753 |  | - | - |
| 63 | April | 30 | 245 | 365 | 0.671 |  | - | - |
| 64 | May | 31 | 214 | 365 | 0.586 |  | - | - |
| 65 | June | 30 | 184 | 365 | 0.504 |  | - | - |
| 66 | July | 31 | 153 | 365 | 0.419 |  | - | - |
| 67 | August | 31 | 122 | 365 | 0.334 |  | - | - |
| 68 | September | 30 | 92 | 365 | 0.252 |  | - | - |
| 69 | October | 31 | 61 | 365 | 0.167 |  | - | - |
| 70 | November | 30 | 31 | 365 | 0.085 |  | - | - |
| 71 | December | 31 | 1 | 365 | 0.003 |  | - | - |
| 72 | Total | 365 |  |  |  |  | - |  |


| 73 | Beginning Balance-Total | Worksheet P5-2.123.f | - |
| :---: | :---: | :---: | :---: |
| 74 | Beginning Balance-Not Subject to Proration | Worksheet P5-2.129.f | - |
| 75 | Beginning Balance-Subject to Proration | (Line 59, Col H ) | - |
| 76 | Ending Balance-Total | Worksheet P5-2.123.g | - |
| 77 | Ending Balance-Not Subject to Proration | Worksheet P5-2.129.g | - |
| 78 | Ending Balance-Subject to Proration | Worksheet P5-2.126.g | - |
| 79 | Average Balance | Line $71 \mathrm{Col} \mathrm{H}+($ Lines $74+77 \mathrm{ColH}) / 2$ | - |
| 80 | Reserved |  |  |
| 81 | Amount for Attachment H | (Line 79 less line 80) | - |
|  | Total Amount for Projected Attachment H | (Lines 27+54+81) | - |

## El Paso Electric Company

Worksheet P5-2
Projected Accumulated Deferred Income Taxes/Accumulated Deferred Investment Tax Credits - Details
Estimated - For the 12 months ended 12/31/yyyy

| No. | (a) | mmm-yyyy <br> (b) | $\begin{aligned} & \text { mmm-yyyy } \\ & \text { (c) } \\ & \hline \end{aligned}$ | (e) | mmmyyyy <br> (f) | $\begin{gathered} \text { mmm-yyyy } \\ (\mathrm{g}) \\ \hline \end{gathered}$ | (h) | (i) | (j) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Line <br> No. | Item | BOY <br> Balance | EOY Balance | Allocator | BOY <br> Allocated <br> Amount | EOY <br> Allocated <br> Amount | Prorated <br> (Yes/No) <br> (Note C) | Explanation <br> (Note B) | Projection Classification (Note D) |

## ACCOUNT 190 ACCUMULATED DEFERRED INCOME TAXES

| 1 | Reserved | - | - | $0.000 \%$ | - |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 2 | Reserved | - | - | $0.000 \%$ | - |
| 3 | Reserved | - | - | $0.000 \%$ | - |
| 4 | Reserved | - | - | $0.000 \%$ | - |
| 5 | Reserved | - | - | $0.000 \%$ | - |
| 6 | Reserved | - | - | $0.000 \%$ | - |
| 7 | Reserved | - | - | $0.000 \%$ | - |
| 8 | Reserved | - | - | $0.000 \%$ | - |
| 9 | Reserved | - | - | $0.000 \%$ | - |
| 10 | Reserved | - | - | $0.000 \%$ | - |
| 11 | Reserved | - | $0.000 \%$ | - |  |
| 12 | Reserved | - | $0.000 \%$ | - |  |
| 13 | Reserved | - | $0.000 \%$ | - |  |
| 14 | Reserved |  | - | $0.000 \%$ | - |


| 15 | Reserved | - | - |
| :---: | :---: | :---: | :---: |
| 16 | Reserved | - | - |
| 17 | Reserved | - | - |
| 18 | Reserved | - | - |
| 19 | Reserved | - | - |
| 20 | Reserved | - | - |
| 21 | Reserved | - | - |
| 22 | Reserved | - | - |
| 23 | Reserved | - | - |
| 24 | Reserved | - | - |
| 25 | Reserved | - | - |
| 26 | Reserved | - | - |
| 27 | Reserved | - | - |
| 28 | Reserved | - | - |
| 29 | Reserved | - | - |
| 30 | Reserved | - | - |
| 31 | Reserved | - | - |
| 32 | Reserved | - | - |
| 33 | Reserved | - | - |
| 34 | Reserved | - | - |
| 35 | Reserved | - | - |
| 36 | Reserved | - | - |


|  |  |  |  |
| :--- | :--- | :--- | :--- |
| $0.000 \%$ | - | - |  |
| $0.000 \%$ | - | - |  |
| $0.000 \%$ | - | - |  |
| $0.000 \%$ | - | - |  |
| $0.000 \%$ | - | - |  |
| $0.000 \%$ | - | - |  |
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| $0.000 \%$ | - | - |  |
| $0.000 \%$ | - | - |  |
| $0.000 \%$ | - | - |  |
| $0.000 \%$ | - | - |  |


| 37 | Reserved | - | - | $0.000 \%$ | - | - |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 38 | Reserved | - | - | $0.000 \%$ | - | - |
| 39 | Reserved | - | - | $0.000 \%$ | - | - |
| 40 | Reserved | - | - | $0.000 \%$ | - | - |
| 41 | Reserved | - | - | $0.000 \%$ | - | - |
| 42 | Reserved | - | - | $0.000 \%$ | - | - |
| 43 | Reserved | - | - | $0.000 \%$ | - | - |
| 44 | Reserved | - | - | $0.000 \%$ | - | - |
| 45 | Reserved | - | - | $0.000 \%$ | - | - |

## El Paso Electric Company

Worksheet P5-2
Projected Accumulated Deferred Income Taxes/Accumulated Deferred Investment Tax Credits - Details
Estimated - For the 12 months ended 12/31/yyyy

| No. | (a) | mmmуууу <br> (b) | mmmуууу <br> (c) | (e) | $\begin{gathered} \text { mmm-yyyy } \\ \text { (f) } \\ \hline \end{gathered}$ | $\begin{gathered} \text { mmm-уууу } \\ (\mathrm{g}) \\ \hline \end{gathered}$ | (h) | (i) | (j) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Line } \\ & \text { No. } \end{aligned}$ | Item | BOY <br> Balance | EOY <br> Balance | Allocator | BOY <br> Allocated <br> Amount | EOY <br> Allocated <br> Amount | Prorated <br> (Yes/No) <br> (Note C) | Explanation (Note B) | Projection Classification (Note D) |
| 46 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 47 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 48 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 49 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 50 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 51 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 52 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 53 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 54 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 55 | Total Account 190 Tax Reg Asset / Liab Adjustments (Note A) | - | - |  | - | - |  |  |  |
| 56 | Reserved |  |  | 0.000\% | - | - |  |  |  |
| 57 | Reserved |  |  | 0.000\% | - | - |  |  |  |

58 Adjustments
59 Prorated Balances

Tax Reg Asset / Liab
60 Adjustments
Prorated Account 190 Balances
61 After Adjustments

62 Non-Prorated Balances
Tax Reg Asset / Liab
63 Adjustments
Non-Prorated Account 190
64 Balances After Adjustments ACCOUNT 282 ACCUMULATED DEFERRED INCOME TAXES - OTHER PROPERTY (Enter Negative)

| 65 | Reserved |  | $0.000 \%$ |
| :--- | :--- | :--- | :--- |
| 66 | Reserved |  | $0.000 \%$ |
| 67 | Reserved |  | $0.000 \%$ |
| 68 | Reserved |  | $0.000 \%$ |
| 69 | Reserved | - | $0.000 \%$ |
| 70 | Reserved | - | $0.000 \%$ |
| 71 | Reserved | - | $0.000 \%$ |
| 72 | Reserved | - | - |

73 Total Account 282
Tax Reg Asset / Liab
Adjustments (Note A)
Reserved $\quad-\quad-\quad 0.000 \%$

Total Account 282 After
76 Adjustments
77 Prorated Balances
Tax Reg Asset / Liab
78 Adjustments
Prorated Account 282 Balances
79 After Adjustments

- -
-
$0.000 \%$ -
0.000\% -

.000\%

El Paso Electric Company
Worksheet P5-2
Projected Accumulated Deferred Income Taxes/Accumulated Deferred Investment Tax Credits - Details
Estimated - For the $\mathbf{1 2}$ months ended 12/31/yyyy

| No. | (a) |  | $\begin{aligned} & \text { mmm-yyyy } \\ & \text { (c) } \end{aligned}$ | (e) | mmmуууу <br> (f) | $\begin{gathered} \text { mmm-уyyy } \\ (\mathrm{g}) \\ \hline \end{gathered}$ | (h) | (i) | (j) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Line <br> No. | Item | BOY <br> Balance | EOY <br> Balance | Allocator | BOY <br> Allocated <br> Amount | EOY <br> Allocated <br> Amount | Prorated <br> (Yes/No) <br> (Note C) | Explanation <br> (Note B) | Projection Classification (Note D) |

ACCOUNT 283 ACCUMULATED DEFERRED INCOME TAXES - OTHER (Enter Negative)

| 83 | Reserved | - | $0.000 \%$ | - |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 84 | Reserved | - | - | $0.000 \%$ | - |
| 85 | Reserved | - | - | $0.000 \%$ | - |
| 86 | Reserved | - | - | $0.000 \%$ | - |
| 87 | Reserved | - | - | $0.000 \%$ | - |
| 88 | Reserved | - | - | $0.000 \%$ | - |
| 89 | Reserved | - | - | $0.000 \%$ | - |
| 90 | Reserved | - | - | $0.000 \%$ | - |
| 91 | Reserved | - | - | $0.000 \%$ | - |
| 92 | Reserved | - | - | $0.000 \%$ | - |
| 93 | Reserved |  |  | $0.000 \%$ | - |


| 94 | Reserved | - | - | 0.000\% | - | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 95 | Reserved | - | - | 0.000\% | - | - |
| 96 | Reserved | - | - | 0.000\% | - | - |
| 97 | Reserved | - | - | 0.000\% | - | - |
| 98 | Reserved | - | - | 0.000\% | - | - |
| 99 | Reserved | - | - | 0.000\% | - | - |
| 100 | Reserved | - | - | 0.000\% | - | - |
| 101 | Reserved | - | - | 0.000\% | - | - |
| 102 | Reserved | - | - | 0.000\% | - | - |
| 103 | Reserved | - | - | 0.000\% | - | - |
| 104 | Reserved | - | - | 0.000\% | - | - |
| 105 | Reserved | - | - | 0.000\% | - | - |
| 106 | Reserved | - | - | 0.000\% | - | - |
| 107 | Reserved | - | - | 0.000\% | - | - |
| 108 | Reserved | - | - | 0.000\% | - | - |
| 109 | Reserved | - | - | 0.000\% | - | - |
| 110 | Reserved | - | - | 0.000\% | - | - |
| 111 | Reserved | - | - | 0.000\% | - | - |
| 112 | Reserved | - | - | 0.000\% | - | - |
| 113 | Reserved | - | - | 0.000\% | - | - |
| 114 | Reserved | - | - | 0.000\% | - | - |
| 115 | Reserved | - | - | 0.000\% | - | - |


| 116 | Reserved | - | - | $0.000 \%$ | - | - |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 117 | Reserved | - | - | $0.000 \%$ | - | - |
| 118 | Reserved | - | - | $0.000 \%$ | - | - |
| 119 | Reserved | - | - | $0.000 \%$ | - | - |
| 120 | Total Account 283 | - | - | - | - |  |

## El Paso Electric Company <br> Worksheet P5-2

Projected Accumulated Deferred Income Taxes/Accumulated Deferred Investment Tax Credits - Details
Estimated - For the 12 months ended 12/31/yyyy

| No. | (a) | mmm-yyyy <br> (b) | mmmyyyy <br> (c) | (e) | mmm <br> уууу <br> (f) | $\underset{\text { yyyy }}{\text { mmm- }}$ $(\mathrm{g})$ | (h) | (i) | (j) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Line <br> No. | Item | BOY <br> Balance | EOY <br> Balance | Allocator | BOY <br> Allocated <br> Amount | EOY <br> Allocated <br> Amount | Prorated <br> (Yes/No) <br> (Note C) | Explanation <br> (Note B) | Projection Classification (Note D) |

Tax Reg Asset /
Liab Adjustments
(Note A)
121 Reserved
$0.000 \%$
Reserved
$0.000 \%$ -
Total Account 283
After Adjustments

Prorated Balances
Tax Reg Asset /
125 Liab Adjustments
Prorated Account
283 Balances After
Adjustments
Non-Prorated


Notes:
A The balances in Accounts 190, 281, 282 and 283, as adjusted by any amounts associated with tax-related regulatory assets and liabilities other than excess / deficient deferred income taxes ("EDIT"). EDIT is calculated in schedules P6-1 and P6-2 and presented in Att-H separately from ADIT.
Each ADIT item is categorized into 1 of 7 categories. The selected category will will determine the Allocator applied to the ADIT balance.

1) Prod: The ADIT balance is $100 \%$ related to production of electricity and the NA Allocator is applied.
2) Retail: The ADIT balance is $100 \%$ related to retail operations and the NA Allocator is applied.
3) ONT: Other $100 \%$ Non-Transmission (Items other than Prod \& Retail) related ADIT for which the NA Allocator is applied. Such items shall include:

- ADIT related to the Income Tax Regaultory Assets and Liabilities
- ADIT related to Pension and PBOP
- Any other ADIT if not separately removed in other categories that relates to regulatory assets and liabilities that are not included in rate base.

4) Trans: The ADIT balance is $100 \%$ related to transmission operations and the DA Allocator is applied.
5) Plant: The ADIT balance is related to Property, Plant, \& Equipment "PP\&E" and the NP Allocator is applied.
6) NPO: ADIT balances other than PP\&E where the NP Allocator is applied.
7) Labor: The ADIT balance is labor related and the W/S Allocator is applied.

C Each ADIT Item must be categorized into balances that require proration and those that do not. ADIT items with a "Plant" Explanation code will be designated "Yes" for proration treatment and all other Items will be designated "No".
D A=Actuals from most recent FERC Form 1 are used. $\mathrm{P}=\mathrm{A}$ projection of the ADIT balance is calculated.
E The balance in Account 255 is directly allocated among types of depreciable plant based the amount of investment tax credit (ITC) allowed for each type of property. In accordance with the normalization requirements applicable to utilities, the Company has elected to reduce rate base by unamortized ITC rather than to reduce income tax expense by ITC amortization. Rate base is not reduced by unamortized ITC until the ITC has been utilized by the Company on its tax return.

## El Paso Electric Company

Worksheet P6-1
Excess / Deficient Deferred Income Taxes ('EDIT'')
Page 1 of 1
Proration Used for Projected Revenue Requirement Calculation

| EDIT included within Accounts 182.3 \& 254 |  |  |  |  | Projection - Proration of Deferred Tax Activity |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | ays in Period |  |  |  |  |  |
| (a) <br> Month | (b) <br> Days in the Month | (c) <br> Number of Days Remaining in Year After Month's Accrual of Deferred Taxes | (d) <br> Total Days in Future Portion of Test Period (Line 18, Col b) | (e) <br> Proration <br> Amount (Lines 6 to $17, \mathrm{Col}$ c / Col d) | (f) <br> Projected Monthly Activity ((Line 24 Col h-Line 21 Col h)/12) (See Note 7.) | (g) <br> Prorated <br> Projected <br> Monthly <br> Activity <br> (Lines 6 to <br> 17, Col ex <br> Colf) | (h) <br> Prorated Projected Balance (Line 5, Col h plus Cumulative Sum of Colg ) |
| December 31st balance Prorated Items (Worksheet P6-2.61.g) |  |  |  |  |  |  |  |
| January | 31 | 335 | 365 | 91.78\% | - | - | - |
| February | 28 | 307 | 365 | 84.11\% | - | - | - |
| March | 31 | 276 | 365 | 75.62\% | - | - | - |
| April | 30 | 246 | 365 | 67.40\% | - | - | - |
| May | 31 | 215 | 365 | 58.90\% | - | - | - |
| June | 30 | 185 | 365 | 50.68\% | - | - | - |
| July | 31 | 154 | 365 | 42.19\% | - | - | - |
| August | 31 | 123 | 365 | 33.70\% | - | - | - |
| September | 30 | 93 | 365 | 25.48\% | - | - | - |
| October | 31 | 62 | 365 | 16.99\% | - | - | - |
| November | 30 | 32 | 365 | 8.77\% | - | - | - |


| 17 | December 31 | 1 | 365 | 0.27\% | - | - | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 18 | Total (sum of Lines (-17) |  |  |  | - | - |  |
| 19 | Beginning Balance-Total |  |  | Worksheet | 2.62.g |  | - |
| 20 | Beginning Balance-Not Subject to Proration |  |  | Worksheet (Line 5, Co | $2.55 . \mathrm{g}$ |  | - |
| 21 | Beginning Balance-Subject to Proration |  |  | H) |  |  | - |
| 22 | Ending Balance-Total |  |  | Worksheet | 2.62.i |  | - |
| 23 | Ending Balance-Not Subject to Proration |  |  | Worksheet | 2.55.i |  | - |
| 24 | Ending Balance-Subject to Proration |  |  | Worksheet Line 17 Co | $\begin{aligned} & 2.61 .1 \\ & +(\operatorname{Lin} \end{aligned}$ |  | - |
| 25 | Average Balance |  |  | Col N)/2 |  |  | - |
| 26 | Reserved |  |  | Reserved |  |  |  |
| 27 | Amount for Attachment H |  |  | (Line 25 les | ne 26) |  | - |

## El Paso Electric Company

Worksheet P6-2
Accumulated Excess / Deficient Deferred Income Taxes ("EDIT")
Estimated - For the 12 months ended 12/31/yyyy


| Line <br> No. | Item | BOY <br> Balance <br> (Note D) | Current Period Amortization | Current <br> Period <br> Other <br> Activity <br> (Note <br> C) | EOY <br> Balance (Note D) | Allocator | BOY <br> Allocated <br> Amount | Amorti zation <br> Allocat ed | EOY <br> Allocat <br> ed <br> Amoun <br> t | Prorat ed (Yes/N o) (Note B) | Amort <br> Period <br> or <br> Metho <br> d | Explanation <br> (Note A) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

NON-PLANT UNPROTECTED EDIT INCLUDED WITHIN ACCOUNTS 182.3 \& 254

| 1 | Reserved | - | - | - | NA | $0.000 \%$ | - |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2 | Reserved | - | - | - | NA | $0.000 \%$ | - |  |
| 3 | Reserved | - | - | - | NA | $0.000 \%$ | - |  |
| 4 | Reserved | - | - | - | NA | $0.000 \%$ | - |  |
| 5 | Reserved | - | - | - | NA | $0.000 \%$ | - |  |
| 6 | Reserved | - | - | - | NA | $0.000 \%$ | - |  |
| 7 | Reserved | - | - | - | NA | $0.000 \%$ | - |  |
| 8 | Reserved | - | - |  | NA | $0.000 \%$ | - |  |
| 9 | Reserved | - | - |  | NA | $0.000 \%$ | - |  |
| 10 | Reserved | - | - | - | NA | $0.000 \%$ | - |  |
| 11 | Reserved | - | - | - | NA | $0.000 \%$ | - |  |
| 12 | Reserved | - | - |  |  |  |  |  |


| No | - | - |
| :--- | :--- | :--- |
| No | - | - |
| No | - | - |
| No | - | - |
| No | - | - |
| No | - | - |
| No | - | - |
| No | - | - |
| No | - | - |
| No | - | - |
| No | - | - |
| No | - |  |


| 13 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 14 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 15 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 16 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 17 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 18 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 19 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 20 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 21 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 22 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 23 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 24 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 25 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 26 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 27 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 28 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 29 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 30 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 31 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 32 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 33 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 34 | Reserved | - | - | - | NA | 0.000\% |  | - | - | No | - |  |


| 35 | Reserved | - | - | - | NA $0.000 \%$ | - | - | - | No |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 36 | Reserved | - | - | - | NA $0.000 \%$ | - | - | - | No |
| 37 | Reserved | - | - | - | NA $0.000 \%$ | - | - | - | No |
| 38 | Reserved | - | - | - | NA $0.000 \%$ | - | - | - | No |
| 39 | Reserved | - | - | - | NA $0.000 \%$ | - | - | - | No |
| 40 | Reserved | - | - | - | NA $0.000 \%$ |  | - | - | No |
| 41 | Reserved | - | - | - | NA $0.000 \%$ |  | - | - | No |
| 42 | Reserved | - | - | - | NA $0.000 \%$ |  | - | - | No |

## El Paso Electric Company

Worksheet P6-2

## Accumulated Excess Deferred Income Taxes/Accumulated Deferred Investment Tax Credits - Details

Estimated - For the 12 months ended 12/31/yyyy


| Line <br> No. | Item | BOY <br> Balance <br> (Note <br> D) | Current Period Amortization | Current <br> Period <br> Other <br> Activity <br> (Note <br> C) | EOY <br> Balance <br> (Note <br> D) | Allocator | BOY <br> Allocated <br> Amount | Amortization Allocated | EOY <br> Allocated <br> Amount | Prorated <br> (Yes/No) <br> (Note B) | Amort <br> Period or <br> Method | Expla natio n (Note A) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| 43 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 44 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No |
| 45 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No |
| 46 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No |
| 47 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No |
| 48 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No |
| 53 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No |
| 54 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No |

PLANT EDIT INCLUDED WITHIN ACCOUNTS 182.3 \& 254

| 56 | Reserved | - | - | $0.000 \%$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 57 | Reserved | - |  | - | $0.000 \%$ |
| 58 | Reserved | - | - | - | $0.000 \%$ |

59 Reserved
60 Reserved
Total
Excess/Deficient
Deferred
Income Taxes
Notes:
A Each EDIT item is categorized into 1 of 7 categories. The selected category will will determine the Allocator applied to the EDIT balance.

1) Prod: The EDIT balance is 100\% related to production of electricity and the NA Allocator is applied.
2) Retail: The EDIT balance is 100\% related to retail operations and the NA Allocator is applied.
3) ONT: Other 100\% Non-Transmission (Items other than Prod \& Retail) related EDIT for which the NA Allocator is applied. Such items shall
include:

- EDIT related to Pension and PBOP
- Any other EDIT if not separately removed in other categories that relates to regulatory assets and liabilities that are not included in rate base.

4) Trans: The EDIT balance is 100\% related to transmission operations and the DA Allocator is applied.
5) Plant: The EDIT balance is related to Property, Plant, \& Equipment "PP\&E" and the NP Allocator is applied.
6) NPO: EDIT balances other than PP\&E where the NP Allocator is applied.
7) Labor: The EDIT balance is labor related and the W/S Allocator is applied.
Each EDIT Item must be categorized into balances that require proration and those that do not. EDIT items with a "Plant" Explanation code will be
designated "Yes" for proration treatment and all other Items will be designated "No".
Includes the impact of tax rate changes enacted during the period.
EDIT balances exclude income tax gross-ups recorded to accounts 182.3 and 254

## El Paso Electric Company

Worksheet P7
Projected Adjustments to Rate Base
Estimated - For the $\mathbf{1 2}$ months ended 12/31/yyyy

| $\begin{gathered} \text { Line } \\ \text { No } \end{gathered}$ | Month <br> (a) | Unamortized Regulatory Asset (b) | Unamortized Abandoned Plant (c) | CWIP <br> (d) |
| :---: | :---: | :---: | :---: | :---: |
| 1 | December Prior Year | - | - | - |
| 2 | January | - | - | - |
| 3 | February | - | - | - |
| 4 | March | - | - | - |
| 5 | April | - | - | - |
| 6 | May | - | - | - |
| 7 | June | - | - | - |
| 8 | July | - | - | - |
| 9 | August | - | - | - |
| 10 | September | - | - | - |
| 11 | October | - | - | - |
| 12 | November | - | - | - |
| 13 | December | - | - | - |
| 14 | Average of the 13 Monthly Balances | - | - | - |

## El Paso Electric Company

## Schedule 1

## Ancillary Services, Schedule No. 1 - Scheduling System Control and Dispatch Service

Estimated - For the 12 months ended 12/31/yyyy

| Description | Reference | Amount |  |
| :---: | :---: | :---: | :---: |
| Revenue Requirement |  |  |  |
| Total Load Dispatch and Scheduling (Account 561) | 321.85-92.b | \$ | - |
| Less: Scheduling, System Control \& Dispatch Services (Account 561.4) | 321.88.b | \$ | - |
| Less: Reliability, Planning and Standards Development (Account 561.5) | 321.89.b | \$ | - |
| Less: Transmission Service Studies (Account 561.6) | 321.90.b | \$ | - |
| Less: Generation Interconnection Studies (Account 561.7) | 321.91.b | \$ | - |
| Less: Reliability, Planning \& Standards Development Services (Account 561.8) | 321.92.b | \$ | - |
| Total 561 Costs for Schedule 1 Annual Rev Req | Sum Lines 2 through 7 | \$ | - |
| Less: Schedule 1 Point to Point Revenues | Company records | \$ | - |
| Actual Schedule 1 Annual Rev Req (before True Up) | Line 8 - Line 10 | \$ | - |
| True Up Adjustment |  |  |  |
| Actual Revenue Requirement | Line 8 | \$ | - |
| Originally Projected Revenue Requirement without True Up Adjustment | Previous Filing (Note B) | \$ | - |
| True-up Amount (before interest) | Line 15 - Line 16 | \$ | - |
| Interest Rate on True-up Amount | (Worksheet TU, Line 33) Line 17 * Line 18 * 24 / |  | 0.0000\% |
| Interest on True-up Amount | 12 |  | - |
| True-up Adjustment | Line $17+$ Line 19 | \$ | - |
| Net Schedule 1 Annual Rev Req | Line $12+$ Line 20 (Note A) | \$ | - |
| Divisor |  |  |  |
| Divisor (kW) | (Worksheet P3, Line 15) |  | - |
| Rates |  |  |  |


| 28 | Annual |
| :--- | :--- |
| 29 | Monthly |
| 30 | Weekly |
| 31 | Daily On-Peak |
| 32 | Daily Off-Peak |
| 33 | Hourly On-Peak |
| 34 | Hourly Off-Peak |


|  | $\$$ |
| :--- | :--- |
| 12 months/year | $\$$ |
| 52 weeks/year | $\$$ |
| 6 days/week | $\$$ |
| 7 days/week | $\$$ |
| 16 hours/day | $\$$ |
| 24 hours/day | $\$$ |

- $\quad / \mathrm{kW}$-year
/kW-
month
- /kW-week

Daily On-Peak
52 weeks/year

- /kW-day

Hourly On-Peak
16 hours/day

- /kW-day

Hourly Off-Peak
24 hours/day
IMW-hour

- /MW-hour

[^9]
# ATTACHMENT H-2 <br> El Paso Electric Company Formula Rate Implementation Protocols <br> Projections are for Rate Years - January-December <br> True-Ups are for Calendar Years - January-December 

## I. Applicability

The following procedures (the "Protocols") shall apply to El Paso Electric Company's ("EPE") calculations under its Formula Rate Template set forth in Tariff Attachment H-1 ("Formula Rate Template").

For purposes of these Protocols, the term "Interested Party" means a transmission customer of EPE, a state commission in a state where EPE serves retail customers, any entity having standing in a Federal Energy Regulatory Commission ("Commission" or "FERC") proceeding investigating the Formula Rate (as defined in Section II.1, below), and staff of FERC.

## II. Annual Updates

1. The Formula Rate Template, which includes Schedule 1 - Scheduling System Control and Dispatch Service as Appendix B to Attachment H-1, and these Protocols together comprise the Transmission Provider's filed rate (collectively, the "Formula Rate") for Transmission Service under the Tariff or transmission agreements incorporating Tariff rates. The Transmission Provider will follow the instructions specified in the Formula Rate to annually calculate (project and subsequently true up as applicable) its Annual Transmission Revenue Requirement ("ATRR") and long-term firm loads to develop rates for Network Integration Transmission Service and Point-to-Point Transmission Service for posting by the Transmission Provider (hereinafter the projection and true-up process is referred to as the "Annual Update").
2. The Formula Rate shall be applicable to service on and after January 1 of a given calendar year through December 31 of the same calendar year ("Rate Year"), subject to review, challenge, and refunds or surcharges with interest, as provided herein. The Formula Rate shall initially be the effective date established by the Commission.
3. Each calendar year, the Transmission Provider shall:
(a) By June 15 of the current year, calculate the projected ATRR, and transmission rates for the next Rate Year ("Projection") and Schedule 1 rates for the next Rate Year in accordance with the Formula Rate. The Formula Rate specifies in detail the manner in which the immediately preceding calendar year FERC Form No. 1 data and actual data from the Transmission Provider's books and records shall be used as inputs to the Formula Rate.
(b) By June 15 of the current year, calculate the true-up of the Projection for the preceding calendar year in accordance with the Formula Rate ("TrueUp Adjustment"). The True-Up Adjustment shall use the actual data for such preceding calendar year to calculate the actual charges for that calendar year. As part of the True-Up Adjustment, the Transmission Provider shall calculate the under- or over-collection of the revenue requirement for all customers taking service pursuant to the Formula Rate, as follows:
i. At the time of the Annual Update, the Transmission Provider shall calculate the amount of under- or over-collection of its actual net
revenue requirement during the preceding Rate Year after the FERC Form No. 1 data for that Rate Year has been filed with the Commission.
ii. The True-Up Adjustment shall be calculated in the following manner. The projected net revenue requirement on the Projected Attachment H for the Rate Year will be compared to the actual net revenue requirement for the same Rate Year as determined by the population of the Formula Rate Template with actual data.
iii. Interest on any over-recovery of the actual net revenue requirement shall be determined based on the Commission's regulation at 18 C.F.R. § 35.19a. Interest on any under-recovery of the actual net revenue requirement shall be determined using the interest rate determined based on the Commission's regulation at 18 C.F.R § 35.19a. An average interest rate shall be used to calculate the interest payable for the twenty-four (24) months during which the over or under recovery in the revenue requirement exists. The interest rate determined based on the Commission's regulation at 18 C.F.R § 35.19a will be determined using the average of the posted quarterly rates for the last four available quarters available at the time of posting.
iv. The True-Up Adjustment, as calculated on Worksheet TU of the Template, shall be included in the Transmission Provider's subsequent projected net revenue requirement determination.
(c) Include with the Annual Update an identification and explanation of each material change ("Material Change"). A Material Change is: (i) any change in the Transmission Provider's accounting policies, practices or procedures (including changes resulting from revisions to FERC's Uniform System of Accounts and/or FERC Form No. 1 reporting requirements and inter-company cost allocation methodologies) from those in effect during the calendar year upon which the most recent actual ATRR was based and that, in the Transmission Provider's reasonable judgment, could impact the Formula Rate, including impact to the ATRR or load divisor; and (ii) any change in the classification of any transmission facility that has been directly assigned and the dollar value of the change that the Transmission Provider has made in the applicable Projection or True-Up Adjustment; and
(d) Post such Annual Update on its OASIS by June 15, or if June 15 is a Saturday, Sunday or Federal holiday, the first business day thereafter, as well as a populated Formula Rate Template in fully functional spreadsheets showing the calculation of such Annual Update with documentation supporting such calculation and information supporting the Projection as described in Section II.3(a), above, which information shall include a narrative, and worksheets where appropriate, explaining the source and derivation of any data input to the Formula that is not drawn directly from the Transmission Provider's FERC Form No. 1, as well as the following information for all transmission facilities included in the
expected transmission plant additions: (i) expected date of completion; (ii) percent completion status as of the date of the Annual Update; (iii) a one-line diagram of facilities exceeding $\$ 5$ million in cost; (iv) the estimated total installed cost of the facility; and (v) the reason for the facility addition;
(e) File such Annual Update with the Commission as an informational filing ("Informational Filing") on the Publication Date; and
(f) On the Publication Date, notify Interested Parties by email (using the last known email addresses provided to the Transmission Provider) of the website address where the Annual Update posting is located. The Transmission Provider shall use the email list developed from the most recent Annual Update and any other email addresses of individuals who have requested to be included in the Annual Update distribution list.
4. A change to the Formula Rate inputs related to unamortized abandoned plant, construction work in progress (which is currently set to zero), return on equity incentives, extraordinary property losses, return on equity, depreciation rates for each regulatory jurisdiction that are used to calculate the composite rates applied in the Formula Rate, or Post Employment Benefits Other than Pensions may not be made absent a filing with the Commission pursuant to Federal Power Act ("FPA") Sections 205 or 206.

## III. Annual Review Procedures

Each Annual Update shall be subject to the following review procedures ("Annual Review Procedures"). If any of the dates provided for herein fall on a Saturday, Sunday or Federal holiday, then the due date shall be the first business day thereafter:

1. Each year, with at least fifteen (15) calendar days written notice, the Transmission Provider shall convene at least one meeting, which shall include at the Transmission Provider's option either video conferencing or webinar/internet conferencing, among Interested Parties ("Customer Meeting") during which the Transmission Provider shall present details about its Annual Update. The Customer Meeting shall provide Interested Parties the chance to seek information and clarifications from the Transmission Provider about the Annual Update. The first Customer Meeting of a Rate Year shall take place between within forty-five (45) calendar days from the Publication Date at a date and time convenient for a majority of the parties and posted on the Transmission Provider's internet website. The Transmission Provider shall also schedule subsequent Customer Meetings as appropriate ("Subsequent Meetings"). The date and time of such Subsequent Meetings shall be posted on the Transmission Provider's internet website and shall include at the Transmission Provider's option either video conferencing or webinar/internet conferencing.
2. Immediately following the Publication Date, Interested Parties may submit requests for information supporting the Annual Update. Interested Parties will have one-hundred and twenty (120) calendar days after the Publication Date to serve reasonable information requests to the Transmission Provider ("Information Request Period"). Such information requests shall be limited to that which is necessary to determine: (1) if the Transmission Provider has properly calculated the Formula Rate for the Annual Update under review; (2) whether the inputs to the True-Up Adjustment are correct and otherwise appropriate costs and revenue
credits and have been accounted for and recorded appropriately; and (3) whether there have been any Material Changes that affect the Formula Rate calculations.
3. The Transmission Provider shall make reasonable efforts to respond to information requests pertaining to the Annual Update within ten (10) business days of receipt of such requests. Such data responses shall be served on all Interested Parties identifying themselves to the Transmission Provider (as set forth in Section II.3(f)). Information requests received after 4 p.m. Mountain Prevailing Time shall be considered received the next business day. In the event the Transmission Provider believes it cannot respond within the ten (10) business day timeframe, it shall notify the requesting party and shall provide an estimate of when the Transmission Provider will provide the requested information.
4. The Transmission Provider shall make available in a central electronic location all information requests received and all responses to such requests. Each information request received by the Transmission Provider shall become available in the central electronic location within one business day of receipt of such request. Each response by the Transmission Provider shall become available in the central electronic location within one business day of distribution of such response to the party that submitted the information request.
5. To the extent the Transmission Provider and any Interested Party(ies) are unable to resolve disputes related to information requests submitted during the Information Request Period in accordance with these Protocols, the Transmission Provider or any Interested Party may petition FERC to appoint an Administrative Law Judge as a discovery master after reasonable attempts to resolve the disputes
have been made by the Transmission Provider and any Interested Parties. The discovery master shall have the authority to issue binding orders to resolve discovery disputes and compel the production of discovery, as appropriate, in accordance with the Protocols and consistent with FERC's discovery rules.
6. At any time throughout the Information Request Period and up to thirty (30) calendar days after the later of: (i) the close of the Information Request Period, or (ii) receipt of all responses to information requests submitted during the Information Request Period, any Interested Party may review the calculations ("Review Period") and notify the Transmission Provider in writing of any specific challenges to the application of the Formula Rate ("Preliminary Challenge"). Notice of such Preliminary Challenges shall be promptly posted (at the same location as the Annual Update) by the Transmission Provider.
7. Challenges to the Formula Rate itself shall not be considered within the scope of these Annual Review Procedures. Modifications to the Formula Rate itself can only be made pursuant to Sections 205 and 206 of the Federal Power Act, as set out in Article VI below.

## IV. Resolution of Annual Update Challenges

1. If the Transmission Provider and any Interested Party have not resolved a Preliminary Challenge to an Annual Update within sixty (60) calendar days after written notification of a Preliminary Challenge, senior management of the Interested Parties and the Transmission Provider may attempt to resolve any outstanding issues ("Senior Management Review"). If the Transmission Provider and any Interested Party's (or Parties') senior management are unable to resolve
all issues raised in such Preliminary Challenge within thirty (30) calendar days after the Senior Management Review process begins, the Interested Party or Parties may, at any time thereafter, file a formal challenge with the Commission for a period up to three-hundred sixty five (365) calendar days after the Customer Meeting for a particular Annual Update ("Formal Challenge"). An Interested Party may not file a Formal Challenge thereafter. However, any Party may at any time within the period specified above, with or without prior Senior Management Review or submission of a Preliminary Challenge, file a Formal Challenge with the Commission regarding the Annual Update. For avoidance of doubt and as provided in Article IV hereof, nothing in this section is intended to limit the rights of any Interested Party to file a complaint under the FPA outside the Formal Challenge procedures provided by these Protocols.
2. The Transmission Provider shall promptly post notice of resolution of a Preliminary Challenge (at the same location as the notice of Preliminary Challenges) and shall notify all Interested Parties of such resolution, consistent with the procedures set forth in Section III.4, above.
3. Any and all information produced pursuant to these Protocols may be included in any proceeding concerning the El Paso Electric Company Formula Rate initiated at FERC pursuant to the FPA, including, but not limited to, a Formal Challenge. Information produced pursuant to these Protocols designated as confidential information and not otherwise publicly available shall be treated as confidential in any such proceeding referenced herein; provided that confidential treatment shall
be subject to a later determination by the presiding authority that the material is, in whole or in part, not entitled to confidential treatment.
4. Any Formal Challenge shall be served on the Transmission Provider by electronic service on the date of such filing.
5. There shall be no need for an Interested Party to make a separate Formal Challenge with respect to any action initiated by the Commission sua sponte regarding an Annual Update, to participate in any resulting Commission proceeding.
6. Failure to make a Preliminary Challenge or Formal Challenge as to any Annual Update shall not act as a bar to a Preliminary Challenge or Formal Challenge related to any subsequent Annual Update. However, no Preliminary Challenge to an Annual Update shall be permitted after the deadline for written notification of Preliminary Challenges, described in Section III.6.
7. Failure to make a Preliminary Challenge or Formal Challenge with respect to a Material Change as to any Annual Update shall not act as a bar to a Preliminary Challenge or Formal Challenge related to that Material Change in any subsequent Annual Update.
8. Any changes or adjustments to the True-Up Adjustment or projected ATRR resulting from the Information Exchange and Informal Challenge processes that are agreed to by El Paso Electric Company wll be reported in the Informational Filing required pursuant to Section II of these Protocols. Any such changes or adjustments agreed to by El Paso Electric Company on or before December 1 will be reflected in the projected ATRR for the upcoming Rate Year. Any changes or
adjustments agreed to by El Paso Electric Company after December 1 will be reflected in the following year's True-Up Adjustment, as discussed in Section V.

## V. Changes to True-Up Adjustment or Projection

1. Except as provided in Section IV. 8 of these Protocols, any changes to the data inputs, including but not limited to revisions to El Paso Electric Company's FERC Form 1, or as the result of any FERC proceeding to consider the Annual True-Up Adjustment or projected net ATRR, or as a result of the procedures set forth herein, shall be incorporated into the formula rate and the charges produced by the formula rate in the projected net ATRR for the next Rate Year. This reconciliation mechanism shall apply in lieu of mid-Rate Year adjustments. Except as otherwise specified pursuant to a Commission order, all refunds or surcharges shall be determined with interest calculated in accordance with 18 C.F.R. § 35.19a.

## VI. Party's Rights and Burden of Proof

1. Nothing in these Protocols affects any rights the Transmission Provider, FERC, or any Interested Party may have under the FPA, including the right of the Transmission Provider to file a change in rates under Section 205 of the FPA or the right of an Interested Party to file a complaint that is not a Formal Challenge at any time under Section 206 of the FPA or other Commission regulation, or for an Interested Party to participate in any Commission proceeding relating to the Formula Rate. Nothing in these Protocols affects or modifies in any manner the procedural and substantive requirements, including requirements relating to the burden of proof, that are otherwise applicable under Commission precedent,
regulations, and statute, in such a proceeding. The provisions of these Protocols addressing review and challenge of the Annual Update shall not be construed as limiting the Transmission Provider's, FERC's, or any Interested Party's rights under any applicable provision of the FPA.
2. Failure to have made a Preliminary Challenge or Formal Challenge pursuant to these Protocols shall neither, in any manner, be asserted against a complainant in a proceeding instituted under Section 206 of the FPA nor prejudice or otherwise limit the complainant's right to relief that may be granted pursuant to Section 206 of the Federal Power Act.
3. Nothing herein is intended to alter the established burden(s) of going forward or burden(s) of proof as applied by the FERC at the time of any proceeding. Notwithstanding and without limiting the foregoing, in any proceeding ordered by FERC in response to a Formal Challenge raised under these Protocols or a proceeding initiated sua sponte by the Commission, the Transmission Provider shall have the ultimate burden of proof to establish that: (i) it reasonably applied the Formula Rate; (ii) it reasonably calculated the challenged Annual Update pursuant to the Formula Rate; and (iii) it reasonably adopted and applied any Material Change.

# UNITED STATES OF AMERICA <br> BEFORE THE <br> FEDERAL ENERGY REGULATORY COMMISSION 

El Paso Electric Company $\quad$ ) Docket No. ER22-__-000

# PREPARED DIRECT TESTIMONY OF DAVID C. HAWKINS <br> ON BEHALF OF <br> EL PASO ELECTRIC COMPANY 

OCTOBER 29, 2021

# UNITED STATES OF AMERICA <br> BEFORE THE <br> FEDERAL ENERGY REGULATORY COMMISSION 

El Paso Electric Company ) () Docket No. ER22-__-000

## PREPARED DIRECT TESTIMONY OF DAVID C. HAWKINS

## I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
A. My name is David C. Hawkins. My business address is El Paso Electric Company, P.O. Box 982, El Paso, Texas 79960.
Q. WHO IS YOUR CURRENT EMPLOYER AND WHAT POSITION DO YOU HOLD?
A. My employer is El Paso Electric Company ("EPE"). I am the Vice President of Strategy and Sustainability.
Q. WHAT ARE YOUR DUTIES IN YOUR CURRENT POSITION?
A. I oversee business development and EPE business units that manage interconnection and transmission service requests, renewable and emerging technologies, resource planning, resource management, and sustainability.
Q. ON WHOSE BEHALF ARE YOU SUBMITTING THIS TESTIMONY?
A. I am testifying on behalf of EPE.

## Q. PLEASE DESCRIBE YOUR BACKGROUND AND YOUR PROFESSIONAL EXPERIENCE.

A. I hold a Master of Science degree and a Bachelor of Science degree in Electrical Engineering from New Mexico State University. I have been with EPE since 2002, where I have held various positions including Vice President of Generation, System Planning and Dispatch and Vice President of Power Marketing, Fuels and Resource Planning. Before joining EPE, I served as a Wholesale Power Marketing Analyst at Public Service Company of New Mexico ("PNM").
Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION ("FERC") OR BEFORE OTHER REGULATORY AGENCIES AND COURTS ON UTILITY-RELATED MATTERS?
A. I have not testified before FERC. I have previously presented written and live testimony before the Public Utility Commission of Texas and the New Mexico Public Regulation Commission.

## Q. PLEASE EXPLAIN THE PURPOSE OF YOUR TESTIMONY AND HOW IT IS ORGANIZED.

A. The purpose of my testimony is to:

1) Introduce the other witnesses who will be submitting testimony on behalf of EPE in this filing;
2) Describe the relevant transmission services EPE currently provides under its Open Access Transmission Tariff ("OATT"), including the services on EPE's share of transmission facilities associated with the Palo Verde Generating Station ("Palo Verde Facilities");
3) Describe the transmission services and other arrangements EPE receives from other transmission providers to meet its native and network load obligations;
4) Describe the proposed rate treatment of EPE's various transmission facilities; and
5) Describe the changes to the OATT that EPE proposes in this rate filing, including changes to implement its formula rate and the related tariff attachments establishing formula rate protocols.

## Q. WAS YOUR TESTIMONY PREPARED BY YOU OR UNDER YOUR DIRECT SUPERVISION?

A. Yes.
II. IDENTIFICATION OF WITNESSES
Q. WHO ARE THE OTHER EPE WITNESSES TESTIFYING IN THIS PROCEEDING IN SUPPORT OF EPE'S RATE FILING?
A. In addition to my testimony, the following witnesses are submitting testimony in this proceeding:

- James A. Schichtl, EPE's Vice President, Regulatory and Governmental Affairs, describes EPE's capital investment in transmission facilities, provides an overview of EPE's transmission plant account balance, and identifies the benefits to EPE of moving to an annual transmission formula rate;
- John Wolfram, Principal of Catalyst Consulting LLC, developed and supports the company's proposed formula rate template and protocols, the annual transmission revenue requirement ("ATRR") for the upcoming 2022 rate year, and the derivation of formula rates for network and point-to-point OATT services, as well as for Schedule 1, as part of EPE's updating of its wholesale transmission service rates under the OATT;
- Bryn T. Davis, EPE's Senior Director, Asset Management Services, describes EPE's transmission system and planned transmission projects;
- Cynthia S. Prieto, EPE's Vice President, Controller, describes EPE's general accounting practices, the actuarial study of EPE's pensions and post-retirement benefits other than pensions, and the rate base impacts associated with accumulated deferred income tax balances, including excess accumulated deferred income taxes as a result of the Tax Cuts and Jobs Act of 2017;
- Adrien M. McKenzie, CFA, President of FINCAP, Inc., describes the derivation of the cost of capital, including the capital structure and rate of return on equity to be applied in EPE's formula rate; and
- John J. Spanos, President of Gannett Fleming Valuation and Rate Consultants, LLC, ("Gannett Fleming") describes the Depreciation Study prepared by Gannett Fleming for the year ending December 31, 2019, and how the methodologies used to calculate EPE's depreciation accrual rates for transmission plant are consistent with those commonly used in the industry and with the Commission's requirements and precedent.


## III. EPE'S TRANSMISSION SERVICES

## Q. PLEASE PROVIDE AN OVERVIEW OF EPE'S TRANSMISSION SYSTEM AND ITS LOCATION.

A. EPE's service territory is located in west Texas and southern New Mexico, at the far southeastern corner of the Western Electricity Coordinating Council ("WECC") region within the Western Interconnection of the United States. WECC spans a geographic area that covers EPE's west Texas service territory, reaches north to include two Canadian provinces and stretches far west to include all or part of fourteen western states, as well as northern Baja California, Mexico. EPE is also connected to the Southwest Power Pool through an asynchronous High Voltage Direct Current ("HVDC") tie located near the City of Artesia in Eddy County, New Mexico. EPE is not interconnected to the Electric Reliability Council of Texas. EPE's transmission system in its service territory interconnects with other transmission systems, including: (1) PNM at West Mesa near Albuquerque, New Mexico; (2) Southwestern Public Service Company at the Eddy County HVDC Terminal; (3) Tucson Electric Power Company at Springerville and Greenlee in Arizona, not far from the New Mexico-Arizona state line; and (4) the Comisión Federal de Electricidad at the United States-Mexico border. EPE also interconnects with the transmission system of Tri-State Generation and Transmission Association, Inc. ("Tri-State"). This Tri-State system is located within the PNM Balancing Authority Area ("BAA").

In addition to EPE's transmission system in its west Texas and southern New Mexico service territory, EPE is a co-owner of the Palo Verde Facilities located in Arizona. EPE's ownership interest in the Palo Verde Facilities is $18.7 \%$.

The Palo Verde Facilities include three 500 kV transmission lines that extend approximately 165 miles (in total) from the Palo Verde Generating Station ("Palo Verde") to Westwing and Kyrene, both of which are near Phoenix, Arizona. Two of the three 500 kV lines extend to Westwing, and the third line extends to Kyrene. All three lines are used to transmit energy from Arizona to EPE's service territory in New Mexico and Texas through implementation of exchanges and other arrangements.

## Q. PLEASE PROVIDE AN OVERVIEW OF THE WHOLESALE TRANSMISSION SERVICES PROVIDED BY EPE.

A. As a FERC-jurisdictional transmission provider, EPE provides open access transmission services. One type of open access transmission service is Network Integration Transmission Service ("NITS"), pursuant to which network resources are transmitted to serve load. The second type of open access transmission service is Point-to-Point Transmission Service ("PTP service"), pursuant to which power is transmitted from an identified point of receipt on the EPE transmission system to an identified point of delivery from the EPE transmission system to a receiving party that will either consume that power or move it on third-party transmission systems to loads located elsewhere. EPE's OATT services include firm and nonfirm long-term and short-term PTP service pursuant to sections 13 and 14 of its OATT, and NITS pursuant to section 34 of the OATT. Attachment H to the OATT establishes EPE's ATRR for these services, which, as Mr. Wolfram explains, forms the basis for the formula rates proposed in EPE's filing, including those set forth for NITS and PTP services.

## Q. WHEN DID EPE LAST CHANGE ITS OATT RATES?

A. EPE's currently-effective OATT rates have their origin in a black-box settlement reached when EPE implemented its first OATT in the 1990s. The settlement gave effect to an identified ATRR, and to a series of stated rates for PTP services (one set for PTP services within the EPE BAA, one set for PTP services on the transmission lines to Westwing, and one set for PTP services on the transmission line to Jojoba and Kyrene). Jojoba refers to a location between Palo Verde and Kyrene.

## A. NITS UNDER THE OATT

Q. PLEASE PROVIDE AN OVERVIEW OF THE NITS THAT EPE PROVIDES UNDER ITS OATT.
A. EPE's NITS allows for the delivery of energy from multiple designated resources to customer load under a single transmission service contract under which the customer pays for transmission service based on the customer's network load coincident with the system peak. NITS requires EPE to plan, construct, operate, and maintain the system to ensure transmission service from designated network resources to the customer's load.

## Q. WHO ARE EPE'S NITS CUSTOMERS?

A. EPE provides NITS to the Rio Grande Electric Cooperative, an electric cooperative with load-serving obligations. EPE also uses the transmission system to serve its retail load. In doing so, EPE treats itself like a NITS customer; it designates network resources and transmits those resources to its load.
Q. HOW HAS EPE REFLECTED ITS OWN SYSTEM USAGE IN DETERMINING THE TRANSMISSION COST OF SERVICE?
A. EPE has 446,027 retail and wholesale customers. In developing the transmission cost of service to be recovered under the OATT, EPE looked to its 2020 coincident peak load to assess the use of the transmission system, including EPE's use of the transmission system in serving retail load. Mr. Wolfram addresses in his testimony how he developed a comprehensive transmission cost of service upon which the revised OATT rates were developed.

## B. PTP SERVICE UNDER THE OATT

Q. WHAT AMOUNT OF LONG-TERM FIRM PTP SERVICE DOES EPE PROVIDE UNDER ITS OATT?
A. At present, the total reserved capacity under long-term firm PTP service agreements entered into under EPE's OATT is 1,119 megawatts per month.
Q. DOES EPE EXPECT ANY MATERIAL CHANGE IN LONG-TERM FIRM PTP CAPACITY RESERVATIONS IN 2022?
A. No.
Q. DOES EPE PROVIDE SHORT-TERM FIRM PTP AND NON-FIRM PTP SERVICES UNDER ITS OATT?
A. Yes.
Q. HOW DOES EPE PROPOSE TO TREAT THE SHORT-TERM FIRM PTP AND NON-FIRM PTP SERVICES IN THE EPE FORMULA RATE?
A. Short-term firm PTP service and non-firm PTP service under the OATT, like longterm PTP service, are to be provided pursuant to formula rates. Mr. Wolfram addresses how those formula rates were developed in his testimony.

## Q. WHAT TRANSMISSION SERVICES DOES EPE PROVIDE USING THE PALO VERDE FACILITIES?

A. EPE offers and provides, pursuant to its OATT, firm and non-firm, long-term and short-term PTP services on the Palo Verde Facilities. In addition, EPE uses the Palo Verde Facilities to serve native and network load located within the EPE BAA in New Mexico and Texas.

## Q. HOW ARE THE COSTS OF THE PALO VERDE FACILITIES REFLECTED IN THE EPE OATT FORMULA RATES?

A. The costs of EPE's transmission facilities, regardless of their location (i.e., Arizona, New Mexico, and Texas), are rolled into the formula rates presented in this filing. The mechanics of how the rolled-in OATT rates were developed are addressed in Mr. Wolfram's testimony.
Q. DO EPE's PALO VERDE FACILITIES MEET THE COMMISSION'S REQUIREMENTS FOR ROLLED IN RATE TREATMENT?
A. Yes. My understanding is that to treat the Palo Verde Facilities on a rolled in basis for purposes of rate design: (1) the Palo Verde Facilities must be integrated with the rest of EPE's transmission system, and (2) EPE must be able to provide service using its Palo Verde Facilities just as it provides service using the rest of its transmission facilities.

## Q. ARE THE PALO VERDE FACILITIES INTEGRATED WITH THE REST OF EPE'S TRANSMISSION SYSTEM?

A. Yes. EPE's load is served from a combination of network resources, a portion of which is located on the Palo Verde Facilities and a portion of which is located within the EPE BAA.

## Q. IS PALO VERDE A DESIGNATED NETWORK RESOURCE UNDER EPE'S OATT?

A. Yes.
Q. ARE THE PALO VERDE FACILITIES INTEGRATED INTO EPE'S OPERATIONS?
A. Yes. As EPE system operators perform their duties as the Transmission Provider, they must remain vigilant in their awareness of the status of the Palo Verde Facilities. Import capability to receive Palo Verde network resources and deliver those resources to load, as load moves up and down, is an important part of the function of EPE system operations, yearly, monthly, daily, hourly, and intra-hour.

## Q. DO OUTAGES ON THE PALO VERDE FACILITIES AFFECT SERVICE ON THE REST OF EPE'S TRANSMISSION SYSTEM?

A. Yes.
Q. PLEASE EXPLAIN.
A. Outages on the Palo Verde Facilities can affect EPE's service to load within its BAA. EPE's access to network resources can change as a result of outage conditions on the Palo Verde Facilities, which, in turn, increases EPE's reliance on other resources, including undesignated network resources. This can cause changes in the use and availability of OATT service within the EPE BAA. Secondary network transmission and non-firm point-to-point transmission, in particular, can be affected.
Q. DOES EPE PROVIDE OPEN ACCESS TRANSMISSION SERVICES ON THE PALO VERDE FACILITIES?
A. Yes. EPE provides open access transmission service on the Palo Verde Facilities, just as it does on the rest of its transmission system.
Q. HOW DOES EPE'S ROLLED-IN RATE DESIGN COMPARE TO THE RATE DESIGNS EMPLOYED BY THE OTHER JOINT OWNERS OF THE PALO VERDE FACILITIES?
A. EPE is one of several owners of the Palo Verde Facilities. The Palo Verde Facilities are jointly owned by a combination of entities. Certain of the co-owners are public utilities under the Federal Power Act and subject to FERC's rate jurisdiction. Other co-owners are non-public utilities. The public utility co-owners use a rolled-in rate design, i.e., each public utility co-owner rolls the costs of its share of the Palo Verde Facilities into the costs of the rest of its transmission facilities. EPE is not as familiar with the rate designs employed by the non-public utilities; however, a review of the posted rates of the non-public utilities suggests that they also are based upon a rolled-in rate design.

## C. INTERCONNECTION AGREEMENTS

Q. DOES EPE HAVE ANY GENERATOR INTERCONNECTION AGREEMENTS?
A. Yes.
Q. ARE NETWORK UPGRADES SOMETIMES NEEDED TO RELIABLY IMPLEMENT THE REQUESTED GENERATOR INTERCONNECTIONS?
A. Yes. Network Upgrades to the EPE transmission system are sometimes necessary to accommodate interconnection services provided under generator interconnection agreements.
Q. HOW DOES EPE PROPOSE TO TREAT SUCH NETWORK UPGRADES IN THE FORMULA RATE TEMPLATE?
A. Network Upgrades constructed under EPE's generator interconnection agreements become included in EPE's transmission rate base as EPE reimburses the interconnection customers under those agreements for the costs of the Network

Upgrades initially funded by such customers. The inclusion in EPE's rate base increases the ATRR for purposes of the rates determined in the annual formula rate process. In contrast, other facilities identified in EPE's generator interconnection agreements, for example, Transmission Provider Interconnection Facilities, are directly assigned to the interconnection customer and are not considered part of EPE's transmission rate base.

## IV. TRANSMISSION SERVICES PURCHASED BY EPE

## Q. PLEASE DESCRIBE THE TRANSMISSION SERVICES EPE PURCHASES FROM OTHER TRANSMISSION PROVIDERS TO SERVE NATIVE AND NETWORK LOAD.

A. EPE purchases the following transmission services from third parties to serve native and network load:

- Salt River Project ("SRP") provides long-term firm transmission service on its system from a point of receipt on the Palo Verde Facilities to a point of delivery at Coronado in Arizona, near the New Mexico state line. SRP charges for such services under rates that are not subject to FERC's ratemaking jurisdiction.
- PNM provides long-term firm transmission service on its system from a point of receipt at Four Corners to a point of delivery at West Mesa in New Mexico, on the boundary of the EPE BAA. PNM charges its long-term firm PTP service OATT rate for such services to EPE.

In addition to the long-term services identified above, EPE sometimes purchases short-term transmission from third-party service providers.

## Q. HOW DOES EPE PROPOSE TO TREAT OR ALLOCATE THE COSTS OF THIRD-PARTY TRANSMISSION SERVICES IN THE EPE FORMULA RATE CALCULATION?

A. EPE proposes to treat or allocate the cost of third-party transmission services as a transmission-related expense in the formula rate calculation.

## V. EPE TRANSMISSION SYSTEM IMPROVEMENTS

## Q. HAS EPE INVESTED IN ITS TRANSMISSION SYSTEM SINCE THE

 CURRENTLY EFFECTIVE OATT RATES WERE FILED?A. Yes. EPE's currently-effective OATT rates have their origin in a rate filing that resulted in a black-box settlement approved by the Commission in 1998. EPE's total transmission plant account balance has grown substantially since that time, as Mr. Schichtl explains in his testimony.
Q. HOW DOES EPE DETERMINE WHEN AND WHERE TO EXPAND OR REINFORCE ITS TRANSMISSION SYSTEM?
A. EPE's expansions and improvements to its transmission system are driven by a number of factors, including the long-term transmission services subscribed by customers, the transmission system upgrades or additions identified as necessary to provide generator interconnection services, and infrastructure to maintain reliability and serve load growth. Mr. Davis discusses this in more detail in his testimony.

## VI. AMENDED OATT

## Q. PLEASE DESCRIBE HOW EPE'S OATT IS BEING REVISED IN THIS FILING.

A. EPE's OATT revisions are limited to the following:

1) Revisions to Attachment H to reflect EPE's updated ATRR, together with the addition of a formula rate template and accompanying protocols,
pursuant to which NITS and PTP service rates are to be charged, trued-up and adjusted prospectively.
2) Revisions to section 34 of the main body of EPE's OATT, which addresses NITS rates, to refer to the formula rate template in Attachment H .
3) Revisions to Schedule 1, to reflect adoption of a formula rate mechanism for Scheduling, System Control and Dispatch Service; and
4) Revisions to Schedules 7 and 8 to reflect adoption of rolled-in formula rates for PTP services, and to refer to the formula rate template in Attachment H. These portions of the OATT are shown in Attachment A to the rate filing, with a marked version provided as Attachment B to the filing. EPE's witness Mr. Wolfram discusses the formula rate template, revised OATT rates and related formula rate protocols.

## Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

# UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION 

El Paso Electric Company
)
Docket No. ER22--000

## VERIFICATION

Pursuant to 28 U.S.C. § 1746 (2000), I state under penalty of perjury that I am the David C. Hawkins referred to in the foregoing "Prepared Direct Testimony of David C. Hawkins on Behalf of El Paso Electric Company," that I have read the same and am familiar with the contents thereof, and that the facts set forth therein are true and correct to the best of my knowledge, information, and belief.

Executed this 29th day of October, 2021.


# UNITED STATES OF AMERICA <br> BEFORE THE <br> FEDERAL ENERGY REGULATORY COMMISSION 

El Paso Electric Company $\quad$ ) Docket No. ER22___000

# PREPARED DIRECT TESTIMONY OF 

JAMES A. SCHICHTL
ON BEHALF OF
EL PASO ELECTRIC COMPANY

OCTOBER 29, 2021

# UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION 

El Paso Electric Company )<br>Docket No. ER22--000

PREPARED DIRECT TESTIMONY OF JAMES A. SCHICHTL

## I. INTRODUCTION

Q. PLEASE STATE YOUR NAME, POSITION, AND BUSINESS ADDRESS.
A. My name is James A. Schichtl. My business address is El Paso Electric Company, P.O. Box 982, El Paso, Texas 79960.
Q. WHO IS YOUR CURRENT EMPLOYER AND WHAT POSITION DO YOU HOLD?
A. My employer is El Paso Electric Company ("EPE" or the "Company"). I am the Vice President of Regulatory and Governmental Affairs at EPE.

## Q. WHAT ARE YOUR DUTIES IN YOUR CURRENT POSITION?

A. As Vice President of Regulatory and Governmental Affairs, I am responsible for the oversight and direction of EPE's Economic Research, Rate Research, and Regulatory Case Management groups, as well as EPE's Governmental Affairs unit. In my capacity as Vice President, I direct development of filings related to rate change applications and other approval actions at state regulatory agencies and at the Federal Energy Regulatory Commission ("FERC" or the "Commission"). My duties and responsibilities require knowledge of the statutory and regulatory requirements of each jurisdiction.

## Q. ON WHOSE BEHALF ARE YOU SUBMITTING THIS TESTIMONY?

A. I am testifying on behalf of EPE.

## Q. PLEASE DESCRIBE YOUR BACKGROUND AND YOUR PROFESSIONAL EXPERIENCE.

A. I graduated with a Bachelor of Science in Mechanical Engineering in May 1987 from the University of Texas at El Paso, where I also studied graduate level economics and econometrics. Throughout my career, I have attended and presented material for numerous seminars and workshops related to cost of service, rate and program design, and regulation.

I have been employed by EPE since February 2012, when I joined the Company as a Regulatory Case Manager. In June 2016, I was promoted from Director of Regulatory Affairs to Vice President of Regulatory Affairs. Prior to becoming Director, I was Manager of EPE's Economic \& Rate Research group, responsible for EPE's jurisdictional cost of service, rate design, and development of EPE's retail rate schedules and charges. Prior to that, I was a Senior Regulatory Case Manager, responsible for the production, filing, and execution of regulatory applications before both the Public Utility Commission of Texas and the New Mexico Public Regulation Commission.

Prior to joining EPE in February 2012, I spent eighteen years in various regulatory positions at Southern California Edison Company ("SCE"), twelve of those in a managerial capacity. As Manager of Pricing Design and Research, I was responsible for SCE's rates and tariffs during deregulation and changes required following the California power crisis in 2001. I was subsequently promoted to Manager of Tariffs and Advice Letters, with broad responsibility within the
regulatory functions for evaluating California statutes, rules, and regulations and managing regulatory efforts at the California Public Utilities Commission.

## Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE FERC OR BEFORE OTHER REGULATORY AGENCIES AND COURTS ON UTILITYRELATED MATTERS?

A. Yes. I have filed testimony before the Commission in Docket Nos. ER02-925, ER03-142, ER04-1222, and ER06-186, and I have testified many times before state regulators.
Q. PLEASE EXPLAIN THE PURPOSE OF YOUR TESTIMONY AND HOW
IT IS ORGANIZED.
A. The purpose of my testimony is to:

1) Identify EPE's projected capital investment in transmission facilities for the period the filed rates are proposed to be in effect;
2) Provide EPE's total transmission plant account balance for the most recent calendar year (i.e., year 2020); and
3) Describe the benefits of moving to an annual formula-based transmission rate.

## Q. ARE YOU SPONSORING ANY EXHIBITS IN SUPPORT OF YOUR TESTIMONY IN THIS FILING?

A. Yes. I am sponsoring Exhibit No. EPE-0003 - EPE's Projected Transmission Plant Through Year 2022.
Q. WAS YOUR TESTIMONY PREPARED BY YOU OR UNDER YOUR DIRECT SUPERVISION?
A. Yes.
II. EPE'S PROJECTED CAPITAL EXPENDITURES FOR TRANSMISSION
Q. WHAT ARE EPE'S UPCOMING CAPITAL EXPENDITURES FOR TRANSMISSION?
A. I have attached as Exhibit No. EPE-0003, EPE's projected transmission plant account balances through year-end 2022. Year 2022 coincides with the initial year during which EPE's proposed formula rate is expected to be in effect.
III. EPE'S TRANSMISSION PLANT ACCOUNT BALANCE
Q. HAS EPE EXPERIENCED SIGNIFICANT GROWTH IN ITS TOTAL TRANSMISSION PLANT ACCOUNT BALANCE OVER TIME?
A. Yes. At the time EPE last filed rates for its transmission services in the mid-1990s, its total transmission plant account balance was $\$ 238,822.547$. Since then, EPE's total transmission plant account balance has grown to $\$ 572,495,263$, as reflected in EPE's FERC Form No. 1 for the 2020 calendar year (pages 206-207 at line 58).

## IV. EPE'S PROPOSED FORMULA RATE

Q. HOW DOES EPE RECOVER ITS TRANSMISSION INVESTMENT?
A. EPE currently recovers transmission investment through stated rates established in an Offer of Settlement ("Settlement") approved by the Commission by letter order issued in Docket No. OA96-200-004 on June 10, 1998. The Settlement resolved issues concerning rates for Point-to-Point and Network Integration Transmission Services. Such rates have not been modified until now.
Q. WHAT ARE THE BENEFITS OF MOVING TO A FORMULA RATE FROM A STATED RATE?
A. It is important to note that EPE expects to continue to incur significant transmission capital expense to provide and maintain its system. Therefore, moving to a projected formula rate will permit EPE to timely recover those capital investments
and thereby avoid the regulatory lag associated with preparing, filing, litigating and resolving individual section 205 stated rate proceedings, which can be extensive and costly in both resources and time. Through a formula rate, EPE's transmission rates will more accurately and timely reflect the actual costs EPE incurs to provide transmission service.

In addition, aligning EPE's transmission rates with its costs through an updated and projected formula rate tends to reduce "rate shock" or sudden jumps in rates that can occur when stated rate cases are filed years apart. Thus, transmission formula rates allow customers greater regulatory certainty and the ability to more accurately budget for transmission costs. A formula rate should also help EPE to minimize its financing costs, which, in turn, mitigates the costs of providing service.

Finally, I note that EPE's proposed transmission formula rate structure incorporates transparency to transmission customers and the Commission. For example, the formula rate protocols require the submittal of annual information filings, as well procedures for data and information exchange regarding EPE's implementation of the formula.

## Q. WHY IS THE USE OF A FORMULA RATE HELPFUL IN KEEPING FINANCING COSTS DOWN?

A. EPE must maintain its ability to access capital at all times to plan, construct, maintain, and operate its transmission system. To do so at reasonable cost, EPE needs to demonstrate solid capital structure ratios, predictable and stable cash flows, and a competitive and reasonable rate of return, among other factors. A

## 5 V. CONCLUSION

6 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

# UNITED STATES OF AMERICA <br> BEFORE THE <br> FEDERAL ENERGY REGULATORY COMMISSION 

El Peso Electric Company<br>)<br>Docket No. ER 22--000

## VERIFICATION

Pursuant to 28 U.S.C. $\$ 1746$ (2000), I state cinder penalty of perjury that I am the James A. Schichtl referred to in the foregoing "Prepared Direct Testimony of James A. Schichtl on Behalf of El Paso Electric Company," that I have read the same and am familiar with the contents thereof, and that the facts set forth therein are true and correct to the best of my knowledge, information, and belief.

Executed this 29th day of October, 2021.


JAMES A. SCHCHTL

## Projected Transmission Plant Through Year-End 2022

| Line | Month \&Year | Projected Plant Additions |  | Transmission Plant in Service |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | (a) |  | (b) |  | (c) |
| 1 | Dec-20 |  |  |  | 572,495,263 |
| 2 | Jan-21 | \$ | 221,000 | \$ | 572,716,263 |
| 3 | Feb-21 | \$ | 936,000 | \$ | 573,652,263 |
| 4 | Mar-21 | \$ | 946,000 | \$ | 574,598,263 |
| 5 | Apr-21 | \$ | 1,695,000 | \$ | 576,293,263 |
| 6 | May-21 | \$ | 4,234,000 | \$ | 580,527,263 |
| 7 | Jun-21 | \$ | 870,000 | \$ | 581,397,263 |
| 8 | Jul-21 | \$ | 958,000 | \$ | 582,355,263 |
| 9 | Aug-21 | \$ | 874,000 | \$ | 583,229,263 |
| 10 | Sep-21 | \$ | 1,532,000 | \$ | 584,761,263 |
| 11 | Oct-21 | \$ | 1,138,000 | \$ | 585,899,263 |
| 12 | Nov-21 | \$ | 1,279,000 | \$ | 587,178,263 |
| 13 | Dec-21 | \$ | 15,987,000 | \$ | 603,165,263 |
| 14 | Jan-22 | \$ | 1,346,000 | \$ | 604,511,263 |
| 15 | Feb-22 | \$ | 1,238,000 | \$ | 605,749,263 |
| 16 | Mar-22 | \$ | 1,362,000 | \$ | 607,111,263 |
| 17 | Apr-22 | \$ | 4,589,000 | \$ | 611,700,263 |
| 18 | May-22 | \$ | 3,528,000 | \$ | 615,228,263 |
| 19 | Jun-22 | \$ | 1,531,000 | \$ | 616,759,263 |
| 20 | Jul-22 | \$ | 4,936,000 | \$ | 621,695,263 |
| 21 | Aug-22 | \$ | 1,531,000 | \$ | 623,226,263 |
| 22 | Sep-22 | \$ | 2,652,000 | \$ | 625,878,263 |
| 23 | Oct-22 | \$ | 2,421,000 | \$ | 628,299,263 |
| 24 | Nov-22 | \$ | 1,538,000 | \$ | 629,837,263 |
| 25 | Dec-22 | \$ | 35,199,000 | \$ | 665,036,263 |

## UNITED STATES OF AMERICA <br> BEFORE THE <br> FEDERAL ENERGY REGULATORY COMMISSION

# El Paso Electric Company ) <br> ) <br> Docket No. ER22- <br> -000 

PREPARED DIRECT TESTIMONY OF JOHN WOLFRAM

ON BEHALF OF EL PASO ELECTRIC COMPANY

OCTOBER 29, 2021

# UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION 

El Paso Electric Company )<br>Docket No. ER22--000

)

## PREPARED DIRECT TESTIMONY OF JOHN WOLFRAM

## I. INTRODUCTION

Q. PLEASE STATE YOUR NAME, POSITION, AND BUSINESS ADDRESS.
A. My name is John Wolfram. I am the founder and Principal of Catalyst Consulting LLC, a rate and regulatory consulting firm. My business address is 3308 Haddon Road, Louisville, Kentucky, 40241.
Q. ON WHOSE BEHALF ARE YOU TESTIFYING?
A. I am testifying on behalf of El Paso Electric Company ("EPE").
Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.
A. I received the degree of Bachelor of Science in Electrical Engineering from the University of Notre Dame in South Bend, Indiana, in May 1990. I also received the Master of Science degree in Electrical Engineering from Drexel University in Philadelphia, Pennsylvania, in June 1997, with a concentration in power system modeling and engineering management.

## Q. PLEASE DESCRIBE YOUR PROFESSIONAL EXPERIENCE.

A. I began my career in 1990 with PJM Interconnection, L.L.C. ("PJM"), where I implemented Energy Management Systems ("EMS") for the reliable operation of
the multi-state transmission grid. I left PJM to work with Cincinnati Gas \& Electric Company in 1993 on an EMS project before returning to PJM in 1994 during the deregulation of the electric wholesale market. I implemented new practices and tools for PJM in conjunction with Federal Energy Regulatory Commission ("Commission" or "FERC") Order Nos. 888 and 889. In 1997, I joined Louisville Gas \& Electric Company ("LG\&E"). I worked in Energy Trading and Generation Planning before becoming the Manager of Regulatory Affairs for LG\&E and Kentucky Utilities Company ("KU"). In that role, I directed strategic regulatory initiatives with the FERC and with regulators in Kentucky and Virginia, including rate cases, certificates of public convenience and necessity and transmission siting proceedings, compliance \& management audits, regional transmission organization ("RTO") membership, and hydroelectric relicensing. I testified many times before the Kentucky Public Service Commission and participated as a panelist in a FERC technical conference on Standards of Conduct. I then served as Director of Customer Service \& Marketing for LG\&E and KU, where I was responsible for all facets of customer interaction, including marketing, major accounts, walk-in offices, call centers, customer inquiries, economic development, and energy efficiency program design and implementation.

In 2009, I joined The Prime Group, LLC, a rate and regulatory consulting firm, as a Senior Consultant. In that role, I provided consulting services to investorowned utilities, municipal utilities, and electric cooperatives on matters related to rate design, formula rates, cost of service studies, revenue requirements, open access transmission tariffs, RTO membership, and special rate structures. In 2012,

I founded Catalyst Consulting LLC, a rate and regulatory consulting firm specializing in utility rate cases, tariffs, transmission formula rates, and complex regulatory matters.

## Q. WHAT ARE YOUR DUTIES IN YOUR CURRENT POSITION?

A. I provide consulting services to electric utilities on matters relating to rate design, cost of service, revenue requirements, special rate structures, and other regulatory matters. I have provided advice on pricing matters and rate design to several transmission-only entities as well as to traditional investor-owned utilities, electric cooperatives, and municipal utilities. I have advised utilities on transmission issues associated with FERC regulation of open access transmission service. I have provided consulting service to transmission-owning members of the Midcontinent Independent System Operator, Inc., PJM, and Southwest Power Pool, Inc. I have advised these clients on transmission formula rates, transmission pricing, transmission planning, cost allocation, and other broad transmission policy initiatives.

## Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE FERC OR BEFORE OTHER REGULATORY AGENCIES ON UTILITY-RELATED MATTERS?

A. Yes. I have filed testimony before the Commission in several proceedings and have testified many times before state regulators. A detailed summary of my experience and previous testimony is provided in Exhibit No. EPE-0005.
Q. WAS YOUR TESTIMONY PREPARED BY YOU OR UNDER YOUR DIRECT SUPERVISION?
A. Yes.

## II. BACKGROUND

## Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. I have been requested to develop a formula rate ("Formula Rate Template" or "Template") for determining the Annual Transmission Revenue Requirement ("ATRR") and support the development of the accompanying formula rate protocols ("Protocols") (collectively, the "Formula Rate") for EPE, a transmissionowning electric utility within the footprint of the Western Electric Coordinating Council. The purpose of my testimony is to:

1) Describe the Formula Rate Template (Exhibit No. EPE-0006) proposed by EPE in this proceeding as a new Attachment H-1 to the EPE Open Access Transmission Tariff ("OATT") and, through my testimony, show that it produces a just and reasonable rate on both a locked-in basis from the effective date of this filing until the effective date of the next annual update submitted under the Protocols, as well as on a prospective basis;
2) Describe how the proposed Formula Rate Template and the associated worksheets operate to calculate the projected net revenue requirement;
3) Describe the Protocols proposed by EPE as new Attachment H-2 to the EPE OATT (Exhibit No. EPE-0007) and show that they are transparent and provide EPE's current and future customers and the Commission with procedural safeguards and sufficient information to facilitate the annual review of the inputs to the Formula Rate Template, consistent with Commission requirements;
4) Sponsor a fully populated Template (Exhibit No. EPE-0008) that supports the proposed rates for Network Integration Transmission Service ("NITS"), long-term and short term, firm and non-firm point-to-point transmission service ("PTP service"), and Scheduling, System Control and Dispatch Service (Schedule 1 to the OATT) during the first rate period (calendar year 2022); and
5) Sponsor a summary comparing sales and services and revenues from sales and services under EPE's current OATT versus the fully-populated Template during the locked-in first rate period for each class of service, specifically a comparison of the proposed rate versus the existing stated rates for long-term and short-term firm and non-firm PTP service under Schedule 7 and Schedule 8 for relevant delivery points, including the transmission facilities connecting the Palo Verde Generating Station ("Palo Verde") and the Westwing and Kyrene switching stations ("Palo Verde Facilities") (Exhibit No. EPE-0009).

## Q. ARE YOU SPONSORING ANY EXHIBITS IN SUPPORT OF YOUR TESTIMONY IN THIS CASE?

A. Yes. These include:

| 1) Exhibit No. EPE-0005 | John Wolfram's Curriculum Vitae |
| :--- | :--- |
| 2) Exhibit No. EPE-0006 | Attachment H-1, Formula Rate <br> Template |
| 3) Exhibit No. EPE-0007 | Attachment H-2, Formula Rate <br> Implementation |

4) Exhibit No. EPE-0008
5) Exhibit No. EPE-0009

Populated Formula Rate Template for First Rate Period; and

Effects of Rate Change.

## Q. PLEASE DESCRIBE EPE'S EXISTING TRANSMISSION RATES AND REVENUE REQUIREMENT.

A. EPE currently recovers transmission investment at stated rates established through its OATT, which resulted from an Offer of Settlement ("Settlement") submitted in Docket No. OA96-200 and accepted by the Commission in a letter order. ${ }^{1}$ The Settlement resolved issues concerning rates for PTP service and NITS. The Settlement provided an ATRR of $\$ 31,300,000$ and established NITS and PTP service rates. EPE's ATRR and attendant rates have not been modified since.

## Q. WHY IS IT REASONABLE FOR EPE TO TRANSITION TO A FORMULA RATE?

A. EPE is proposing to replace the currently effective stated revenue requirement in Attachment H of its OATT with a forward-looking formula rate to account for EPE's current costs and its increasing transmission system investments in the upcoming years. The use of a forward-looking formula rate instead of stated rates will allow EPE to collect a transmission revenue requirement that is representative of the costs of those transmission system investments in the current period, provide greater certainty for cost recovery of capital expenditures, and ensure that customers pay the costs to serve them over the lives of the transmission projects.

[^10]Moreover, similar formulas and true-up mechanisms have been approved by the Commission in numerous proceedings, including PJM Interconnection, L.L.C., 155 FERC If 61,097 (2016), NextEra Energy Transmission W., LLC, 154 FERC II 61,009 (2016), and PJM Interconnection, L.L.C., 152 FERC II 61,180 (2015), among many others. For these reasons, the adoption of a forward-looking formula rate will help EPE prospectively maintain wholesale transmission rates that more closely reflect the costs of providing service and, therefore, are fair, just, and reasonable.

## Q. PLEASE DESCRIBE THE PALO VERDE FACILITIES.

A. The Palo Verde Facilities consist of three 500 kV lines, and related facilities, that extend 165 miles in total from Palo Verde near Phoenix, Arizona, with two of the lines extending to the Westwing switching station and one extending to the Kyrene switching station, all facilities located entirely in Arizona. EPE is one of several owners of the Palo Verde Facilities. Additional technical details of the Palo Verde Facilities are provided in the Direct Testimony of Mr. David C. Hawkins. See Exhibit No. EPE-0001.
Q. HOW DOES EPE CURRENTLY ADDRESS THE PALO VERDE FACILITIES?
A. EPE provides incrementally priced, i.e., separate from the pricing for service on the portion of EPE's transmission system located in Texas and New Mexico, firm and non-firm, long-term and short-term transmission service on the Palo Verde Facilities pursuant to the current OATT.
Q. HOW DOES EPE PROPOSE TO ADDRESS THE PALO VERDE FACILITIES IN ITS FORMULA RATE?
A. The Palo Verde Facilities are included in the calculations of the overall ATRR. In other words, the costs of all of EPE's transmission facilities, including the Palo Verde Facilities, are reflected in the formula rates presented in this filing, so that the formula rates as designed roll in the costs of all EPE transmission facilities.

## III. OVERVIEW OF FORMULA RATE OPERATION

## Q. PLEASE PROVIDE AN OVERVIEW OF EPE'S FORMULA RATE FILING IN THIS DOCKET.

A. The proposed Formula Rate consists of the Formula Rate Template and Protocols. In the EPE OATT, Section 34, Schedules 1, 7, and 8, and the current Attachment H will be revised. The Formula Rate Template will be added to the OATT as Attachment H-1 and the Protocols as Attachment H-2 (collectively, "Attachment H"). In place of the currently effective rate for NITS in the current OATT, per-unit charges derived from the Formula Rate Template and Protocols will be specified on page 1 of the Projected Attachment H. Schedules 7 and 8 for firm and non-firm PTP service, respectively, will be revised to replace the respective stated rates with references that the rate will be derived pursuant to the Formula Rate Template and Protocols and a description of how those rates will be calculated in accordance with the Formula Rate Template. Schedule 1 also is revised to reference rates derived from the Formula Rate Template and Protocols.

OATT Attachment H-1, the Formula Rate Template shown in Exhibit No. EPE-0006, is an unpopulated formula rate template that EPE will use to calculate its ATRR. The Formula Rate Template is a forward-looking formula rate for which EPE will primarily utilize the previous year's FERC Form No. 1 data as inputs (except for instances in which EPE will use 13-month average balances for certain rate base items where the data necessary to calculate the ATRR is not directly available in the prior year's FERC Form No. 1), and will project changes for the upcoming twelve month period for capital project additions, net plant, and certain rate base items, operations and maintenance ("O\&M") and administrative and general ("A\&G") expense, depreciation expense, taxes other than income taxes ("Other Taxes"), allocators, and the load divisor (referred to in the Protocols as the "Annual Projection"). Each twelve month period from January 1 through December 31 in the Formula Rate Template is a "Rate Year." The resulting projected net revenue requirement from the populated Formula Rate Template will be charged to customers in accordance with the terms and conditions of the EPE OATT throughout that Rate Year.

No later than June 15 following the Rate Year, EPE will calculate the difference between the actual transmission revenues recorded by EPE and EPE's actual net revenue requirement for the Rate Year ("True-Up Amount"). EPE will apply the True-Up Amount (referred to in the Protocols as the "True-Up Adjustment") to the next Rate Year's projected net revenue requirement and resultant rates. The True-Up Adjustment will include an interest component, in accordance with 18 C.F.R. § 35.19a. This overall process will repeat every year and is specified in detail in the proposed Protocols.

The Protocols, which are more fully discussed in Section V of my testimony, set forth the procedures and timelines upon which EPE shall annually
implement the Formula Rate Template for each Rate Year. This includes, among other things, mechanisms for (i) providing interested parties advance notice of EPE's implementation of its formula rate through notifications and holding annual "Customer Meetings"; (ii) providing opportunities for interested parties to submit information and document requests related to EPE's posted implementation of its formula rate; (iii) governing both informal and formal challenges by interested parties on EPE's formula rate implementation; and (iv) annually submitting an informational filing to the Commission pertaining to EPE's implementation of its Annual Projection and True-Up Adjustment for a given Rate Year.

## Q. WILL THERE BE A NEW EFFECTIVE LOCKED-IN PERIOD FOR THE RATES?

A. Yes. EPE is supporting in this filing rates for the 2022 calendar year by populating the Formula Rate Template with 2020 FERC Form No. 1 data, updated with capital project additions that have occurred in 2021 or are projected to occur in the remainder of 2021 and 2022, along with projections for 2022 of other items subject to estimate, specifically certain rate base items, $\mathrm{O} \& \mathrm{M}, \mathrm{A} \& \mathrm{G}$, depreciation expense, Other Taxes, allocators, and the load divisor. This means that EPE is essentially performing the steps outlined in the proposed Protocols to populate the Formula Rate Template and develop an initial set of proposed rates.

## Q. WHAT IS THE PROPOSED EFFECTIVE DATE FOR THE 2022 CALENDAR YEAR RATES?

A. EPE seeks an effective date of January 1, 2022, for the 2022 calendar year rates.

## Q. HOW WILL THE FORMULA RATE OPERATE ON AN ANNUAL BASIS?

A. By June 15 each year, EPE will project the annual revenue requirement (as stated above based on the previous year's FERC Form No. 1 data as inputs, along with projected changes for capital project additions, net plant, certain rate base items, O\&M and $\mathrm{A} \& G$ expense, depreciation and amortization expenses, income taxes, other taxes, allocators, the load divisor, and return on rate base) for the upcoming Rate Year (as I noted earlier, this is referred to in the Protocols as the "Annual Projection"). Using this Annual Projection, EPE will then calculate the rate to be placed in effect for the upcoming Rate Year pursuant to the Formula Rate Template. After the Rate Year, by no later than June 15, EPE will calculate the actual revenue requirement (based on actual rate base and expenses noted in the FERC Form No. 1 and company books and records and a calculation of actual return on rate base) and the difference between the actual transmission revenues recorded by EPE and the actual net revenue requirement for the Rate Year ("True-Up Amount"). EPE will use this True-Up Amount, plus appropriate interest, to adjust the projected revenue requirement for the subsequent Rate Year (as I noted earlier, this is referred to in the Protocols as the "True-Up Adjustment").

## Q. PLEASE PROVIDE AN EXAMPLE OF HOW THE FORMULA WOULD FUNCTION.

A. As an example, after implementing the calendar year 2022 rates in this filing, EPE will:

- By no later than June 15, 2022 :
- project the revenue requirement for the Rate Year from January 1, 2023, through December 31, 2023, by fully populating the Formula Rate Template with EPE's actual costs and expenses for the 2021 Rate Year.
- From January 1, 2022 through December 31, 2022:
- collect the projected net revenue requirement from its customers pursuant to the terms and conditions of the EPE OATT.
- By no later than June 15, 2023:
- calculate the True-Up Adjustment for the 2022 Rate Year by populating the Formula Rate Template with EPE's actual 2022 costs and expenses, comparing that to the actual transmission revenues recorded by EPE for the 2022 Rate Year, and incorporating that difference plus interest into the projected net revenue requirement for the 2024 Rate Year.

The time frames listed above are specifically set forth in the proposed Protocols.

## Q. PLEASE EXPLAIN WHY THE PROPOSED FORMULA IS REASONABLE.

A. The proposed Formula Rate is based on the traditional cost-of-service formula of return on rate base plus O\&M, A\&G, depreciation, Other Taxes, income taxes, less other operating revenues, and is similar to the templates, protocols, and true-up mechanisms approved by the Commission in numerous other proceedings, including PJM Interconnection, L.L.C., 155 FERC II 61,097 (2016), NextEra Energy Transmission W., LLC, 154 FERC II 61,009 (2016), and PJM Interconnection, L.L.C., 152 FERC § 61,180 (2015). The proposed Formula Rate allows EPE to collect a rate that: (1) is representative of the costs of transmission system investment EPE incurs in the current, relevant period; (2) provides for
greater certainty for cost recovery of transmission capital expenditures; and (3) ensures that customers pay the actual cost to serve them over the lives of the facilities.

## Q. PLEASE EXPLAIN THE PROPOSED INTEREST CALCULATION AND WHY IT IS REASONABLE.

A. As mentioned above, the interest on any over- or under-recovery of the net revenue requirement would be calculated based on the interest rates set forth in section 35.19a of the Commission's regulations. EPE proposes to use the average of the Commission's four most recently posted annual interest rates, converted to an average monthly interest rate, to calculate the interest payable for the months during which the over- or under-recovery in the ATRR exists.
Q. HOW DOES THE INITIAL IMPLEMENTATION OF THE FORMULA RATE FOR THE FIRST RATE YEAR, 2021, COMPARE TO THE STATED RATES AS OF THE DATE OF THIS FILING?
A. It is important to note that EPE has not filed for a rate change of its NITS or PTP transmission services since its initial OATT rate was approved in 1998. Therefore, as expected, the implementation of the formula rate for 2022 represents a rate increase for EPE's NITS and PTP transmission services. The estimate of the annual effect on customer rates is provided in Exhibit No. EPE-0009 - Effects of Rate Change.

## IV. DESCRIPTION OF FORMULA RATE METHODOLOGY

## Q. PLEASE DESCRIBE IN DETAIL THE ACTUAL APPLICATION OF THE PROPOSED FORMULA RATE.

A. The Formula Rate Template includes all of the corresponding worksheets that EPE incorporates into Attachment H-1 of its OATT. The Template includes the determination of the ATRR, which produces the resultant NITS rates found on Attachment H, the PTP service rates found in Schedules 7 and 8 of the OATT, and the Scheduling, System Control and Dispatch rates found in Schedule 1. EPE includes the Attachment H-1, Formula Rate Template in this filing as Exhibit No. EPE-0006.

The proposal replaces the current stated revenue requirements set forth in Attachment H of the OATT with the Template, which is presented first on an actual basis (labeled Actual Attachment H) and then on a projected basis (labeled Projected Attachment H). (Because the Projected Attachment H and the Actual Attachment H are similarly structured, I will refer to them collectively in my testimony as "Attachment H" unless specified otherwise.)

## Q. PLEASE FURTHER DESCRIBE ATTACHMENT H.

A. Page 1 of Attachment H summarizes the ATRR calculations for EPE. Pages 2 and 3 of Attachment H calculate the traditional net plant revenue requirement for all transmission facilities for EPE. The gross revenue requirement is the sum of $\mathrm{O} \& \mathrm{M}$, depreciation expense, other taxes, income taxes, and return on rate base. The underlying cost data reflect EPE's costs of service (as projected and later trued-up to data reported in the FERC Form No. 1 and other inputs to the formula).

Attachment H also includes, beginning on page 4, a listing of "Supporting Calculations and Notes" that are inputs to the basic formula on pages 1 through 3, specifically: (a) the Transmission Plant allocator (page 4, line 5); (b) the Transmission Expense allocator (page 4, line 11); (c) the Wages \& Salaries allocator (page 4, line 16); (d) the Common Plant allocator (page 4, line 17); and
(e) the capital structure and overall Rate of Return ("R") (page 4, lines 21-31).

These supporting calculations and notes are followed by explanatory notes on page 5. Note that allocators for Gross Plant and Net Plant are determined on page 2 (lines 6 and 18 respectively).

On Attachment H and its associated worksheets, the data is presented in rows with a title, description, source (which is often a page reference to the FERC Form No. 1 or an attached worksheet), total company value, allocation factor to be applied, and the transmission-related amount that results from the application of the allocation factor to the total company value.

## Q. YOU NOTED THE USE OF ALLOCATION FACTORS IN ATTACHMENT H AND VARIOUS WORKSHEETS, PLEASE DISCUSS FURTHER.

A. The application of allocation factors to total company values adheres to accepted practices for cost functionalization and classification in transmission formula rates. Allocators are calculated and applied in Attachment H, as described below. These include allocators for Gross Plant, Net Plant, Transmission Plant, Transmission Expense, Wages \& Salaries, and Common Plant.

## Q. DISCUSS THE WORKSHEETS SUPPORTING ATTACHMENT H.

A. Attachment H is supported by numerous other worksheets. The worksheets are largely split between those including actual or historical data (labeled as Worksheets A1 through A9) and those including projected data (labeled as Worksheets P1 through P7), with Worksheet TU bridging the actuals and projection by calculating the True-Up Adjustment. The worksheets support the calculations in Attachment H with respect to revenue requirements, rate base, True-Up Adjustment, revenue credits, depreciation, peak demand, and other items.

## Q. PLEASE DESCRIBE EACH OF THE WORKSHEETS THAT SUPPORT ATTACHMENT H.

A. Descriptions are provided as follows:

- Worksheet A1 calculates the revenue credits associated with Accounts 454 (Rent from Electric Property) and 456.1 (Other Electric Revenues).
- Worksheet A2 provides support for certain A\&G expense items, including Electric Power Research Institute ("EPRI") dues, regulatory commission expenses and safety-related advertising.
- Worksheet A3-1 provides supporting data for the accumulated deferred income tax ("ADIT") values.
- Worksheet A3-2 presents additional details and supporting data for the actual ADIT and Accumulated Deferred Investment Tax Credits.
- Worksheet A4 provides supporting data for the rate base adjustments.
- Worksheet A5 lists the depreciation rates.
- Worksheet A6 presents the actual transmission load that is used in the divisor of the per-unit rate calculations for the actual ATRR.
- Worksheet A7 presents the actual "incentive plant" data for any future projects for which EPE may seek and the Commission may approve a return on equity ("ROE") incentive adder; for now this worksheet will remain unpopulated.
- Worksheets A8-1 and A8-2 present the actual Excess/Deficient Deferred Income Tax ("EDIT") calculations.
- Worksheet A9 presents the actual cost of capital calculations.
- Worksheet TU calculates the True-Up Amount before interest and the TrueUp Adjustment (which includes interest).
- Worksheet P1 presents the projected transmission plant additions and associated accumulated depreciation amounts.
- Worksheet P2 calculates the projected O\&M expenses.
- Worksheet P3 calculates the projected transmission network load that is used in the divisor of the per-unit rate calculations for the Projected ATRR.
- Worksheet P4 presents the projected "incentive plant" data for any future projects for which EPE may seek and the Commission may approve an ROE incentive adder in the future; for now this worksheet will remain unpopulated.
- Worksheet P5-1 presents the projected ADIT calculations.
- Worksheet P5-2 presents additional details and supporting data for the projected ADIT and Accumulated Deferred Investment Tax Credits.
- Worksheets P6-1 and P6-2 present the projected EDIT calculations.
- Worksheet P7 presents the projected adjustments to rate base.
Q. PLEASE DESCRIBE HOW RATE BASE IS CALCULATED PURSUANT
TO THE FORMULA RATE TEMPLATE.
A. Rate base is calculated as the sum of total net plant, adjustments to rate base, land held for future use, and total working capital.


## Q. PLEASE DESCRIBE HOW THE NET PLANT COMPONENT OF RATE BASE IS DETERMINED.

A. Net plant is determined as the difference between gross plant (excluding asset retirement costs) and accumulated depreciation and amortization. All plant
balances are calculated based on 13-month averages, for which the details are developed in Worksheet A4. Thereafter, transmission plant is allocated using the Transmission Plant allocator. General and Intangible Plant are functionalized using the Wages \& Salaries allocator. Common plant is functionalized using the Common Plant allocator.

## Q. PLEASE DISCUSS ANY ADJUSTMENTS MADE TO RATE BASE AND HOW THEY ARE DETERMINED.

A. Adjustments to rate base are calculated on Worksheet A4. ADIT and Accumulated Deferred Investment Tax Credits are calculated on Worksheets A3-1 and A3-2 respectively. I describe these later in my testimony. Construction Work In Progress ("CWIP"), unamortized balances for regulatory assets, and unfunded reserves are calculated on Worksheet A4. EDIT is calculated on Worksheets A8-1 and A8-2. Working capital is detailed on Actual Attachment H, page 2, lines 28-31 and includes Cash Working Capital (calculated as one-eighth of total O\&M and A\&G expenses, consistent with Commission practice), Materials \& Supplies (detailed on Worksheet A4), and Prepayments (also detailed on Worksheet A4). Land Held for Future Use is also included on Worksheet A4. All of the amounts on Worksheet A4 are calculated as the average of the 13-month balances.

The Formula Rate Template also includes placeholders for future incentive rate treatments. CWIP is included in the Formula Rate Template at Actual Attachment H, page 2, line 19, and reflects any Commission-approved 13-month average balances as shown on Worksheet A4. Currently, CWIP serves as a placeholder in the Formula Rate Template and any amounts included in CWIP would first be authorized by a specific Commission order.

All of these items are included on page 2 of Actual Attachment H .

## Q. PLEASE DISCUSS THE DEVELOPMENT OF O\&M EXPENSES.

A. The total O\&M expense is determined in Actual Attachment H on page 3. Transmission $\mathrm{O} \& \mathrm{M}$ is allocated using the Transmission Expense allocator, property insurance is allocated using the Gross Plant allocator, and all other A\&G expense is functionalized to transmission using the Wages \& Salaries allocator. A\&G expense is adjusted to remove regulatory commission expenses, EPRI dues, and promotional advertising. Regulatory commission expenses directly related to transmission are added back on line 4c. Ancillary Service costs in Account 561 and items booked to Account 565 (Transmission by Others) are excluded. These items are detailed on Worksheet A2.

The Post-Retirement Benefits Other Than Pensions ("PBOP") rates are supported by an actuarial report performed by an independent third party as described in the Direct Testimony of Ms. Cynthia S. Prieto. See Exhibit No. EPE0012. As reflected in the Template on Actual Attachment H, page 3, the stated PBOP amounts may only be changed subsequently from these levels pursuant to a separate Federal Power Act ("FPA") section 205 or section 206 filing. This treatment is consistent with Trans-Allegheny Interstate Line Co., 124 FERC II 61,075 (2008). In particular, the amount included in Actual Attachment H, page 3, line 4 d is the sum of EPE's classified and unclassified net periodic benefit costs, which are found in the actuarial report provided in Ms. Prieto's Exhibit No. EPE0013.

## Q. HOW IS EPE SEEKING TO RECOVER ITS REGULATORY EXPENSES ASSOCIATED WITH THIS PROCEEDING?

A. EPE projects that it will incur regulatory expenses associated with this rate filing including attorney's fees, and consultant fees. EPE will amortize this amount over three years as reflected in Worksheet A2, line 10 and/or Worksheet P2, line 10a. This is a reasonable amortization period consistent with similar filings. This amount will be subject to true-up for actual costs in accordance with the Protocols upon a final, non-appealable order on EPE's rate filing.
Q. PLEASE DESCRIBE HOW EPE ACCOUNTS FOR A\&G AND HOW THOSE EXPENSES ARE DETERMINED IN THE FORMULA RATE TEMPLATE.
A. I rely on the testimony of Ms. Cynthia S. Prieto in Exhibit No. EPE-0012 that describes the accounting procedures and practices for EPE related to A\&G expense, the extent to which A\&G expenses are directly assigned to particular functions, and how the accounting practices are consistent with the Commission's Uniform System of Accounts. The A\&G expenses are allocated to transmission pursuant to the standard Wages \& Salaries allocator.

## Q. PLEASE DESCRIBE HOW DEPRECIATION AND AMORTIZATION EXPENSES ARE DETERMINED IN THE FORMULA RATE TEMPLATE.

A. Total Transmission Depreciation and Amortization Expense is shown on Attachment H on page 3. It is the sum of transmission plant depreciation and amortization expense plus general plant depreciation and intangible plant amortization, plus Common Plant, plus amortization of abandoned plant cost, functionalized to transmission.

The depreciation rates that yield those depreciation expenses are presented on Worksheet A5 and cannot be changed subsequently absent Commission approval. The transmission depreciation rates proposed by EPE are supported in the Direct Testimony of John J. Spanos in Exhibit No. EPE-0029.

General and Intangible Depreciation is functionalized to transmission by the Wages \& Salaries allocation factor. Common plant, if any, is functionalized to transmission by the Common Plant allocation factor (developed on Attachment H page 4 as the transmission plant percent of total plant times the transmission Wages \& Salaries allocator). The Formula Rate Template also includes a provision for including the amortization of any unrecovered abandoned plant costs; this amortization is directly assigned to the transmission function. Currently, this serves as a placeholder in the Formula Rate Template and any amounts included for amortization of abandoned plant would need to first be authorized by a specific Commission order.

## Q. PLEASE DISCUSS HOW THE FORMULA DEVELOPS TAXES OTHER THAN INCOME TAXES.

A. Other Taxes are functionalized to transmission and specified at Attachment H , page 3, lines 13-20. Labor-related taxes are functionalized by the Wages \& Salaries allocator (page 3, lines 13-14). Real and personal property taxes are functionalized by the Net Plant allocator. Gross receipts taxes are excluded (page 3, line 17).

## Q. PLEASE DISCUSS HOW THE FORMULA DEVELOPS INCOME TAXES.

A. Federal and state income taxes (Attachment H, page 3, lines 21-27) are calculated using a comprehensive formula that has been accepted by the Commission in numerous formula rates. The tax components are the State Income Tax Rate (or

Composite) ("SIT"), Federal Income Tax Rate ("FIT"), and the percent ("p"), if any, of federal income tax deductible in the calculation of state income tax. These components are specified in Note K. The FIT, SIT, and the p are all data enterable fields. In other words, the FIT and SIT will reflect the currently effective FIT and SIT on October 1 for the upcoming Rate Year. The composite federal/state income tax rate (" $T$ ") is calculated on line 21 , where:

$$
\mathrm{T}=1-\{[(1-\mathrm{SIT}) *(1-\mathrm{FIT})] /(1-\mathrm{SIT} * \mathrm{FIT} * \mathrm{p})\}
$$

The Income tax Gross Up Rate, 1/(1-T), is calculated on line 23.
The EDIT and the Permanent Differences Tax adjustments ("Tax Adjustments") are shown at lines 24 through 25 . The respective revenue effects of the Tax Adjustments are calculated by multiplying each of them by the Income Tax Gross Up Rate, the products of which are functionalized to transmission using the Net Plant Allocator.

The income tax component is calculated as the product of (T/1-T) times the portion of the investment return that is taxable times the investment return.

Total income taxes (line 27) are the sum of the income tax component (line 26) and the Tax Adjustments.

## Q. DOES THE FORMULA RATE TEMPLATE INCLUDE PERMANENT WORKSHEETS FOR SPECIFIC ADIT AND EDIT INFORMATION PURSUANT TO FERC ORDER NO. 864?

A. Yes. The Formula Rate Template includes permanent worksheets to incorporate ADIT and EDIT information into the formula rate, consistent with the requirements of FERC Order No. 864. Worksheets A3-1, A3-2, A8-1, and A8-2 provide the specified ADIT and EDIT information for the actual rate year and Worksheets P51, P5-2, P6-1 and P6-2 provide similar information for the projected test year.

## Q. PLEASE DISCUSS HOW THE FORMULA DEVELOPS THE RETURN ON RATE BASE.

A. The return on rate base is the transmission rate base multiplied by the overall rate of return ("R"), which is determined on page 4 of Attachment H. R is the sum of the weighted cost rates for long term debt, preferred stock (if any), and common stock. The amounts of proprietary capital, preferred stock, and long term debt are based on 13-month average balances presented on Worksheet A9. The ROE and capital structure used in the Formula Rate Template are supported in the Direct Testimony of Mr. Adrien M. McKenzie. See Exhibit No. EPE-0016. ROE is proposed as a fixed entry in Attachment $\mathrm{H}-1$ and cannot be changed subsequently absent a FPA section 205 filing or 206 proceeding and an accompanying order by the Commission. Capital structure and cost of debt will reflect the prior year's FERC Form No. 1 data adjusted to reflect any projected changes for an upcoming Rate Year.
Q. PLEASE DESCRIBE HOW THE FORMULA RATE TEMPLATE IDENTIFIES AND ALLOCATES REVENUE CREDITS.
A. EPE credits against the ATRR the revenues received for rent from electric property in Account 454 and other electric revenues in Account 456.1. Those revenue credits are allocated based on the nature of individual line items, as provided on Worksheet A2.

## Q. PLEASE EXPLAIN HOW RATES FOR EPE'S VARIOUS SERVICES ARE DETERMINED FROM THE ATRR.

A. EPE utilizes the standard 12 coincident peak (12-CP) method, i.e., costs are allocated to services based on the average of the twelve month peaks coincident with the system peak or the contract demand. This is consistent with the conventional Commission practice for developing transmission rates.

## Q. PLEASE DISCUSS HOW THE PROJECTED NET REVENUE REQUIREMENT IS DETERMINED IN THE FORMULA RATE TEMPLATE.

A. The ATRR presented on the Projected Attachment H ("Annual Projection") incorporates EPE's anticipated transmission project additions and forecasted system load. The Projected Attachment H structure resembles the Actual Attachment H , in that the ATRR calculation includes $\mathrm{O} \& \mathrm{M}$, depreciation, Other Taxes, income taxes, and a return on rate base. The rate base is calculated by adding the transmission plant that EPE expects to place in service before the end of the projected Rate Year to the existing rate base. The anticipated transmission plant additions and accumulated depreciation are summarized on Worksheet P1. The projected $\mathrm{O} \& \mathrm{M}$ and $\mathrm{A} \& \mathrm{G}$ data items are provided on Worksheet P 2 .

Thereafter, EPE uses the projected system load data to calculate the per-unit charges on page 1 of the Projected Attachment H. EPE provides the load data on Worksheet P3. All of this is consistent with the Commission-accepted methods for determining the Projected ATRR.

## Q. PLEASE EXPLAIN IN DETAIL HOW EACH COMPONENT SUBJECT TO A PROJECTION WILL BE ESTIMATED FOR THE UPCOMING RATE YEAR?

A. Gross plant, accumulated depreciation, net plant in service, and certain other rate base items, including ADIT, will be projected based on projected plant expected to be placed into service in the upcoming Rate Year. The projected change in O\&M, A\&G, and Other Taxes is based on the percentage change in net plant for the projected rate year relative to the actual Rate Year. The projected divisor is based on EPE's projected load for the upcoming year.
Q. WHAT IS THE PROCESS FOR DETERMINING THE PROJECTED PLANT IN SERVICE IN THE UPCOMING RATE YEAR?
A. The projected plant will be based on EPE's annual corporate budgeting process. The results of this budgeting process, as well as other transmission planning processes, will form the basis for the projected plant to be included in the Rate Year.
Q. HOW DOES THE FORMULA RATE ADDRESS INCENTIVE RATE TREATMENTS FOR EPE PROJECTS?
A. As discussed throughout my testimony, the Template includes data fields for particular transmission incentive rate treatments. These include CWIP and incentive ROE adders. At this time, the CWIP and ROE incentives are merely placeholders in the Template. The CWIP incentive is included in Actual Attachment H, page 2, line 19 and in Projected Attachment H, page 2, line 10. The incentive ROE adders are addressed on Worksheets A7 and P4. These and other incentive rate treatments must be separately approved by the Commission and, absent such approval, the appropriate fields in the Template shall remain set to zero.
Q. HOW IS THE TRUE-UP ADJUSTMENT DETERMINED IN THE FORMULA RATE?
A. The True-Up Amount is calculated as the difference between actual transmission revenues recorded by EPE for the Rate Year and the Actual ATRR for the Rate Year in question (absent any previous true-up adjustments). The True-Up Adjustment is the True-Up Amount plus the interest calculated in accordance with 18 C.F.R. § 35.19a. The True-Up Adjustment is determined on Worksheet TU, consistent with the proposed Protocols.
Q. DO THE INITIAL RATES INCLUDE A TRUE-UP ADJUSTMENT?
A. No; for the initial Rate Year, the True-Up Adjustment is zero. Because this filing represents the first year of a transition from stated rates to a formula rate template, there is no historical rate year that qualifies for a True-Up Adjustment pursuant to the proposed Protocols. If this filing is made effective on January 1, 2022, the trueup will first be calculated in 2023 and will be adjusted on pro-rata basis as described in the Protocols, for inclusion in the projected rates for Rate Year 2024.

## Q. HOW DOES THE FORMULA RATE ADDRESS TRANSMISSION FACILITIES DIRECTLY ASSIGNED TO SPECIFIC CUSTOMERS?

A. The cost of facilities that are the responsibility of (and therefore are directly assigned to) specific customers are not included in the Formula Rate Template. The cost of facilities that are not directly assigned to specific customers are included in the Formula Rate Template.

## Q. PLEASE DESCRIBE HOW THE FORMULA RATE TEMPLATE CALCULATES THE ANCILLARY SERVICE SCHEDULE 1 RATE FOR SCHEDULING, SYSTEM CONTROL AND DISPATCH SERVICE.

A. Schedule 1 calculates the total costs recorded in Account 561 for load dispatch and scheduling, less the Short Term PTP service revenues. The net amount is the Schedule 1 annual revenue requirement before true-up. That amount is subject to a true-up which compares the previously-projected Schedule 1 revenue requirement to the actual revenues, and the difference is rolled into the "Net Schedule 1 Annual Revenue Requirement." Interest is applied in the same manner as it is applied on Worksheet TU described before in my testimony. The annual rate is determined as the Net Schedule 1 Annual Revenue Requirement divided by the projected divisor from Worksheet P3.

## V. FORMULA RATE PROTOCOLS

Q. PLEASE PROVIDE AN OVERVIEW OF THE PROPOSED FORMULA RATE PROTOCOLS.
A. Consistent with Commission precedent, the Protocols describe the timing of the True-Up Adjustment and Annual Projection, including associated posting requirements; Information Exchange Procedures for both the True-Up Adjustment and Annual Projection; Challenge Procedures for the True-Up Adjustment; and Changes to the True-Up Adjustment. Informational filings will be made with the Commission for the True-Up Adjustment.

## Q. PLEASE DESCRIBE THE PROCESSES IDENTIFIED ABOVE IN MORE DETAIL.

A. The Protocols require EPE, annually by June $15^{\text {th }}$, to post a populated version of the Formula Rate Template and supporting information, in electronic spreadsheet
form and with formulas intact, on EPE's OASIS for both the Annual Projection and the True-Up Adjustment. EPE will provide notice of such postings to interested parties and will hold open meetings with interested parties to discuss the data, inputs, and rates in these postings.

The Protocols establish timelines for the interested parties to serve reasonable information requests and for EPE to provide responses. The Protocols also describe the steps for informal and formal challenges. The Protocols neither limit the rights of EPE to file changes to the Formula Rate pursuant to section 205 of the FPA, nor do they limit the rights of any party to file a complaint requesting changes to the Formula Rate pursuant to section 206 of the FPA.

## Q. WHY ARE THE PROPOSED PROTOCOLS JUST AND REASONABLE?

A. The proposed Protocols are just and reasonable because they provide a process pursuant to which EPE recovers the cost of providing transmission services under its OATT. The Protocols provide an opportunity for broad participation by interested parties, with the requisite level of transparency to interested parties and the Commission and provide EPE's customers and other interested parties with procedural safeguards and sufficient information to facilitate the annual review of the inputs to the Formula Rate Template. Consistent with the Commission's instructions to other entities with forward-looking formula rates, EPE's Protocols satisfy the Commission's concerns with respect to: (i) scope of participation in EPE's information exchange process; (ii) the transparency of the information exchange; and (iii) the ability of interested parties to challenge EPE's
implementation of the Formula Rate True-Up Adjustment as a result of the information exchange.

## VI. CONCLUSION

## Q. WHAT IS YOUR RECOMMENDATION TO THE COMMISSION IN THIS PROCEEDING?

A. For the reasons discussed above, the Commission should accept the proposed Formula Rate Template and Protocols as filed. EPE is proposing to implement a formula rate with a Template and Protocols that support Commission policies and comply with Commission precedent. The allocation factors used to functionalize and classify costs in the formula rate reflect Commission ratemaking methods. The use of a projected revenue requirement and the true-up mechanism based on the actual revenue requirement are also consistent with Commission precedent. The data used in the formula rate is sourced from the FERC Form No. 1 or for items for which more granular detail is required, from company records noted on the worksheets included with Attachment H-1, the Formula Rate Template. The proposed Protocols provide transparency, as well as procedural safeguards and sufficient information to EPE's current and future customers to facilitate the annual review of the inputs to the Formula Rate Template, consistent with Commission requirements.

## Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, it does.

# UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION 

El Paso Electric Company

)
Docket No. ER22--000

## VERIFICATION

Pursuant to 28 U.S.C. § 1746 (2000), I state under penalty of perjury that I am the John Wolfram referred to in the foregoing "Prepared Direct Testimony of John Wolfram on Behalf of El Paso Electric Company," that I have read the same and am familiar with the contents thereof, and that the facts set forth therein are true and correct to the best of my knowledge, information, and belief.

Executed this 29th day of October, 2021.

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Exhibit No. EPE-0005
Page 1 of 7

## JOHN WOLFRAM

## Summary of Qualifications

Provides consulting services to investor-owned utilities, rural electric cooperatives, and municipal utilities regarding utility rate and regulatory filings, cost of service studies, wholesale and retail rate designs, tariffs and special contracts, formula rates, and other analyses.

## Employment

## CATALYST CONSULTING LLC

June 2012 - Present
Principal
Provide consulting services in the areas of tariff development, formula rates, regulatory analysis, economic development, revenue requirements, cost of service, rate design, special rates, audits, rate filings, and other utility regulatory areas.

THE PRIME GROUP, LLC
March 2010 - May 2012
Senior Consultant
LG\&E and KU, Louisville, KY
1997-2010
(Louisville Gas \& Electric Company and Kentucky Utilities Company)
Director, Customer Service \& Marketing (2006-2010)
Manager, Regulatory Affairs (2001-2006)
Lead Planning Engineer, Generation Planning (1998-2001)
Power Trader, LG\&E Energy Marketing (1997-1998)
PJM INTERCONNECTION, LLC, Norristown, PA 1990-1993; 1994-1997
Project Lead - PJM OASIS Project
Chair, Data Management Working Group
CINCINNATI GAS \& ELECTRIC COMPANY, Cincinnati, OH
1993-1994
Electrical Engineer - Energy Management System

## Education

Bachelor of Science Degree in Electrical Engineering, University of Notre Dame, 1990
Master of Science Degree in Electrical Engineering, Drexel University, 1997
Leadership Louisville, 2006

## Associations

Senior Member, Institute of Electrical and Electronics Engineers ("IEEE") \& Power Engineering Society

## Expert Witness Testimony \& Proceedings

FERC: Submitted direct testimony for TransCanyon Western Development, LLC in FERC Docket No. ER21-1065 regarding a proposed Transmission Formula Rate.

Submitted direct testimony for Cleco Power LLC in FERC Docket No. ER21-370 regarding a proposed rate schedule for Blackstart Service under Schedule 33 of the MISO Open Access Transmission, Energy and Operating Reserve Markets Tariff.

Submitted direct testimony for Constellation Mystic Power, LLC in FERC Docket No. ER18-1639-005 supporting a compliance filing for a cost-of-service rate for compensation for the continued operation of power plants in ISO New England.

Submitted direct testimony for DATC Path 15, LLC in FERC Docket No. ER20-1006 regarding a proposed wholesale transmission rate.

Submitted direct testimony for Tucson Electric Power Company in FERC Docket No. ER19-2019 regarding a proposed Transmission Formula Rate.

Submitted direct testimony for Cheyenne Light, Fuel \& Power Company in FERC Docket No. ER19-697 regarding a proposed Transmission Formula Rate.

Supported Kansas City Power \& Light in FERC Docket No. ER19-1861-000 regarding revisions to fixed depreciation rates in the KCP\&L SPP Transmission Formula Rate.

Supported Westar Energy and Kansas Gas \& Electric Company in FERC Docket No. ER19-269-000 regarding revisions to fixed depreciation rates in the Westar SPP Transmission Formula Rate.

Submitted direct testimony for Midwest Power Transmission Arkansas, LLC in FERC Docket No. ER15-2236 regarding a proposed Transmission Formula Rate.

Submitted direct testimony for Kanstar Transmission, LLC in FERC Docket No. ER152237 regarding a proposed Transmission Formula Rate.

Supported Westar Energy and Kansas Gas \& Electric Company in FERC Docket Nos. FA15-9-000 and FA15-15-000 regarding an Audit of Compliance with Rates, Terms and Conditions of Westar's Open Access Transmission Tariff and Formula Rates, Accounting Requirements of the Uniform System of Accounts, and Reporting Requirements of the FERC Form No. 1.

Submitted direct testimony for Westar Energy in FERC Docket Nos. ER14-804 and ER14-805 regarding proposed revisions to a Generation Formula Rate.

Supported Intermountain Rural Electric Association and Tri-State G\&T in FERC Docket No. ER12-1589 regarding revisions to Public Service of Colorado's Transmission Formula Rate.

Supported Intermountain Rural Electric Association in FERC Docket No. ER11-2853 regarding revisions to Public Service of Colorado's Production Formula Rate.

Supported Kansas Gas \& Electric Company in FERC Docket No. FA14-3-000 regarding an Audit of Compliance with Nuclear Plant Decommissioning Trust Fund Regulations and Accounting Practices.

Supported LG\&E Energy LLC in FERC Docket No. PA05-9-000 regarding an Audit of Code of Conduct, Standards of Conduct, Market-Based Rate Tariff, and MISO's Open Access Transmission Tariff at LG\&E Energy LLC.

Submitted remarks and served on expert panel in FERC Docket No. RM01-10-000 on May 21, 2002 in Standards of Conduct for Transmission Providers staff conference,
regarding proposed rulemaking on the functional separation of wholesale transmission and bundled sales functions for electric and gas utilities.

Kansas: Submitted report for Westar Energy, Inc. in Docket No. 21-WCNE-103-GIE regarding plans and options for funding the decommissioning trust fund, depreciation expenses, and overall cost recovery in the event of premature closing of the Wolf Creek nuclear plant.

Submitted direct and rebuttal testimony for Westar Energy, Inc. in Docket No. 18-WSEE-328-RTS regarding overall rate design, prior rate case settlement commitments, lighting tariffs, an Electric Transit rate schedule, Electric Vehicle charging tariffs, and tariff general terms and conditions.

Submitted direct and rebuttal testimony for Westar Energy, Inc. in Docket No. 18-KG\&E-$303-C O N$ regarding the Evaluation, Measurement and Verification ("EM\&V") of an energy efficiency demand response program offered pursuant to a large industrial customer special contract.

Submitted report for Westar Energy, Inc. in Docket No. 18-WCNE-107-GIE regarding plans and options for funding the decommissioning trust fund, depreciation expenses, and overall cost recovery in the event of premature closing of the Wolf Creek nuclear plant.

Submitted direct and rebuttal testimony for Westar Energy, Inc. in Docket No. 15-WSEE-$115-$ RTS regarding rate designs for large customer classes, establishment of a balancing account related to new rate options, establishment of a tracking mechanism for costs related to compliance with mandated cyber and physical security standards, other rate design issues, and revenue allocation.

Kentucky: Submitted direct testimony on behalf of Jackson Purchase Energy Corporation in Case No. 2021-00358 regarding revenue requirements, pro forma adjustments, cost of service and rate design in a base rate case.

Submitted direct testimony and responses to data requests on behalf of Big Rivers Electric Corporation in Case No. 2021-00289 regarding a Large Industrial Customer Standby Service Tariff.

Submitted direct testimony on behalf of Big Rivers Electric Corporation and Jackson Purchase Energy Corporation in Case No. 2021-00282 regarding a marginal cost of service study in support of an economic development rate for a special contract.

Submitted direct testimony, responses to data requests, and rebuttal testimony on behalf of sixteen distribution cooperative owner-members of East Kentucky Power Cooperative in Case Nos. 2021-00104 through 2021-00119 regarding rate design for the passthrough of a proposed wholesale rate revision.

Submitted direct testimony and responses to data requests on behalf of Kenergy Corp. in Case No. 2021-00066 regarding revenue requirements, pro forma adjustments, cost of service and rate design in a streamlined rate case.

Submitted direct testimony on behalf of Big Rivers Electric Corporation in Case No. 2021-00061 regarding two cost of service studies in a review of the Member Rate Stability Mechanism Charge for calendar year 2020.

Submitted direct testimony and responses to data requests on behalf of Licking Valley R.E.C.C. in Case No. 2020-00338 regarding revenue requirements, pro forma adjustments, cost of service and rate design in a streamlined rate case.

Submitted direct testimony and responses to data requests on behalf of Cumberland Valley Electric in Case No. 2020-00264 regarding revenue requirements, pro forma adjustments, cost of service and rate design in a streamlined rate case.

Submitted direct testimony and responses to data requests on behalf of Taylor County R.E.C.C. in Case No. 2020-00278 regarding the cost support and tariff changes for the implementation of a Prepay Metering Program.

Submitted direct testimony and responses to data requests on behalf of Meade County R.E.C.C. in Case No. 2020-00131 regarding revenue requirements, pro forma adjustments, cost of service and rate design in a streamlined rate case.

Submitted direct testimony and responses to data requests on behalf of Clark Energy Cooperative in Case No. 2020-00104 regarding revenue requirements, pro forma adjustments, cost of service and rate design in a streamlined rate case.

Submitted direct testimony and responses to data requests on behalf of Big Rivers Electric Corporation in Case No. 2019-00435 regarding an Environmental Compliance Plan and Environmental Surcharge rate mechanism.

Submitted direct testimony and responses to data requests on behalf of Jackson Energy Cooperative in Case No. 2019-00066 regarding revenue requirements, cost of service and rate design in a streamlined rate case.

Submitted direct testimony and responses to data requests on behalf of Jackson Purchase Energy Corporation in Case No. 2019-00053 regarding revenue requirements, pro forma adjustments, cost of service and rate design in a streamlined rate case.

Submitted direct testimony and data request responses on behalf of Big Rivers Electric Corporation in Case No. 2018-00146 regarding ratemaking issues associated with the anticipated termination of contracts regarding the operation of an electric generating plant owned by the City of Henderson, Kentucky.

Submitted direct testimony on behalf of fifteen distribution cooperative owner-members of East Kentucky Power Cooperative in Case No. 2018-00050 regarding the economic evaluation of and potential cost shift resulting from a proposed member purchased power agreement.

Submitted direct testimony on behalf of Big Sandy R.E.C.C. in Case No. 2017-00374 regarding revenue requirements, pro forma adjustments, cost of service and rate design in a base rate case.

Submitted direct testimony on behalf of Progress Metal Reclamation Company in Kentucky Power Company Case No. 2017-00179 regarding the potential implementation of a Load Retention Rate or revisions to an Economic Development Rate.

Submitted direct testimony on behalf of Kenergy Corp. and Big Rivers Electric Corporation in Case No. 2016-00117 regarding a marginal cost of service study in support of an economic development rate for a special contracts customer.

Submitted rebuttal testimony on behalf of Big Rivers Electric Corporation in Case No. 2014-00134 regarding ratemaking treatment of revenues associated with proposed wholesale market-based-rate purchased power agreements with entities in Nebraska.

Submitted direct and rebuttal testimony on behalf of Big Rivers Electric Corporation in Case No. 2013-00199 regarding revenue requirements, pro forma adjustments, cost of service and rate design in a base rate case.

Submitted direct and rebuttal testimony on behalf of Big Rivers Electric Corporation in Case No. 2012-00535 regarding revenue requirements, pro forma adjustments, cost of service and rate design in a base rate case.

Submitted direct and rebuttal testimony on behalf of Big Rivers Electric Corporation in Case No. 2012-00063 regarding an Environmental Compliance Plan and Environmental Surcharge rate mechanism.

Submitted direct, rebuttal, and rehearing direct testimony on behalf of Big Rivers Electric Corporation in Case No. 2011-00036 regarding revenue requirements and pro forma adjustments in a base rate case.

Submitted direct testimony for Louisville Gas \& Electric Company in Case No. 200900549 and for Kentucky Utilities Company in Case No. 2009-00548 for adjustment of electric and gas base rates, in support of a new service offering for Low Emission Vehicles, revised special charges, and company offerings aimed at assisting customers.

Submitted discovery responses for Kentucky Utilities and/or Louisville Gas \& Electric Company in various customer inquiry matters, including Case Nos. 2009-00421, 200900312, and 2009-00364.

Submitted discovery responses for Louisville Gas \& Electric Company and Kentucky Utilities Company in Case No. 2008-00148 regarding the 2008 Joint Integrated Resource Plan.

Submitted discovery responses for Louisville Gas \& Electric Company and Kentucky Utilities Company in Administrative Case No. 2007-00477 regarding an investigation of the energy and regulatory issues in Kentucky's 2007 Energy Act.

Submitted direct testimony for Louisville Gas \& Electric Company and Kentucky Utilities Company in Case No. 2007-00319 for the review, modification, and continuation of Energy Efficiency Programs and DSM Cost Recovery Mechanisms.

Submitted direct testimony for Louisville Gas \& Electric Company and Kentucky Utilities Company in Case No. 2007-00067 for approval of a proposed Green Energy program and associated tariff riders.

Submitted direct testimony for Louisville Gas \& Electric Company and Kentucky Utilities Company in Case No. 2005-00467 and 2005-00472 regarding a Certificate of Public Convenience and Necessity for the construction of transmission facilities.

Submitted discovery responses for Kentucky Utilities in Case No. 2005-00405 regarding the transfer of a utility hydroelectric power plant to a private developer.

Submitted discovery responses for Louisville Gas \& Electric Company and Kentucky Utilities Company in Case No. 2005-00162 for the 2005 Joint Integrated Resource Plan.

Presented company position for Louisville Gas \& Electric Company and Kentucky Utilities Company at public meetings held in Case Nos. 2005-00142 and 2005-00154 regarding routes for proposed transmission lines.

Supported Louisville Gas \& Electric Company and Kentucky Utilities Company in a Focused Management Audit of Fuel Procurement practices by Liberty Consulting in 2004.

Supported Louisville Gas \& Electric Company and Kentucky Utilities Company in an Investigation into their Membership in the Midwest Independent Transmission System Operator, Inc. ("MISO") in Case No. 2003-00266.

Supported Louisville Gas \& Electric Company and Kentucky Utilities Company in a Focused Management Audit of its Earning Sharing Mechanism by Barrington-Wellesley Group in 2002-2003.

Submitted direct testimony for Louisville Gas \& Electric Company and Kentucky Utilities Company in Case No. 2002-00381 regarding a Certificate of Public Convenience and Necessity for the acquisition of four combustion turbines.

Submitted direct testimony for Louisville Gas \& Electric Company and Kentucky Utilities Company in Case No. 2002-00029 regarding a Certificate of Public Convenience and Necessity for the acquisition of two combustion turbines.

Virginia: $\quad$ Submitted direct testimony for Kentucky Utilities Company d/b/a Old Dominion Power in Case No. PUE-2002-00570 regarding a Certificate of Public Convenience and Necessity for the acquisition of four combustion turbines.

## Presentations

"Revisiting Rate Design Strategies" presented to APPA Public Power Forward Summit, November 2019.
"Utility Rates at the Crossroads" presented to APPA Business \& Financial Conference, September 2019.
"New Developments in Kentucky Rate Filings" presented to Kentucky Electric Cooperatives Accountants' Association Summer Meeting, June 2019.
"Electric Rates: New Approaches to Ratemaking" presented to CFC Statewide Workshop for Directors, January 2019.
"The Great Rate Debate: Residential Demand Rates" presented to CFC Forum, June 2018.
"Benefits of Cost of Service Studies" presented to Tri-State Electric Cooperatives Accountants' Association Spring Meeting, April 2017.
"Proper Design of Utility Rate Incentives" presented to APPA/Area Development's Public Power Consultants Forum, March 2017.
"Utility Hot Topics and Economic Development" presented to APPA/Area Development's Public Power Consultants Forum, March 2017.
"Emerging Rate Designs" presented to CFC Independent Borrowers Executive Summit, November 2016.
"Optimizing Economic Development" presented to Grand River Dam Authority Municipal Customer Annual Meeting, September 2016.
"Tomorrow's Electric Rate Designs, Today" presented to CFC Forum, June 2016.
"Reviewing Rate Class Composition to Support Sound Rate Design" presented to EEI Rate and Regulatory Analysts Group Meeting, May 2016.
"Taking Public Power Economic Development to the Next Level" presented to APPA/Area Development's Public Power Consultants Forum, March 2016.
"Ratemaking for Environmental Compliance Plans" presented to NARUC Staff Subcommittee on Accounting and Finance Fall Conference, September 2015.
"Top Utility Strategies for Successful Attraction, Retention \& Expansion" presented to APPA/Area Development's Public Power Consultants Forum, March 2015.
"Economic Development and Load Retention Rates" presented to NARUC Staff Subcommittee on Accounting and Finance Fall Conference, September 2013.
"Rates for Distributed Generation" presented to 2010 Electric Cooperative Rate Conference, October 2010.
"What Utilities Can Do to Advance Energy Efficiency in Kentucky" panel session of Second Annual Kentucky Energy Efficiency Conference, October 2007.

## Articles

"FERC Formula Rate Resurgence" Public Utilities Fortnightly, Vol. 158, No. 9, July 2020, 34-37.
"Economic Development Rates: Public Service or Piracy?" IAEE Energy Forum, International Association for Energy Economics, 2016 Q1 (January 2016), 17-20.

# El Paso Electric Company ("EPE") <br> <br> Transmission Formula Rate Template 

 <br> <br> Transmission Formula Rate Template}

## Table of Contents

Page 1 of 1

## Overview

The formula is calculated in two steps. The first step is to fill out the A tabs, and the Actual Attachment H tab with data from the previous year's Form 1 information. This information is used to update the formulas in the Actual Net Rev Req tab to calculate the Actual Revenue Requirement (Actual ATRR) for the previous year.

The TU (True-up) tab uses the revenue requirement from the Actual Attachment H tab and compares it to the revenue requirement from the Projected Attachment H tab that customers were billed for the same period. Interest is added to the difference and the amount is added to the Projected Attachment H tab via the True Up Adjustment line.

The projected O\&M and plant balances are calculated on the P Tabs. These sheets feed into the Projected Attachment H tab for determining the Projected Annual Transmission Revenue Requirement. The EPE tariff rates are calculated based on the EPE Revenue Requirements and the specific point-to-point charges are shown on the same tab.

Cells highlighted in yellow are data input cells, however, some cells may reference the results from other worksheets in the formula. Such cell references may change from year to year requiring manual adjustment of the reference or the direct entry of the proper value.

Cells highlighted in green signify that the data is sourced from other worksheets in the formula and that the reference is static.

| Tab | Schedule/Worksheet Designation | Description |
| :---: | :---: | :---: |
| Act Att-H | Actual Attachment H | Actual Annual Transmission Revenue Requirements for most recent calendar year |
| A1-RevCred | Worksheet A1 | Actual Revenue Credits |
| A2-O\&M | Worksheet A2 | Actual O\&M Expense supporting data |
| A3-1-ADIT | Worksheet A3-1 | Actual Accumulated Deferred Income Tax Calculation |
| A3-2-ADIT-ITC Details | Worksheet A3-2 | Actual Accumulated Deferred Income Tax \& Investment Tax Credits data |
| A4-Rate Base | Worksheet A4 | Actual Rate Base data |
| A5-Depr | Worksheet A5 | Depreciation Rates |
| A6-Divisor | Worksheet A6 | Actual Transmission Load Data for Calculating Rate Divisors |
| A7-IncentPlant | Worksheet A7 | Actual Incentive Plant |
| A8-1 EDIT | Worksheet A8-1 | Actual Excess / Deficient Deferred Income Tax calculation |
| A8-2 EDIT Details | Worksheet A8-2 | Actual Excess / Deficient Deferred Income Tax data |
| A9- Cost of Capital | Worksheet A9 | Actual Cost of Capital Calculations |
| TU-TrueUp | Worksheet TU | True-up Adjustment and Interest Calculation |
| Proj Att-H | Projected Attachment H | Projected Annual Transmission Revenue Requirements for next calendar year |
| P1-Trans Plant | Worksheet P1 | Projected transmission plant for next calendar year |
| P2-O\&M | Worksheet P2 | Projected O\&M expenses for next calendar year |
| P3-Divisor | Worksheet P3 | Projected transmission load for next calendar year |
| P4-IncentPlant | Worksheet P4 | Projected Incentive Plant |
| P5-1 ADIT | Worksheet P5-1 | Projected Accumulated Deferred Income Tax Calculation |
| P5-2 ADIT ITC Details | Worksheet P5-2 | Projected Accumulated Deferred Income Tax \& Investment Tax Credits data |
| P6-1 EDIT | Worksheet P6-1 | Projected Excess / Deficient Deferred Income Tax calculation |
| P6-2 EDIT Details | Worksheet P6-2 | Projected Excess / Deficient Deferred Income Tax data |
| P7-Adj to Rate Base | Worksheet P7 | Projected Adjustments to Rate Base |
| Schedule 1 | Schedule 1 | Ancillary Services, Schedule No. 1 - Scheduling System Control and Dispatch Service |

1 GROSS REVENUE REQUIREMENT (page 3, line 29)

## REVENUE CREDITS

2 Account No. 454
Account No. 456.1
4 Held for Future Use
5 Held for Future Use
6 TOTAL REVENUE CREDITS (sum lines 2-5)
7 NET REVENUE REQUIREMENT
DIVISOR
Divisor (kW)
$\begin{array}{cc}9 & \\ 10 & \text { RATES }\end{array}$
Annual
Monthly
Weekly
Daily On-Peak
Daily Off-Peak
6 Hourly On-Peak
$17 \begin{array}{ll}16 & \text { Hourly On-Peak } \\ \text { Hourly Off-Peak }\end{array}$

Note S)
Worksheet A1, Page 1, Line 17, Col. (f) (Worksheet A1, Page 2, Line 15, Col. (h)
(Line 1 minus Line 6 )

Worksheet A6, Line 14) x 1000

12 months/year
52 weeks/year
6 days/week
7 days/week
16 hours/day
16 hours/day
24 hours/day

Allocated
Amount
$\square$
$\square$

# Docket No. ER22- 

# Exhibit No. EPE-0006 

El Paso Electric Company
Rate Formula Template
Formula Rate - Non-Levelized
(1)

Line
No. RATE BASE: (Note A, V) GROSS PLANT IN SERVICE (Note A) Production
2 Transmission
3 Distribution
4 General \& Intangible
Common
6 TOTAL GROSS PLANT
ACCUMULATED DEPRECIATION (Note A)
7 Production
8 Transmission
9 Distribution
10 General \& Intangible
11 Common
12 TOTAL ACCUM. DEPRECIATION
NET PLANT IN SERVICE
13 Production
14 Transmission
15 Distribution
16 General \& Intangible
17 Common
18 TOTAL NET PLANT
19 CWIP Approved by FERC Order ADJUSTMENTS TO RATE BASE
20 Accumulated Deferred Income Taxes (Accounts 190, 281-283)
21 Accumulated Deferred Investment Tax Credit (Account 255)
22 Excess / Deficient Deferred Income Taxes
23 Unamortized Regulatory Asset
24 Unamortized Abandoned Plant
25 Unfunded Reserves
25 a Hold Harmless Adjustment
26 TOTAL ADJUSTMENTS
27 LAND HELD FOR FUTURE USE
WORKING CAPITAL
28 Cash Working Capital
29 Materials \& Supplies
30 Prepayments (Account 165)
31 TOTAL WORKING CAPITAL
32 RATE BASE
Form No. 1

Worksheet A4, Page 1, (Line 14-28), Col. (b)
Worksheet A4, Page 1, (Line 14-28), Col. (c)
Worksheet A4, Page 1, (Line 14-28), Col. (d)
Worksheet A4, Page 1, (Line 14-28), Cols. (e ) + (f)
Worksheet A4, Page 1, (Line 14-28), Col. (h)
(Sum of Lines 1 through 5)

Worksheet A4, Page 2, (Line $14+28-42$ ), Col. (b) Worksheet A4, Page 2, (Line $14+28-42$ ), Col. (c ) Worksheet A4, Page 2, (Line 14+28-42), Col. (c)
Worksheet A4, Page 2, (Line 14 $+28-42$ ), Col. (d) Worksheet A4, Page 2, (Line $14+28-42$ ), Col.s (e ) + (f) Worksheet A4, Page 2, (Line $14+28-42$ ), Col. (h) (Sum of Lines 7 through 11)

Line 1 - Line 7)
(Line 2 -Line 8)
Line 3 - Line 9)
Line 4 - Line 10)
Line 4 - Line 10)
(Sum of Lines 13 through 17)
Worksheet A4, Page 3, Line 14, Col. (d) (Note Q)

Worksheet A3-1, Page 3, Line 82, Col. (n) (Note F)
Worksheet A3-2, Page 4, Line 138, Col. (g)
Worksheet A8-1, Line 27, Col. (n)
Worksheet A4, Page 3, Line 14, Col. (b) (Notes P \& U)
Worksheet A4, Page 3, Line 14, Col. (c) (Notes T, N \& U)
Worksheet A4, Page 4, Line 10, Col. (d) (Note R)
Company Records (Note V)
Sum of Lines 20 through 25 a)

Worksheet A4, Page 3, Line 14, Col. (e) (Note G)
Note H)
1/8*(Page 3, Line 7)
Worksheet A4, Page 3, Line 28, Col. (e )
Worksheet A4, Page 3, Line 28, Col. (f)
(Sum of Lines 28 through 30)
(Sum Lines 18, 19, 26, 27, \& 31)
(3)

Company Total
$\square$
(4)

Allocator
(5)

Transmission
(Col 3 times Col 4 )

Page 2 of 5
Actuals - For the 12 months ended 12/31/yyyy
.00000
0.00000
. 000000
. 000000
0.00000
$\qquad$
0.0000
1.00000
1.00000
1.00000
1.00000
. 00000
1.00000
1.00000
0.00000
0.00000 0.00000

# Docket No. ER22- <br> Exhibit No. EPE-0006 <br> Page 4 of 56 

El Paso Electric Company
Rate Formula Template
Formula Rate - Non-Levelized

O\&M
Transmission
Less Account 561.1-561.8
Less Account 565
A\&G
Less EPRI/Reg. Comm. Exp./Non-safety Ad. (Note I) Less Property Insurance Acct 924 Plus Property Insurance Acct 924
Plus Transmission Related Reg. Comm. Exp. (Note G) Plus: Fixed PBOP expense
Less: Actual PBOP expense
Common
Hold Harmless Expense Adjustment
(2)

Form No. 1
321.112.b

Worksheet A2, Line 23
321.96.b
323.197 b

Worksheet A2, Line 6
323.185.b
323.185.b

Worksheet A2, Line 12
Company Records (Note J \& B)
Company Records (Note J \& B)
356.1

Company Records (Note V)
(5)

## Transmission Col 3 times Col 4 ) <br> (Col 3 times Col 4 )

336.7.f - 336.7.c

N AND AMORTIZATION EXPENSE (Note A)

General \& Intangible
Common
Ia Amortization of Regulatory Asset
1b Amortization of Abandoned Plant
12 TOTAL DEPRECIATION \& AMORTIZATION
TAXES OTHER THAN INCOME TAXES (Note D) LABOR RELATED

Payroll
Highway and vehicle
PLANT RELATED
Property
Gross Receipts
Other
reserved
TOTAL OTHER TAXES
INCOME TAXES
$\mathrm{T}=1-\left\{[(1-\mathrm{SIT}) *(1-\mathrm{FIT})] /\left(1-\mathrm{SIT} * \mathrm{FIT}^{*} \mathrm{p}\right)\right\}=$
$2 \mathrm{CIT}=(\mathrm{T} / 1-\mathrm{T}) *(1-(\mathrm{WCLTD} / \mathrm{R}))=$
and FIT, SIT \& p are as given in Note K.
Income Tax Gross Up Rate: $1 /(1-\mathrm{T})=($ from line 21$)$
24 Excess / Deficient Deferred Income Taxes Amortization
4a Excess / Deficient Deferred Income Tax Adjustment
25 Permanent Differences
25a Permanent Differences Tax Adjustment
26 Income Tax on Equity and Incentive Return
27 Total Income Taxes
RETURN
28 Rate Base * Rate of Return plus Incentive Return
29 REV. REQUIREMENT
336.10.f \& 336.1.f - 336.10.c \& 336.1.c
336.11.f - 336.11.c

Company Records (Note P)
Company Records (Note N)
(Sum of Lines 8 through 11)
263.i
263.1
263.i
263.i
263.i
(Sum of Lines 13 through 19)
(Note K)

Worksheet A8.2, Line 62, Col. (c) (Note W)
Line 23 times Line 24)
Company Records (Note X)
Line 21 times 23 times Line 25
(Line 22 times Line 28)
(Sum of Lines 24a, 25a, 25c, 26
(Page 2, Line 32, Col. (3) x Page 4, Line 31, Col. (5)) + Page 4, Line
32
(Sum of Lines 7, 12, 20, 27, 28)
(3)

Company Total

0.00000
0.00000
0.00000
0.00000
0.00000
0.00000
0.00000
0.00000
0.00000
0.00000
0.00000
1.00000

$\square$
0.000\% $0.000 \%$

# Exhibit No. EPE-0006 

Page 5 of 56

## El Paso Electric Company <br> Rate Formula Template <br> Utilizing FERC Form 1 Data

(1)
(2)

SUPPORTING CALCULATIONS AND NOTES
Line
No. TRANSMISSION PLANT INCLUDED IN RATES
1 Total transmission plant
2 Less transmission plant excluded from Wholesale Rates
Less transmission plant included in OATT Ancillay Se
$\frac{\text { Less transmission plant included in OATT Ancilla }}{\text { Transmission plant included in Wholesale Rates }}$
(Page 2, Line 2, Col. 3)
Company Records (Note L)

TRANSMISSION EXPENSES
6 Total transmission expenses
(Line 4 divided by Line 1 )

7 Les transm 3, Line 1, Col. 3)
8 Included transmission expenses $\quad$ (Line 6 less Line 7)
$9 \%$ of transmission expenses after adjustment
$10 \%$ of transmission plant included in wholesale Rates
11 \% of transmission expenses included in wholesale Rates WAGES \& SALARY ALLOCATOR (W\&S)

12 Production
13 Transmission
14 Distribution
15 Other
16 Total
COMMON PLANT ALLOCATOR (CE)
17 Electric
8 Gas
19 Other
20 Total

## RETURN (R)

21 Long Term Interest
22 Preferred Dividends
Development of Common Stock:
23 Proprietary Capital
24 Less Preferred Stock
25 Less Other Comprehensive Income
26 Less Account 216
Common Stock
(Line 8 divided by Line 6)
Line 5)
Line 9 times Line 10)

| Form 1 Reference | $\$$ |  | TP |
| :--- | :--- | :--- | :--- |
| 354.20.b | - | 0.00 |  |
| 354.21.b | - | 0.00 |  |
| 354.23.b | - | 0.00 |  |
| 354.24, 25, 26.b | - | 0.00 |  |
| (Sum of Lies 12-15) | $\$$ | - |  |

200.3.c
201.3.d
201.3.e

Sum of Lines 17-19
117, Col. c, Lines 62+63+64-65-66+67
118.29.c (positive number)

Worksheet A9 Line 14, Col. (e)
Worksheet A9 Line 14, Col. (b) (enter negative)
Worksheet A9 Line 14, Col. (d) (enter negative)
Worksheet A9 Line 14, Col. (c) (enter negative)
(Sum of Lines 23-26)

|  |  | Worksheet A9 Line 28, Col. (k) | $\$$ |
| :--- | :--- | :--- | :--- |
| 28 | Long Term Debt | $112.3 . \mathrm{c}$ | - |
| 29 | Preferred Stock | Line 27 | - |
| 30 | Common Stock |  | $0.00 \%$ |

30 Common Stock
(Sum of Lines 28-30)

Worksheet A7, Col. (e)

Actual Attachment H
Page 4 of 5 Actuals - For the 12 months ended 12/31/yyyy
(4)
(5)


# General Note: References to pages in this formulary rate are indicated as: (page\#, line\#, col.\#) 

 References to data from FERC Form 1 are indicated as: \#.y.x (page, line, column)
## Note

Letter
Plant in Service, Accumulated Depreciation, and Depreciation Expense amounts exclude Asset Retirement Obligation amounts unless authorized by FERC.
Workpapers for this calculation will be included in supporting documentation.
C Debt cost rate $=$ long-term interest (line 21) / long term debt (line 28). Preferred cost rate $=$ preferred dividends (line 22) / preferred outstanding (line 29).
D Includes only FICA, unemployment, highway, property, gross receipts, and other assessments charged in the current year. Taxes related to income are excluded
E Removes dollar amount of transmission expenses included in the OATT ancillary services rates. FERC 561 accounts are not included in this line as they are separately removed from O\&M.
F The balances in Accounts 190, 281, 282 and 283, as adjusted by any amounts associated with tax-related regulatory assets and liabilities other than excess / deficient deferred income taxes ("EDIT"). EDIT is calculated in schedules A8-1 and A8-2 and presented in Att-H separately from ADIT.
G Identified in Form 1 as being only transmission related. in the Form 1 .
I EPRI expenses listed in Form 1 at 352.f, all Regulatory Commission Expenses itemized at 350.d, and non-safety-related advertising included in Account 930.1
J Depreciation rates and Post-Employment Benefits Other than Pensions (PBOP) are fixed amounts that can be changed only through a Section 205 filing. The fixed PBOP expense will be used in lieu of the actual PBOP expense incurred in the year absent an appropriate filing with FERC. The Company reviews internal records and identifies the PBOP expenses to be removed from A\&G.
K The currently effective income tax rate, where FIT is the Federal income tax rate; SIT is the State income tax rate, and $\mathrm{p}=$ "the percentage of federal income tax deductible for state income taxes". Since the utility is taxed in more than one state it shall attach a work paper showing the name of each state and how the blended or composite SIT was developed.

Inputs Required: $\quad$ FIT $=$
SIT
0.000\% (Federal Income Tax Rate)
$0.000 \%$ (Composite State Income Tax Rate)
$0.000 \%$ (Percent of federal income tax deductible for state purposes)
L Removes transmission plant determined by Commission order to be state-jurisdictional according to the seven-factor test (until Form 1 balances are adjusted to reflect application of seven-factor test),
M Removes dollar amount of generation step-up facilities, which are deemed to be included in OATT ancillary services. For these purposes, generation step-up facilities are those facilities at a generator substation on which there is no throughflow when the generator is shut down.
N Unamortized Abandoned Plant and Amortization of Abandoned Plant will be zero until the Commission accepts or approves recovery of the cost of abandoned plant. Utility must submit a Section 205 filing to recover the cost of abandoned plant.
O No change in ROE may be made absent a filing with FERC.
P Recovery of any regulatory assets requires authorization from the Commission.
Q AFUDC ceases when CWIP is included in rate base. No CWIP will be included in rate base on line 19 absent FERC authorization.
R The Formula Rate shall include a credit to rate base for all unfunded reserves within accounts 228.2, 242, and 253 (funds collected from customers that (1) have not been set aside in a trust, escrow or restricted account; (2) whose balance are collected from customers through cost accruals to accounts that are recovered under the Formula Rate; and (3) exclude the portion of any balance offset by a balance sheet account). Reserves can be created by capital contributions from customers, by debiting the reserve and crediting a liability, or a combination of customer capital contribution and offsetting liability. Only the portion of a reserve that was created by customer contributions should be a reduction to rate base. Amounts will be calculated on 13-month average balances. See Worksheet A4, Note G.
S The revenues credited shall include only the amounts received directly for service under this tariff reflecting EPE's integrated transmission facilities provided that revenue credits shall not include revenues associated with transmission service for which loads are included in the rate divisor on Actual Attachment H , page 1 , line 8 . They do not include revenues associated with FERC annual charges, gross receipts taxes, ancillary services, facilities not included in this template (e.g., direct assignment facilities and GSUs) that are not recovered under this Rate Formula Template.
T Page 2 Line 24 includes any unamortized balances related to the recovery of abandoned plant costs approved by FERC under a separate docket. Page 3, Line 11 b includes the Amortization expense of abandonment costs. These are shown in the workpapers required pursuant to the Annual Rate Calculation and True-up Procedures.
U Calculate using 13 month average balance, reconciling to FERC Form No. 1 by Page, Line, and Column as shown in Worksheet A4 for inputs on page 2 of 5 above.
V If applicable, a separate workpaper will be provided and posted with other supporting documentation.
W Includes the amortization of any excess/deficient deferred income taxes resulting from changes to income tax laws, income tax rates (including changes in apportionment) and other actions taken by a taxing authority. Excess and deficient deferred income taxes will reduce or increase tax expense by the amount of the excess or deficiency multiplied by (1/1-T).
X Includes the annual income tax cost or benefits due to permanent differences between expenses or revenues recognized for ratemaking purposes and for income tax purposes and depreciation of amounts capitalized to plant for book purposes related to the accrual of the Allowance for Other Funds Used During Construction. T multiplied by the amount of permanent differences and depreciation expense associated with Allowance for Other Funds Used During Construction will increase or decrease tax expense by the amount of the expense or benefit included on line 25 multiplied by (1/1-T)

## El Paso Electric Company

Worksheet A1
Revenue Credits
Actuals - For the 12 months ended 12/31/yyyy

## ACCOUNT 454 (RENT FROM ELECTRIC PROPERTY)

| Line \# |  | Description |  | Total | Explanation <br> (Note A) | Allocation | Allocation Factor | Total Revenue Credit |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | (a) |  | (b) | (c) | (d) | (e) |  |  |
| 1 |  |  |  |  |  |  | 0.000\% |  | \$0 |
| 2 | Reserved |  |  |  |  |  | 0.000\% |  | \$0 |
| 3 | Reserved |  |  |  |  |  | 0.000\% |  | \$0 |
| 4 | Reserved |  |  |  |  |  | 0.000\% |  | \$0 |
| 5 | Reserved |  |  |  |  |  | 0.000\% |  | \$0 |
| 6 | Reserved |  |  |  |  |  | 0.000\% |  | \$0 |
| 7 | Reserved |  |  |  |  |  | 0.000\% |  | \$0 |
| 8 | Reserved |  |  |  |  |  | 0.000\% |  | \$0 |
| 9 | Reserved |  |  |  |  |  | 0.000\% |  | \$0 |
| 10 | Reserved |  |  |  |  |  | 0.000\% |  | \$0 |
| 11 | Reserved |  |  |  |  |  | 0.000\% |  | \$0 |
| 12 | Reserved |  |  |  |  |  | 0.000\% |  | \$0 |
| 13 | Reserved |  |  |  |  |  | 0.000\% |  | \$0 |
| 14 | Reserved |  |  |  |  |  | 0.000\% |  | \$0 |
| 15 | Reserved |  |  |  |  |  | 0.000\% |  | \$0 |
| 16 | Reserved |  |  |  |  |  | 0.000\% |  | \$0 |
| 17 | Total 454 |  | 300.19.b |  |  |  |  | \$ |  |

## El Paso Electric Company

Worksheet A1

## Revenue Credits

Actuals - For the 12 months ended 12/31/yyyy
ACCOUNT 456.1 (OTHER ELECTRIC REVENUES) (Note B)


21 Revenue Types:
Ancillary
23 Divisor
24 Credit

Ancillary services includes regulation \& frequency, control \& dispatch, voltage control, reactive, spinning reserve, and scheduling; no revenue credit. Load associated with these revenues are included in the formula divisor; no revenue credit. Revenue credit because the load is not included in divisor.

## Notes

A Each FERC 0454 item is categorized into 1 of 5 categories. The selected category will determine the Allocator applied to the FERC 0454 balance.

1) Prod: The FERC 0454 balance is $100 \%$ related to production of electricity and the NA Allocator is applied
2) Retail: The FERC 0454 balance is $100 \%$ related to retail operations and the NA Allocator is applied.
3) ONT: Other $100 \%$ Non-Transmission (Items other than Prod \& Retail) related FERC 0454 for which the NA Allocator is applied
4) Trans: The FERC 0454 balance is $100 \%$ related to transmission operations and the DA Allocator is applied.
5) Labor: The FERC 0454 balance is labor or general and intangible plant related, and the W/S Allocator is applied.

## El Paso Electric Company

Worksheet A2

## Actual Operation and Maintenance Expenses <br> Actuals - For the 12 months ended 12/31/yyyy

Page 1 of 1
(a)
(b)
(c)

| Line <br> No. | Form No. 1 <br> Page, Line, Col. | Company Total |
| :---: | :--- | :--- | :--- |

## Notes

A
For FERC account no. 930.1, the Company reviews all entries and identifies those that are safety related advertising.
B Limited to Transmission-related regulatory expenses itemized from total amounts on FERC Form No. 1 page 350-351.
C Limited to amounts in O\&M accounts that are included in the formula rate.

Worksheet A3-1
Accumulated Deferred Income Taxes
Actuals - For the 12 months ended $12 / 31 /$ yyy
Page 1 of 4


| 28 |  |  |  |  |  |  |  |  | ectric Company ksheet A3-1 <br> eferred Income Taxes months ended 12/31/y |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Account 28 |  |  |  |  |  |  |  | Account 282 |  |  |  |  | Page 2 of 4 |
|  | Days in Period |  |  |  |  | Projection - Proration of Deferred Tax Activity |  |  | True-up Adjustment - Proration of Projected Deferred Tax Activity and Averaging of Other Deferred Tax Activity |  |  |  |  |  |
|  | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) | (I) | (m) | ( n ) |
|  | Month | Days in the Month | Number of Days Remaining in Year After Month's Accrual of Deferred Taxes | Total Days in Future Portion of Test Period (Line 18, Col B) | Proration <br> Amount <br> (Lines 6 to <br> 17, Col c / <br> Col d) | Projected Monthly Activity ((Line 24 Col h Line 21 Colh )/12) (See Note 7.) | Prorated Projected Monthly Activity (Lines 6 to 17, Cole x Colf) | Prorated Projected Balance (Line 5, Col $h$ plus Cumulative Sum of Colg ) | Actual Monthly Activity ((Line 24 Col n-Line 21 Col n)/12) (See Note 7.) | Difference between projected monthly and actual monthly activity (See Note 1.) | Preserve proration when actual monthly and projected monthly activity are either both increases or decreases. (See Note 2.) | Difference between projected and actual activity when actual and projected activity are either both increases or decreases. (See Note 3.) | Actual activity (Col I) when projected activity is an increase while actual activity is a decrease OR projected activity is a decrease while actual activity is an increase. (See Note 4.) | Balance reflecting proration or averaging (See Note 5.) |
| 30 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 31 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 32 December 31st balance Prorated Items (Worksheet P5-1.32.h) |  |  |  |  |  |  |  |  | December 31st balance Prorated Items (Worksheet A3-2.79.f) |  |  |  |  |  |
| 33 | January | 31 | 335 | 365 | 91.78\% | - | - | - |  |  | - | - | - | - |
| 34 | February | 28 | 307 | 365 | 84.11\% | - | - | - | - | - | - | - | - | - |
| 35 | March | 31 | 276 | 365 | 75.62\% | - | - | - | - | - | - | - | - | - |
| 36 | April | 30 | 246 | 365 | 67.40\% | - | - | - | - | - | - | - | - | - |
| 37 | May | 31 | 215 | 365 | 58.90\% | - | - | - | - | - | - | - | - | - |
| 38 | June | 30 | 185 | 365 | 50.68\% | - | - | - | - | - | - | - | - | - |
| 39 | July | 31 | 154 | 365 | 42.19\% | - | - | - | - | - | - | - | - | - |
| 40 | August | 31 | 123 | 365 | 33.70\% | - | - | - | - | - | - | - | - | - |
| 41 | September | 30 | 93 | 365 | 25.48\% | - | - | - | - | - | - | - | - | - |
| 42 | October | 31 | 62 | 365 | 16.99\% | - | - | - | - | - | - | - | - | - |
| 43 | November | 30 | 32 | 365 | 8.77\% | - | - | - | - | - | - | - | - | - |
| 44 | December | 31 | 1 | 365 | 0.27\% | - | - | - | - | - | - | - | - | - |
|  | Total (sum |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 45 | of lines 33- <br> 44) | 365 |  |  |  | - | - |  | - | - | - | - | - |  |
| 46 | Beginning Balance-Total |  |  |  | Worksheet P5-1.46.h |  |  | - | Beginning Balance-Total |  |  | Worksheet A3-2.76.f |  | - |
| 47 | Beginning Balance-Not Subject to Proration |  |  |  | Worksheet P5-1.47.h |  |  | - | Beginning Balance-No | ot Subject to Proration |  | Worksheet A3-2.82.f |  | - |
| 48 | Beginning Balance-Subject to Proration |  |  |  | (Line 32, Col H ) |  |  | - | Beginning Balance-Sub | ubject to Proration |  | (Line 32, ColN ) |  | - |
| 49 |  |  |  |  | Worksheet P5-1.49.h |  |  | - | Ending Balance-Total |  |  | Worksheet A3-2.76.g |  | - |
| 50 | Ending Balance-Not Subject to Proration |  |  |  |  |  |  | - | Ending Balance-Not S | Subject to Proration |  | Worksheet A3-2.82.g |  | - |
| 51 | Ending Balance-Subject to Proration |  |  |  | Worksheet P5-1.50.hWorksheet P5-1.51.h |  |  | - | Ending Balance-Subje | ject to Proration |  | Worksheet A3-2.79.g |  | - |
| 52 | Average Balance (See Note 6.) |  |  |  |  |  |  | - | Average Balance (See Note 6.) Reserved |  |  | Lines $44 \mathrm{ColN}+($ Lines $47+50 \mathrm{ColN}) / 2$ |  | - |
| 53 | Reserved |  |  |  | Line $44 \mathrm{Col} \mathrm{H}+($ Lines $47+50 \mathrm{Col} \mathrm{H}) / 2$ |  |  |  |  |  |  |  |  |  |
| 54 | Amount for Attachment H |  |  |  | (Line 52 less line 53) |  |  | - | Amount for Attachment H |  |  | (Line 52 less line 53) |  | - |

## El Paso Electric Company <br> Worksheet A3-1

Accumulated Deferred Income Taxes
Actuals - For the 12 months ended 12/31/yyyy
Page 3 of 4

| $\begin{aligned} & 55 \\ & 56 \end{aligned}$ | ccount 2 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Days in Period |  |  |  |  |
|  | (a) | (b) | (c) | (d) | (e) |
|  | Month | Days in the Month | Number of Days Remaining in Year After Month's Accrual of Deferred Taxes | Total Days in Future Portion of Test Period (Line 18, Col B) | Proration <br> Amount <br> (Lines 6 to <br> 17, Col c $/$ <br> Col d) |


| Projection - Proration of Deferred Tax Activity |  |  |
| :---: | :---: | :---: |
| (f) | (g) | (h) |
| Projected Monthly |  |  |


| True-up Adjustment - Proration of Projected Deferred Tax Activity and Averaging of Other Deferred Tax Activity |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (i) | (j) | (k) | (1) | (m) | (n) |
| Actual Monthly Activity ((Line 24 Col n-Line 21 Col n)/12) (See Note 7.) | Difference between projected monthly and actual monthly activity (See Note 1.) | Preserve proration when actual monthly and projected monthly activity are either both increases or decreases. (See Note 2.) | Difference between projected and actual activity when actual and projected activity are either both increases or decreases. (See Note 3.) | Actual activity ( Col I ) when projected activity is an increase while actual activity is a decrease OR projected activity is a decrease while actual activity is an increase. (See Note 4.) | Balance reflecting proration or averaging (See Note 5.) |

59 December 31st balance Prorated Items (Worksheet P5-1.59.h)

| 60 January | 31 | 335 | 365 | 91.78\% |
| :---: | :---: | :---: | :---: | :---: |
| 61 February | 28 | 307 | 365 | 84.11\% |
| 62 March | 31 | 276 | 365 | 75.62\% |
| 63 April | 30 | 246 | 365 | 67.40\% |
| 64 May | 31 | 215 | 365 | 58.90\% |
| 65 June | 30 | 185 | 365 | 50.68\% |
| 66 July | 31 | 154 | 365 | 42.19\% |
| 67 August | 31 | 123 | 365 | 33.70\% |
| 68 September | 30 | 93 | 365 | 25.48\% |
| 69 October | 31 | 62 | 365 | 16.99\% |
| 70 November | 30 | 32 | 365 | 8.77\% |
| 71 December | 31 | 1 | 365 | 0.27\% |

## Total (sum

${ }^{71}$
3 Beginning Balance-Total Worksheet P5-1.73.
74 Beginning Balance-Not Subject to Proration
75 Beginning Balance-Subject to Proration
76 Ending Balance-Total
77 Ending Balance-Not Subject to Proration
78 Ending Balance-Subject to Proration
79 Average Balance (See Note 6. )
80 Reserved
1 Amount for Attachment H

Worksheet P5-1.73.h
Worksheet P5-1.74
Line 59, Col H )
Worksheet P5-1.76.
Worksheet P5-1.77.h
Worksheet P5-1.78.h
Line $71 \mathrm{ColH}+($ Lines $74+77 \mathrm{Col} \mathrm{H}) / 2$
(Line 79 less line 80)

| - |
| ---: |
| - |
| - |
| - |
|  |

Beginning Balance-Total
Beginning Balance-Not Subject to Proration Beginning Balance-Subject to Proration Ending Balance-Total
Ending Balance-Not Subject to Proration Enang Balance-Subject to Proration Average B
Reserved
, Note
Amount for Attachment H

Worksheet A3-2.123.f
Worksheet A3-2.129.f
Worksheet A3-2.
(Line 59, Col N)
Worksheet A3-2.123.g
Worksheet A3-2.129.g
Worksheet A3-2.126.g
Line $71 \operatorname{Col} \mathrm{~N}+($ Lines $74+77 \operatorname{Col} \mathrm{~N}) / 2$
(Line 79 less line 80)

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## El Paso Electric Company <br> Worksheet A3-1 <br> Accumulated Deferred Income Taxes <br> Actuals - For the 12 months ended 12/31/yyyy

1) Column J is the difference between projected monthly and actual monthly activity (Column I minus Column F). Specifically, if projected and actual activity are both positive, a negative in Column $J$ represents over-projection (amount of projected activity that did not occur) and a positive in Column $J$ represents under-projection excess of actual activity over projected activity). If projected and actual activity are both negative, a negative in Column J represents under-projection (excess of actua activity over projected activity) and a positive in Column J represents over-projection (amount of projected activity that did not occur).
) Column $K$ preserves proration when actual monthly and projected monthly activity are either both increases or decreases. Specifically, if Column $J$ is over-
projected, enter Column $\mathrm{G} \times[$ Column I/Column F$]$. If Column J is under-projected, enter the amount from Column G and complete Column L ). In other situations, nter zero
2) Column $L$ applies when (1) Column $J$ is under-projected AND (2) actual monthly and projected monthly activity are either both increases or decreases. Enter the mount from Column J. In other situations, enter zero.
3) Column M applies when (1) projected monthly activity is an increase while actual monthly activity is a decrease OR (2) projected monthly activity is a decrease while actual monthly activity is an increase. Enter actual monthly activity ( Col I ). In other situations, enter zero.
Column N is computed by adding the prorated monthly activity, if any, from Column K to 50 percent of the portion of monthly activity, if any, from Column L or M to the balance at the end of the prior month. The activity in columns L and M is multiplied by 50 percent to reflect averaging of rate base to the extent that the proration .
For the non-property-related component of the balance, the Average Balance is computed using the average of beginning of year and end of year balance. For the property-related component of the balance, the Average Balance is computed as described in Note 5 .
4) Projected and Actual monthly activity is computed based on the annual activity for the period, divided by 12 months.

Accumulated Deferred Income Taxes/Accumulated Deferred Investment Tax Credits - Details
Actuals - For the 12 months ended 12/31/yyyy


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EI Paso Electric Company
Worksheet A3-2
Accumulated Deferred Income Taxes/Accumulated Deferred Investment Tax Credits - Details
Actuals - For the 12 months ended 12/31/yyyy

| No. | (a) | mmm-yyyy <br> (b) | mmm-yyyy <br> (c) | (e) | mmm-yyyy <br> (f) | mmm-yyyy <br> (g) | (h) | Page 2 of 5 <br> (i) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Line No. | Item | $\begin{gathered} \text { BOY Balance } \\ \text { (Note A) } \\ \hline \end{gathered}$ | EOY Balance (Note B) | Allocator | BOY Allocated Amount | $\begin{aligned} & \text { EOY Allocated } \\ & \text { Amount } \\ & \hline \end{aligned}$ | Prorated (Yes/No) <br> (Note E) | Explanation (Note D) |
| 33 | Reserved |  |  | 0.000\% | - | - |  |  |
| 34 | Reserved |  |  | 0.000\% | - | - |  |  |
| 35 | Reserved |  |  | 0.000\% | - | - |  |  |
| 36 | Reserved |  |  | 0.000\% | - | - |  |  |
| 37 | Reserved |  |  | 0.000\% | - | - |  |  |
| 38 | Reserved |  |  | 0.000\% | - | - |  |  |
| 39 | Reserved |  |  | 0.000\% | - | - |  |  |
| 40 | Reserved |  |  | 0.000\% | - | - |  |  |
| 41 | Reserved |  |  | 0.000\% | - | - |  |  |
| 42 | Reserved |  |  | 0.000\% | - | - |  |  |
| 43 | Reserved |  |  | 0.000\% | - | - |  |  |
| 44 | Reserved |  |  | 0.000\% | - | - |  |  |
| 45 | Reserved |  |  | 0.000\% | - | - |  |  |
| 46 | Reserved |  |  | 0.000\% | - | - |  |  |
| 47 | Reserved |  |  | 0.000\% | - | - |  |  |
| 48 | Reserved |  |  | 0.000\% | - | - |  |  |
| 49 | Reserved |  |  | 0.000\% | - | - |  |  |
| 50 | Reserved |  |  | 0.000\% | - | - |  |  |
| 51 | Reserved |  |  | 0.000\% | - | - |  |  |
| 52 | Reserved |  |  | 0.000\% | - | - |  |  |
| 53 | Reserved |  |  | 0.000\% | - | - |  |  |
| 54 | Reserved |  |  | 0.000\% | - | - |  |  |
| 55 | Total Account 190 (234.8.b\&c) | - | - |  | - | - |  |  |
|  | Tax Reg Asset / Liab Adjustments (Note C) |  |  |  |  |  |  |  |
| 56 | Reserved |  |  | 0.000\% | - | - | No |  |
| 57 | Reserved |  |  | 0.000\% | - | - | No |  |
| 58 | Total Account 190 After Adjustments |  |  |  | 0 | - | - | - |
| 59 | Prorated Balances |  |  |  | - | - |  |  |
| 60 | Tax Reg Asset / Liab Adjustments |  |  |  | - | - |  |  |
| 61 | Prorated Account 190 Balances After Adjustment |  |  |  | - | - |  |  |
| 62 | Non-Prorated Balances |  |  |  | - | - |  |  |
| 63 | Tax Reg Asset / Liab Adjustments |  |  |  | - | - |  |  |
| 64 | Non-Prorated Account 190 Balances After Adjus | tments |  |  | - | - |  |  |

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El Paso Electric Company
Worksheet A3-2
Accumulated Deferred Income Taxes/Accumulated Deferred Investment Tax Credits - Details
Actuals - For the 12 months ended 12/31/yyyy


## Worksheet A3-2

Accumulated Deferred Income Taxes/Accumulated Deferred Investment Tax Credits - Details
Actuals - For the 12 months ended 12/31/yyyy


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## El Paso Electric Company

Worksheet A3-2

## Accumulated Deferred Income Taxes/Accumulated Deferred Investment Tax Credits - Details <br> Actuals - For the 12 months ended 12/31/yyy

Notes:
Beginning of Year ("BOY") balance is end of previous year balance per FERC Form No. 1
B End of Year ("EOY") balance is end of current year balance per FERC Form No. 1.
C The balances in Accounts 190, 281, 282 and 283, as adjusted by any amounts associated with tax-related regulatory assets and liabilities other than excess / deficient deferred income taxes ("EDIT"). EDIT is calculated in schedules A8-1 and A8-2 and presented in Att-H separately from ADIT.
D Each ADIT item is categorized into 1 of 7 categories. The selected category will determine the Allocator applied to the ADIT balance.

1) Prod: The ADIT balance is $100 \%$ related to production of electricity and the NA Allocator is applied
2) Retail: The ADIT balance is $100 \%$ related to retail operations and the NA Allocator is applied.
3) ONT: Other $100 \%$ Non-Transmission (Items other than Prod \& Retail) related ADIT for which the NA Allocator is applied. Such items shall include:

- ADIT related to the Income Tax Regaultory Assets and Liabilities
- Any other ADIT if not separately removed in other categories that relates to regulatory assets and liabilities that are not included in rate base.

4) Trans: The ADIT balance is $100 \%$ related to transmission operations and the DA Allocator is applied.
5) Plant: The ADIT balance is related to Property, Plant, \& Equipment "PP\&E" and the NP Allocator is applied
6) NPO: ADIT balances other than PP\&E where the NP Allocator is applied.
7) Labor: The ADIT balance is labor related and the W/S Allocator is applied.

E Each ADIT Item must be categorized into balances that require proration and those that do not. ADIT items with a "Plant" Explanation code will be designated "Yes" for proration treatment and all other Items will be designated "No".
F The Company has elected and applied the second option for accounting for investment tax credits ("ITC") under Internal Revenue Code 46 (f) and the regulations thereunder to apply a cost of service adjustment to reduce tax expense no more rapidly than ratably. Under option 2, there is no rate base reduction for the unamortized balance of the ITC



Actuals - For the 12 months ended 12/31/yyyy


## El Paso Electric Company

Worksheet A5
Depreciation Rates

Page 1 of 1


## El Paso Electric Company

Worksheet A6
Divisor - Network Transmission Load

## Actuals - For the 12 months ended 12/31/2020

| Line | Month | Transmission System Peak Load (MW) | Firm Network for Self (MW) | Firm <br> Network Service for Others (MW) | Long-Term Firm Point to Point Reservations (MW) | Other Long Term Firm Service (MW) | Short Term Firm <br> Point to Point Reservation (MW) | Other Service (MW) | 12-CP <br> Average <br> (MW) <br> (Note A) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (a) | (b) | (e) | (f) | (g) | (h) | (i) | (j) | (k) |
|  | FN1 Reference for Total | Sum Colm's (e) through ( $\mathbf{j}$ ) | 400.17.e | 400.17.f | 400.17.g | 400.17.h | 400.17.i | 400.17.j | Colm (b) - (i) |
| 1 | January | 0 |  |  |  |  |  |  | 0 |
| 2 | February | 0 |  |  |  |  |  |  | 0 |
| 3 | March | 0 |  |  |  |  |  |  | 0 |
| 4 | April | 0 |  |  |  |  |  |  | 0 |
| 5 | May | 0 |  |  |  |  |  |  | 0 |
| 6 | June | 0 |  |  |  |  |  |  | 0 |
| 7 | July | 0 |  |  |  |  |  |  | 0 |
| 8 | August | 0 |  |  |  |  |  |  | 0 |
| 9 | September | 0 |  |  |  |  |  |  | 0 |
| 10 | October | 0 |  |  |  |  |  |  | 0 |
| 11 | November | 0 |  |  |  |  |  |  | 0 |
| 12 | December | 0 |  |  |  |  |  |  | 0 |
| 13 | Total | - | - | - | - | - | - | - | 0 |
| 14 | 12-CP |  |  |  |  |  |  |  | - |
| 15 |  |  |  |  |  |  |  |  |  |


$\frac{\text { Notes }}{\text { A }}$
Special depreciation rates may be utilized for specific incentive transmission projects if approved by the FERC
Incentive ROE requires authorization by the Commission


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El Paso Electric Company
Worksheet A8-1
Excess / Deficient Deferred Income Taxes ("EDIT")
Actuals - For the 12 months ended 12/31/yyyy

NOTES
1 Column J is the difference between projected monthly and actual monthly activity (Column I minus Column F). Specifically, if projected and actual activity are both positive, a negative in Column Jrepresents over-projection (amount of projected activity that did not Column K preserves proration when actual monthly and projected monthly activity are either both increases or decreases. Specifically, if Column J is over-projected, enter Column Gx [Column $I /$ Column F$]$. If Column J is under-projected, enter the amount from Column G and complete Column L). In other situations, enter zero.
3 Column L applies when (1) Column J is under-projected AND (2) actual monthly and projected monthly activity are either both increases or decreases. Enter the amount from Column J. In other situations, enter zero.
4 Column M applies when (1) projected monthly activity is an increase while actual monthly activity is a decrease OR (2) projected monthly activity is a decrease while actual monthly activity is an increase. Enter actual monthly activity (Col I). In other situations. enter zero.
5 Column N is computed by adding the prorated monthly activity, if any, from Column K to 50 percent of the portion of monthly activity, if any, from Column L or M to the balance at the end of the prior month. The activity in columns L and M is multiplied by 50 percent to reflect averaging of rate base to the extent that the proration requirement has not been applied to a portion of the monthly activity.
6 For the non-property-related component of the balance, the Average Balance is computed using the average of beginning of year and end of year balance. For the property-related component of the balance, the Average Balance is computed as described in Note 5 .
7 Projected and Actual monthly activity is computed based on the annual activity for the period, divided by 12 months.


| No. | (a) | Dec-2019 <br> (b) | $\begin{gathered} 2020 \\ \text { (c) } \\ \hline \end{gathered}$ |  | $\begin{gathered} \text { Dec-2020 } \\ \text { (e) } \end{gathered}$ | (f) | $\begin{gathered} \text { Dec-2019 } \\ (\mathrm{g}) \end{gathered}$ | $\begin{gathered} 2020 \\ \text { (h) } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Dec-2020 } \\ \text { (i) } \\ \hline \end{gathered}$ | (j) | (k) | Page 2 of 2 $\qquad$ <br> (1) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Line No. 1 | Item | BOY Balance (Note D) | Current Period Amortization | Current Period Other Activity (Note C) | $\underset{\text { D) }}{\substack{\text { EOY Balance (Note } \\ \text { D }}}$ | Allocator | BOY Allocated Amount | Amortization Allocated | EOY Allocated Amount | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { Prorated } \\ \text { (Yes/No) } \\ \text { (Note B) } \end{array} \\ \hline \end{array}$ | Amort <br> Period or <br> Method | Explanation (Note A) |
| 41 | Reserved |  |  |  |  | 0.000\% | - | - | - |  |  |  |
| 42 | Reserved |  |  |  |  | 0.000\% | - | - | - |  |  |  |
| 43 | Reserved |  |  |  |  | 0.000\% | - | - | - |  |  |  |
| 44 | Reserved |  |  |  |  | 0.000\% | - | - | - |  |  |  |
| 45 | Reserved |  |  |  |  | 0.000\% | - | - | - |  |  |  |
| 46 | Reserved |  |  |  |  | 0.000\% | - | - | - |  |  |  |
| 47 | Reserved |  |  |  |  | 0.000\% | - | - | - |  |  |  |
| 48 | Reserved |  |  |  |  | 0.000\% | - | - | - |  |  |  |
| 53 | Reserved |  |  |  |  | 0.000\% | - | - | - |  |  |  |
| 54 | Reserved |  |  |  |  | 0.000\% | - | - | - |  |  |  |
| 55 | Total Non Plant Unprotected | - | - | - | - |  | - | - | - |  |  |  |
|  | PLANT EDIT INCLUDED WITHIN ACCOUNTS 182.3 \& 254 |  |  |  |  |  |  |  |  |  |  |  |
| 56 | Reserved |  |  |  |  | 0.000\% | - | - | - |  |  |  |
| 57 | Reserved |  |  |  |  | 0.000\% | - | - | - |  |  |  |
| 58 | Reserved |  |  |  |  | 0.000\% | - | - | - |  |  |  |
| 59 | Reserved |  |  |  |  | 0.000\% | - | - | - |  |  |  |
| 60 | Reserved |  |  |  |  | 0.000\% | - | - | - |  |  |  |
| 61 | Total Plant | - | - | - | - |  | - | - | - |  |  |  |
| 62 | Total Excess/Deficient Deferred Income Tax | - | - | - | - |  | - | - | - |  |  |  |
| Notes: |  |  |  |  |  |  |  |  |  |  |  |  |
| A | Each EDIT item is categorized into 1 of 7 categories. The selected category will will determine the Allocator applied to the EDIT balance. <br> 1) Prod: The EDIT balance is $100 \%$ related to production of electricity and the NA Allocator is applied. <br> 2) Retail: The EDIT balance is $100 \%$ related to retail operations and the NA Allocator is applied. |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 3) ONT: Other $100 \%$ Non-Transmission (Items other than Prod \& Retail) related EDIT for which the NA Allocator is applied. Such item- EDIT related to Pension and PBOP |  |  |  |  | include: |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | - Any other EDIT if not separately removed in other categories that relates to regulatory assets and liabilities that are not included in rate base. 4) Trans: The EDIT balance is $100 \%$ related to transmission operations and the DA Allocator is applied. |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 5) Plant: The EDIT balance is related to Property, Plant, \& Equipment "PP\&E" and the NP Allocator is applied. |  |  |  |  |  |  |  |  |  |  |  |
|  | 6) NPO: EDIT balances other than PP\&E where the NP Allocator is applied. |  |  |  |  |  |  |  |  |  |  |  |
|  | ${ }^{\text {7) }}$ Labor: The EDIT balance is labor related and the W/S Allocator is applied. |  |  |  |  |  |  |  |  |  |  |  |
| B |  |  |  |  |  | Each EDIT Item must be categorized into balances that require proration and those that do not. EDIT items with a "Plant" Explanation code will be designated "Yes" for proration treatment and all other Items will be designated "No". Includes the impact of tax rate changes enacted during the period. |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| C |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| D | EDIT balances exclude income tax gross-ups recorded to accounts 182.3 and 254 |  |  |  |  |  |  |  |  |  |  |  |

# El Paso Electric Company <br> Worksheet A9 <br> Cost of Capital Worksheet 

| PROPRIETARY CAPITAL |  |  |  |  |  | Page 1 of 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| Line No | Month <br> (a) | Preferred Stock | Subsidiary Earnings | Comprehensive Income | Total Proprietary Capital <br> (e) <br> 112.16.c |  |
|  |  | Issued (204) | (216.1) | (219) |  |  |
|  |  | (b) | (c) | (d) |  |  |
|  | FN1 Reference for Dec | 112.3.c | 112.12.c | 112.15.c |  |  |
| 1 | December Prior Year |  | - |  |  |  |
| 2 | January |  |  |  |  |  |
| 3 | February |  |  |  |  |  |
| 4 | March |  |  |  |  |  |
| 5 | April |  |  |  |  |  |
| 6 | May |  |  |  |  |  |
| 7 | June |  |  |  |  |  |
| 8 | July |  |  |  |  |  |
| 9 | August |  |  |  |  |  |
| 10 | September |  |  |  |  |  |
| 11 | October |  |  |  |  |  |
| 12 | November |  |  |  |  |  |
| 13 | December |  |  |  |  |  |
| 14 | Average of the 13 Monthly Balances | - | - | - | - |  |

LONG TERM DEBT

| Line No | Month <br> (f) | Total Long Term <br> Debt (221-222 + 223 $\text { + } 224+225-226)$ <br> (g) | Unamortized Debt Expenses (181) <br> (h) | Unamortized Loss on Reacquired Debt (189) <br> (i) | Unamortized Gain on Reacquired Debt (257) <br> (j) | $\operatorname{Total}(\mathrm{g}-\mathrm{h}-\mathrm{i}+\mathbf{j})$ <br> (k) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | FN1 Reference for Dec | 112.24.c | 111.69.c | 111.81c | 113.61.c |  |
| 15 | December Prior Year |  |  |  | - | - |
| 16 | January |  |  |  | - | - |
| 17 | February |  |  |  | - | - |
| 18 | March |  |  |  | - | - |
| 19 | April |  |  |  | - | - |
| 20 | May |  |  |  | - | - |
| 21 | June |  |  |  | - | - |
| 22 | July |  |  |  | - | - |
| 23 | August |  |  |  | - | - |
| 24 | September |  |  |  | - | - |
| 25 | October |  |  |  | - | - |
| 26 | November |  |  |  | - | - |
| 27 | December |  |  |  | - | - |
| 28 | Average of the 13 Monthly Balances | - | - | - | - |  |

## El Paso Electric Company <br> Worksheet TU <br> True-Up Adjustment <br> Actuals - For the 12 months ended 12/31/yyyy



# El Paso Electric Company <br> Worksheet TU <br> True-Up Adjustment <br> Actuals - For the 12 months ended 12/31/yyyy 

## Interest Calculation

## FERC Otr Int. Rate

Qtr (3 Prior to Most Recent) Qtr (2 Prior to Most Recent) Qtr (Prior to Most Recent)
Qtr (Most Recent)
Average of the last 4 quarters
Average Monthly Rate

Note D
Annual Rate
Annual Rate
Annual Rate
Annual Rate
(Sum Lines 30-33 / 4)
Line 34 / 12

| Rate |
| ---: |
| $0.00 \%$ |
| $0.00 \%$ |
| $0.00 \%$ |
| $0.00 \%$ |
| $0.00 \%$ |
| $0.0000 \%$ |

An over or under collection will be recovered pro-rata over year collected, held for one year, and returned prorata over next year:

| Year | Month | Levelized True Up before Interest (Note E) | Interest Rate | Number of Months |  | Interest | True Up plus Interest |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| yyyy | January | - | 0.00\% | 12 | \$ | - |  |
| yyyy | February | - | 0.00\% | 11 | \$ | - |  |
| yyyy | March | - | 0.00\% | 10 | \$ | - |  |
| yyyy | April | - | 0.00\% | 9 | \$ | - |  |
| yyyy | May | - | 0.00\% | 8 | \$ | - |  |
| yyyy | June | - | 0.00\% | 7 | \$ | - |  |
| yyyy | July | - | 0.00\% | 6 | \$ | - |  |
| ууyy | August | - | 0.00\% | 5 | \$ | - |  |
| yyyy | September | - | 0.00\% | 4 | \$ | - |  |
| ууyy | October | - | 0.00\% | 3 | \$ | - |  |
| yyyy | November | - | 0.00\% | 2 | \$ | - |  |
| ууyy | December | - | 0.00\% | 1 | \$ | - |  |
|  |  | - |  |  |  | - | \$ - |


| yyyy | Jan-Dec | $\$$ | - | $0.00 \%$ | 12 | $\$$ | - | $\$$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

# El Paso Electric Company <br> Worksheet TU <br> True-Up Adjustment <br> Actuals - For the 12 months ended 12/31/yyyy 

| 55 |  |  | True Up plus Interest |  | Interest Rate | Total Interest |  | Amoritization |  | Balance Due/Owed |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 56 | yyyy | January | \$ | - | 0.00\% | \$ | - | \$ | - | \$ | - |
| 57 | yyyy | February | \$ | - | 0.00\% | \$ | - | \$ | - | \$ | - |
| 58 | yyyy | March | \$ | - | 0.00\% | \$ | - | \$ | - | \$ | - |
| 59 | yyyy | April | \$ | - | 0.00\% | \$ | - | \$ | - | \$ | - |
| 60 | yyyy | May | \$ | - | 0.00\% | \$ | - | \$ | - | \$ | - |
| 61 | yyyy | June | \$ | - | 0.00\% | \$ | - | \$ | - | \$ | - |
| 62 | yyyy | July | \$ | - | 0.00\% | \$ | - | \$ | - | \$ | - |
| 63 | yyyy | August | \$ | - | 0.00\% | \$ | - | \$ | - | \$ | - |
| 64 | yyyy | September | \$ | - | 0.00\% | \$ | - | \$ | - | \$ | - |
| 65 | yyyy | October | \$ | - | 0.00\% | \$ | - | \$ | - | \$ | - |
| 66 | yyyy | November | \$ | - | 0.00\% | \$ | - | \$ | - | \$ | - |
| 67 | yyyy | December | \$ | - | 0.00\% | \$ | - | \$ | - | \$ | - |
| 68 |  |  |  |  |  | \$ | - |  |  |  |  |

Page 3 of 3

## Notes

A Actual Net Revenue Requirement for rate year subject to True Up from Actual Attachment H, line 7.
B Actual Revenues for transmission service as booked, including amounts noted on FERC Form No. 1, pages 328-330, and other amounts included in supporting documentation.
C Prior Period Adjustment, if any, is calculated to the same timing basis as balance of true up (i.e. before interest applied on line for the Prior Period Adjustment calculation will be included in supporting documentation.
D Interest rates posted by FERC; this section to be completed each year for most recent four quarters
E If Rate Year 1 is a partial rate year, the Actual Revenue Requirement, Actual Revenues, Prior Period Adjustment (if any), and Levelized True Up before Interest will reflect only those months for which the rate was in effect. Otherwise, these amounts will all reflect a full 12 month period.

Formula Rate - Non-Levelized

Line
No.
1 GROSS REVENUE REQUIREMENT (page 3, line 29)

REVENUE CREDITS
2 Account No. 454
3 Account No. 456.
4 Held for Future Use
5 Held for Future Use
6 TOTAL REVENUE CREDITS (sum lines 2-5)
6a Total True Up Adjustment
7 NET REVENUE REQUIREMENT

7a Net Revenue Requirement without True Up Adjustment
DIVISOR
8 Divisor (kW)
$\begin{array}{cc}9 & \\ 10 & \text { RATES }\end{array}$
11 Annual
12 Monthly
13 Weekly
14 Daily On-Peak
15 Daily Off-Peak
16 Hourly On-Peak
17 Hourly Off-Peak

## El Paso Electric Company

Rate Formula Template

Estimated - For the 12 months ended 12/31/yyyy

Act Att-H, page 1 Line 2
Act Att-H, page 1 Line 3

Worksheet TU, page 1, Line 26
(Line 1 minus Line 6 plus Line 6a)
(Line 7 minus Line 6a)

Worksheet P3, Line $15 \times 1000$

12 months/year
52 weeks/year
6 days/week
7 days/week
16 hours/day
24 hours/day

- /kW-year
- /kW-month
- /kW-week
- /kW-day
- /kW-day
- /kW-day
- /MW-hour

Allocated
$\square$
$\square$

| Allocator |  |
| :---: | :--- |
| TP | 0.00000 |
| TP | 0.00000 |
| TP | 0.00000 |
| TP | 0.00000 |


\$

# Exhibit No. EPE-0006 

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|  |  |
| ---: | ---: |
| Formula Rate - Non-Levelized | El Paso Electric Company |
| Rate Formula Template |  |

(1)

Line
No. RATE BASE:
GROSS PLANT IN SERVICE
1 Transmission
2 General \& Intangible
3 TOTAL GROSS PLANT
ACCUMULATED DEPRECIATION
4 Transmission
5 General \& Intangible
6 TOTAL ACCUM. DEPRECIATION
NET PLANT IN SERVICE
7 Transmission
8 General \& Intangible
9 TOTAL NET PLANT
10 CWIP Approved by FERC Order
ADJUSTMENTS TO RATE BASE
11 Accumulated Deferred Income Taxes (Accounts 190, 281-283)
12 Accumulated Deferred Investment Tax Credit (Account 255)
13 Excess / Deficient Deferred Income Taxes
14 Unamortized Regulatory Asset
15 Unamortized Abandoned Plant
16 Unfunded Reserves (enter negative)
17 Hold Harmless Adjustmen
18 TOTAL ADJUSTMENTS
19 LAND HELD FOR FUTURE USE

## WORKING CAPITAL

20 CWC
21 Materials \& Supplies
22 Prepayments (Account 165)
23 TOTAL WORKING CAPITAL
24 RATE BASE
Rate Formula Template

| (2) <br> Reference Page, Line, Col. | Company Total | Allocator |  | (5) <br> Transmission (Col 3 times $\operatorname{Col} 4$ ) |
| :---: | :---: | :---: | :---: | :---: |
| Worksheet P1, Line 30, Col. (c) | - | TP | 0.00000 | - |
| Act Att-H, Page 2, Line 4, Col. (3) | - | W/S | 0.00000 | - |
| (Sum Lines 1 and 2) | - |  |  | - |
| Worksheet P1, Line 30, Col. (f) | - | TP | 0.00000 | - |
| Act Att-H, Page 2, Line 10, Col. (3) | - | W/S | 0.00000 | - |
| (Sum Lines 4 and 5) | - |  |  | - |
| (Line 1 - Line 4) | - |  |  | - |
| (Line 2 - Line 5) | - |  |  | - |
| (Sum Lines 7 and 8) | - |  |  | - |
| Worksheet P7, Page 1, Line 14, Col. (d) | - | DA | 1.00000 | - |
| Worksheet P5-1, Page 3, Line 82, Col. (h) | - | DA | 1.00000 | - |
| Worksheet P5-2, Line 138, Col. (g) | - | DA | 1.00000 | - |
| Worksheet P6-1, Line 27, Col. (h) | - | DA | 1.00000 | - |
| Worksheet P7, Page 1, Line 14, Col. (b) | - | DA | 1.00000 | - |
| Worksheet P7, Page 1, Line 14, Col. (c) | - | DA | 1.00000 | - |
| Act Att-H, Page 2, Line 25, Col. (3) | - | DA | 1.00000 | - |
| Act Att-H, Page 2, Line 25a, Col. (3) | - | DA | 1.00000 | - |
| (Sum of Lines 11-17) | - |  |  | - |
| Worksheet A4, Page 3, Line 14, Col. (e) | - | TP | 0.00000 | - |
| 1/8*(Page 3, Line 7) | - |  |  | - |
| Act Att-H, Page 2, Line 29, Col. (3) | - | TP | 0.00000 | - |
| Act Att-H, Page 2, Line 30, Col. (3) | - | GP | 0.00000 | - |
| (Sum of Lines 20-22) | - |  |  | - |
| (Sum Lines 9, 10, 18, 19, \& 23) | - |  |  | - |

Projected Attachment H
Page 2 of 5
Estimated - For the 12 months ended 12/31/yyyy

$$
\text { (Col } 3 \text { times Col } 4
$$

$\qquad$

# Docket No. ER22- <br> Exhibit No. EPE-0006 

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## El Paso Electric Company

Rate Formula Template
Formula Rate - Non-Levelized
(1)

Line
O\&M
Transmission
Less Account 561.1-561.8
Less Account 565
A\&G
Less EPRI/Reg. Comm. Exp./Non-safety Ad.
Less Property Insurance Acct 924
Plus Property Insurance Acct 924
Plus Transmission Related Reg. Comm. Exp.
Plus Transmission Related Reg
Plus: Fixed PBOP expense
Plus: Fixed PBOP expense
Coms: Ac
Hold Harmless Expense Adjustment
TOTAL O\&M (sum lines 1, 3, 4b, 4c,4d, 5,6 less lines 2, 2a, 4, 4a, 4e DEPRECIATION AND AMORTIZATION EXPENSE
8 Transmission
9 General \& Intangible
10 Common
11a Amortization of Regulatory Asset
11 b Amortization of Abandoned Plant
12 TOTAL DEPRECIATION \& AMORTIZATION
TAXES OTHER THAN INCOME TAXES
LABOR RELATED
Payroll
Highway and vehicle
PLANT RELATED
Property
Gross Receipts
Other
Payments in lieu of taxes
TOTAL OTHER TAXES
INCOME TAXES
$\mathrm{T}=1-\left\{[(1-\mathrm{SIT}) *(1-\mathrm{FIT})] /\left(1-\mathrm{SIT}^{*} \mathrm{FIT} * \mathrm{p}\right)\right\}=$ $\mathrm{CIT}=(\mathrm{T} / 1-\mathrm{T}) *(1-(\mathrm{WCLTD} / \mathrm{R}))=$
where WCLTD=(page 4, line 28) and $\mathrm{R}=$ (page 4, line 31
and FIT, SIT \& $p$ are as given in Note A.
$1 /(1-T)=($ from line 21$)$
24 Deficient / (Excess) Deferred Income Taxes Amortization
24a Deficient / (Excess) Deferred Income Tax Adjustment
25 Permanent Differences
25a Tax Effect of Permanent Differences
26 Income Tax on Equity and Incentive Return
27 Total Income Taxes

## RETURN

28 Rate Base * Rate of Return + Incentive Return
(2)
Reference
Page, Line, Col.
(3)

Company Total

### 0.000\%

$0.000 \%$

Worksheet P6-2, Line 62, Col. (h) (enter as negative)
(Line 23 times Line 24) $\qquad$
(Line 21 times 23 times Line 25)
(Line 22 times Line 28)
(Sum of Lines 24a, 25a, 26)
(Page 2, Line $24 \times$ Page 4, Line 31, Col. (5)) + Page 4, Line 32
(Sum of Lines 7, 12, 20, 27, 28)


Actual Attachment H, Page 3, Line 9
age 3, Line 9
Actual Attachment H, Page 3, Line 10
Company Records
Company Records
(Sum of Lines 8 through 11

Worksheet P2, Page 1, Line 15, Col. (e) Worksheet P2, Page 1, Line 16, Col. (e)

Worksheet P2, Page 2, Line 3, Col. (e)
Worksheet P2, Page 1, Line 18, Col. (e)
Worksheet P2, Page 1, Line 19, Col. (e)
Worksheet P2, Page 1, Line 20, Col. (e)
(Sum of Lines 13 through 19)
(Note A)
Worksheet P2, Page 1, Line 3, Col. (e) Worksheet P2, Page 1, Line 4, Col. (e) Worksheet P2, Page 1, Line 5, Col. (e) Worksheet P2, Page 1, Line 6, Col. (e) Worksheet P2, Page 1, Line 7, Col. (e) Worksheet P2, Page 1, Line 8, Col. (e) Worksheet P2, Page 1, Line 9, Col. (e) Worksheet P2, Page 1, Lines $10+10 \mathrm{a}$, Col. (e)
Worksheet P2, Page 1, Line 11, Col. (e)
Worksheet P2, Page 1, Line 12, Col. (e)
Worksheet P2, Page 1, Line 13, Col. (e)
Worksheet P2, Page 1, Line 14, Col. (e)

(5)

Transmission (Col 3 times Col 4 )

Estimated - For the 12 months ended 12/31/yyyy
0.00000
0.00000
0.00000
1.00000
0.00000
0.00000

| 0.00000 | - |
| :--- | :--- |
| 0.00000 | - |
| 0.00000 | - |
| 0.00000 | - |
| 0.00000 | - |
| 0.00000 | - |
| 0.00000 | - |
| 0.00000 | - |
| 0.00000 | - |
| 0.00000 | - |
| 0.00000 | - |
| 1.00000 | - |
|  | - |
|  | - |
| 0.00000 | - |
| 0.00000 | - |
| 0.00000 | - |
| 1.00000 | - |
| 1.00000 | - |
|  | - |
|  | - |
| 0.00000 | - |
| 0.00000 | - |
|  | -00000 |

# Docket No. ER22- 

Formula Rate - Non-Levelized

## Paso Electric Company

Rate Formula Template

## (1)

(2)

## SUPPORTING CALCULATIONS AND NOTES

## Line

No. TRANSMISSION PLANT INCLUDED IN RATES
1 Total transmission plant
Actual Attachment H , Page 4, Line
Actual Attachment H, Page 4, Line 2
3 Less transmission plant excluded from Wholesale Rates
4 Transmission plant included in Wholesale Rates
(Line 1 less Lines 2 \& 3
(Line 4 divided by Line 1 )

| Total transmission expenses | (Page 3, Line 1, Col. 3) |
| :--- | :--- |
| Less transmission expenses included in OATT Ancillary Services | Actual Attachment H, Page 4, Line 7 |

$\begin{array}{lll}7 & \text { Less transmission expenses included in OATT Ancillary Services } & \text { Actual Attachment H } \\ & \text { Included transmission expenses } & \text { (Line 6 less Line 7) }\end{array}$
9 Percentage of transmission expenses after adjustment (Line 8 divided by Line 6 )
10 Percentage of transmission plant included in wholesale Rates
11 Percentage of transmission expenses included in wholesale Rates
WAGES \& SALARY ALLOCATOR (W\&S)

|  |  | Reference | \$ | TP |
| :---: | :---: | :---: | :---: | :---: |
| 12 | Production | Actual Attachment H, Page 4, Line 12 |  | 0.00 |
| 13 | Transmission | Actual Attachment H, Page 4, Line 13 |  | 0.00 |
| 14 | Distribution | Actual Attachment H, Page 4, Line 14 |  | 0.00 |
| 15 | Other | Actual Attachment H, Page 4, Line 15 |  | 0.00 |
| 16 | Total | (Sum of Lies 12-15) |  |  |
|  | COMMON PLANT ALLOCATOR (CE) |  | \$ |  |
| 17 | Electric | Actual Attachment H, Page 4, Line 17 |  |  |
| 18 | Gas | Actual Attachment H, Page 4, Line 18 |  |  |
| 19 | Water | Actual Attachment H, Page 4, Line 19 |  |  |
| 20 | Total | (Sum of Lines 17-19) |  |  |
|  | RETURN (R) |  |  |  |
| 21 | Long Term Interest | Actual Attachment H, Page 4, Line 21 |  |  |
| 22 | Preferred Dividends | Actual Attachment H, Page 4, Line 22 |  |  |
|  | Development of Common Stock: |  |  |  |
| 23 | Proprietary Capital | Actual Attachment H, Page 4, Line 23 |  |  |
| 24 | Less Preferred Stock | Actual Attachment H, Page 4, Line 24 |  |  |
| 25 | Less Other Comprehensive Income | Actual Attachment H, Page 4, Line 25 |  |  |
| 26 | Less Account 216.1 | Actual Attachment H, Page 4, Line 26 |  |  |
| 27 | Common Stock | (Sum of Lines 23-26) |  |  |
|  |  |  | \$ | \% |
| 28 | Long Term Debt | Actual Attachment H, Page 4, Line 28 |  | 0\% |
| 29 | Preferred Stock | Actual Attachment H, Page 4, Line 29 |  | 0\% |
| 30 | Common Stock | Actual Attachment H, Page 4, Line 30 |  | 0\% |
| 31 | Total | (Sum of Lines 28-30) |  |  |

## Projected Attachment H

Page 4 of 5
Estimated - For the 12 months ended 12/31/yyyy
(5)
(4)
$\square$
$\mathrm{TP}=$ 0.00000
$\begin{array}{r}- \\ - \\ \hline 0\end{array}$
0.00000
0.00000
0.00000
\% Electric (line 17 / line 20) 0.00000 *
\&S Allocator (line 16) $0.00000=$

# Exhibit No. EPE-0006 

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Formula Rate - Non-Levelized

## El Paso Electric Company

Rate Formula Template
(1)

Line
No.
GROSS PLANT ALLOCATOR (GP)
Production
2 Transmission
3 Distribution
General \& Intangible
Commo
NET PLANT ALLOCATOR (NP)
Production
Transmission
9 Distribution
10 General \& Intangible
1 Common
Total
(3)

Company Total
(4)

Allocator

[^11]Note
Letter
 attach a work paper showing the name of each state and how the blended or composite SIT was developed.
$\begin{array}{ll}\text { Inputs Required: } & \text { FIT }= \\ \text { SIT }=\end{array}$
$\mathrm{SIT}=$
0.000\% (Federal Income Tax Rate)
$0.000 \%$ (State Income Tax Rate or Composite SIT)
$0.000 \%$ (percent of federal income tax deductible for state purposes)

## El Paso Electric Company

Worksheet P1
Projected Transmission Plant
Estimated - For the 12 months ended 12/31/yyyy
Page 1 of 2


## El Paso Electric Company

Worksheet P1
Projected Transmission Plant

## Estimated - For the 12 months ended 12/31/yyy

Notes:
A In periods where the company will use the actual depreciation rate, enter "A". The actual depreciation rate is calculated as follows: -Actual Attachment H , page 3, line 8) divided by actual transmission plant in service (Actual Attachment H , page 2, line 2 ) divided by 12 months.

In periods where the company has submitted new depreciation rates for FERC approval, enter "N". The new depreciation rate is calculated as follows:
-The annual composite transmission depreciation rate developed within a new depreciation study, divided by 12 months.

| Current Depreciation Rate (A) | $0.0000 \%$ |
| ---: | :--- |
| New Depreciation Rate (N) | $0.0000 \%$ |

B The depreciation accrual is based on the average of the current and prior month Plant in Service, times the actual "A" or new "N" depreciation rate
C In the initial year rates are set, use Lines 26 and 28, thereafter use Lines 27 and 29, calculated on line 30 .

[^12]$\qquad$

# El Paso Electric Company <br> Worksheet P2 <br> Projected Expenses 

Exhibit No. EPE-0006
Page 41 of 56
Estimated - For the 12 months ended 12/31/yyyy
Page 1 of 2

| Line | (a) | (b) | (c) | (d) | (e) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | O\&M / OTHER TAXES (Excluding Property Taxes) |  |  |  |
|  | Item | Reference | Actual Costs | arge Facto <br> (Note A) | Projected Costs (Note B) |
| 1 | Net Plant in Service | Actual Attachment H, Page 2 Line 18 | - |  |  |
| 2 | Projected Net Plant in Service | Projected Attachment H, Page 2, Line 9 |  |  | - |
| O\&M |  |  |  |  |  |
| 3 | Transmission | Actual Attachment H, Page 3, Line 1 | - | - | - |
| 4 | Less Account 561.1-561.8 | Actual Attachment H, Page 3, Line 2 | - | - | - |
| 5 | Less Account 565 | Actual Attachment H, Page 3, Line 2a | - | - | - |
| 6 | A\&G | Actual Attachment H, Page 3, Line 3 | - | - | - |
| 7 | Less EPRI \& Reg. Comm. Exp. \& Non-safety Ad. | Actual Attachment H, Page 3, Line 4 | - | - | - |
| 8 | Less Property Insurance Acct 924 | Actual Attachment H, Page 3, Line 4a | - | - | - |
| 9 | Plus Property Insurance Acct 924 | Actual Attachment H, Page 3, Line 4b | - | - | - |
| 10 | Plus Transmission Related Reg. Comm. Exp. | Actual Attachment H, Page 3, Line 4c | - | - | - |
| 10a | Plus Transmission Related Rate Case Cost Amort Bal | Note D |  |  | - |
| 11 | Plus: Fixed PBOP expense | Actual Attachment H, Page 3, Line 4d | - |  | - |
| 12 | Less: Actual PBOP expense | Actual Attachment H, Page 3, Line 4e | - |  | - |
| 13 | Common | Actual Attachment H, Page 3, Line 5 | - | - | - |
| 14 | Hold Harmless Expense Adjustment | Actual Attachment H, Page 3, Line 6 | - | - | - |
| OTHER TAXES (Excluding Property Taxes) LABOR RELATED |  |  |  |  |  |
| 15 | Payroll | Actual Attachment H, Page 3, Line 13 | - | - | - |
| 16 | Highway and vehicle | Actual Attachment H, Page 3, Line 14 | - | - | - |
| 17 | PLANT RELATED |  |  |  |  |
| 18 | Gross Receipts | Actual Attachment H, Page 3, Line 17 | - | - | - |
| 19 | Other | Actual Attachment H, Page 3, Line 18 | - | - | - |
| 20 | Payment in Lieu of Taxes | Actual Attachment H, Page 3, Line 19 | - | - | - |

## Estimated - For the 12 months ended 12/31/yyyy

| (a) | (b) | (c) |  |
| :---: | :---: | :---: | :---: | :---: |
|  | PROPERTY TAXES |  |  |
| Item | Reference | Actual | Charge Factor |

## PROPERTY TAXES

1 Net Plant in Service for Actual (Note C)
2 Net Plant in Service for Projected (Note C)
3 Property Taxes
200.15.b
200.15.b

Actual Attachment H, Page 3, Line 16

## NOTES:

A Charge Factor: Actual O\&M expenses \& Other Taxes divided by total actual net plant from Actuals Attachment H. This is used as one of the basis to calculate projected O\&M costs and projected Other Taxes.
B -When the Net Plant Change \% falls within a minimum or maximum threshold, Projected Costs = Row 2, Col. (f) times Col. (d) -When the Net Plant Change \% is greater than the maximum threshold, Projected Costs $=$ Col. (c ) times Maximum Percentage -When the Net Plant Change \% is less than the minimum threshold, Projected Costs $=$ Col. (c ) times Minimum Percentage
Net Plant Change $\%$
Maximum percentage change applied
Minimum percentage change applied

| $0.0 \%$ | Use Calculated Factors in column 4 |
| :--- | :--- |
| $0.0 \%$ | Use Maximum Percentage Change |
| $0.0 \%$ | Use Minimum Percentage Change |

C Property tax expenses relate to plant balances as of December 31, 2 Years prior to the expense period.
FERC Form 1 Reporting Period for Actual
Result:
Use Maximum Percentage Change
yyyy
FERC Form 1 Reporting Period for Projected
уууу
D Transmission rate case cost amortization balance is the remaining balance of total projected rate case costs amortized over a 3 year period.

## El Paso Electric Company

## Worksheet P3

Projected Divisor - Network Transmission Load
Page 1 of 1
$\underline{\text { Line No. }}$

1 Peak Network Load (MW) During:

|  | a | b | c | d |
| :---: | :---: | :---: | :---: | :---: |
|  | Month | Actual Transmission Network Load (Worksheet A-6) | Percentage of <br> Maximum <br> Transmission Network <br> Load | Projected Transmission Network Load (Col c x Line 1) |
| 2 | January | - | 0.00\% | - |
| 3 | February | - | 0.00\% | - |
| 4 | March | - | 0.00\% | - |
| 5 | April | - | 0.00\% | - |
| 6 | May | - | 0.00\% | - |
| 7 | June | - | 0.00\% | - |
| 8 | July | - | 0.00\% | - |
| 9 | August | - | 0.00\% | - |
| 10 | September | - | 0.00\% | - |
| 11 | October | - | 0.00\% | - |
| 12 | November | - | 0.00\% | - |
| 13 | December | - | 0.00\% | - |
| 14 | Total | - |  | - |
| 15 | 12-CP | - |  | - |

Note: Maximum Transmission Network Load is the maximum hourly load measured on the system for the listed year at the time of the Projection.

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El Paso Electric Company
Worksheet P5-1
Projected Accumulated Deferred Income Taxes
Estimated - For the 12 months ended 12/31/yyyy
Exhibit No. EPE-0006
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Page 1 of 3
1 Account 190

| Days in Period |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| (a) | (b) | (c ) | (d) | (e) |
| Month | Days in the <br> Month | Number of <br> Days <br> Prorated | Total Days in <br> Future <br> Portion of <br> Test Period | Proration <br> Amount (c /d) |


| Averaging with Proration - Projected |  |  |
| :---: | :---: | :---: |
| (f) | (g) | (h) |
| Projected | Prorated | Prorated Projected |
| Projected | Balance (Cumulative |  |
| Monthly Activity | Monthly Activity <br> (e x f) | Sum of g) |

4
5 December 31st balance Prorated Items (P5-2.61.f)

| 6 January | 31 | 335 | 365 | $91.78 \%$ |
| :--- | ---: | ---: | ---: | ---: |
| 7 February | 28 | 307 | 365 | $84.11 \%$ |
| 8 March | 31 | 276 | 365 | $75.62 \%$ |
| 9 April | 30 | 246 | 365 | $67.40 \%$ |
| 10 May | 31 | 215 | 365 | $58.90 \%$ |
| 11 June | 30 | 185 | 365 | $50.68 \%$ |
| 12 July | 31 | 154 | 365 | $42.19 \%$ |
| 13 August | 31 | 123 | 365 | $33.70 \%$ |
| 14 September | 30 | 93 | 365 | $25.48 \%$ |
| 15 October | 31 | 62 | 365 | $16.99 \%$ |
| 16 November | 30 | 32 | 365 | $8.77 \%$ |
| 17 December | 31 | 1 | 365 | $0.27 \%$ |
| 18 Total | 365 |  |  |  |

Worksheet P5-2.58.f
Worksheet P5-2.64.f
(Line 5, Col H)
Worksheet P5-2.58.g
Worksheet P5-2.64.g
Worksheet P5-2.61.g
Line $17 \mathrm{ColN}+($ Lines $20+23 \operatorname{Col} \mathrm{~N}) / 2$
(Line 25 less line 26)
$\qquad$

Worksheet P5-1
Projected Accumulated Deferred Income Taxes
Estimated - For the 12 months ended 12/31/yyyy

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$\qquad$

## Projected Accumulated Deferred Income Taxes

Estimated - For the 12 months ended 12/31/yyyy
Page 3 of 3


[^14]|  |  |  |  |  |  |  |  |  | Page 1 of |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | (a) | mmm-yyyy <br> (b) | mmm-yyyy <br> (c) | (e) | mmm-yyyy <br> (f) | mmm-yyyy <br> (g) | (h) | (i) |  |
| Line No. | Item | BOY Balance | EOY Balance | Allocator | BOY Allocated Amount | EOY Allocated Amount | Prorated <br> (Yes/No) <br> (Note C) | Explanation <br> (Note B) | Projection Classification (Note D) |



Projected Accumulated Deferred Income Taxes/Accumulated Deferred Investment Tax Credits - Details Estimated - For the 12 months ended 12/31/yyyy

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| No. | (a) | mmm-yyyy <br> (b) | mmm-yyyy <br> (c) | (e) | $\underset{(f)}{\substack{\text { mmm-yyyy }}}$ | $\underset{(\mathrm{g})}{\mathrm{mmm}}$ | (h) | (i) | (j) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Line No. | Item | BOY Balance | EOY Balance | Allocator | BOY Allocated Amount | EOY Allocated Amount | $\begin{aligned} & \hline \text { Prorated } \\ & \text { (Yes/No) } \\ & \text { (Note C) } \end{aligned}$ | Explanation (Note B) | Projection <br> Classification <br> (Note D) |
| 46 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 47 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 48 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 49 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 50 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 51 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 52 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 53 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 54 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 55 | Total Account 190 | - | - |  | - | - |  |  |  |
|  | Tax Reg Asset / Liab Adjustments (Note A) |  |  |  |  |  |  |  |  |
| 56 | Reserved |  |  | 0.000\% | - | - |  |  |  |
| 57 | Reserved |  |  | 0.000\% | - | - |  |  |  |
| 58 | Total Account 190 After Adjustments |  |  |  | - | - |  |  |  |
| 59 | Prorated Balances |  |  |  | - | - |  |  |  |
| 60 | Tax Reg Asset / Liab Adjustments |  |  |  | - | - |  |  |  |
| 61 | Prorated Account 190 Balances After Adjustments |  |  |  | - | - |  |  |  |
| 62 | Non-Prorated Balances |  |  |  | - | - |  |  |  |
| 63 | Tax Reg Asset / Liab Adjustments |  |  |  | - | - |  |  |  |
| 64 | Non-Prorated Account 190 Balances After Adjustments |  |  |  | - | - |  |  |  |

ACCOUNT 282 ACCUMULATED DEFERRED INCOME TAXES - OTHER PROPERTY (Enter Negative)

| ACCOUNT 282 ACCUMULATED DEFERRED INCOME TAXES - OTHER PROPERTY (Enter Negative) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Reserved |  |  | 0.000\% | - | - |
| Reserved |  |  | 0.000\% | - | - |
| Reserved |  |  | 0.000\% | - | - |
| Reserved |  |  | 0.000\% | - | - |
| Reserved |  |  | 0.000\% | - | - |
| Reserved | - | - | 0.000\% | - | - |
| Reserved | - | - | 0.000\% | - | - |
| Reserved | - | - | 0.000\% | - | - |

3 Total Account 282
0.000\%

## Tax Reg Asset / Liab Adjustments (Note A)

7 Reserved $\quad 0.000 \%$
Total Account 282 After Adjustments
7 Prorated Balances
78 Tax Reg Asset / Liab Adjustments
79 Prorated Account 282 Balances After Adjustments $\qquad$

80 Non-Prorated Balances
81 Tax Reg Asset / Liab Adjustments
82 Non-Prorated Account 282 Balances After Adjustments $\qquad$

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Projected Accumulated Deferred Income Taxes/Accumulated Deferred Investment Tax Credits - Details Estimated - For the 12 months ended 12/31/yyyy

| No. | (a) | mmm-yyyy <br> (b) | mmm-yyyy <br> (c) | (e) | mmm-yyyy <br> (f) | mmm-yyyy <br> (g) | (h) | (i) | Page 3 of 4 <br> (j) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Line No. | Item | BOY Balance | EOY Balance | Allocator | BOY Allocated Amount | EOY Allocated Amount | Prorated (Yes/No) <br> (Note C) | Explanation (Note B) | Projection <br> Classification <br> (Note D) |
| Line No. | ACCOUNT 283 ACCUMULATED DEFERRED INCOME TAXES - OTHER (Enter Negative) |  |  |  |  |  |  |  |  |
| 83 | Reserved |  | - | 0.000\% | - | - |  |  |  |
| 84 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 85 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 86 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 87 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 88 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 89 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 90 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 91 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 92 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 93 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 94 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 95 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 96 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 97 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 98 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 99 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 100 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 101 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 102 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 103 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 104 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 105 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 106 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 107 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 108 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 109 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 110 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 111 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 112 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 113 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 114 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 115 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 116 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 117 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 118 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 119 | Reserved | $-$ | - | 0.000\% | - | - |  |  |  |
| 120 | Total Account 283 |  |  |  |  |  |  |  |  |

Projected Accumulated Deferred Income Taxes/Accumulated Deferred Investment Tax Credits - Details Estimated - For the 12 months ended 12/31/yyyy

Exhibit No. EPE-0006

| No. | (a) | $\begin{gathered} \text { mmm-yyyy } \\ \text { (b) } \\ \hline \end{gathered}$ | $\begin{gathered} \text { mmm-yyyy } \\ \text { (c) } \\ \hline \end{gathered}$ | (e) | $\begin{gathered} \text { mmm-yyyy } \\ \text { (f) } \\ \hline \end{gathered}$ | $\begin{gathered} \text { mmm-yyyy } \\ (\mathrm{g}) \\ \hline \end{gathered}$ | (h) | (i) | (j) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Line No. | Item | BOY Balance | EOY Balance | Allocator | BOY Allocated Amount | EOY Allocated Amount | Prorated <br> (Yes/No) <br> (Note C) | Explanation <br> (Note B) | Projection Classification (Note D) |

Tax Reg Asset / Liab Adjustments (Note A)
121 Reserved
122 Reserved
123 Total Account 283 After Adjustments
24 Prorated Balances
125 Tax Reg Asset / Liab Adjustments
126 Prorated Account 283 Balances After Adjustments
$\qquad$

Non-Prorated Balances
128 Tax Reg Asset / Liab Adjustments
129 Non-Prorated Account 283 Balances After Adjustments


35 Total Account 255 (266.8.b \& 267.8.h)
36 Unrealized ITC Adjustment
137 Account 255 balance after Unrealized Adjustment
138 Average ITC Balance for Attachment H
$\qquad$

$$
0.000 \%
$$

|  | $0.000 \%$ |
| :---: | :---: |
| - | $0.000 \%$ |

## Notes:

A The balances in Accounts 190, 281, 282 and 283, as adjusted by any amounts associated with tax-related regulatory assets and liabilities other than excess / deficient deferred income taxes ("EDIT"). EDIT is calculated in schedules P6-1 and P6-2 and presented in Att-H separately from ADIT.
B Each ADIT item is categorized into 1 of 7 categories. The selected category will will determine the Allocator applied to the ADIT balance

1) Prod: The ADIT balance is $100 \%$ related to production of electricity and the NA Allocator is applied.
2) Retail: The ADIT balance is $100 \%$ related to retail operations and the NA Allocator is applied.
3) ONT: Other $100 \%$ Non-Transmission (Items other than Prod \& Retail) related ADIT for which the NA Allocator is applied. Such items shall include:

- ADIT related to the Income Tax Regaultory Assets and Liabilities
- ADIT related to Pension and PBOP
- Any other ADIT if not separately removed in other categories that relates to regulatory assets and liabilities that are not included in rate base.

4) Trans: The ADIT balance is $100 \%$ related to transmission operations and the DA Allocator is applied.
5) Plant: The ADIT balance is related to Property, Plant, \& Equipment "PP\&E" and the NP Allocator is applied.
6) NPO: ADIT balances other than PP\&E where the NP Allocator is applied.
7) Labor: The ADIT balance is labor related and the W/S Allocator is applied.

C Each ADIT Item must be categorized into balances that require proration and those that do not. ADIT items with a "Plant" Explanation code will be designated "Yes" for proration treatment and all other Items will be designated "No".
D A=Actuals from most recent FERC Form 1 are used. $\mathrm{P}=\mathrm{A}$ projection of the ADIT balance is calculated.
E The balance in Account 255 is directly allocated among types of depreciable plant based the amount of investment tax credit (ITC) allowed for each type of property. In accordance with the normalization requirements applicable to utilities, the Company has elected to reduce rate base by unamortized ITC rather than to reduce income tax expense by ITC amortization. Rate base is not reduced by unamortized ITC until the ITC has been utilized by the Company on its tax return.

Page 1 of 1
Proration Used for Projected Revenue Requirement Calculation


| Projection - Proration of Deferred Tax Activity |  |  |
| :---: | :---: | :---: |
| (f) | (g) | (h) |
|  |  | Prorated Projected |
| Projected Monthly | Prorated Projected | Balance (Line 5, |
| Activity ((Line 24 Col h | Monthly Activity | Col h plus |
| - Line 21 Col h)/12) | (Lines 6 to 17, Col e | Cumulative Sum of |
| (See Note 7.) | x Col f) | Col g) |

5 December 31st balance Prorated Items (Worksheet P6-2.61.g)

| 6 | January | 31 | 335 | 365 | $91.78 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 7 | February | 28 | 307 | 365 | $84.11 \%$ |
| 8 | March | 31 | 276 | 365 | $75.62 \%$ |
| 9 | April | 30 | 246 | 365 | $67.40 \%$ |
| 1 May | 31 | 215 | 365 | $58.90 \%$ |  |
| 1 | June | 30 | 185 | 365 | $50.68 \%$ |
| 12 | July | 31 | 154 | 365 | $42.19 \%$ |
| 3 | August | 31 | 123 | 365 | $33.70 \%$ |
| 4 | September | 30 | 93 | 365 | $25.48 \%$ |
| 5 | October | 31 | 62 | 365 | $16.99 \%$ |
| 6 | November | 30 | 32 | 365 | $8.77 \%$ |
| 7 | December | 31 | 1 | 365 | $0.27 \%$ |


|  |  | - |
| :--- | :--- | :--- | :--- |
| - | - | - |
| - | - | - |
| - | - | - |
| - | - | - |
| - | - | - |
| - | - | - |
| - | - | - |
| - | - | - |
| - | - | - |
| - | - |  |

9 Beginning Balance-Total
0 Beginning Balance-Not Subject to Proration
Beginning Balance-Subject to Proration
Ending Balance-Total
Ending Balance-Not Subject to Proration
Ending Balance-Subject to Proration
Average Balance
Reserved
Amount for Attachment H

Worksheet P6-2.62.g
Worksheet P6-2.55.g
(Line 5, Col H )
Worksheet P6-2.62.i
Worksheet P6-2.55.i
Worksheet P6-2.61.i
Line $17 \mathrm{ColN}+($ Lines $20+23 \mathrm{Col} \mathrm{N}) / 2$
Reserved
(Line 25 less line 26)


El Paso Electric Company
Worksheet P6-2
/ Deficient Deferred Inco Taxes ("EDIT")
Estimated - For the 12 months ended 12/31/yyyy

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| No. | (a) | mmm-yyyy <br> (b) | $\begin{gathered} \mathbf{y y y y} \\ \text { (c) } \\ \hline \end{gathered}$ | yyyy <br> (d) | mmm-yyyy <br> (e) | (f) | mmm-yyyy <br> (g) | $\begin{gathered} \mathbf{y y y y} \\ \text { (h) } \\ \hline \end{gathered}$ | mmm-yyyy <br> (i) | (j) | (k) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Line No. Item |  | BOY Balance (Note D) | Current Period Amortization | Current Period Other Activity (Note C) | EOY Balance (Note D) | Allocator | BOY Allocated Amount | Amortization Allocated | EOY Allocated Amount | Prorated (Yes/No) (Note B) | Amort Period or Method | Explanatio <br> n (Note A) |


|  | NON-PLANT UNPROTECTED EDIT INCLUDED WITHIN ACCOUNTS 182.3 \& 254 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 2 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 3 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 4 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 5 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 6 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 7 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 8 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 9 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 10 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 11 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 12 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 13 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 14 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 15 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 16 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 17 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 18 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 19 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 20 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 21 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 22 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 23 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 24 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 25 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 26 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 27 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 28 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 29 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 30 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 31 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 32 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 33 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 34 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 35 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 36 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 37 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 38 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No |  | - |
| 39 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No |  | - |
| 40 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 41 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |
| 42 | Reserved | - | - | - | NA | 0.000\% | - | - | - | No | - | - |

## Paso Electric Company

Worksheet P6-2
Accumulated Excess Deferred Income Taxes/Accumulated Deferred Investment Tax Credits - Detail Estimated - For the 12 months ended 12/31/yyyy

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| No. | (a) | $\begin{gathered} \text { mmm-yyyy } \\ \text { (b) } \\ \hline \end{gathered}$ | $\begin{gathered} \mathbf{y y y y} \\ \text { (c) } \end{gathered}$ | yyyy (d) | $\begin{gathered} \text { mmm-yyyy } \\ \text { (e) } \\ \hline \end{gathered}$ | (f) | $\underset{(\mathrm{g})}{\substack{\text { mmm-yyy }}}$ | $\begin{gathered} \text { yyyy } \\ \text { (h) } \end{gathered}$ | $\underset{\substack{\text { mmm-yyyy } \\ \text { (i) }}}{ }$ | (j) | (k) | Page 2 of 2 <br> (1) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Line No. | Item | BOY Balance (Note D) | Current Period Amortization | Current Period Other Activity (Note C) | EOY Balance (Note D) | Allocator | BOY Allocated Amount | Amortization Allocated | EOY Allocated Amount | Prorated <br> (Yes/No) <br> (Note B) | Amort Period or Method | Explanatio <br> n (Note A) |
| 43 | Reserved | - | - |  | - | NA $0.000 \%$ | - | - | - | No | - | - |
| 44 | Reserved | - | - |  | - | NA 0.000\% | - | - | - | No | - | - |
| 45 | Reserved | - | - |  | - | NA $0.000 \%$ | - | - | - | No | - | - |
| 46 | Reserved | - | - |  | - | NA 0.000\% | - | - | - | No | - | - |
| 47 | Reserved | - | - |  | - | NA $0.000 \%$ | - | - | - | No | - | - |
| 48 | Reserved | - | - |  | - | NA 0.000\% | - | - | - | No | - | - |
| 53 | Reserved | - | - |  | - | NA $0.000 \%$ | - | - | - | No | - | - |
| 54 | Reserved | - | - |  | - | NA $0.000 \%$ | - | - | - | No | - | - |
| 55 | Total Non Plant Unprotected | - | - | - | - |  | - | - | - |  |  |  |
|  | PLANT EDIT INCLUDED WITHIN ACCOUNTS 182.3 \& 254 |  |  |  |  |  |  |  |  |  |  |  |
| 56 | Reserved | - |  |  | - | 0.000\% | - | - | - |  |  |  |
| 57 | Reserved | - |  |  | - | 0.000\% | - | - | - |  |  |  |
| 58 | Reserved | - | - |  | - | 0.000\% | - | - | - |  |  |  |
| 59 | Reserved |  |  |  |  | 0.000\% | - | - | - |  |  |  |
| 60 | Reserved |  |  |  |  | 0.000\% | - | - | - |  |  |  |
| 61 | Total Plant |  |  |  |  |  |  |  |  |  |  |  |

62 Total Excess/Deficient Deferred Income Tax

Notes:
Each EDIT item is categorized into 1 of 7 categories. The selected category will will determine the Allocator applied to the EDIT balance

1) Prod: The EDIT balance is $100 \%$ related to production of electricity and the NA Allocator is applied.
2) Retail: The EDIT balance is $100 \%$ related to retail operations and the NA Allocator is applied.
3) ONT: Other $100 \%$ Non-Transmission (Items other than Prod \& Retail) related EDIT for which the NA Allocator is applied. Such items shall include:

EDIT related to Pension and PBOP
Any other EDIT if not separately removed in other categories that relates to regulatory assets and liabilities that are not included in rate base.
4) Trans: The EDIT balance is $100 \%$ related to transmission operations and the DA Allocator is applied.
5) Plant: The EDIT balance is related to Property, Plant, \& Equipment "PP\&E" and the NP Allocator is applied
6) NPO: EDIT balances other than PP\&E where the NP Allocator is applied.
7) Labor: The EDIT balance is labor related and the W/S Allocator is applied.

B Each EDIT Item must be categorized into balances that require proration and those that do not. EDIT items with a "Plant" Explanation code will be designated "Yes" for proration treatment and all other Items will be designated "No"
C Includes the impact of tax rate changes enacted during the period
D EDIT balances exclude income tax gross-ups recorded to accounts 182.3 and 254

## El Paso Electric Company

Worksheet P7
Projected Adjustments to Rate Base
Estimated - For the 12 months ended 12/31/yyyy

Page 1 of 1

| Line No | Month <br> (a) | Unamortized Regulatory Asset (b) | Unamortized Abandoned Plant (c) | CWIP <br> (d) |
| :---: | :---: | :---: | :---: | :---: |
| 1 | December Prior Year | - | - | - |
| 2 | January | - | - | - |
| 3 | February | - | - | - |
| 4 | March | - | - | - |
| 5 | April | - | - | - |
| 6 | May | - | - | - |
| 7 | June | - | - | - |
| 8 | July | - | - | - |
| 9 | August | - | - | - |
| 10 | September | - | - | - |
| 11 | October | - | - | - |
| 12 | November | - | - | - |
| 13 | December | - | - | - |
| 14 | Average of the 13 Monthly Balances | - | - | - |

## El Paso Electric Company

Schedule 1

## Ancillary Services, Schedule No. 1 - Scheduling System Control and Dispatch Service Estimated - For the 12 months ended 12/31/yyyy

Page 1


## Notes

A Net Schedule 1 Annual Revenue Requirement projection is set to Actual amount from previous year plus Sch 1 True Up Adjustment
B Explanatory comment(s) for Originally Projected Sch 1 Rev Req without True Up Adjustment from Previous Filing:

## ATTACHMENT H-2

## El Paso Electric Company Formula Rate Implementation Protocols <br> Projections are for Rate Years - January-December <br> True-Ups are for Calendar Years - January-December

## I. Applicability

The following procedures (the "Protocols") shall apply to El Paso Electric Company's ("EPE") calculations under its Formula Rate Template set forth in Tariff Attachment H-1 ("Formula Rate Template").

For purposes of these Protocols, the term "Interested Party" means a transmission customer of EPE, a state commission in a state where EPE serves retail customers, any entity having standing in a Federal Energy Regulatory Commission ("Commission" or "FERC") proceeding investigating the Formula Rate (as defined in Section II.1, below), and staff of FERC.

## II. Annual Updates

1. The Formula Rate Template, which includes Schedule 1 - Scheduling System Control and Dispatch Service as Appendix B to Attachment H-1, and these Protocols together comprise the Transmission Provider's filed rate (collectively, the "Formula Rate") for Transmission Service under the Tariff or transmission agreements incorporating Tariff rates. The Transmission Provider will follow the instructions specified in the Formula Rate to annually calculate (project and subsequently true up as applicable) its Annual Transmission Revenue Requirement ("ATRR") and long-term firm loads to develop rates for Network Integration Transmission Service and Point-to-Point Transmission Service for posting by the Transmission Provider (hereinafter the projection and true-up process is referred to as the "Annual Update").
2. The Formula Rate shall be applicable to service on and after January 1 of a given calendar year through December 31 of the same calendar year ("Rate Year"), subject to review, challenge, and refunds or surcharges with interest, as provided herein. The Formula Rate shall initially be the effective date established by the Commission.
3. Each calendar year, the Transmission Provider shall:
(a) By June 15 of the current year, calculate the projected ATRR, and transmission rates for the next Rate Year ("Projection") and Schedule 1 rates for the next Rate Year in accordance with the Formula Rate. The Formula Rate specifies in detail the manner in which the immediately preceding calendar year FERC Form No. 1 data and actual data from the Transmission Provider's books and records shall be used as inputs to the Formula Rate.
(b) By June 15 of the current year, calculate the true-up of the Projection for the preceding calendar year in accordance with the Formula Rate ("TrueUp Adjustment"). The True-Up Adjustment shall use the actual data for such preceding calendar year to calculate the actual charges for that calendar year. As part of the True-Up Adjustment, the Transmission Provider shall calculate the under- or over-collection of the revenue requirement for all customers taking service pursuant to the Formula Rate, as follows:
i. At the time of the Annual Update, the Transmission Provider shall calculate the amount of under- or over-collection of its actual net
revenue requirement during the preceding Rate Year after the FERC Form No. 1 data for that Rate Year has been filed with the Commission.
ii. The True-Up Adjustment shall be calculated in the following manner. The projected net revenue requirement on the Projected Attachment H for the Rate Year will be compared to the actual net revenue requirement for the same Rate Year as determined by the population of the Formula Rate Template with actual data.
iii. Interest on any over-recovery of the actual net revenue requirement shall be determined based on the Commission's regulation at 18 C.F.R. § 35.19a. Interest on any under-recovery of the actual net revenue requirement shall be determined using the interest rate determined based on the Commission's regulation at 18 C.F.R § 35.19a. An average interest rate shall be used to calculate the interest payable for the twenty-four (24) months during which the over or under recovery in the revenue requirement exists. The interest rate determined based on the Commission's regulation at 18 C.F.R $\S 35.19$ a will be determined using the average of the posted quarterly rates for the last four available quarters available at the time of posting.
iv. The True-Up Adjustment, as calculated on Worksheet TU of the Template, shall be included in the Transmission Provider's subsequent projected net revenue requirement determination.
(c) Include with the Annual Update an identification and explanation of each material change ("Material Change"). A Material Change is: (i) any change in the Transmission Provider's accounting policies, practices or procedures (including changes resulting from revisions to FERC's Uniform System of Accounts and/or FERC Form No. 1 reporting requirements and inter-company cost allocation methodologies) from those in effect during the calendar year upon which the most recent actual ATRR was based and that, in the Transmission Provider's reasonable judgment, could impact the Formula Rate, including impact to the ATRR or load divisor; and (ii) any change in the classification of any transmission facility that has been directly assigned and the dollar value of the change that the Transmission Provider has made in the applicable Projection or True-Up Adjustment; and
(d) Post such Annual Update on its OASIS by June 15, or if June 15 is a Saturday, Sunday or Federal holiday, the first business day thereafter, as well as a populated Formula Rate Template in fully functional spreadsheets showing the calculation of such Annual Update with documentation supporting such calculation and information supporting the Projection as described in Section II.3(a), above, which information shall include a narrative, and worksheets where appropriate, explaining the source and derivation of any data input to the Formula that is not drawn directly from the Transmission Provider's FERC Form No. 1, as well as the following information for all transmission facilities included in the (ii) percent completion status as of the date of the Annual Update; (iii) a one-line diagram of facilities exceeding $\$ 5$ million in cost; (iv) the estimated total installed cost of the facility; and (v) the reason for the facility addition;
(e) File such Annual Update with the Commission as an informational filing ("Informational Filing") on the Publication Date; and
(f) On the Publication Date, notify Interested Parties by email (using the last known email addresses provided to the Transmission Provider) of the website address where the Annual Update posting is located. The Transmission Provider shall use the email list developed from the most recent Annual Update and any other email addresses of individuals who have requested to be included in the Annual Update distribution list.
4. A change to the Formula Rate inputs related to unamortized abandoned plant, construction work in progress (which is currently set to zero), return on equity incentives, extraordinary property losses, return on equity, depreciation rates for each regulatory jurisdiction that are used to calculate the composite rates applied in the Formula Rate, or Post Employment Benefits Other than Pensions may not be made absent a filing with the Commission pursuant to Federal Power Act ("FPA") Sections 205 or 206.

## III. Annual Review Procedures

Each Annual Update shall be subject to the following review procedures ("Annual Review Procedures"). If any of the dates provided for herein fall on a Saturday, Sunday or Federal holiday, then the due date shall be the first business day thereafter:

1. Each year, with at least fifteen (15) calendar days written notice, the Transmission Provider shall convene at least one meeting, which shall include at the Transmission Provider's option either video conferencing or webinar/internet conferencing, among Interested Parties ("Customer Meeting") during which the Transmission Provider shall present details about its Annual Update. The Customer Meeting shall provide Interested Parties the chance to seek information and clarifications from the Transmission Provider about the Annual Update. The first Customer Meeting of a Rate Year shall take place between within forty-five (45) calendar days from the Publication Date at a date and time convenient for a majority of the parties and posted on the Transmission Provider's internet website. The Transmission Provider shall also schedule subsequent Customer Meetings as appropriate ("Subsequent Meetings"). The date and time of such Subsequent Meetings shall be posted on the Transmission Provider's internet website and shall include at the Transmission Provider's option either video conferencing or webinar/internet conferencing.
2. Immediately following the Publication Date, Interested Parties may submit requests for information supporting the Annual Update. Interested Parties will have one-hundred and twenty (120) calendar days after the Publication Date to serve reasonable information requests to the Transmission Provider ("Information Request Period"). Such information requests shall be limited to that which is necessary to determine: (1) if the Transmission Provider has properly calculated the Formula Rate for the Annual Update under review; (2) whether the inputs to the True-Up Adjustment are correct and otherwise appropriate costs and revenue
credits and have been accounted for and recorded appropriately; and (3) whether there have been any Material Changes that affect the Formula Rate calculations.
3. The Transmission Provider shall make reasonable efforts to respond to information requests pertaining to the Annual Update within ten (10) business days of receipt of such requests. Such data responses shall be served on all Interested Parties identifying themselves to the Transmission Provider (as set forth in Section II.3(f)). Information requests received after 4 p.m. Mountain Prevailing Time shall be considered received the next business day. In the event the Transmission Provider believes it cannot respond within the ten (10) business day timeframe, it shall notify the requesting party and shall provide an estimate of when the Transmission Provider will provide the requested information.
4. The Transmission Provider shall make available in a central electronic location all information requests received and all responses to such requests. Each information request received by the Transmission Provider shall become available in the central electronic location within one business day of receipt of such request. Each response by the Transmission Provider shall become available in the central electronic location within one business day of distribution of such response to the party that submitted the information request.
5. To the extent the Transmission Provider and any Interested Party(ies) are unable to resolve disputes related to information requests submitted during the Information Request Period in accordance with these Protocols, the Transmission Provider or any Interested Party may petition FERC to appoint an Administrative Law Judge as a discovery master after reasonable attempts to resolve the disputes
have been made by the Transmission Provider and any Interested Parties. The discovery master shall have the authority to issue binding orders to resolve discovery disputes and compel the production of discovery, as appropriate, in accordance with the Protocols and consistent with FERC's discovery rules.
6. At any time throughout the Information Request Period and up to thirty (30) calendar days after the later of: (i) the close of the Information Request Period, or (ii) receipt of all responses to information requests submitted during the Information Request Period, any Interested Party may review the calculations ("Review Period") and notify the Transmission Provider in writing of any specific challenges to the application of the Formula Rate ("Preliminary Challenge"). Notice of such Preliminary Challenges shall be promptly posted (at the same location as the Annual Update) by the Transmission Provider.
7. Challenges to the Formula Rate itself shall not be considered within the scope of these Annual Review Procedures. Modifications to the Formula Rate itself can only be made pursuant to Sections 205 and 206 of the Federal Power Act, as set out in Article VI below.

## IV. Resolution of Annual Update Challenges

1. If the Transmission Provider and any Interested Party have not resolved a Preliminary Challenge to an Annual Update within sixty (60) calendar days after written notification of a Preliminary Challenge, senior management of the Interested Parties and the Transmission Provider may attempt to resolve any outstanding issues ("Senior Management Review"). If the Transmission Provider and any Interested Party's (or Parties') senior management are unable to resolve
all issues raised in such Preliminary Challenge within thirty (30) calendar days after the Senior Management Review process begins, the Interested Party or Parties may, at any time thereafter, file a formal challenge with the Commission for a period up to three-hundred sixty five (365) calendar days after the Customer Meeting for a particular Annual Update ("Formal Challenge"). An Interested Party may not file a Formal Challenge thereafter. However, any Party may at any time within the period specified above, with or without prior Senior Management Review or submission of a Preliminary Challenge, file a Formal Challenge with the Commission regarding the Annual Update. For avoidance of doubt and as provided in Article IV hereof, nothing in this section is intended to limit the rights of any Interested Party to file a complaint under the FPA outside the Formal Challenge procedures provided by these Protocols.
2. The Transmission Provider shall promptly post notice of resolution of a Preliminary Challenge (at the same location as the notice of Preliminary Challenges) and shall notify all Interested Parties of such resolution, consistent with the procedures set forth in Section III.4, above.
3. Any and all information produced pursuant to these Protocols may be included in any proceeding concerning the El Paso Electric Company Formula Rate initiated at FERC pursuant to the FPA, including, but not limited to, a Formal Challenge. Information produced pursuant to these Protocols designated as confidential information and not otherwise publicly available shall be treated as confidential in any such proceeding referenced herein; provided that confidential treatment shall
be subject to a later determination by the presiding authority that the material is, in whole or in part, not entitled to confidential treatment.
4. Any Formal Challenge shall be served on the Transmission Provider by electronic service on the date of such filing.
5. There shall be no need for an Interested Party to make a separate Formal Challenge with respect to any action initiated by the Commission sua sponte regarding an Annual Update, to participate in any resulting Commission proceeding.
6. Failure to make a Preliminary Challenge or Formal Challenge as to any Annual Update shall not act as a bar to a Preliminary Challenge or Formal Challenge related to any subsequent Annual Update. However, no Preliminary Challenge to an Annual Update shall be permitted after the deadline for written notification of Preliminary Challenges, described in Section III.6.
7. Failure to make a Preliminary Challenge or Formal Challenge with respect to a Material Change as to any Annual Update shall not act as a bar to a Preliminary Challenge or Formal Challenge related to that Material Change in any subsequent Annual Update.
8. Any changes or adjustments to the True-Up Adjustment or projected ATRR resulting from the Information Exchange and Informal Challenge processes that are agreed to by El Paso Electric Company wll be reported in the Informational Filing required pursuant to Section II of these Protocols. Any such changes or adjustments agreed to by El Paso Electric Company on or before December 1 will be reflected in the projected ATRR for the upcoming Rate Year. Any changes or
adjustments agreed to by El Paso Electric Company after December 1 will be reflected in the following year's True-Up Adjustment, as discussed in Section V.

## V. Changes to True-Up Adjustment or Projection

1. Except as provided in Section IV. 8 of these Protocols, any changes to the data inputs, including but not limited to revisions to El Paso Electric Company's FERC Form 1, or as the result of any FERC proceeding to consider the Annual True-Up Adjustment or projected net ATRR, or as a result of the procedures set forth herein, shall be incorporated into the formula rate and the charges produced by the formula rate in the projected net ATRR for the next Rate Year. This reconciliation mechanism shall apply in lieu of mid-Rate Year adjustments. Except as otherwise specified pursuant to a Commission order, all refunds or surcharges shall be determined with interest calculated in accordance with 18 C.F.R. § 35.19a.

## VI. Party's Rights and Burden of Proof

1. Nothing in these Protocols affects any rights the Transmission Provider, FERC, or any Interested Party may have under the FPA, including the right of the Transmission Provider to file a change in rates under Section 205 of the FPA or the right of an Interested Party to file a complaint that is not a Formal Challenge at any time under Section 206 of the FPA or other Commission regulation, or for an Interested Party to participate in any Commission proceeding relating to the Formula Rate. Nothing in these Protocols affects or modifies in any manner the procedural and substantive requirements, including requirements relating to the burden of proof, that are otherwise applicable under Commission precedent,
regulations, and statute, in such a proceeding. The provisions of these Protocols addressing review and challenge of the Annual Update shall not be construed as limiting the Transmission Provider's, FERC's, or any Interested Party's rights under any applicable provision of the FPA.
2. Failure to have made a Preliminary Challenge or Formal Challenge pursuant to these Protocols shall neither, in any manner, be asserted against a complainant in a proceeding instituted under Section 206 of the FPA nor prejudice or otherwise limit the complainant's right to relief that may be granted pursuant to Section 206 of the Federal Power Act.
3. Nothing herein is intended to alter the established burden(s) of going forward or burden(s) of proof as applied by the FERC at the time of any proceeding. Notwithstanding and without limiting the foregoing, in any proceeding ordered by FERC in response to a Formal Challenge raised under these Protocols or a proceeding initiated sua sponte by the Commission, the Transmission Provider shall have the ultimate burden of proof to establish that: (i) it reasonably applied the Formula Rate; (ii) it reasonably calculated the challenged Annual Update pursuant to the Formula Rate; and (iii) it reasonably adopted and applied any Material Change.

# El Paso Electric Company ('EPE') Transmission Formula Rate Template 

## Table of Contents

Page 1 of 1

## Overview

The formula is calculated in two steps. The first step is to fill out the A tabs, and the Actual Attachment H tab with data from the previous year's Form 1 information. This information is used to update the formulas in the Actual Net Rev Req tab to calculate the Actual Revenue Requirement (Actual ATRR) for the previous year.

The TU (True-up) tab uses the revenue requirement from the Actual Attachment H tab and compares it to the revenue requirement from the Projected Attachment H tab that customers were billed for the same period. Interest is added to the difference and the amount is added to the Projected Attachment H tab via the True Up Adjustment line.

The projected O\&M and plant balances are calculated on the P Tabs. These sheets feed into the Projected Attachment H tab for determining the Projected Annual Transmission Revenue Requirement. The EPE tariff rates are calculated based on the EPE Revenue Requirements and the specific point-to-point charges are shown on the same tab.

Cells highlighted in yellow are data input cells, however, some cells may reference the results from other worksheets in the formula. Such cell references may change from year to year requiring manual adjustment of the reference or the direct entry of the proper value.

Cells highlighted in green signify that the data is sourced from other worksheets in the formula and that the reference is static.

| Tab | Schedule/Worksheet Designation | Description |
| :--- | :--- | :--- |
| Act Att-H | Actual Attachment H | Actual Annual Transmission Revenue Requirements for most recent calendar year |
| A1-RevCred | Worksheet A1 | Actual Revenue Credits |
| A2-O\&M | Worksheet A2 | Actual O\&M Expense supporting data |
| A3-1-ADIT | Worksheet A3-1 | Actual Accumulated Deferred Income Tax Calculation |
| A3-2-ADIT-ITC Details | Worksheet A3-2 | Actual Accumulated Deferred Income Tax \& Investment Tax Credits data |
| A4-Rate Base | Worksheet A4 | Actual Rate Base data |
| A5-Depr | Worksheet A5 | Depreciation Rates |
| A6-Divisor | Worksheet A6 | Actual Transmission Load Data for Calculating Rate Divisors |
| A7-IncentPlant | Worksheet A7 | Actual Incentive Plant |
| A8-1 EDIT | Worksheet A8-1 | Actual Excess / Deficient Deferred Income Tax data |
| A8-2 EDIT Details | Worksheet A8-2 | Actual Cost of Capital Calculations |
| A9- Cost of Capital | Worksheet A9 | True-up Adjustment and Interest Calculation |
| TU-TrueUp | Worksheet TU | Projected Annual Transmission Revenue Requirements for next calendar year |
| Proj Att-H | Projected Attachment H | Projected transmission plant for next calendar year |
| P1-Trans Plant | Worksheet P1 | Projected O\&M expenses for next calendar year |
| P2-O\&M | Worksheet P2 | Projected transmission load for next calendar year |
| P3-Divisor | Worksheet P3 | Projected Incentive Plant |
| P4-IncentPlant | Worksheet P4 | Projected Accumulated Deferred Income Tax Calculation |
| P5-1 ADIT | Worksheet P5-1 | Projectedary Services, Schedule No. 1 - Scheduling System Control and Dispatch Service |
| P5-2 ADIT ITC Details | Worksheet P5-2 | Worksheet P6-1 |

El Paso Electric Company
Rate Formula Template
Utilizing FERC Form 1 Data

## Formula Rate - Non-Levelized

Line
No.
1 GROSS REVENUE REQUIREMENT (page 3, line 29)

## REVENUE CREDITS

2 Account No. 454
Account No. 456.1
4 Held for Future Use
5 Held for Future Use
6 TOTAL REVENUE CREDITS (sum lines 2-5)
7 NET REVENUE REQUIREMENT
DIVISOR
Divisor (kW)
0 RATES
Annual
Monthly
Weekly
Daily On-Peak
Daily Off-Peak
Hourly On-Peak
7 Hourly On-Peak
Hourly Off-Peak
(Note S)
(Worksheet A1, Page 1, Line 17, Col. (f)
(Worksheet A1, Page 2, Line 15, Col. (h)
(Line 1 minus Line 6)
(Worksheet A6, Line 14) x 1000

|  | $\$$ | 44.780 | $/ \mathrm{kW}$-year |
| :--- | :--- | ---: | :--- |
| 12 months/year | $\$$ | $3.730 / \mathrm{kW}$-mont |  |
| 52 weeks/year | $\$$ | $0.860 / \mathrm{kW}$-week |  |
| 6 days/week | $\$$ | $0.143 / \mathrm{kW}$-day |  |
| 7 days/week | $\$$ | $0.123 / \mathrm{kW}$-day |  |
| 16 hours/day | $\$$ | $8.958333 / \mathrm{MW}$-hou |  |
| 24 hours/day | $\$$ | $5.119048 / \mathrm{MW}-$-hou |  |

52 weeks/year
6 days/week
6 hours/day
24 hours/day


10,680,322
-

Allocated
$\$ \quad 134,676,555$
 TP TP
1.00000
1.00000
1.00000
1.00000 10,680,322

10,730,236
$123,946,319$
$2,767,750$

Formula Rate - Non-Levelized
Paso Electric Company
Rate Formula Template
Utilizing FERC Form 1 Data

## (1)

No. RATE BASE: (Note A, V) GROSS PLANT IN SERVICE (Note A) Production
Transmission
3 Distribution
4 General \& Intangible
5 Common
6 TOTAL GROSS PLANT
ACCUMULATED DEPRECIATION (Note A)
7 Production
8 Transmission
9 Distribution
10 General \& Intangible
1 Common
12 TOTAL ACCUM. DEPRECIATION

## NET PLANT IN SERVICE

13 Production
14 Transmission
15 Distribution
16 General \& Intangible
17 Common
18 TOTAL NET PLANT
19 CWIP Approved by FERC Order ADJUSTMENTS TO RATE BASE
20 Accumulated Deferred Income Taxes (Accounts 190, 281-283)
21 Accumulated Deferred Investment Tax Credit (Account 255)
22 Excess / Deficient Deferred Income Taxes
23 Unamortized Regulatory Asset
24 Unamortized Abandoned Plant
25 Unfunded Reserves
25a Hold Harmless Adjustment
26 TOTAL ADJUSTMENTS
27 LAND HELD FOR FUTURE USE
wORKING CAPITAL
28 Cash Working Capital
29 Materials \& Supplies
30 Prepayments (Account 165)
31 TOTAL WORKING CAPITAL
32 RATE BASE

Worksheet A4, Page 1, (Line 14-28), Col. (b)
Worksheet A4, Page 1, (Line 14-28), Col. (c)
Worksheet A4, Page 1, (Line 14-28), Col. (d)
Worksheet A4, Page 1, (Line 14-28), Cols. (e ) + (f)
Worksheet A4, Page 1, (Line 14-28), Col. (h)
(Sum of Lines 1 through 5)

Worksheet A4, Page 2, (Line $14+28-42$ ), Col. (b) Worksheet A4, Page 2, (Line $14+28-42$ ), Col. (c) Worksheet A4, Page 2, (Line $14+28-42$ ), Col. (d) Worksheet A4, Page 2, (Line $14+28-42$ ), Col.s (e ) + (f) Worksheet A4, Page 2, (Line $14+28-42$ ), Col. (h) (Sum of Lines 7 through 11)

Line 1 - Line 7)
(Line 2 - Line 8)
(Line 3 - Line 9)
(Line 4 - Line 10)
Line 4 - Line 10)
Line 5 -Line 11)
Sum of Lines 13 through 17)
Worksheet A4, Page 3, Line 14, Col. (d) (Note Q)

Worksheet A3-1, Page 3, Line 82, Col. (n) (Note F
Worksheet A3-2, Page 4, Line 138, Col. (g)
Worksheet A8-1, Line 27, Col. (n)
Worksheet A4, Page 3, Line 14, Col. (b) (Notes P \& U)
Worksheet A4, Page 3, Line 14, Col. (c) (Notes T, N \& U)
Worksheet A4, Page 4, Line 10, Col. (d) (Note R)
Company Records (Note V)
(Sum of Lines 20 through 25a)
Worksheet A4, Page 3, Line 14, Col. (e) (Note G)
Note H )
1/8*(Page 3, Line 7)
Worksheet A4, Page 3, Line 28, Col. (e )
Worksheet A4, Page 3, Line 28, Col. (f)
(Sum of Lines 28 through 30)
(Sum Lines 18, 19, 26, 27, \& 31)
(3)

Company Total

| 3,099,086,313 | NA | 1.00000 | - |
| :---: | :---: | :---: | :---: |
| 562,544,677 | TP |  | 562,544,677 |
| 1,394,522,057 | NA |  | - |
| 438,921,790 | W/S | 0.21070 | 92,481,955 |
| - | CE | 0.21070 | - |
| 5,495,074,837 | GP= | 0.11920 | 655,026,633 |
| (1,662,653,393) | NA |  | $(252,992,159)$ |
| $(252,992,159)$ | TP | 1.00000 |  |
| $(422,176,240)$ | NA |  | - |
| $(100,019,384)$ | W/S | 0.21070 | $(21,074,343)$ |
| - | CE | 0.21070 | - |
| (2,437,841,175) |  |  | (274,066,502) |
| 1,436,432,921 |  |  | - |
| 309,552,518 |  |  | 815,536,836 |
| 972,345,817 |  |  | - |
| 338,902,406 |  |  | 113,556,298 |
| - |  |  | - |
| 3,057,233,662 | $\mathrm{NP}=$ | 0.30390 | 929,093,134 |
| - | DA | 1.00000 | - |
| $(112,994,498)$ | DA | 1.00000 | (112,994,498) |
| - | DA | 1.00000 | - |
| $(69,695,664)$ | DA | 1.00000 | $(69,695,664)$ |
| - | DA | 1.00000 | - |
| - | DA | 1.00000 | - |
| - | DA | 1.00000 | - |
| - | DA | 1.00000 | - |
| $(182,690,162)$ |  |  | (182,690,162) |
| - | TP | 1.00000 | - |
| 14,673,997 |  |  | 4,430,819 |
| 2,954,231 | TP | 1.00000 | 2,954,231 |
| 18,668,836 | GP | 0.11920 | 2,225,372 |
| 36,297,064 |  |  | 9,610,421 |
| 2,910,840,563 |  |  | 756,013,393 |

(5)

Transmission
(Col 3 times $\operatorname{Col} 4$ )
-
$\frac{-}{274,066,502)}$

113,556,298
(12,994,498)
$(69,695,664)$
$182,690,162)$

El Paso Electric Company
Rate Formula Template
Utilizing FERC Form 1 Data

Transmission
Less Account 561.1-561.8
Less Account 56

## A\&

Less EPRI/Reg. Comm. Exp./Non-safety Ad. (Note I) Less Property Insurance Acct 924
Plus Property Insurance Acct 924
Plus Transmission Related Reg. Comm. Exp. (Note G) Plus: Fixed PBOP expense
Less: Actual PBOP expense
Common
Hold Harmless Expense Adjustmen

Page, Line, Col.

Worksheet A2, Line 23
321.96.b
323.197 b

Worksheet A2, Line 6
323.185.b
323.185.b

Worksheet A2, Line 12
Company Records (Note J \& B)
Company Records (Note J \& B)
356.1

Company Records (Note V)
(3)

Company Total

| $23,716,836$ |
| ---: |
| $3,483,962$ |
| $6,728,666$ |
| $108,440,624$ |
| $5,182,406$ |
| $4,852,276$ |
| $4,852,276$ |
| 629,552 |
| $(3,848,723)$ |
| $(3,848,723)$ |
| - |
| - |
| $117,391,978$ |
|  |
| $7,714,721$ |
| $21,126,541$ |
| - |
| - |
| - |
| $28,841,262$ |


| $9,285,435$ |
| ---: |
| - |
| $28,273,987$ |
| $10,007,659$ |
| $1,995,415$ |
| - |

TOTAL O\&M (sum lines $1,3,4 b, 4 c, 4 d, 5,6$ less lines $2,2 a, 4,4 a, 4 e$ )
DEPRECIATION AND AMORTIZATION EXPENSE (Note A)

## Transmission

Common
Amortization of Regulatory Asset
Amortization of Abandoned Plant
TOTAL DEPRECIATION \& AMORTIZATION
TAXES OTHER THAN INCOME TAXES (Note D) LABOR RELATED

Payroll
Highway and vehicle

## PLANT RELATED

Property
Gross Receipts
reserved
0 TOTAL OTHER TAXES
INCOME TAXES
336.7.f-336.7.c
336.10.f \& 336.1.f - 336.10.c \& 336.1.c
336.11.f-336.11.c

Company Records (Note P)
Company Records (Note N)
(Sum of Lines 8 through 11)
263.i
263.1
263.i
263.i
263.i
(Sum of Lines 13 through 19)
$21 \mathrm{~T}=1-\{[(1-$ SIT $) *(1-$ FIT $)] /(1-$ SIT $*$ FIT *p $)\}=$ $\mathrm{CIT}=(\mathrm{T} / 1-\mathrm{T}) *(1-(\mathrm{WCLTD} / \mathrm{R}))=$
and FIT, SIT \& p are as given in Note K.
Income Tax Gross Up Rate: $1 /(1-\mathrm{T})=($ from line 21$)$
24 Excess / Deficient Deferred Income Taxes Amortization
4a Excess / Deficient Deferred Income Tax Adjustment
25 Permanent Differences
5a Permanent Differences Tax Adjustment
26 Income Tax on Equity and Incentive Return
27 Total Income Taxes

## RETURN

28 Rate Base * Rate of Return plus Incentive Return
29 REV. REQUIREMENT

Note K)
, (

Worksheet A8.2, Line 62, Col. (c) (Note W)
Line 23 times Line 24)
Company Records (Note X)
Line 21 times 23 times Line 25 )
(Line 22 times Line 28)
(Sum of Lines 24a, 25a, 25c, 26
(Page 2, Line 32, Col. (3) x Page 4, Line 31, Col. (5)) + Page 4, Line 32
(Sum of Lines 7, 12, 20, 27, 28)
238,203,874.13
485,539,702
(5)

## Transmission

(Col 3 times Col 4)

| $23,716,836$ |
| ---: |
| $3,483,962$ |
| $6,728,666$ |
| $22,848,720$ |
| $1,091,946$ |
| $1,022,387$ |
| 578,403 |
| 629,552 |
| $(810,936)$ |
| $(810,936)$ |
| - |

35,446,550

7,714,721
4,451,416.78

12,166,138

| 0.21070 | $1,956,465$ |
| :---: | ---: |
| 0.21070 | - |
| 0.30390 | $8,592,463$ |
| 0.00000 | - |
| 0.11920 | 237,858 |
|  |  |
|  |  |
|  |  |

10,786,787

1,248,648
0.30390

684,132
$14,477,182$
$14,409,962$

134,676,555

Formula Rate - Non-Levelized
Et Paso Electric Company
Utilizing FERC Form 1 Data

No. TRANSMISSION PLANT INCLUDED IN RATES
1 Total transmission plant
Less transmission plant excluded from Wholesale Rates
Less transmission plant included in OATT Ancillary Services
Transmission plant included in Wholesale Rates
(Page 2, Line 2, Col. 3)

TRANSMISSION EXPENSES
6 Total transmission expenses
7 (Page 3, Line 1, Col. 3)
7 Less transmission expenses included in OATT Ancillary Services Company Records (Note E)
8 Included transmission expenses (Line 6 less Line 7)
$9 \%$ of transmission expenses after adjustment
$10 \%$ of transmission plant included in wholesale Rates
$11 \%$ of transmission expenses included in wholesale Rates WAGES \& SALARY ALLOCATOR (W\&S)

12 Production
13 Transmission
14 Distribution
15 Other
16 Total COMMON PLANT ALLOCATOR (CE)
17 Electric
8 Gas
19 Other RETURN (R)
21 Long Term Interest
22 Preferred Dividends
Development of Common Stock:
23 Proprietary Capital
24 Less Preferred Stock
25 Less Other Comprehensive Income
6 Less Account 216.1
27 Common Stock

|  |  | \$ | \% |
| :---: | :---: | :---: | :---: |
| 28 Long Term Debt | Worksheet A9 Line 28, Col. (k) | 1,260,231,525 | 48.86\% |
| 29 Preferred Stock | 112.3.c | - | 0.00\% |
| 30 Common Stock | Line 27 | 1,318,930,353 | 51.14\% |
| 31 Total | (Sum of Lines 28-30) | 2,579,161,878 |  |

Company Records (Note L)
Company Records (Note L)
Company Records (Note M)
(Line 1 less Lines 2 \& 3)
(Line 4 divided by Line 1 )
(Line 8 divided by Line 6)
(Line 5)
(Line 9 times Line 10)

| Form 1 Reference | $\$$ | TP |
| :--- | ---: | ---: |
| 354.20.b | $17,097,034$ | 0.00 |
| 354.21.b | $10,826,624$ | 1.00 |
| 354.23.b | $14,677,499$ | 0.00 |
| 354.24, 25, 26.b | $8,782,285$ | 0.00 |
| Sum of Lies 12-15) | $51,383,442$ |  |
|  | $\$$ |  |
| 200.3.c | $4,742,045,111$ |  |
| 201.3.d | - |  |
| 201.3.e | - |  |
| (Sum of Lines 17-19) | $4,742,045,111$ |  |

117, Col. c, Lines 62+63+64-65-66+67
118.29.c (positive number)

Worksheet A9 Line 14, Col. (e)
Worksheet A9 Line 14, Col. (b) (enter negative)
Worksheet A9 Line 14, Col. (d) (enter negative)
Worksheet A9 Line 14 Col. (c) (enter negative)
(Sum of Lines 23-26)

Actual Attachment H
Page 4 of 5 Actuals - For the 12 months ended 12/31/2020
(4)

562,544,677

562,544,677
$T P=$
1.00000

23,716,836

|  | $23,716,836$ |
| :--- | ---: |
|  | 1.00000 |
| TP | 1.00000 |
| TE $=$ | 1.00000 |


| Allocation |  |
| ---: | :---: |
| $10,826,624$ |  |
| 0 | W\&S Allocator |
| 0 | (\$ / Allocation) |
| $10,826,624$ | 0.21070 |$=\mathrm{WS}$

\% Electric
W\&S Allocator
(line 16)
CE
1.00000 *
$0.21070=$

\$

General Note: References to pages in this formulary rate are indicated as: (page\#, line\#, col.\#) References to data from FERC Form 1 are indicated as: \#.y.x (page, line, column)

## Note

Letter
Plant in Service, Accumulated Depreciation, and Depreciation Expense amounts exclude Asset Retirement Obligation amounts unless authorized by FERC.
Workpapers for this calculation will be included in supporting documentation.
C Debt cost rate $=$ long-term interest (line 21) / long term debt (line 28). Preferred cost rate $=$ preferred dividends (line 22) / preferred outstanding (line 29).
D Includes only FICA, unemployment, highway, property, gross receipts, and other assessments charged in the current year. Taxes related to income are excluded.
E Removes dollar amount of transmission expenses included in the OATT ancillary services rates. FERC 561 accounts are not included in this line as they are separately removed from O\&M
F The balances in Accounts 190, 281, 282 and 283, as adjusted by any amounts associated with tax-related regulatory assets and liabilities other than excess / deficient deferred income taxes ("EDIT"). EDIT is calculated in schedules A8-1 and A8-2 and presented in Att-H separately from ADIT.
Identified in Form 1 as being only transmission related. in the Form 1.
I EPRI expenses listed in Form 1 at 352.f, all Regulatory Commission Expenses itemized at 350.d, and non-safety-related advertising included in Account 930.1
J Depreciation rates and Post-Employment Benefits Other than Pensions (PBOP) are fixed amounts that can be changed only through a Section 205 filing. The fixed PBOP expense will be used in lieu of the actual PBOP expense incurred in the year absent an appropriate filing with FERC. The Company reviews internal records and identifies the PBOP expenses to be removed from A\&G.
K The currently effective income tax rate, where FIT is the Federal income tax rate; SIT is the State income tax rate, and $\mathrm{p}=$ "the percentage of federal income tax deductible for state income taxes". Since the utility is taxed in more than one state it shall attach a work paper showing the name of each state and how the blended or composite SIT was developed.

## Inputs Required: <br> FIT =

$\mathrm{SIT}=$
$\mathrm{p}=$
21.000\% (Federal Income Tax Rate)
$3.440 \%$ (Composite State Income Tax Rate)
$0.000 \%$ (Percent of federal income tax deductible for state purposes)
L Removes transmission plant determined by Commission order to be state-jurisdictional according to the seven-factor test (until Form 1 balances are adjusted to reflect application of seven-factor test)
M Removes dollar amount of generation step-up facilities, which are deemed to be included in OATT ancillary services. For these purposes, generation step-up facilities are those facilities at a generator substation on which there is no throughflow when the generator is shut down.
N Unamortized Abandoned Plant and Amortization of Abandoned Plant will be zero until the Commission accepts or approves recovery of the cost of abandoned plant. Utility must submit a Section 205 filing to recover the cost of abandoned plant.
No change in ROE may be made absent a filing with FERC.
P Recovery of any regulatory assets requires authorization from the Commission
Q AFUDC ceases when CWIP is included in rate base. No CWIP will be included in rate base on line 19 absent FERC authorization.
R The Formula Rate shall include a credit to rate base for all unfunded reserves within accounts 228.2, 242, and 253 (funds collected from customers that (1) have not been set aside in a trust, escrow or restricted account; (2) whose balance are collected from customers through cost accruals to accounts that are recovered under the Formula Rate; and (3) exclude the portion of any balance offset by a balance sheet account). Reserves can be created by capital contributions from customers, by debiting the reserve and crediting a liability, or a combination of customer capital contribution and offsetting liability. Only the portion of a reserve that was created by customer contributions should be a reduction to rate base. Amounts will be calculated on 13-month average balances. See Worksheet A4, Note G.
S The revenues credited shall include only the amounts received directly for service under this tariff reflecting EPE's integrated transmission facilities provided that revenue credits shall not include revenues associated with transmission service for which loads are included in the rate divisor on Actual Attachment H , page 1 , line 8 . They do not include revenues associated with FERC annual charges, gross receipts taxes, ancillary services, facilities not included in thi template (e.g., direct assignment facilities and GSUs) that are not recovered under this Rate Formula Template.
T Page 2 Line 24 includes any unamortized balances related to the recovery of abandoned plant costs approved by FERC under a separate docket. Page 3, Line 11 b includes the Amortization expense of abandonment costs. These are shown in the workpapers required pursuant to the Annual Rate Calculation and True-up Procedures.
U Calculate using 13 month average balance, reconciling to FERC Form No. 1 by Page, Line, and Column as shown in Worksheet A4 for inputs on page 2 of 5 above
V If applicable, a separate workpaper will be provided and posted with other supporting documentation.
W Includes the amortization of any excess/deficient deferred income taxes resulting from changes to income tax laws, income tax rates (including changes in apportionment) and other actions taken by a taxing authority. Excess and deficient deferred income taxes will reduce or increase tax expense by the amount of the excess or deficiency multiplied by (1/1-T).
X Includes the annual income tax cost or benefits due to permanent differences between expenses or revenues recognized for ratemaking purposes and for income tax purposes and depreciation of amounts capitalized to plant for book purposes related to the accrual of the Allowance for Other Funds Used During Construction. T multiplied by the amount of permanent differences and depreciation expense associated with Allowance for Other Funds Used During Construction will increase or decrease tax expense by the amount of the expense or benefit included on line 25 multiplied by (1/1-T)
$\qquad$

El Paso Electric Company
Worksheet A1
Revenue Credits
Actuals - For the 12 months ended 12/31/2020

## ACCOUNT 454 (RENT FROM ELECTRIC PROPERTY)

| Line \# | Description | Total | Explanation (Note A) | Allocation | Allocation Factor | Total Revenue Credit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (a) | (b) | (c) | (d) | (e) | (f) |
| 1 |  |  |  |  | 0.000\% | \$0 |
| 2 | General \& Intangible Plant - Rent from affiliates | \$0 | Labor | W/S | 21.070\% | \$0 |
| 3 | Production Plant - Rent from Affiliates | \$0 | Prod | NA | 0.000\% | \$0 |
| 4 | Transmission Plant - Rent from Affiliates | \$0 | Trans | DA | 100.000\% | \$0 |
| 5 | Distribution Plant - Rent from Affiliates | \$0 | Retail | NA | 0.000\% | \$0 |
| 6 | Customer Account - Rent from Affiliates | \$0 | Retail | NA | 0.000\% | \$0 |
| 7 | Production Plant Rent | \$0 | Prod | NA | 0.000\% | \$0 |
| 8 | Transmission Plant Rent | \$49,914 | Trans | DA | 100.000\% | \$49,914 |
| 9 | Distribution Plant Rent | \$1,735,355 | Retail | NA | 0.000\% | \$0 |
| 10 | Reserved |  |  |  | 0.000\% | \$0 |
| 11 | Reserved |  |  |  | 0.000\% | \$0 |
| 12 | Reserved |  |  |  | 0.000\% | \$0 |
| 13 | Reserved |  |  |  | 0.000\% | \$0 |
| 14 | Reserved |  |  |  | 0.000\% | \$0 |
| 15 | Reserved |  |  |  | 0.000\% | \$0 |
| 16 | Reserved |  |  |  | 0.000\% | \$0 |
| 17 | Total 454 | 1,785,269 |  |  |  | \$ 49,914 |

## El Paso Electric Company

## Worksheet A1

## Revenue Credits

Actuals - For the 12 months ended 12/31/2020
ACCOUNT 456.1 (OTHER ELECTRIC REVENUES) (Note B)


Revenue Types:
Ancillary Ancillary services includes regulation \& frequency, control \& dispatch, voltage control, reactive, spinning reserve, and scheduling; no revenue credit.
Divisor Load associated with these revenues are included in the formula divisor; no revenue credit. Revenue credit because the load is not included in divisor.

Notes
Each FERC 0454 item is categorized into 1 of 5 categories. The selected category will determine the Allocator applied to the FERC 0454 balance.

1) Prod: The FERC 0454 balance is $100 \%$ related to production of electricity and the NA Allocator is applied.
2) Retail: The FERC 0454 balance is $100 \%$ related to retail operations and the NA Allocator is applied.
3) ONT: Other $100 \%$ Non-Transmission (Items other than Prod \& Retail) related FERC 0454 for which the NA Allocator is applied
4) Trans: The FERC 0454 balance is $100 \%$ related to transmission operations and the DA Allocator is applied.
5) Labor: The FERC 0454 balance is labor or general and intangible plant related, and the W/S Allocator is applied.

PTP Revenue credits from Line 15, Column (h) populate Actual Attachment H, page 1, line 3.

## El Paso Electric Company <br> Worksheet A2 <br> Actual Operation and Maintenance Expenses <br> Actuals - For the 12 months ended 12/31/2020

Page 1 of 1
(a)
(b)
(c)

| Line No. | Item | Form No. 1 <br> Page, Line, Col. | Company Total |  |
| :---: | :---: | :---: | :---: | :---: |
| 1 | EPRI Annual Membership Dues | 353.x.f (Note C) | \$ | - |
| 2 | Regulatory Commission Expenses | 350.46.d | \$ | 3,714,886 |
| 3 | Account No. 930.1 | 323.191.b | \$ | 1,693,142 |
| 4 | Less: Safety Related Advertising | Company Records (Note A) | \$ | 225,622 |
| 5 | Account No. 930.1 less Safety Related Advertising | Line 3 - Line 4 | \$ | 1,467,520 |
| 6 | EPRI \& Reg. Comm. Exp. \& Non-safety Ad. | Sum of Lines 1, 2, \& 5 | \$ | 5,182,406 |
| 7 |  |  |  |  |
| 8 | Transmission Related Regulatory Expense | (Note B) |  |  |
| 9 |  |  |  |  |
| 10 | Reserved for use in the event of transmission rate filings | Company Records | \$ | - |
| 11 | Transmission Related Reg. Comm. Exp. | 350.x.d | \$ | 629,552 |
| 12 | Transmission Related Regulatory Expense | Sum of Lines 10-11 | \$ | 629,552 |
| 13 |  |  |  |  |
| 14 | Actual Ancillary Expenses |  |  |  |
| 15 | 561.1 Load Dispatch-Reliability | 321.85.b | \$ | 128,147 |
| 16 | 561.2 Load Dispatch-Monitor and Operate Transmission System | 321.86.b | \$ | 932,103 |
| 17 | 561.3 Load Dispatch-Transmission Service and Scheduling | 321.87.b | \$ | 1,092,216 |
| 18 | 561.4 Scheduling, System Control and Dispatch Services | 321.88.b | \$ | 652,858 |
| 19 | 561.5 Reliability, Planning and Standards Development | 321.89.b | \$ | 678,638 |
| 20 | 561.6 Transmission Service Studies | 321.90.b | \$ | - |
| 21 | 561.7 Generation Interconnection Studies | 321.91.b | \$ | - |
| 22 | 561.8 Reliability, Planning and Standards Development | 321.92.b | \$ | - |
| 23 | Total Ancillary Expenses | Sum of Lines 15-22 | \$ | 3,483,962 |

## Notes

For FERC account no. 930.1, the Company reviews all entries and identifies those that are safety related advertising.
B Limited to Transmission-related regulatory expenses itemized from total amounts on FERC Form No. 1 page 350-351.
C Limited to amounts in O\&M accounts that are included in the formula rate.

Worksheet A3-1
Accumulated Deferred Income Taxes
Actuals - For the 12 months ended 12/31/2020
Page 1 of 4
Proration Used for Projected Revenue Requirement Calculation Account 190

Proration Used for True-up Revenue Requirement Calculation

| Proration Used for Projected Revenue Requirement Calculation |  |  |  |  |  |  |  |  | Proration Used for True-up Revenue Requirement Calculation |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Account 190 |  |  |  |  |  |  |  | Account 190 |  |  |  |  |  |
| 2 | Days in Period |  |  |  |  | Projection - Proration of Deferred Tax Activity |  |  | True-up Adjustment - Proration of Projected Deferred Tax Activity and Averaging of Other Deferred Tax Activity |  |  |  |  |  |
|  | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) | (1) | (m) | (n) |
|  | Month | Days in the Month | Number of Days Remaining in Year After Month's Accrual of Deferred Taxes | $\begin{aligned} & \text { Total Days } \\ & \text { in Future } \\ & \text { Portion of } \\ & \text { Test Period } \\ & \text { (Line 18, } \\ & \text { Col B) } \end{aligned}$ | Proration Amount (Lines 6 to 17, Col c $/$ Col d) | Projected Monthly Activity ((Line 24 Colh Line 21 Col h)/12) (See Note 7.) | $\begin{aligned} & \text { Prorated Projected } \\ & \text { Monthly Activity } \\ & \text { (Lines } 6 \text { to 17, Col e } \\ & \text { x Col f) } \end{aligned}$ | Prorated Projected <br> Balance (Line 5, Col h plus Cumulative Sum of Colg ) | Actual Monthly Activity ((Line 24 Col n-Line 21 Col n)/12) (See Note 7. | Difference between projected monthly and actual monthly activity (See Note 1.) | Preserve proration when actual monthly and projected monthly activity are either both increases or decreases (See Note 2.) | Difference between projected and actual activity when actual and projected activity are either both increases or decreases. (See Note 3.) | Actual activity (Col I) when projected activity is an increase while actual activity is a decrease OR projected activity is a decrease while actual activity is an increase. (See Note 4.) | Balance reflecting proration or averaging (See Note 5.) |
| 5 | December 31st balance Prorated Items (Worksheet P5-1.5.h) 19,188,576 |  |  |  |  |  |  |  | December 31st balance Prorated Items (Worksheet A3-2.61.f) |  |  |  |  | 19,188,576 |
| 6 | January | $31 \quad 335$ |  | 365 | 91.78\% | 180,999 | 166,122 | 19,354,698 | 180,999 | - | 166,122 | - |  | 19,354,698 |
| 7 | February | 28 307 |  | 365 | 84.11\% | 180,999 | 152,237 | 19,506,935 | 180,999 | - | 152,237 | - | - | 19,506,935 |
| 8 | March | $31 \quad 27$ |  | 365 | 75.62\% | 180,999 | 136,865 | 19,643,800 | 180,999 | - | 136,865 | - |  | 19,643,800 |
| 9 | April | $30 \quad 24$ |  | 365 | 67.40\% | 180,999 | 121,988 | 19,765,788 | 180,999 | - | 121,988 | - |  | 19,765,788 |
| 0 | May | $31 \quad 215$ |  | 365 | 58.90\% | 180,999 | 106,616 | 19,872,404 | 180,999 | - | 106,616 | - |  | 19,872,404 |
| 1 | June | $30 \quad 185$ |  | 365 | 50.68\% | 180,999 | 91,739 | 19,964,143 | 180,999 | - | 91,739 | - |  | 19,964,143 |
| 12 | July | $31 \quad 154$ |  | 365 | 42.19\% | 180,999 | 76,367 | 20,040,510 | 180,999 | - | 76,367 | - | - | 20,040,510 |
| 3 | August | $31 \quad 123$ |  | 365 | 33.70\% | 180,999 | 60,994 | 20,101,504 | 180,999 | - | 60,994 | - | - | 20,101,504 |
| 14 | September | $30 \quad 93$ |  | 365 | 25.48\% | 180,999 | 46,118 | 20,147,621 | 180,999 | - | 46,118 | - | - | 20,147,621 |
| 5 | October | $31 \quad 62$ |  | 365 | 16.99\% | 180,999 | 30,745 | 20,178,366 | 180,999 | - | 30,745 | - | - | 20,178,366 |
| 6 | November | $30 \times 32$ |  | 365 | 8.77\% | 180,999 | 15,868 | 20,194,235 | 180,999 | - | 15,868 | - | - | 20,194,235 |
| 17 | December |  |  | 365 | 0.27\% | 180,999 | 496 | 20,194,731 | 180,999 | - | 496 | - | - | 20,194,731 |
|  | Total (sum |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | of Lines 6 - <br> 17) | 365 |  |  |  | 2,171,986 | 1,006,155 |  | 2,171,986 | - | 1,006,155 | - | - |  |
| 19 | Beginning Balance-Total |  |  |  | Worksheet P5-1.19.h |  |  | 26,237,804 | Beginning Balance-Total |  |  | Worksheet A3-2.58.f |  | 26,237,804 |
| 20 | Beginning Balance-Not Subject to Proration |  |  |  | Worksheet P5-1.20.h |  |  | 7,049,228 | Beginning Balance-N | ot Subject to Proration |  | Worksheet A3-2.64.f |  | 7,049,228 |
| 21 | Beginning Balance-Subject to Proration |  |  |  | (Line 5, Coll H ) |  |  | 19,188,576 | Beginning Balance-S | ubject to Proration |  | (Line 5, Col N ) |  | 19,188,576 |
| 22 | Ending Balance-Total |  |  |  | Worksheet p5-1.22h |  |  | 27,287,463 | Ending Balance-Total |  |  | Worksheet A3-2.58.g |  | 27,287,463 |
| 23 | Ending Balance-Not Subject to Proration |  |  |  | Worksheet P5-1.23.h |  |  | 5,926,901 | Ending Balance-Not S | Subject to Proration |  | Worksheet A3-2.64.g |  | 5,926,901 |
| 24 | Ending Balance-Subject to Proration |  |  |  | Worksheet P5-1.24.h |  |  | 21,360,561 | Ending Balance-Subje | ject to Proration |  | Worksheet A3-2.61.g |  | 21,360,561 |
| 5 | Average Balance (See Note 6.) |  |  |  | Line $17 \mathrm{ColN}+($ Lines $20+23 \mathrm{ColN}) / 2$ |  |  | 26,682,795 | Average Balance (See | Note 6.) |  | Line $17 \mathrm{Col} \mathrm{N}+($ Lines $20+$ | $+23 \mathrm{ColN}) / 2$ | 26,682,795 |
| 26 |  |  |  |  |  |  |  |  | Reserved |  |  |  |  |  |
| 27 | Amount for Attachment H |  |  |  | (Line 25 less line 26) |  |  | 26,682,795 | Amount for Attachme | ent H |  | (Line 25 less line 26) |  | 26,682,795 |

5 December 31st balance Prorated Items (Worksheet P5-1.5.h)

| Proration Used for Projected Revenue Requirement Calculation |  |  |  |  |  |  |  |  | Proration Used for True-up Revenue Requirement Calculation |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Account 190 |  |  |  |  |  |  |  | Account 190 |  |  |  |  |  |
| 2 | Days in Period |  |  |  |  | Projection - Proration of Deferred Tax Activity |  |  | True-up Adjustment - Proration of Projected Deferred Tax Activity and Averaging of Other Deferred Tax Activity |  |  |  |  |  |
|  | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) | (1) | (m) | (n) |
|  | Month | Days in the Month | Number of Days Remaining in Year After Month's Accrual of Deferred Taxes | $\begin{aligned} & \text { Total Days } \\ & \text { in Future } \\ & \text { Portion of } \\ & \text { Test Period } \\ & \text { (Line 18, } \\ & \text { Col B) } \end{aligned}$ | Proration Amount (Lines 6 to 17, Col c $/$ Col d) | Projected Monthly Activity ((Line 24 Colh Line 21 Col h)/12) (See Note 7.) | $\begin{aligned} & \text { Prorated Projected } \\ & \text { Monthly Activity } \\ & \text { (Lines } 6 \text { to 17, Col e } \\ & \text { x Col f) } \end{aligned}$ | Prorated Projected <br> Balance (Line 5, Col h plus Cumulative Sum of Colg ) | Actual Monthly Activity ((Line 24 Col n-Line 21 Col n)/12) (See Note 7. | Difference between projected monthly and actual monthly activity (See Note 1.) | Preserve proration when actual monthly and projected monthly activity are either both increases or decreases (See Note 2.) | Difference between projected and actual activity when actual and projected activity are either both increases or decreases. (See Note 3.) | Actual activity (Col I) when projected activity is an increase while actual activity is a decrease OR projected activity is a decrease while actual activity is an increase. (See Note 4.) | Balance reflecting proration or averaging (See Note 5.) |
| 5 | December 31st balance Prorated Items (Worksheet P5-1.5.h) 19,188,576 |  |  |  |  |  |  |  | December 31st balance Prorated Items (Worksheet A3-2.61.f) |  |  |  |  | 19,188,576 |
| 6 | January | $31 \quad 335$ |  | 365 | 91.78\% | 180,999 | 166,122 | 19,354,698 | 180,999 | - | 166,122 | - |  | 19,354,698 |
| 7 | February | 28 307 |  | 365 | 84.11\% | 180,999 | 152,237 | 19,506,935 | 180,999 | - | 152,237 | - | - | 19,506,935 |
| 8 | March | $31 \quad 27$ |  | 365 | 75.62\% | 180,999 | 136,865 | 19,643,800 | 180,999 | - | 136,865 | - |  | 19,643,800 |
| 9 | April | $30 \quad 24$ |  | 365 | 67.40\% | 180,999 | 121,988 | 19,765,788 | 180,999 | - | 121,988 | - |  | 19,765,788 |
| 0 | May | $31 \quad 215$ |  | 365 | 58.90\% | 180,999 | 106,616 | 19,872,404 | 180,999 | - | 106,616 | - |  | 19,872,404 |
| 1 | June | $30 \quad 185$ |  | 365 | 50.68\% | 180,999 | 91,739 | 19,964,143 | 180,999 | - | 91,739 | - |  | 19,964,143 |
| 12 | July | $31 \quad 154$ |  | 365 | 42.19\% | 180,999 | 76,367 | 20,040,510 | 180,999 | - | 76,367 | - | - | 20,040,510 |
| 3 | August | $31 \quad 123$ |  | 365 | 33.70\% | 180,999 | 60,994 | 20,101,504 | 180,999 | - | 60,994 | - | - | 20,101,504 |
| 14 | September | $30 \quad 93$ |  | 365 | 25.48\% | 180,999 | 46,118 | 20,147,621 | 180,999 | - | 46,118 | - | - | 20,147,621 |
| 5 | October | $31 \quad 62$ |  | 365 | 16.99\% | 180,999 | 30,745 | 20,178,366 | 180,999 | - | 30,745 | - | - | 20,178,366 |
| 6 | November | $30 \times 32$ |  | 365 | 8.77\% | 180,999 | 15,868 | 20,194,235 | 180,999 | - | 15,868 | - | - | 20,194,235 |
| 17 | December |  |  | 365 | 0.27\% | 180,999 | 496 | 20,194,731 | 180,999 | - | 496 | - | - | 20,194,731 |
|  | Total (sum |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | of Lines 6 - <br> 17) | 365 |  |  |  | 2,171,986 | 1,006,155 |  | 2,171,986 | - | 1,006,155 | - | - |  |
| 19 | Beginning Balance-Total |  |  |  | Worksheet P5-1.19.h |  |  | 26,237,804 | Beginning Balance-Total |  |  | Worksheet A3-2.58.f |  | 26,237,804 |
| 20 | Beginning Balance-Not Subject to Proration |  |  |  | Worksheet P5-1.20.h |  |  | 7,049,228 | Beginning Balance-N | ot Subject to Proration |  | Worksheet A3-2.64.f |  | 7,049,228 |
| 21 | Beginning Balance-Subject to Proration |  |  |  | (Line 5, Coll H ) |  |  | 19,188,576 | Beginning Balance-S | ubject to Proration |  | (Line 5, Col N ) |  | 19,188,576 |
| 22 | Ending Balance-Total |  |  |  | Worksheet p5-1.22h |  |  | 27,287,463 | Ending Balance-Total |  |  | Worksheet A3-2.58.g |  | 27,287,463 |
| 23 | Ending Balance-Not Subject to Proration |  |  |  | Worksheet P5-1.23.h |  |  | 5,926,901 | Ending Balance-Not S | Subject to Proration |  | Worksheet A3-2.64.g |  | 5,926,901 |
| 24 | Ending Balance-Subject to Proration |  |  |  | Worksheet P5-1.24.h |  |  | 21,360,561 | Ending Balance-Subje | ject to Proration |  | Worksheet A3-2.61.g |  | 21,360,561 |
| 5 | Average Balance (See Note 6.) |  |  |  | Line $17 \mathrm{ColN}+($ Lines $20+23 \mathrm{ColN}) / 2$ |  |  | 26,682,795 | Average Balance (See | Note 6.) |  | Line $17 \mathrm{Col} \mathrm{N}+($ Lines $20+$ | $+23 \mathrm{ColN}) / 2$ | 26,682,795 |
| 26 |  |  |  |  |  |  |  |  | Reserved |  |  |  |  |  |
| 27 | Amount for Attachment H |  |  |  | (Line 25 less line 26) |  |  | 26,682,795 | Amount for Attachme | ent H |  | (Line 25 less line 26) |  | 26,682,795 |


| Proration Used for Projected Revenue Requirement Calculation |  |  |  |  |  |  |  |  | Proration Used for True-up Revenue Requirement Calculation |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Account 190 |  |  |  |  |  |  |  | Account 190 |  |  |  |  |  |
| 2 | Days in Period |  |  |  |  | Projection - Proration of Deferred Tax Activity |  |  | True-up Adjustment - Proration of Projected Deferred Tax Activity and Averaging of Other Deferred Tax Activity |  |  |  |  |  |
|  | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) | (1) | (m) | (n) |
|  | Month | Days in the Month | Number of Days Remaining in Year After Month's Accrual of Deferred Taxes | $\begin{aligned} & \text { Total Days } \\ & \text { in Future } \\ & \text { Portion of } \\ & \text { Test Period } \\ & \text { (Line 18, } \\ & \text { Col B) } \end{aligned}$ | Proration Amount (Lines 6 to 17, Col c $/$ Col d) | Projected Monthly Activity ((Line 24 Colh Line 21 Col h)/12) (See Note 7.) | $\begin{aligned} & \text { Prorated Projected } \\ & \text { Monthly Activity } \\ & \text { (Lines } 6 \text { to 17, Col e } \\ & \text { x Col f) } \end{aligned}$ | Prorated Projected <br> Balance (Line 5, Col h plus Cumulative Sum of Colg ) | Actual Monthly Activity ((Line 24 Col n-Line 21 Col n)/12) (See Note 7. | Difference between projected monthly and actual monthly activity (See Note 1.) | Preserve proration when actual monthly and projected monthly activity are either both increases or decreases (See Note 2.) | Difference between projected and actual activity when actual and projected activity are either both increases or decreases. (See Note 3.) | Actual activity (Col I) when projected activity is an increase while actual activity is a decrease OR projected activity is a decrease while actual activity is an increase. (See Note 4.) | Balance reflecting proration or averaging (See Note 5.) |
| 5 | December 31st balance Prorated Items (Worksheet P5-1.5.h) 19,188,576 |  |  |  |  |  |  |  | December 31st balance Prorated Items (Worksheet A3-2.61.f) |  |  |  |  | 19,188,576 |
| 6 | January | $31 \quad 335$ |  | 365 | 91.78\% | 180,999 | 166,122 | 19,354,698 | 180,999 | - | 166,122 | - |  | 19,354,698 |
| 7 | February | 28 307 |  | 365 | 84.11\% | 180,999 | 152,237 | 19,506,935 | 180,999 | - | 152,237 | - | - | 19,506,935 |
| 8 | March | $31 \quad 27$ |  | 365 | 75.62\% | 180,999 | 136,865 | 19,643,800 | 180,999 | - | 136,865 | - |  | 19,643,800 |
| 9 | April | $30 \quad 24$ |  | 365 | 67.40\% | 180,999 | 121,988 | 19,765,788 | 180,999 | - | 121,988 | - |  | 19,765,788 |
| 0 | May | $31 \quad 215$ |  | 365 | 58.90\% | 180,999 | 106,616 | 19,872,404 | 180,999 | - | 106,616 | - |  | 19,872,404 |
| 1 | June | $30 \quad 185$ |  | 365 | 50.68\% | 180,999 | 91,739 | 19,964,143 | 180,999 | - | 91,739 | - |  | 19,964,143 |
| 12 | July | $31 \quad 154$ |  | 365 | 42.19\% | 180,999 | 76,367 | 20,040,510 | 180,999 | - | 76,367 | - | - | 20,040,510 |
| 3 | August | $31 \quad 123$ |  | 365 | 33.70\% | 180,999 | 60,994 | 20,101,504 | 180,999 | - | 60,994 | - | - | 20,101,504 |
| 14 | September | $30 \quad 93$ |  | 365 | 25.48\% | 180,999 | 46,118 | 20,147,621 | 180,999 | - | 46,118 | - | - | 20,147,621 |
| 5 | October | $31 \quad 62$ |  | 365 | 16.99\% | 180,999 | 30,745 | 20,178,366 | 180,999 | - | 30,745 | - | - | 20,178,366 |
| 6 | November | $30 \times 32$ |  | 365 | 8.77\% | 180,999 | 15,868 | 20,194,235 | 180,999 | - | 15,868 | - | - | 20,194,235 |
| 17 | December |  |  | 365 | 0.27\% | 180,999 | 496 | 20,194,731 | 180,999 | - | 496 | - | - | 20,194,731 |
|  | Total (sum |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | of Lines 6 - <br> 17) | 365 |  |  |  | 2,171,986 | 1,006,155 |  | 2,171,986 | - | 1,006,155 | - | - |  |
| 19 | Beginning Balance-Total |  |  |  | Worksheet P5-1.19.h |  |  | 26,237,804 | Beginning Balance-Total |  |  | Worksheet A3-2.58.f |  | 26,237,804 |
| 20 | Beginning Balance-Not Subject to Proration |  |  |  | Worksheet P5-1.20.h |  |  | 7,049,228 | Beginning Balance-N | ot Subject to Proration |  | Worksheet A3-2.64.f |  | 7,049,228 |
| 21 | Beginning Balance-Subject to Proration |  |  |  | (Line 5, Coll H ) |  |  | 19,188,576 | Beginning Balance-S | ubject to Proration |  | (Line 5, Col N ) |  | 19,188,576 |
| 22 | Ending Balance-Total |  |  |  | Worksheet p5-1.22h |  |  | 27,287,463 | Ending Balance-Total |  |  | Worksheet A3-2.58.g |  | 27,287,463 |
| 23 | Ending Balance-Not Subject to Proration |  |  |  | Worksheet P5-1.23.h |  |  | 5,926,901 | Ending Balance-Not S | Subject to Proration |  | Worksheet A3-2.64.g |  | 5,926,901 |
| 24 | Ending Balance-Subject to Proration |  |  |  | Worksheet P5-1.24.h |  |  | 21,360,561 | Ending Balance-Subje | ject to Proration |  | Worksheet A3-2.61.g |  | 21,360,561 |
| 5 | Average Balance (See Note 6.) |  |  |  | Line $17 \mathrm{ColN}+($ Lines $20+23 \mathrm{ColN}) / 2$ |  |  | 26,682,795 | Average Balance (See | Note 6.) |  | Line $17 \mathrm{Col} \mathrm{N}+($ Lines $20+$ | $+23 \mathrm{ColN}) / 2$ | 26,682,795 |
| 26 |  |  |  |  |  |  |  |  | Reserved |  |  |  |  |  |
| 27 | Amount for Attachment H |  |  |  | (Line 25 less line 26) |  |  | 26,682,795 | Amount for Attachme | ent H |  | (Line 25 less line 26) |  | 26,682,795 |

19,188,576 19,354,698 19,506,93 19,643,800 19,765,788 19,872,404 19,964,143 20,040,510 20,101,504 20,147,621 20,178,366

9 Beginning Balance-Tota
20 Beginning Balance-Not Subject to Proration
Beginning Balance-Subject to Proration
2 Ending Balance-Total
3 Ending Balance-Not Subject to Proration
24 Ending Balance-Subject to Proration
25 Average Balance (See Note 6.
26 Reserved
7 Amount for Attachment H
orksheet P5-1.19.h Worksheet P5-1.20. (Line 5, Col H ) Worksheet p5-1.22h
Worksheet P5-1.23.h
Worksheet P5-1.24.h
Line 17 Col $\mathrm{N}+($ Lines $20+23 \mathrm{Col} \mathrm{N}) / 2$
(Line 25 less line 26

| Proration Used for Projected Revenue Requirement Calculation |  |  |  |  |  |  |  |  | Proration Used for True-up Revenue Requirement Calculation |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Account 190 |  |  |  |  |  |  |  | Account 190 |  |  |  |  |  |
| 2 | Days in Period |  |  |  |  | Projection - Proration of Deferred Tax Activity |  |  | True-up Adjustment - Proration of Projected Deferred Tax Activity and Averaging of Other Deferred Tax Activity |  |  |  |  |  |
|  | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) | (1) | (m) | (n) |
|  | Month | Days in the Month | Number of Days Remaining in Year After Month's Accrual of Deferred Taxes | $\begin{aligned} & \text { Total Days } \\ & \text { in Future } \\ & \text { Portion of } \\ & \text { Test Period } \\ & \text { (Line 18, } \\ & \text { Col B) } \end{aligned}$ | Proration Amount (Lines 6 to 17, Col c $/$ Col d) | Projected Monthly Activity ((Line 24 Colh Line 21 Col h)/12) (See Note 7.) | $\begin{aligned} & \text { Prorated Projected } \\ & \text { Monthly Activity } \\ & \text { (Lines } 6 \text { to 17, Col e } \\ & \text { x Col f) } \end{aligned}$ | Prorated Projected <br> Balance (Line 5, Col h plus Cumulative Sum of Colg ) | Actual Monthly Activity ((Line 24 Col n-Line 21 Col n)/12) (See Note 7. | Difference between projected monthly and actual monthly activity (See Note 1.) | Preserve proration when actual monthly and projected monthly activity are either both increases or decreases (See Note 2.) | Difference between projected and actual activity when actual and projected activity are either both increases or decreases. (See Note 3.) | Actual activity (Col I) when projected activity is an increase while actual activity is a decrease OR projected activity is a decrease while actual activity is an increase. (See Note 4.) | Balance reflecting proration or averaging (See Note 5.) |
| 5 | December 31st balance Prorated Items (Worksheet P5-1.5.h) 19,188,576 |  |  |  |  |  |  |  | December 31st balance Prorated Items (Worksheet A3-2.61.f) |  |  |  |  | 19,188,576 |
| 6 | January | $31 \quad 335$ |  | 365 | 91.78\% | 180,999 | 166,122 | 19,354,698 | 180,999 | - | 166,122 | - |  | 19,354,698 |
| 7 | February | 28 307 |  | 365 | 84.11\% | 180,999 | 152,237 | 19,506,935 | 180,999 | - | 152,237 | - | - | 19,506,935 |
| 8 | March | $31 \quad 27$ |  | 365 | 75.62\% | 180,999 | 136,865 | 19,643,800 | 180,999 | - | 136,865 | - |  | 19,643,800 |
| 9 | April | $30 \quad 24$ |  | 365 | 67.40\% | 180,999 | 121,988 | 19,765,788 | 180,999 | - | 121,988 | - |  | 19,765,788 |
| 0 | May | $31 \quad 215$ |  | 365 | 58.90\% | 180,999 | 106,616 | 19,872,404 | 180,999 | - | 106,616 | - |  | 19,872,404 |
| 1 | June | $30 \quad 185$ |  | 365 | 50.68\% | 180,999 | 91,739 | 19,964,143 | 180,999 | - | 91,739 | - |  | 19,964,143 |
| 12 | July | $31 \quad 154$ |  | 365 | 42.19\% | 180,999 | 76,367 | 20,040,510 | 180,999 | - | 76,367 | - | - | 20,040,510 |
| 3 | August | $31 \quad 123$ |  | 365 | 33.70\% | 180,999 | 60,994 | 20,101,504 | 180,999 | - | 60,994 | - | - | 20,101,504 |
| 14 | September | $30 \quad 93$ |  | 365 | 25.48\% | 180,999 | 46,118 | 20,147,621 | 180,999 | - | 46,118 | - | - | 20,147,621 |
| 5 | October | $31 \quad 62$ |  | 365 | 16.99\% | 180,999 | 30,745 | 20,178,366 | 180,999 | - | 30,745 | - | - | 20,178,366 |
| 6 | November | $30 \times 32$ |  | 365 | 8.77\% | 180,999 | 15,868 | 20,194,235 | 180,999 | - | 15,868 | - | - | 20,194,235 |
| 17 | December |  |  | 365 | 0.27\% | 180,999 | 496 | 20,194,731 | 180,999 | - | 496 | - | - | 20,194,731 |
|  | Total (sum |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | of Lines 6 - <br> 17) | 365 |  |  |  | 2,171,986 | 1,006,155 |  | 2,171,986 | - | 1,006,155 | - | - |  |
| 19 | Beginning Balance-Total |  |  |  | Worksheet P5-1.19.h |  |  | 26,237,804 | Beginning Balance-Total |  |  | Worksheet A3-2.58.f |  | 26,237,804 |
| 20 | Beginning Balance-Not Subject to Proration |  |  |  | Worksheet P5-1.20.h |  |  | 7,049,228 | Beginning Balance-N | ot Subject to Proration |  | Worksheet A3-2.64.f |  | 7,049,228 |
| 21 | Beginning Balance-Subject to Proration |  |  |  | (Line 5, Coll H ) |  |  | 19,188,576 | Beginning Balance-S | ubject to Proration |  | (Line 5, Col N ) |  | 19,188,576 |
| 22 | Ending Balance-Total |  |  |  | Worksheet p5-1.22h |  |  | 27,287,463 | Ending Balance-Total |  |  | Worksheet A3-2.58.g |  | 27,287,463 |
| 23 | Ending Balance-Not Subject to Proration |  |  |  | Worksheet P5-1.23.h |  |  | 5,926,901 | Ending Balance-Not S | Subject to Proration |  | Worksheet A3-2.64.g |  | 5,926,901 |
| 24 | Ending Balance-Subject to Proration |  |  |  | Worksheet P5-1.24.h |  |  | 21,360,561 | Ending Balance-Subje | ject to Proration |  | Worksheet A3-2.61.g |  | 21,360,561 |
| 5 | Average Balance (See Note 6.) |  |  |  | Line $17 \mathrm{ColN}+($ Lines $20+23 \mathrm{ColN}) / 2$ |  |  | 26,682,795 | Average Balance (See | Note 6.) |  | Line $17 \mathrm{Col} \mathrm{N}+($ Lines $20+$ | $+23 \mathrm{ColN}) / 2$ | 26,682,795 |
| 26 |  |  |  |  |  |  |  |  | Reserved |  |  |  |  |  |
| 27 | Amount for Attachment H |  |  |  | (Line 25 less line 26) |  |  | 26,682,795 | Amount for Attachme | ent H |  | (Line 25 less line 26) |  | 26,682,795 |


|  | $\begin{gathered} \text { El Paso Electric Company } \\ \text { Worksheet A3-1 } \\ \text { Accumulated Deferred Income Taxes } \\ \text { Actuals - For the } 12 \text { months ended 12/31/2020 } \end{gathered}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | Page 2 of 4 |
| 28 Account 282 |  |  |  |  |  |  |  |  | Account 282 |  |  |  |  |  |
| 29 | Days in Period |  |  |  |  | Projection - Proration of Deferred Tax Activity |  |  | True-up Adjustment - Proration of Projected Deferred Tax Activity and Averaging of Other Deferred Tax Activity |  |  |  |  |  |
|  | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) | (1) | (m) | (n) |
|  | Month | $\left.\begin{gathered} \text { Days in the } \\ \text { Month } \end{gathered} \right\rvert\,$ | $\begin{gathered} \text { Number of Days } \\ \text { Remaining in Year } \\ \text { After Month's } \\ \text { Accrual of } \\ \text { Deferred Taxes } \end{gathered}$ | $\begin{aligned} & \text { Total Days } \\ & \text { in Future } \\ & \text { Portion of } \\ & \text { Test Period } \\ & \text { (Line 18, } \\ & \text { Col B) } \end{aligned}$ | $\begin{aligned} & \text { Proration } \\ & \text { Amount } \\ & \text { (Lines } 6 \text { to } \\ & \text { 17, Col c / } \\ & \text { Col d) } \end{aligned}$ | Projected Monthly Activity ((Line 24 Col h Line 21 Col h)/12) (See Note 7.) | Prorated Projected Monthly Activity (Lines 6 to 17, Col e x Col f) | Prorated Projected Balance (Line 5, Col h plus Cumulative Sum of Col g) | Actual Monthly Activity ((Line 24 Col n- Line 21 Col n)/12) (See Note 7. | Difference between projected monthly and actual monthly activity (See Note 1.) | Preserve proration when actual monthly and projected monthly activity are either both increases or decreases. (See Note 2.) | Difference between projected and actual activity when actual and projected activity are either <br> both increases or decreases. (See Note 3.) | Actual activity ( Col I ) when projected activity is an increase while actual activity is a decrease OR projected activity is a decrease while actual activity is an increase. (See Note 4.) | Balance reflecting proration or averaging (See Note 5.) |
| 30 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 31 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 December 31st balance Prorated Items (Worksheet P5-1.32.h) |  |  |  |  |  |  |  | $(138,296,256)$ | December 31st balance Prorated Items (Worksheet A3-2.79.f) |  |  |  |  | (138,296,256) |
| 33 | January | 31 | 335 | 365 | 91.78\% | $(248,437)$ | $(228,018)$ | (138,524,274) | $(248,437)$ |  | $(228,018)$ |  |  | $(138,524,274)$ |
| 34 | February | 28 | 307 | 365 | 84.11\% | $(248,437)$ | $(208,959)$ | $(138,733,233)$ | $(248,437)$ |  | $(208,959)$ |  |  | $(138,733,233)$ |
| 35 | March | 31 | 276 | 365 | 75.62\% | $(248,437)$ | $(187,859)$ | $(138,921,092)$ | $(248,437)$ | - | $(187,859)$ | - |  | $(138,921,092)$ |
| 36 | April | 30 | 246 | 365 | 67.40\% | $(248,437)$ | $(167,440)$ | $(139,088,532)$ | $(248,437)$ | - | $(167,440)$ | - |  | $(139,088,532)$ |
| 37 | May | 31 | 215 | 365 | 58.90\% | $(248,437)$ | $(146,340)$ | $(139,234,872)$ | $(248,437)$ | - | $(146,340)$ | - |  | (139,234,872) |
| 38 | June | 30 | 185 | 365 | 50.68\% | $(248,437)$ | $(125,920)$ | (139,360,792) | $(248,437)$ | - | $(125,920)$ | - |  | (139,360,792) |
| 39 | July | 31 | 154 | 365 | 42.19\% | $(248,437)$ | $(104,820)$ | $(139,465,612)$ | $(248,437)$ | - | $(104,820)$ |  |  | (139,465,612) |
| 40 | August | 31 | 123 | 365 | 33.70\% | $(248,437)$ | $(83,720)$ | (139,549,332) | $(248,437)$ | - | $(83,720)$ | - |  | $(139,549,332)$ |
| 41 | September | 30 | 93 | 365 | 25.48\% | $(248,437)$ | $(63,300)$ | (139,612,632) | $(248,437)$ | - | $(63,300)$ | - |  | $(139,612,632)$ |
| 42 | October | 31 | 62 | 365 | 16.99\% | $(248,437)$ | $(42,200)$ | (139,654,832) | $(248,437)$ | - | $(42,200)$ | - |  | $(139,654,832)$ |
| 43 | November | 30 | 32 | 365 | 8.77\% | $(248,437)$ | (21,781) | $(139,676,613)$ | $(248,437)$ | - | (21,781) | - |  | $(139,676,613)$ |
| 44 | December | 31 | 1 | 365 | 0.27\% | $(248,437)$ | (681) | $(139,677,294)$ | $(248,437)$ | - | (681) | - | - | $(139,677,294)$ |
|  | Total (sum |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 45 | of lines 33 <br> 44) | 365 |  |  |  | $(2,981,244)$ | $(1,381,038)$ |  | $(2,981,244)$ | - | $(1,381,038)$ | - |  |  |
| 46 | Beginning Balance-Total |  |  |  | Worksheet P5-1.46.h |  |  | $(138,296,256)$ | Beginning Balance-Total |  |  | Worksheet A3-2.76.f |  | $(138,296,256)$ |
| 47 | Beginning Balance-Not Subject to Proration |  |  |  | Worksheet P5-1.47.h |  |  | - | Beginning Balance-Not Subject to Proration |  |  | Worksheet A3-2.82.f |  | - |
| 48 | Beginning Balance-Subject to Proration |  |  |  | (Line 32, Col H ) |  |  | $(138,296,256)$ | Beginning Balance-Subject to Proration |  |  | (Line 32, Col N) |  | $(138,296,256)$ |
| 49 | Ending Balance-Total |  |  |  | Worksheet P5-1.49.h |  |  | $(141,277,501)$ | Ending Balance-Total |  |  | Worksheet A3-2.76.g |  | $(141,277,501)$ |
| 50 | Ending Balance-Not Subject to Proration |  |  |  | Worksheet P5-1.50.h |  |  |  | Ending Balance-Not | Subject to Proration |  | Worksheet A3-2.82.g |  | - |
| 51 | Ending Balance-Subject to Proration |  |  |  | Worksheet P5-1.51.h |  |  | (141,277,501) | Ending Balance-Subj | ject to Proration |  | Worksheet A3-2.79.g |  | (141,277,501) |
| 52 | Average Balance (See Note 6.) |  |  |  | Line $44 \mathrm{Col} \mathrm{H}+($ Lines $47+50 \mathrm{Col} \mathrm{H} / 2$ |  |  | (139,677,294) | Average Balance (See | e Note 6.) |  | Lines $44 \mathrm{Col} \mathrm{N}+$ (Lines 47 | + 50 Col N / $/ 2$ | (139,677,294) |
| 53 | Reserved |  |  |  |  |  |  |  | Reserved |  |  |  |  |  |
| 54 | Amount for Attachment H |  |  |  | (Line 52 less line 53) |  |  | $(139,677,294)$ | Amount for Attachme | ent H |  | (Line 52 less line 53) |  | (139,677,294) |

Worksheet A3-1
Accumulated Deferred Income Taxes

| $\begin{aligned} & 55 \\ & 56 \end{aligned}$ | Days in Period |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  | (a) | (b) | (c) | (d) | (e) |
|  | Month | $\begin{gathered} \text { Days in the } \\ \text { Month } \end{gathered}$ | Number of Days Remaining in Year After Month's Accrual of Deferred Taxes | Total Days in Future Portion of Test Period (Line 18, Col B) | Proration <br> Amount <br> (Lines 6 to <br> 17, Col c / <br> Cold) |


| Projection - Proration of Deferred Tax Activity |  |  |
| :---: | :---: | :---: |
| (f) | (g) | (h) |
| Projected Monthly Activity ((Line 24 Col h Line 21 Col h)/12) (See Note 7.) | Prorated Projected Monthly Activity (Lines 6 to 17, Col e $x \operatorname{Col} f)$ | Prorated Projected Balance (Line 5, Col h plus Cumulative Sum of Colg ) |


| True-up Adjustment - Proration of Projected Deferred Tax Activity and Averaging of Other Deferred Tax Activity |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (i) | (j) | (k) | (1) | (m) | (n) |
| Actual Monthly Activity ((Line 24 Col n- Line 21 Col n)/12) (See Note 7.) | Difference between projected monthly and actual monthly activity (See Note 1.) | Preserve proration when actual monthly and projected monthly activity are either both increases or decreases (See Note 2.) | Difference between projected and actual activity when actual and projected activity are either both increases or decreases. (See Note 3.) | Actual activity (Col I) when projected activity is an increase while actual activity is a decrease OR projected activity is a decrease while actual activity is an increase. (See Note 4.) | Balance reflecting proration or averaging (See Note 5.) |

59 December 31st balance Prorated Items (Worksheet P5-1.59.h)

| 60 | January | 31 | 335 | 365 |
| :--- | :--- | :--- | :--- | :--- |

## Total (sum

71) 

73 Beginning Balance-Total Worksheet P5-1.73.

74 Beginning Balance-Not Subject to Proration
5 Beginning Balance-Subject to Proration
6 Ending Balance-Total
Ending Balance-Not Subject to Proration
Ending Balance-Subject to Proration
80 Reserved
1 Amount for Attachment H
82 Total Amount for Attachment $\mathbf{H}$

Worksheet P5-1.73.h Worksheet P5-1.74.h
Line 59, Col H) Worksheet P5-1.76. Worksheet P5-1.77.h Worksheet P5-1.78.h Line $71 \mathrm{Col} \mathrm{H}+($ Lines $74+77 \mathrm{Col} \mathrm{H}) / 2$
(Line 79 less line 80)

- Beginning Balance-Total

Beginning Balance--otal
Beginning Balance-Not Subject to Proration
Beginning Balance-Not Subject to Proratite
Beginning Balance-Subject to Proration Ending Balance-Total
Ending Balance-Not Subject to Proratio Ending Balance-Subject to Proration
Average Balance (See Note 6.
Reserved
Amount for Attachment H

Worksheet A3-2.123.f
Worksheeet A3-2.129.f
(Line 59, Col N)
Worksheet A3-2.123.g
Worksheet A3-2.129.g
Worksheet A3-2.126.g
Line 71 Col $\mathrm{N}+($ Lines $74+77$ Col N)/2
(Line 79 less line 80)
$\qquad$

1) Column J is the difference between projected monthly and actual monthly activity (Column I minus Column F). Specifically, if projected and actual activity are both positive, a negative in Column $J$ represents over-projection (amount of projected activity that did not occur) and a positive in Column J represents under-projection (excess of actual activity over projected activity). If projected and actual activity are both negative, a negative in Column J represents under-projection (excess of actual activity over projected activity) and a positive in Column J represents over-projection (amount of projected activity that did not occur).
2) Column K preserves proration when actual monthly and projected monthly activity are either both increases or decreases. Specifically, if Column $J$ is over-
projected, enter Column $\mathrm{G} \times$ [Column I/Column F]. If Column J is under-projected, enter the amount from Column G and complete Column L ). In other situations, nter zer
3) Column L applies when (1) Column $J$ is under-projected AND (2) actual monthly and projected monthly activity are either both increases or decreases. Enter the amount from Column J. In other situations, enter zero.
4) Column M applies when (1) projected monthly activity is an increase while actual monthly activity is a decrease OR (2) projected monthly activity is a decrease while actual monthly activity is an increase. Enter actual monthly activity (Col I). In other situations, enter zero.
5) Column N is computed by adding the prorated monthly activity, if any, from Column K to 50 percent of the portion of monthly activity, if any, from Column L or M to the balance at the end of the prior month. The activity in columns L and M is multiplied by 50 percent to reflect averaging of rate base to the extent that the proratio ()

For the non-property-related component of the balance, the Average Balance is computed using the average of beginning of year and end of year balance. For the property-related component of the balance, the Average Balance is computed as described in Note 5 .
7) Projected and Actual monthly activity is computed based on the annual activity for the period, divided by 12 months.

Accumulated Deferred Income Taxes/Accumulated Deferred Investment Tax Credits - Details
Actuals - For the 12 months ended 12/31/2020

| No. | (a) | Dec-2019 <br> (b) | Dec-2020 <br> (c) |  | (e) | Dec-2019 <br> (f) | Dec-2020 $(\mathrm{g})$ | (h) | Page 1 of 5 <br> (i) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Line No. | Item | BOY Balance (Note A) | EOY Balance (Note B) | Allocator |  | BOY Allocated Amount | EOY Allocated Amount | Prorated <br> (Yes/No) <br> (Note E) | Explanation (Note D) |
|  | ACCOUNT 190 ACCUMULATED DEFERRED INCOME TAXES |  |  |  |  |  |  |  |  |
| 1 | Electric | 63,141,097 | 70,288,139 | NP | 30.390\% | 19,188,576 | 21,360,561 | Yes | Plant |
| 2 | Plant, principally due to captialized costs | 38,309,509 | 41,931,711 |  | 0.000\% | - | - |  |  |
| 3 | Asset retirement obligation | 23,239,446 | 25,435,590 |  | 0.000\% | - | - |  |  |
| 4 | Decommissioning costs | 1,528,952 | 1,359,444 |  | 0.000\% | - | - |  |  |
| 5 | Benefit of tax loss carryforwards | 63,190 | 1,561,394 |  | 0.000\% | - | - |  |  |
| 6 | Electric | 81,355,636 | 79,864,250 | NA | 0.000\% | - | - | No | ONT |
| 7 | Alternative minimum tax credit carryforward | - | (12) |  | 0.000\% | - | - |  |  |
| 8 | Regulatory liabilities related to income taxes | 66,824,187 | 66,762,983 |  | 0.000\% | - | - |  |  |
| 9 | Deferred Fuel | 4,105,369 | 311,590 |  | 0.000\% | - | - |  |  |
| 10 | Debt | 3,632,472 | 3,495,073 |  | 0.000\% | - | - |  |  |
| 11 | Other | 6,793,608 | 9,294,616 |  | 0.000\% | - | - |  |  |
| 12 | Electric | 33,455,821 | 28,129,230 | W/S | 21.070\% | 7,049,228 | 5,926,901 | No | Labor |
| 13 | Pensions and benefits | 33,455,821 | 28,129,230 |  | 0.000\% | - | - |  |  |
| 14 | Reserved |  |  |  | 0.000\% | - | - |  |  |
| 15 | Reserved |  |  |  | 0.000\% | - | - |  |  |
| 16 | Reserved |  |  |  | 0.000\% | - | - |  |  |
| 17 | Reserved |  |  |  | 0.000\% | - | - |  |  |
| 18 | Reserved |  |  |  | 0.000\% | - | - |  |  |
| 19 | Reserved |  |  |  | 0.000\% | - | - |  |  |
| 20 | Reserved |  |  |  | 0.000\% | - | - |  |  |
| 21 | Reserved |  |  |  | 0.000\% | - | - |  |  |
| 22 | Reserved |  |  |  | 0.000\% | - | - |  |  |
| 23 | Reserved |  |  |  | 0.000\% | - | - |  |  |
| 24 | Reserved |  |  |  | 0.000\% | - | - |  |  |
| 25 | Reserved |  |  |  | 0.000\% | - | - |  |  |
| 26 | Reserved |  |  |  | 0.000\% | - | - |  |  |
| 27 | Reserved |  |  |  | 0.000\% | - | - |  |  |
| 28 | Reserved |  |  |  | 0.000\% | - | - |  |  |
| 29 | Reserved |  |  |  | 0.000\% | - | - |  |  |
| 30 | Reserved |  |  |  | 0.000\% | - | - |  |  |
| 31 | Reserved |  |  |  | 0.000\% | - | - |  |  |
| 32 | Reserved |  |  |  | 0.000\% | - | - |  |  |

Accumulated Deferred Income Taxes/Accumulated Deferred Investment Tax Credits - Details
Actuals - For the 12 months ended 12/31/2020

| No. | (a) | Dec-2019 <br> (b) | Dec-2020 <br> (c) | (e) | Dec-2019 <br> (f) | Dec-2020 (g) | (h) | Page 2 of 5 <br> (i) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Line No. | Item | BOY Balance (Note A) | EOY Balance (Note B) | Allocator | BOY Allocated Amount | EOY Allocated Amount | Prorated <br> (Yes/No) <br> (Note E) | Explanation <br> (Note D) |
| 33 | Reserved |  |  | 0.000\% | - | - |  |  |
| 34 | Reserved |  |  | 0.000\% | - | - |  |  |
| 35 | Reserved |  |  | 0.000\% | - | - |  |  |
| 36 | Reserved |  |  | 0.000\% | - | - |  |  |
| 37 | Reserved |  |  | 0.000\% | - | - |  |  |
| 38 | Reserved |  |  | 0.000\% | - | - |  |  |
| 39 | Reserved |  |  | 0.000\% | - | - |  |  |
| 40 | Reserved |  |  | 0.000\% | - | - |  |  |
| 41 | Reserved |  |  | 0.000\% | - | - |  |  |
| 42 | Reserved |  |  | 0.000\% | - | - |  |  |
| 43 | Reserved |  |  | 0.000\% | - | - |  |  |
| 44 | Reserved |  |  | 0.000\% | - | - |  |  |
| 45 | Reserved |  |  | 0.000\% | - | - |  |  |
| 46 | Reserved |  |  | 0.000\% | - | - |  |  |
| 47 | Reserved |  |  | 0.000\% | - | - |  |  |
| 48 | Reserved |  |  | 0.000\% | - | - |  |  |
| 49 | Reserved |  |  | 0.000\% | - | - |  |  |
| 50 | Reserved |  |  | 0.000\% | - | - |  |  |
| 51 | Reserved |  |  | 0.000\% | - | - |  |  |
| 52 | Reserved |  |  | 0.000\% | - | - |  |  |
| 53 | Reserved |  |  | 0.000\% | - | - |  |  |
| 54 | Reserved |  |  | 0.000\% | - | - |  |  |
| 55 | Total Account 190 (234.8.b\&c) | 177,952,554 | 178,281,619 |  | 26,237,804 | 27,287,463 |  |  |
|  | Tax Reg Asset / Liab Adjustments (Note C) |  |  |  |  |  |  |  |
| 56 | Remove regulatory gross-ups for Excess Deferred | $(66,824,187)$ | $(66,762,983)$ NA | 0.000\% | - | - | No | ONT |
| 57 | Remove regulatory gross-ups for ITC | $(5,374,574)$ | $(4,944,037)$ NA | 0.000\% | - | - | No | ONT |
| 58 | Total Account 190 After Adjustments |  |  |  | 26,237,804 | 27,287,463 | 1.0400 | (0.0400) |
| 59 | Prorated Balances |  |  |  | 19,188,576 | 21,360,561 |  |  |
| 60 | Tax Reg Asset / Liab Adjustments |  |  |  | - | - |  |  |
| 61 | Prorated Account 190 Balances After Adjustme |  |  |  | 19,188,576 | 21,360,561 |  |  |
| 62 | Non-Prorated Balances |  |  |  | 7,049,228 | 5,926,901 |  |  |
| 63 | Tax Reg Asset / Liab Adjustments |  |  |  | - |  |  |  |
| 64 | Non-Prorated Account 190 Balances After Adju | tments |  |  | 7,049,228 | 5,926,901 |  |  |

## Actuals - For the 12 months ended 12/31/202



## Worksheet A3-2

Accumulated Deferred Income Taxes/Accumulated Deferred Investment Tax Credits - Details
Actuals - For the 12 months ended 12/31/2020

| No. | (a) | Dec-2019 <br> (b) | Dec-2020 <br> (c) |  | (e) | Dec-2019 <br> (f) | Dec-2020 <br> (g) | (h) | Page 4 of 5 <br> (i) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 101 | Reserved |  |  |  | 0.000\% | - |  |  |  |
| 102 | Reserved |  |  |  | 0.000\% | - | - |  |  |
| 103 | Reserved |  |  |  | 0.000\% | - |  |  |  |
| 104 | Reserved |  |  |  | 0.000\% | - | - |  |  |
| 105 | Reserved |  |  |  | 0.000\% | - |  |  |  |
| 106 | Reserved | - | - |  | 0.000\% | - | - |  |  |
| 107 | Reserved | - | - |  | 0.000\% | - | - |  |  |
| 108 | Reserved | - | - |  | 0.000\% | - | - |  |  |
| 109 | Reserved | - | - |  | 0.000\% | - | - |  |  |
| 110 | Reserved | - | - |  | 0.000\% | - | - |  |  |
| 111 | Reserved | - | - |  | 0.000\% | - | - |  |  |
| 112 | Reserved | - | - |  | 0.000\% | - | - |  |  |
| 113 | Reserved | - | - |  | 0.000\% | - | - |  |  |
| 114 | Reserved | - | - |  | 0.000\% | - | - |  |  |
| 115 | Reserved | - | - |  | 0.000\% | - | - |  |  |
| 116 | Reserved | - | - |  | 0.000\% | - | - |  |  |
| 117 | Reserved | - | - |  | 0.000\% | - | - |  |  |
| 118 | Reserved | - | - |  | 0.000\% | - | - |  |  |
| 119 | Reserved | - | - |  | 0.000\% | - | - |  |  |
| 120 | Total Account 283 (276.9.b \& 277.9.k) | (32,347,600) | (42,801,748) |  |  | - | - |  |  |
|  | Tax Reg Asset / Liab Adjustments (Note C) |  |  |  |  |  |  |  |  |
| 121 | Remove regulatory gross-ups for Excess Deferred | 7,184,684 | 6,847,188 | NA | 0.000\% | - | - | No | ONT |
| 122 | Reserved | 7,712,349 | - |  | 0.000\% | - | - |  |  |
| 123 | Total Account 283 After Adjustments |  |  |  |  | - | - |  |  |
| 124 | Prorated Balances |  |  |  |  | - | - |  |  |
| 125 | Tax Reg Asset / Liab Adjustments |  |  |  |  | - |  |  |  |
| 126 | Prorated Account 283 Balances After Adjustm |  |  |  |  | - | - |  |  |
| 127 | Non-Prorated Balances |  |  |  |  | - | - |  |  |
| 128 | Tax Reg Asset / Liab Adjustments |  |  |  |  | - |  |  |  |
| 129 | Non-Prorated Account 283 Balances After Adj | ents |  |  |  | - | - |  |  |
|  | ACCOUNT | : ACCUMULA | DEFERRED IN | VVES | EENT TAX | DITS (Enter | ( (ote F) |  |  |
| 130 | Intangible |  |  | W/S | 21.070\% | - | - |  |  |
| 131 | Production | $(20,959,358)$ | (19,339,718) | NA | 0.000\% | - | - |  |  |
| 132 | Transmission |  |  | DA | 100.000\% | - | - |  |  |
| 133 | Distribution |  |  | NA | 0.000\% | - | - |  |  |
| 134 | General Plant |  |  | W/S | 21.070\% | - | - |  |  |
| 135 | Total Account 255 (266.8.b \& 267.8.h) | $(20,959,358)$ | (19,339,718) |  |  | - | - |  |  |
| 136 | Unrealized ITC Adjustment |  |  |  |  |  |  |  |  |
| 137 | Account 255 balance after Unrealized Adjustment |  |  |  |  | - | - |  |  |
| 138 | Average ITC Balance for Attachment H |  |  |  |  |  |  |  |  |

## El Paso Electric Company

Worksheet A3-2

## Accumulated Deferred Income Taxes/Accumulated Deferred Investment Tax Credits - Details <br> Actuals - For the $\mathbf{1 2}$ months ended 12/31/202

Notes:
A Beginning of Year ("BOY") balance is end of previous year balance per FERC Form No. 1.
B End of Year ("EOY") balance is end of current year balance per FERC Form No. 1.
C The balances in Accounts 190, 281, 282 and 283, as adjusted by any amounts associated with tax-related regulatory assets and liabilities other than excess / deficient deferred income taxes ("EDIT"). EDIT is calculated in schedules A8-1 and A8-2 and presented in Att-H separately from ADIT.
D Each ADIT item is categorized into 1 of 7 categories. The selected category will determine the Allocator applied to the ADIT balance.

1) Prod: The ADIT balance is $100 \%$ related to production of electricity and the NA Allocator is applied.
2) Retail: The ADIT balance is $100 \%$ related to retail operations and the NA Allocator is applied.
3) ONT: Other $100 \%$ Non-Transmission (Items other than Prod \& Retail) related ADIT for which the NA Allocator is applied. Such items shall include:

- ADIT related to the Income Tax Regaultory Assets and Liabilities
- Any other ADIT if not separately removed in other categories that relates to regulatory assets and liabilities that are not included in rate base.

4) Trans: The ADIT balance is $100 \%$ related to transmission operations and the DA Allocator is applied.
5) Plant: The ADIT balance is related to Property, Plant, \& Equipment "PP\&E" and the NP Allocator is applied.
6) NPO: ADIT balances other than PP\&E where the NP Allocator is applied.
7) Labor: The ADIT balance is labor related and the W/S Allocator is applied.

E Each ADIT Item must be categorized into balances that require proration and those that do not. ADIT items with a "Plant" Explanation code will be designated "Yes" for proration treatment and all other Items will be designated "No".
F The Company has elected and applied the second option for accounting for investment tax credits ("ITC") under Internal Revenue Code 46 (f) and the regulations thereunder to apply a cost of service adjustment to reduce tax expense no more rapidly than ratably. Under option 2, there is no rate base reduction for the unamortized balance of the ITC

Actuals - For the 12 months ended 12/31/2020

|  |  | Gross Plant In Service |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Line No | Month <br> (a) | Production <br> (b) | Transmission <br> (c) | Distribution <br> (d) | General <br> (e) | $\begin{aligned} & \text { Intangible } \\ & \text { (f) } \end{aligned}$ | $\begin{aligned} & \text { Total Plant } \\ & \text { (g) } \end{aligned}$ | Common <br> (h) |
|  | FN1 Reference for Dec | 205.46.g | 207.58.g | 207.75.g | 207.99.g | 205.5.g | 207.100.g | 356.1 |
| 1 | December Prior Year | 3,034,065,458 | 550,330,158 | 1,355,690,685 | 260,197,566 | 168,740,228 | 5,369,024,095 |  |
| 2 | January | 3,033,172,894 | 551,065,616 | 1,359,398,259 | 261,684,210 | 169,079,661 | 5,374,400,640 | - |
| 3 | February | 3,038,466,408 | 560,094,029 | 1,363,236,137 | 262,704,489 | 169,324,596 | 5,393,825,659 | - |
| 4 | March | 3,047,059,934 | 561,002,011 | 1,368,497,360 | 262,983,524 | 169,395,154 | 5,408,937,983 |  |
| 5 | April | 3,047,804,699 | 560,981,034 | 1,371,543,413 | 263,188,527 | 169,550,998 | 5,413,068,671 | - |
| 6 | May | 3,052,970,062 | 562,873,159 | 1,394,958,527 | 263,298,237 | 169,740,572 | 5,443,840,557 | - |
| 7 | June | 3,062,390,590 | 563,459,124 | 1,399,703,075 | 264,799,196 | 169,892,553 | 5,460,244,538 | - |
| 8 | July | 3,062,545,331 | 564,551,833 | 1,404,880,533 | 265,724,546 | 175,664,881 | 5,473,367,124 | - |
| 9 | August | 3,068,632,905 | 565,606,993 | 1,408,811,450 | 269,779,210 | 176,363,793 | 5,489,194,351 | - |
| 10 | September | 3,071,837,501 | 566,160,092 | 1,417,795,291 | 271,128,817 | 174,961,895 | 5,501,883,596 | - |
| 11 | October | 3,075,194,753 | 567,099,399 | 1,421,897,091 | 273,005,238 | 175,224,495 | 5,512,420,976 | - |
| 12 | November | 3,085,141,522 | 567,362,094 | 1,428,009,461 | 273,852,722 | 175,622,403 | 5,529,988,202 | - |
| 13 | December | 3,098,236,410 | 572,495,263 | 1,434,365,456 | 274,534,528 | 176,677,429 | 5,556,309,086 | - |
| 14 | Average of the 13 Monthly Balances | 3,059,809,113 | 562,544,677 | 1,394,522,057 | 266,683,139 | 172,326,051 | 5,455,885,037 | - |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  | In Service - Asset Retire |  |  |  |  |
|  | Month <br> (a) | Production <br> (b) | Transmission <br> (c) | Distribution <br> (d) | General <br> (e) | Reserved <br> (f) | $\begin{aligned} & \text { Total Plant } \\ & (\mathrm{g}) \end{aligned}$ | Common <br> (h) |
|  | FN1 Reference for Dec | 205.15.g+205.44.g | 207.57.g | 207.74.g | 207.98.g |  |  |  |
| 15 | December Prior Year | $(38,761,099)$ |  | g | 87,400 |  | $(38,673,699)$ |  |
| 16 | January | $(38,761,099)$ | - | - | 87,400 | - | $(38,673,699)$ | - |
| 17 | February | $(38,761,099)$ | - | - | 87,400 | - | $(38,673,699)$ | - |
| 18 | March | $(38,761,099)$ | - | - | 87,400 |  | $(38,673,699)$ | - |
| 19 | April | $(38,761,099)$ | - | - | 87,400 | - | $(38,673,699)$ | - |
| 20 | May | $(38,761,099)$ | - | - | 87,400 | - | $(38,673,699)$ | - |
| 21 | June | $(39,719,573)$ | - | - | 87,400 | - | $(39,632,173)$ | - |
| 22 | July | $(39,719,573)$ | - | - | 87,400 | - | $(39,632,173)$ | - |
| 23 | August | $(39,719,573)$ | - | - | 87,400 | - | $(39,632,173)$ | - |
| 24 | September | $(39,719,573)$ | - | - | 87,400 |  | $(39,632,173)$ | - |
| 25 | October | $(39,719,573)$ | - | - | 87,400 | - | $(39,632,173)$ | - |
| 26 | November | $(39,719,573)$ | - | - | 87,400 | - | $(39,632,173)$ | - |
| 27 | December | ( $39,719,573$ ) | - | - | 87,400 | - | (39,632,173) | - |
| 28 | Average of the 13 Monthly Balances | $(39,277,200)$ | - | - | 87,400 | - | $(39,189,800)$ | - |



Actuals - For the 12 months ended 12/31/2020


Actuals - For the 12 months ended 12/31/2020

| Unfunded Reserves (Note F) |  |  |  |
| :---: | :---: | :---: | :---: |
| (a) | (b) | (c) | (d) |
| List of all reserves: | Amount | Allocation (Plant or Labor Allocator) | Amount Allocated, col. (b) x col.(c) |
|  |  | 21.070\% |  |
|  |  | 21.070\% |  |
|  |  | 21.070\% |  |
|  |  | 21.070\% |  |
|  |  | 0.000\% |  |
|  |  | 0.000\% |  |
|  |  | 0.000\% |  |
|  |  | 0.000\% |  |

Notes: A Recovery of any regulatory asset is limited to such regulatory assets authorized by FERC.
B Recovery of abandoned plant is limited to any abandoned plant recovery authorized by FERC and will be zero until the Commission accepts or approves recovery of the cost of abandoned plant.
C Includes only CWIP authorized by the Commission for inclusion in rate base. The annual report filed pursuant to the Protocols will include for each project under construction (i) the CWIP balance eligible for inclusion in rate base; (ii) the CWIP bay to the total Account 107 CWIP balance reported on p. 216.b of the FERC Form 1. The demonstration in (iii) above will show that monthly debts and credits do not contain entries for AFUDC for each CWIP project in rate base.
D Transmission related only
E M\&S allocation: Direct Assign 227.8.c at $100 \%$, plus 227.1.c and 227.5.c allocated on Labor (W/S) from Actual Attachment H page 4 line 16 .
F The Formula Rate shall include a credit to rate base for unfunded reserves within accounts 228.2, 242, and 253 (funds collected from customers that (1) have not been set aside in a trust, escrow or restricted account; (2) whose balance are collected from customers through cost accruals to accounts that are recovered under the Formula Rate; and (3) exclude the portion of any balance offset by a balance sheet account). Each unfunded reserve will be included bance
on lines $1-9$ above. The allocator in Col. (c) will be the same allocator used in the formula for the cost accruals to the account that is recovered under the Formula Rate. Reserves can be created by capital contributions from customers, by debiting the reserve and crediting a liability, or a combination of customer capital contribution and offsetting liability. Only the portion of a reserve that was created by customer contributions should be a reduction to rate base. Amounts will be calculated on 13 -month average balances.

## El Paso Electric Company

Worksheet A5
Depreciation Rates

Page 1 of 1

| Line |
| :---: |
| No. |
|  |
| 1 |
| 2 |
| 3 |
| 4 |
| 4 |
| 5 |
| 6 |
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| 9 |
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| 16 |
| 17 |
| 18 |
| 19 |
| 20 |
| 21 |
| 22 |
| 23 |
| 24 |
| 25 |
| 26 |
| 27 |

Plant Type
Rates

| Transmission Plant |  |
| :---: | :---: |
| 350.00 Land Rights | 0.99\% |
| 352.00 Structures and Improvements | 1.33\% |
| 353.00 Station Equipment | 1.00\% |
| 354.00 Towers and Fixtures | 1.29\% |
| 355.00 Poles and Fixtures | 1.76\% |
| 356.00 Overhead Conductors \& Devices | 1.36\% |
| 359.00 Roads and Trails | 1.05\% |
| General Plant |  |
| 390.00 Structures and Improvements-Other | 1.06\% |
| 390.00 Stanton Tower | 1.80\% |
| 390.00 System Operations Building | 2.29\% |
| 390.00 Eastside Operations Center | 1.74\% |
| 391.00 Office Furniture and Equipment | 1.71\% |
| 391.20 Network Equipment | 20.00\% |
| 392-C0 Transportation Equipment - Remotes | 10.37\% |
| 392.C1 Transportation Equipment-C1 0-8,500 LBS | 10.37\% |
| 392.C2 Transportation Equipment - C2 8,500-10,000 LBS | 10.37\% |
| 392.C3 Transportation Equipment - C3 10,001-14,000 LBS | 10.37\% |
| 392.C4 Transportation Equipment -C4 14,001-16,000 LBS | 10.37\% |
| 392.C5 Transportation Equipment - C5 16,001-19,500 LBS | 10.37\% |
| 392.C6 Transportation Equipment - C6 19,501-26,000 LBS | 10.37\% |
| 392.C7 Transportation Equipment - C7 26,001-33,000 LBS | 10.37\% |
| 392.C8 Transportation Equipment - C8 over 33,000 | 10.37\% |
| 392.C9 Transportation Equipment - C9 Trailers | 10.37\% |
| 393.00 Stores Equipment | 3.96\% |
| 394.00 Tools, Shop and Garage Equipment | 3.83\% |
| 395.00 Laboratory Equipment | 6.47\% |
| 396.00 Power Operated Equipment | 4.58\% |
| 397.20 Telecommunication Equipment | 6.48\% |
| 398.00 Miscellaneous Equipment | 6.65\% |

## El Paso Electric Company

Worksheet A6
Divisor - Network Transmission Load

## Actuals - For the 12 months ended 12/31/2020

Page 1 of 1

| Line | Month | Transmission System Peak Load (MW) | Firm Network for Self (MW) | Firm <br> Network Service for Others (MW) | Long-Term Firm Point to Point Reservations (MW) | Other Long. Term Firm Service (MW) | Short Term Firm Point to Point Reservation (MW) | Other Service (MW) | 12-CP <br> Average <br> (MW) <br> (Note A) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (a) <br> FN1 Reference for Total | (b) | (e) | (f) | (g) | (h) | (i) | (j) | (k) |
|  |  | Sum Colm's (e) through ( $\mathbf{j}$ ) | 400.17.e | 400.17.f | 400.17.g | 400.17.h | 400.17.i | 400.17.j | Colm (b) - (i) |
| 1 | January | 2,362 | 1,072 | 6 | 824 | 50 | 10 | 400 | 2,352 |
| 2 | February | 2,417 | 1,126 | 7 | 824 | 50 | 10 | 400 | 2,407 |
| 3 | March | 2,299 | 1,010 | 5 | 824 | 50 | 10 | 400 | 2,289 |
| 4 | April | 2,670 | 1,377 | 9 | 824 | 50 | 10 | 400 | 2,660 |
| 5 | May | 2,934 | 1,639 | 11 | 824 | 50 | 10 | 400 | 2,924 |
| 6 | June | 3,216 | 1,919 | 13 | 824 | 50 | 10 | 400 | 3,206 |
| 7 | July | 3,522 | 2,159 | 14 | 824 | 50 | 75 | 400 | 3,447 |
| 8 | August | 3,449 | 2,087 | 13 | 824 | 50 | 75 | 400 | 3,374 |
| 9 | September | 3,408 | 1,860 | 10 | 824 | 50 | 264 | 400 | 3,144 |
| 10 | October | 2,983 | 1,442 | 7 | 824 | 50 | 260 | 400 | 2,723 |
| 11 | November | 2,576 | 1,038 | 4 | 824 | 50 | 260 | 400 | 2,316 |
| 12 | December | 2,631 | 1,091 | 6 | 824 | 50 | 260 | 400 | 2,371 |
| 13 | Total | 34,467 | 17,820 | 105 | 9,888 | 600 | 1,254 | 4,800 | 33,213 |
| 14 | 12-CP |  |  |  |  |  |  |  | 2,768 |
| 15 |  |  |  |  |  |  |  |  |  |

NOTES
A 12-CP average includes all but Short Term Firm Point to Point

$\frac{\text { Notes }}{A}$
Special depreciation rates may be utilized for specific incentive transmission projects if approved by the FERC
Incentive ROE requires authorization by the Commission

Proration Used for Projected Revenue Requirement Calculation



| 6 | January |
| :--- | :--- |
| 7 | 31 |
| February | 38 |


| 7 | February | 31 | 335 |
| :--- | :--- | :--- | :--- |
|  | 28 | 32 |  |

8 March
9 April
10 May
1 June
12 July
3 August
14 Septembe
5 October
16 November

|  | 30 | 32 | 365 | $8.77 \%$ |
| :---: | ---: | ---: | ---: | :--- |
| December | 31 | 1 | 365 | $0.27 \%$ |

$18 \begin{array}{ll}\text { Total (sum of } \\ \text { Lines } 6-17) & 365\end{array}$
19 Beginning Balance-Total
20 Beginning Balance-Not Subject to Proration
21 Beginning Balance-Subject to Proration
22 Ending Balance-Total
23 Ending Balance-Not Subject to Proration
24 Ending Balance-Subject to Proratio
25 Average Balance (See Note 6.)
26 Reserved
27 Amount for Attachment H

Worksheet P6-1.19.h
Worksheet P6-1.20
(Line 5, Coll H )
Worksheet P6-1.22.h
Worksheet P6-1.23.h
Line $17 \mathrm{ColN}+($ Lines $20+23 \mathrm{Col} \mathrm{N}) / 2$
Reserved
(Line 25 less line 26

| Projection - Proration of Deferred Tax Activity |  |  |
| :---: | :---: | :---: |
| (f) | (g) | (h) |
| Projected Monthly Activity ((Line 24 Col h - Line 21 Col h)/12) (See Note 7.) | Prorated <br> Projected Monthly Activity (Lines 6 to 17, Colex Colf) | Prorated Projected Balance (Line 5, Co h plus Cumulative Sum of Colg ) |


|  |  | $(76,725,107)$ |
| ---: | ---: | ---: |
|  | 7,031 | 7,371 |
| $(76,717,736)$ |  |  |
| 8,031 | 6,755 | $(76,710,981)$ |
| 8,031 | 6,073 | $(76,704,908)$ |
| 8,031 | 5,413 | $(76,699,495)$ |
| 8,031 | 4,731 | $(76,694,75)$ |
| 8,031 | 4,071 | $(66,690,694)$ |
| 8,031 | 3,389 | $(76,687,305)$ |
| 8,031 | 2,706 | $(76,684,599)$ |
| 8,031 | 2,046 | $(76,682,553)$ |
| 8,031 | 1,364 | $(76,681,189)$ |
| 8,031 | 704 | $(76,680,484)$ |
| 8,031 | 22 | $(76,680,462)$ |
| 96,375 | 44,645 |  |
|  |  |  |


| $(69,547,389)$ |
| ---: |
| $7,177,718$ |
| $(76,725,107)$ |
| $(69,836,853)$ |
| $6,71,879$ |
| $(76,628,732)$ |
| $(69,695,664)$ |
| $(69,695,664)$ |

Proration Used for True-up Revenue Requirement Calculation
EDIT included within Accounts 182.3 Proration

| True-up Adjustment - Proration of Projected Deferred Tax Activity and Averaging of Other Deferred Tax Activity |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (i) | (j) | (k) | (1) | (m) | (n) |
| Actual Monthly Activity ((Line 24 Col n-Line 21 Col n)/12) (See Note 7.) | Difference between projected monthly and actual monthly activity (See Note 1.) | Preserve proration when actual monthly and projected monthly activity are either both increases or decreases. (See Note 2.) | Difference between projected and actual activity when actual and projected activity are either both increases or decreases. (See Note 3.) | Actual activity (Col I) when projected activity is an increase while actual activity is a decrease OR projected activity is a decrease while actual activity is an increase. (See Note 4.) | Balance reflecting proration or averaging (See Note 5.) |

December 31st balance Prorated Items (Worksheet A8-2.61.g)

Beginning Balance-Total
Beginning Balance-Not Subject to Proration
Beginning Balance--Not Subject to Prora
Ending Balance-Total
Ending Balance-Not Subject to Proration
Ending Balance-Subject to Proratio
Average Balance (See Note 6.)
Reserved
$\mathbf{6 9 , 6 9 5 , 6 6 4 )}$ Amount for Attachment H

Worksheet A8-2.62.g
Worksheet A8-2.62.g
Line 5, Col H)
Line 5, Col H)
Worksheet A8-2.55.i
Worksheet A8-2.61.i
Line $17 \mathrm{ColN}+($ Lines $20+23 \mathrm{ColN}) / 2$
Reserved
Line 25 less line 26)

Page 1 of 2

| December 31st balance Prorated Items (Worksheet A8-2.61.g) |  |  |  | $(76,725,107)$ |
| :---: | :---: | :---: | :---: | :---: |
| 8,031 | 7,371 |  |  | (76,717,736) |
| 8,031 | 6,755 |  |  | (76,710,981) |
| 8,031 | 6,073 |  |  | $(76,704,908)$ |
| 8,031 | 5,413 | - |  | $(76,699,495)$ |
| 8,031 | 4,731 | - |  | $(76,694,765)$ |
| 8,031 | 4,071 | - | - | $(76,690,694)$ |
| 8,031 | 3,389 | - |  | $(76,687,305)$ |
| 8,031 | 2,706 | - | - | (76,684,599) |
| 8,031 | 2,046 | - | - | $(76,682,553)$ |
| 8,031 | 1,364 | - | - | (76,681,189) |
| 8,031 | 704 | - | - | (76,680,484) |
| 8,031 | 22 | - | - | (76,680,462) |
| 96,375 | 44,645 | - |  |  |
| Beginning Balance-Total |  | Worksheet A8-2.62.g |  | (69,547,389) |
| Beginning Balance-Not Subject to Proration |  | Worksheet A8-2.55.g |  | 7,177,718 |
| Beginning Balance-Subject to Proration |  | (Line 5, Col H ) |  | $(76,725,107)$ |
| Ending Balance-Total |  | Worksheet A8-2.62.i |  | $(69,836,853)$ |
| Ending Balance-Not Subject to Proration |  | Worksheet A8-2.55.i |  | 6,791,879 |
| Ending Balance-Subject to Proration |  | Worksheet A8-2.61.i |  | $(76,628,732)$ |
| Average Balance (See Note 6.) |  | Line $17 \mathrm{ColN}+($ Lines $20+23 \mathrm{Col} \mathrm{N}) / 2$ |  | (69,695,664) |
| Reserved |  | Reserved |  |  |
| Amount for Attachment H |  | (Line 25 less line 26) |  | (69,695,664) |

NOTES
1 Column J is the difference between projected monthly and actual monthly activity (Column I minus Column F ). Specifically, if projected and actual activity are both positive, a negative in Column Jrepresents over-projection (amount of projected activity that did not
2 Column K preserves proration when actual monthly and projected monthly activity are either both increases or decreases. Specifically, if Column J is over-projected, enter Column Gx [Column I /Column F . If Column J is under-projected, enter the amount from Column G and complete Column L). In other situations, enter zero
3 Column $L$ applies when (1) Column $J$ is under-projected AND (2) actual monthly and projected monthly activity are either both increases or decreases. Enter the amount from Column J. In other situations, enter zero.
Column M applies when (1) projected monthly activity is an increase while actual monthly activity is a decrease OR (2) projected monthly activity is a decrease while actual monthly activity is an increase. Enter actual monthly activity (Col I ). In other situations, enter zero.
Column N is computed by adding the prorated monthly activity, if any, from Column K to 50 percent of the portion of monthly activity, if any, from Column L or M to the balance at the end of the prior month. The activity in columns L and M is multiplied by 50 percent to reflect averaging of rate base to the extent that the proration requirement has not been applied to a portion of the monthly activity
6 For the non-property-related component of the balance, the Average Balance is computed using the average of beginning of year and end of year balance. For the property-related component of the balance, the Average Balance is computed as described in Note 5 .
7 Projected and Actual monthly activity is computed based on the annual activity for the period, divided by 12 months.

EI Paso Electric Company
Worksheet A8-2
Accumulated Excess / Deficient Deferred Income Taxes ("EDIT") Actuals - For the 12 months ended 12/31/2020


El Paso Electric Company
Worksheet A8-2
Accumulated Excess / Deficient Deferred Income Taxes ("EDIT") Actuals - For the 12 months ended 12/31/2020


Notes:
A Each EDIT item is categorized into 1 of 7 categories. The selected category will will determine the Allocator applied to the EDIT balance.

1) Prod: The EDIT balance is $100 \%$ related to production of electricity and the NA Allocator is applied.
2) Retail: The EDIT balance is $100 \%$ related to retail operations and the NA Allocator is applied.
3) ONT: Other $100 \%$ Non-Transmission (Items other than Prod \& Retail) related EDIT for which the NA Allocator is applied. Such items shall include:

- EDIT related to Pension and PBOP
- Any other EDIT if not separately removed in other categories that relates to regulatory assets and liabilities that are not included in rate base

4) Trans: The EDIT balance is $100 \%$ related to transmission operations and the DA Allocator is applied.
5) Plant: The EDIT balance is related to Property, Plant, \& Equipment "PP\&E" and the NP Allocator is applied.
6) NPO: EDIT balances other than PP\&E where the NP Allocator is applied.
7) Labor: The EDIT balance is labor related and the W/S Allocator is applied.

B
Each EDIT Item must be categorized into balances that require proration and those that do not. EDIT items with a "Plant" Explanation code will be designated "Yes" for proration treatment and all other Items will be designated "No"
C Includes the impact of tax rate changes enacted during the period
C EDIT balances exclude income tax gross-ups recorded to accounts 182.3 and 254

# El Paso Electric Company <br> Worksheet A9 <br> Cost of Capital Worksheet 

Docket No. ER22-

## PROPRIETARY CAPITAL

Page 1 of 1

## Line No <br> Month

(a)

FN1 Reference for Dec December Prior Year
January
February
March
April
May
June
July
August
September
October
November
December
Average of the 13 Monthly Balances

| Preferred Stock <br> Issued (204) <br> (b) | Undistributed <br> Subsidiary Earnings <br> $(\mathbf{2 1 6 . 1 )}$ | Accumulated Other <br> Comprehensive Income <br> $(\mathbf{2 1 9})$ | Total Proprietary <br> Capital |
| :---: | :---: | :---: | :---: |
| 112.3.c | (c) | (d) | (e) |

## LONG TERM DEBT

| Line No | Month <br> (f) | $+224+225-226)$ <br> (g) | Expenses (181) <br> (h) | Reacquired Debt (189) <br> (i) | Reacquired Debt (257) <br> (j) | $\operatorname{Total}(\mathrm{g}-\mathrm{h}-\mathrm{i}+\mathbf{j})$ <br> (k) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | FN1 Reference for Dec | 112.24.c | 111.69.c | 111.81c | 113.61.c |  |
| 15 | December Prior Year | 1,288,018,879 | 13,108,942 | 15,211,751 |  | 1,259,698,186 |
| 16 | January | 1,288,018,679 | 13,063,846 | 15,132,563 |  | 1,259,822,270 |
| 17 | February | 1,288,018,479 | 13,018,750 | 15,053,375 |  | 1,259,946,354 |
| 18 | March | 1,288,018,279 | 13,246,980 | 14,974,187 | - | 1,259,797,112 |
| 19 | April | 1,288,018,166 | 13,274,892 | 14,894,999 | - | 1,259,848,275 |
| 20 | May | 1,288,018,053 | 13,263,398 | 14,815,811 | - | 1,259,938,844 |
| 21 | June | 1,288,018,139 | 13,121,952 | 14,736,623 | - | 1,260,159,564 |
| 22 | July | 1,288,017,998 | 13,078,096 | 14,657,435 | - | 1,260,282,467 |
| 23 | August | 1,288,017,857 | 13,042,285 | 14,578,247 |  | 1,260,397,325 |
| 24 | September | 1,288,017,716 | 12,950,767 | 14,499,059 | - | 1,260,567,890 |
| 25 | October | 1,288,017,634 | 12,907,965 | 14,419,871 | - | 1,260,689,798 |
| 26 | November | 1,288,017,553 | 12,861,525 | 14,340,683 | - | 1,260,815,345 |
| 27 | December | 1,288,017,678 | 12,709,792 | 14,261,495 | - | 1,261,046,391 |
| 28 | Average of the 13 Monthly Balances | 1,288,018,085 | 13,049,938 | 14,736,623 | - | 1,260,231,525 |

## El Paso Electric Company <br> Worksheet TU <br> True-Up Adjustment <br> Actuals - For the $\mathbf{1 2}$ months ended 12/31/2020



## El Paso Electric Company <br> Worksheet TU <br> True-Up Adjustment <br> Actuals - For the 12 months ended 12/31/2020

## Interest Calculation

FERC Qtr Int. Rate
Qtr (3 Prior to Most Recent) Qtr (2 Prior to Most Recent) Qtr (Prior to Most Recent) Qtr (Most Recent)
Average of the last 4 quarters
Average Monthly Rate

Note D
Annual Rate
Annual Rate
Annual Rate
Annual Rate
(Sum Lines 30-33 / 4)
Line 34 / 12


[^15]

| 2021 | Jan-Dec | \$ |  |  |  | \$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

# El Paso Electric Company <br> Worksheet TU <br> True-Up Adjustment <br> Actuals - For the 12 months ended 12/31/2020 

| 55 |  |  | True Up plus Interest |  | Interest Rate | Total Interest |  | Amoritization |  | Balance Due/Owed |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 56 | 2022 | January | \$ | - | 0.00\% | \$ | - | \$ |  | \$ | - |
| 57 | 2022 | February | \$ | - | 0.00\% | \$ | - | \$ | - | \$ | - |
| 58 | 2022 | March | \$ | - | 0.00\% | \$ | - | \$ | - | \$ | - |
| 59 | 2022 | April | \$ | - | 0.00\% | \$ | - | \$ | - | \$ | - |
| 60 | 2022 | May | \$ | - | 0.00\% | \$ | - | \$ | - | \$ | - |
| 61 | 2022 | June | \$ | - | 0.00\% | \$ | - | \$ | - | \$ | - |
| 62 | 2022 | July | \$ | - | 0.00\% | \$ | - | \$ | - | \$ | - |
| 63 | 2022 | August | \$ | - | 0.00\% | \$ | - | \$ | - | \$ | - |
| 64 | 2022 | September | \$ | - | 0.00\% | \$ | - | \$ | - | \$ | - |
| 65 | 2022 | October | \$ | - | 0.00\% | \$ | - | \$ | - | \$ | - |
| 66 | 2022 | November | \$ | - | 0.00\% | \$ | - | \$ | - | \$ | - |
| 67 | 2022 | December | \$ | - | 0.00\% | \$ | - | \$ | - | \$ | - |
| 68 |  |  |  |  |  | \$ | - |  |  |  |  |

## Notes

A Actual Net Revenue Requirement for rate year subject to True Up from Actual Attachment H, line 7.
B Actual Revenues for transmission service as booked, including amounts noted on FERC Form No. 1, pages 328-330, and other amounts included in supporting documentation.
C Prior Period Adjustment, if any, is calculated to the same timing basis as balance of true up (i.e. before interest applied on line for the Prior Period Adjustment calculation will be included in supporting documentation.
D Interest rates posted by FERC; this section to be completed each year for most recent four quarters
E If Rate Year 1 is a partial rate year, the Actual Revenue Requirement, Actual Revenues, Prior Period Adjustment (if any), and Levelized True Up before Interest will reflect only those months for which the rate was in effect. Otherwise, these amounts will all reflect a full 12 month period.

Formula Rate - Non-Levelized

## REVENUE CREDITS

2 Account No. 454
3 Account No. 456.1
4 Held for Future Use
5 Held for Future Use
6 TOTAL REVENUE CREDITS (sum lines 2-5)

Line
No.
1 GROSS REVENUE REQUIREMENT (page 3, line 29)

6a Total True Up Adjustment
7 NET REVENUE REQUIREMENT

7a Net Revenue Requirement without True Up Adjustment
DIVISOR
8 Divisor (kW)
10 RATES
11 Annual
12 Monthly
13 Weekly
14 Daily On-Peak
15 Daily Off-Peak
16 Hourly On-Peak
17 Hourly Off-Peak

## El Paso Electric Company

 Rate Formula TemplateAct Att-H, page 1 Line
Act Att-H, page 1 Line 3

Worksheet TU, page 1, Line 26
(Line 1 minus Line 6 plus Line 6a)
(Line 7 minus Line 6a)

Worksheet P3, Line 15 x 1000

Allocated

|  | Allocated <br> Amount |
| :---: | :---: |
| $\$ 136,651,249$ |  |
|  |  |
|  | 49,914 |
|  | $10,680,322$ |
|  | - |
|  | - |
|  | $10,730,236$ |

49,914

| Total |  | Allocator |  |
| :---: | :---: | :---: | :---: |
|  | TP,914 |  | 1.00000 |
| $10,680,322$ |  | TP | 1.00000 |
| - |  | TP | 1.00000 |
| - |  | TP | 1.00000 |

## \$ 125,921,014

\$ 125,921,014

12 months/year
52 weeks/year
6 days/week
7 days/week
16 hours/day
24 hours/day
$47.160 / \mathrm{kW}$-year
$3.930 / \mathrm{kW}$-month
$0.910 / k W-w e e k$
$0.152 / \mathrm{kW}$-day
0.130 kW -day
9.479167 /MW-hour
5.416667 /MW-hour

Estimated - For the 12 months ended 12/31/2022

Formula Rate - Non-Levelized

## Line

## No. RATE BASE:

GROSS PLANT IN SERVICE
Transmission
General \& Intangible
TOTAL GROSS PLANT
ACCUMULATED DEPRECIATION
Transmission
General \& Intangible
6 TOTAL ACCUM. DEPRECIATION
NET PLANT IN SERVICE
Transmission
General \& Intangible
TOTAL NET PLANT

10 CWIP Approved by FERC Order
ADJUSTMENTS TO RATE BASE
Accumulated Deferred Income Taxes (Accounts 190, 281-283)
12 Accumulated Deferred Investment Tax Credit (Account 255)
13 Excess / Deficient Deferred Income Taxes
4 Unamortized Regulatory Asset
15 Unamortized Abandoned Plant
16 Unfunded Reserves (enter negative)
17 Hold Harmless Adjustment
18 TOTAL ADJUSTMENTS
19 LAND HELD FOR FUTURE USE
WORKING CAPITAL
20 CWC
21 Materials \& Supplies
22 Prepayments (Account 165)
23 TOTAL WORKING CAPITAL
24 RATE BASE

## (2) <br> Referenc

Page, Line, Col
(3)

Company Total

| Worksheet P1, Line 30, Col. (c) | $581,405,263$ |
| :--- | ---: |
| Act Att-H, Page 2, Line 4, Col. (3) | $438,921,790$ |
| (Sum Lines 1 and 2) | $1,020,327,053$ |


| Worksheet P1, Line 30, Col. (f) | $(250,061,258)$ |
| :--- | :--- | :--- |
| Act Att-H, Page 2, Line 10, Col. (3) | $(100,019,384)$ |
| (Sum Lines 4 and 5) | $(350,080,642)$ |


| (Line 1 - Line 4) | $831,466,521$ |
| :--- | ---: |
| (Line $2-$ Line 5) | $538,941,174$ |
| (Sum Lines 7 and 8) | $1,370,407,695$ |

Worksheet P7, Page 1, Line 14, Col. (d)

Worksheet P5-1, Page 3, Line 82, Col. (h)
Worksheet P5-2, Line 138, Col. (g)
Worksheet P6-1, Line 27, Col. (h)
Worksheet P7, Page 1, Line 14, Col. (b)
Worksheet P7, Page 1, Line 14, Col. (c)
Act Att-H, Page 2, Line 25, Col. (3)
Act Att-H, Page 2, Line 25a, Col. (3)
(Sum of Lines 11-17)
Worksheet A4, Page 3, Line 14, Col. (e)

1/8*(Page 3, Line 7)
Act Att-H, Page 2, Line 29, Col. (3)
Act Att-H, Page 2, Line 30, Col. (3)
(Sum of Lines 20-22)
(Sum Lines 9, 10, 18, 19, \& 23)

(4)

Allocator
(5)

Transmission
Col 3 times Col 4$)$

581,405,263
1.00000
0.21070
1.00000
0.21070

| $(250,061,258)$ |
| ---: |
| $(21,074,343)$ |
| $(271,135,601)$ |

831,466,521
$\begin{array}{r}831,466,521 \\ \hline 945,022,819\end{array}$
1.00000
$1.00000 \quad(93,613,070)$
1.00000
1.00000
1.00000
1.00000
1.00000
1.00000
1.00000

## $(150,195,868)$

1.00000


## El Paso Electric Compan

Rate Formula Template
Formula Rate - Non-Levelized
(1)

Line
O\&M

## Transmissio

Less Account 561.1-561.8
Less Account 565
A\&G
Less EPRI/Reg. Comm. Exp./Non-safety Ad.
Less Property Insurance Acct 924
Plus Property Insurance Acct 924
Plus Transmission Related Reg. Comm. Exp.
Plus: Fixed PBOP expense
Less: Actual PBOP expense

## Common

Hold Harmless Expense Adjustment
TOTAL O\&M (sum lines 1, 3, 4b, 4c,4d, 5 , 6 less lines 2, 2a, 4, 4a, 4e DEPRECIATION AND AMORTIZATION EXPENSE
8 Transmission
9 General \& Intangible
10 Common
1a Amortization of Regulatory Asset
1b Amortization of Abandoned Plan
12 TOTAL DEPRECIATION \& AMORTIZATION

## TAXES OTHER THAN INCOME TAXES

## LABOR RELATED

## Payroll

Highway and vehicle

## PLANT RELATED

Property
Gross Receipts
Other
Payments in lieu of taxes
TOTAL OTHER TAXES

## INCOME TAXES

$\mathrm{T}=1-\{[(1-\mathrm{SIT}) *(1-\mathrm{FIT})] /(1-\mathrm{SIT} * \mathrm{FIT} * \mathrm{p})\}=$
$22 \mathrm{CIT}=(\mathrm{T} / 1-\mathrm{T}) *(1-(\mathrm{WCLTD} / \mathrm{R}))=$
where WCLTD=(page 4 , line 28$)$ and $\mathrm{R}=($ page 4 , line 31 )
and FIT, SIT \& $p$ are as given in Note A.
$1 /(1-\mathrm{T})=($ from line 21$)$
24 Deficient / (Excess) Deferred Income Taxes Amortization
4a Deficient / (Excess) Deferred Income Tax Adjustment
25 Permanent Differences
5a Tax Effect of Permanent Differences
26 Income Tax on Equity and Incentive Return
27 Total Income Taxes

## RETURN

28 Rate Base * Rate of Return + Incentive Return

Reference
Page, Line, Col
Worksheet P2, Page 1, Line 3, Col. (e) Worksheet P2, Page 1, Line 4, Col. (e) Worksheet P2, Page 1, Line 5, Col. (e) Worksheet P2, Page 1, Line 6, Col. (e) Worksheet P2, Page 1, Line 7, Col. (e) Worksheet P2, Page 1, Line 8, Col. (e) Worksheet P2, Page 1, Line 9, Col. (e) Worksheet P2, Page 1, Lines $10+10 \mathrm{a}$, Col. (e) Worksheet P2, Page 1, Line 11, Col. (e) Worksheet P2, Page 1, Line 12, Col. (e) Worksheet P2, Page 1, Line 13, Col. (e) Worksheet P2, Page 1, Line 14, Col. (e)

Worksheet P1, Page 1, Line 30, Col. (d) Actual Attachment H, Page 3, Line 9 Actual Attachment H, Page 3, Line 10 Company Records
Company Records
(Sum of Lines 8 through 11)

Worksheet P2, Page 1, Line 15, Col. (e )
Worksheet P2, Page 1, Line 16, Col. (e)
Worksheet P2, Page 2, Line 3, Col. (e) Worksheet P2, Page 1, Line 18, Col. (e) Worksheet P2, Page 1, Line 19, Col. (e)
Worksheet P2, Page 1, Line 20, Col (e) (Sum of Lines 13 through 19)

1,506,802 (Note A)
23.718\%
20.168\%

Worksheet P6-2, Line 62, Col. (h) (enter as negative
(Line 23 times Line 24)
Actual Attachment H, Page 3, Line 25
(Line 21 times 23 times Line 25)
(Line 22 times Line 28)
(Sum of Lines 24a, 25a, 26)

| 1.311 |
| ---: |
| $(1,631,111)$ |
| $(2,138,254)$ |
| $7,240,402$ |
| $2,251,174$ |
| $20,744,590$ |
| $20,857,511$ |

(Page 2, Line $24 \times$ Page 4, Line 31, Col. (5)) + Page 4, Line 32
102,860,411
(3)

Company Total
$29,084,458$
(5)
(4)

Allocator

| $24,309,757$ |
| ---: |
| $3,571,061$ |
| $6,896,883$ |
| $111,151,640$ |
| $5,311,966$ |
| $4,973,583$ |
| $4,973,583$ |
| $1,235,891$ |
| $(3,848,723)$ |
| $(3,848,723)$ |
| - |
| - |
| $120,917,378$ |
|  |
| $7,957,917$ |
| $21,126,541$ |
| - |
| - |
| - |
| $29,084,458$ |

Transmission
(Col 3 times Col 4)

| $24,309,757$ |
| ---: |
| $3,571,061$ |
| $6,896,883$ |
| $23,419,938$ |
| $1,119,245$ |
| $1,047,947$ |
| 607,848 |
| $1,235,891$ |
| $(810,936)$ |
| $(810,936)$ |
| - |

36,938,298

7,957,917
4,451,417
$12,409,334$

2,005,377

7,488,597
249,967
$9,743,941$
$(2,138,254)$
$\begin{array}{r}567,880 \\ 13,280,373 \\ \hline\end{array}$
$\begin{array}{r}13,280,373 \\ \hline 11,709,999\end{array}$

65,849,678

| $36,938,298$ |
| ---: |
| $7,957,917$ |
| $4,451,417$ |
| - |
| - |
| - |
| $12,409,334$ |
|  |
| $2,005,377$ |
| - |
|  |
| $7,488,597$ |
| - |
| 249,967 |
| - |
| $9,743,941$ |

Estimated - For the 12 months ended 12/31/2022

136,651,249

## (1)

 <br> \section*{\section*{(2) <br> \section*{\section*{(2) <br> <br> SUPPORTING CALCULATIONS AND NOTES} <br> <br> SUPPORTING CALCULATIONS AND NOTES}Line
No. TRANSMISSION PLANT INCLUDED IN RATES

1 Total transmission plant
2 Less transmission plant excluded from Wholesale Rates
3 Less transmission plant included in OATT Ancillary Services
4 Transmission plant included in Wholesale Rates
5 Percentage of transmission plant included in Wholesale Rates
TRANSMISSION EXPENSES
6 Total transmission expenses
7 Less transmission expenses included in OATT Ancillary Services
Included transmission expenses
Percentage of transmission expenses after adjustment
10 Percentage of transmission plant included in wholesale Rates
11 Percentage of transmission expenses included in wholesale Rates
WAGES \& SALARY ALLOCATOR (W\&S)

|  |  | Reference | \$ | TP |
| :---: | :---: | :---: | :---: | :---: |
| 12 | Production | Actual Attachment H, Page 4, Line 12 | 17,097,034 | 0.00 |
| 13 | Transmission | Actual Attachment H, Page 4, Line 13 | 10,826,624 | 1.00 |
| 14 | Distribution | Actual Attachment H, Page 4, Line 14 | 14,677,499 | 0.00 |
| 15 | Other | Actual Attachment H, Page 4, Line 15 | 8,782,285 | 0.00 |
| 16 | Total | (Sum of Lies 12-15) | 51,383,442 |  |
|  | COMMON PLANT ALLOCATOR (CE) |  | \$ |  |
| 17 | Electric | Actual Attachment H, Page 4, Line 17 | 4,742,045,111 |  |
| 18 | Gas | Actual Attachment H, Page 4, Line 18 | - |  |
| 19 | Water | Actual Attachment H, Page 4, Line 19 | - |  |
| 20 | Total | (Sum of Lines 17-19) | 4,742,045,111 |  |
|  | RETURN (R) |  |  |  |
| 21 | Long Term Interest | Actual Attachment H, Page 4, Line 21 |  |  |
| 22 | Preferred Dividends | Actual Attachment H, Page 4, Line 22 |  |  |
|  | Development of Common Stock: |  |  |  |
| 23 | Proprietary Capital | Actual Attachment H, Page 4, Line 23 |  |  |
| 24 | Less Preferred Stock | Actual Attachment H, Page 4, Line 24 |  |  |
| 25 | Less Other Comprehensive Income | Actual Attachment H, Page 4, Line 25 |  |  |
| 26 | Less Account 216.1 | Actual Attachment H, Page 4, Line 26 |  |  |
| 27 | Common Stock | (Sum of Lines 23-26) |  |  |
|  |  |  | \$ | \% |
| 28 | Long Term Debt | Actual Attachment H, Page 4, Line 28 | 1,260,231,525 | 49\% |
| 29 | Preferred Stock | Actual Attachment H, Page 4, Line 29 | - | 0\% |
| 30 | Common Stock | Actual Attachment H, Page 4, Line 30 | 1,318,930,353 | 51\% |
| 31 | Total | (Sum of Lines 28-30) | 2,579,161,878 |  |

Actual Attachment H, Page 4, Line 1
Actual Attachment H, Page 4, Line 1
Actual Attachment H, Page 4, Line 2
Actual Attachment H, Pag
(Line 4 divided by Line 1)
(Page 3, Line 1, Col. 3)
Actual Attachment H, Page 4, Line 7
(Line 6 less Line 7)
(Line 8 divided by Line 6)
(Line 5)
(Line 9 times Line 10)
Actual Attachment H, Page 4, Line 3
(3)

\% Electric
(line 17 / line 20)
1.00000 *

W\&S Allocator
(line 16)
$0.21070=$
21070

Incentive Return
Worksheet P4, Line 35, Col. (e )

Estimated - For the 12 months ended 12/31/2022
(4)


## El Paso Electric Company

Worksheet P1
Projected Transmission Plant
Estimated - For the $\mathbf{1 2}$ months ended 12/31/2022
Page 1 of 2


## El Paso Electric Company

Worksheet P1
Projected Transmission Plant

## Estimated - For the 12 months ended 12/31/2022

Notes:
A In periods where the company will use the actual depreciation rate, enter "A". The actual depreciation rate is calculated as follows: -Actual Attachment H, page 3, line 8) divided by actual transmission plant in service (Actual Attachment H, page 2, line 2) divided by 12 months.

In periods where the company has submitted new depreciation rates for FERC approval, enter " N ". The new depreciation rate is calculated as follows:
-The annual composite transmission depreciation rate developed within a new depreciation study, divided by 12 months

| Current Depreciation Rate (A) | $0.1142 \%$ |
| ---: | :--- |
| New Depreciation Rate (N) | $0.1142 \%$ |

B The depreciation accrual is based on the average of the current and prior month Plant in Service, times the actual "A" or new "N" depreciation rate
C In the initial year rates are set, use Lines 26 and 28, thereafter use Lines 27 and 29, calculated on line 30.
$\qquad$

## Estimated - For the 12 months ended 12/31/2022

Page 1 of 2

| Line | (a) | (b) | (c) | (d) | (e) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | O\&M / OTHER TAXES (Excluding Property Taxes) |  |  |  |  |
|  | Item | Reference | Actual Costs | arge Factor <br> (Note A) | Projected Costs (Note B) |
| 2 | Net Plant in Service | Actual Attachment H, Page 2 Line 18 Projected Attachment H, Page 2, Line 9 | 929,093,134 |  |  |
|  | Projected Net Plant in Service |  |  |  | 945,022,819 |
| O\&M |  |  |  |  |  |
| 3 | Transmission | Actual Attachment H, Page 3, Line 1 | 23,716,836 | 0.02553 | 24,309,757 |
| 4 | Less Account 561.1-561.8 | Actual Attachment H, Page 3, Line 2 | 3,483,962 | 0.00375 | 3,571,061 |
| 5 | Less Account 565 | Actual Attachment H, Page 3, Line 2a | 6,728,666 | 0.00724 | 6,896,883 |
| 6 | A\&G | Actual Attachment H, Page 3, Line 3 | 108,440,624 | 0.11672 | 111,151,640 |
| 7 | Less EPRI \& Reg. Comm. Exp. \& Non-safety Ad. | Actual Attachment H, Page 3, Line 4 | 5,182,406 | 0.00558 | 5,311,966 |
| 8 | Less Property Insurance Acct 924 | Actual Attachment H, Page 3, Line 4a | 4,852,276 | 0.00522 | 4,973,583 |
| 9 | Plus Property Insurance Acct 924 | Actual Attachment H, Page 3, Line 4b | 4,852,276 | 0.00522 | 4,973,583 |
| 10 | Plus Transmission Related Reg. Comm. Exp. | Actual Attachment H, Page 3, Line 4c | 629,552 | 0.00068 | 645,291 |
| 10a | Plus Transmission Related Rate Case Cost Amort Bal | Note D | 590,600 |  | 590,600 |
| 11 | Plus: Fixed PBOP expense | Actual Attachment H, Page 3, Line 4d | $(3,848,723)$ |  | $(3,848,723)$ |
| 12 | Less: Actual PBOP expense | Actual Attachment H, Page 3, Line 4e | $(3,848,723)$ |  | $(3,848,723)$ |
| 13 | Common | Actual Attachment H, Page 3, Line 5 | - | - | - |
| 14 | Hold Harmless Expense Adjustment | Actual Attachment H, Page 3, Line 6 | - | - | - |
| OTHER TAXES (Excluding Property Taxes) LABOR RELATED |  |  |  |  |  |
|  |  |  |  |  |  |  |
| 15 | Payroll | Actual Attachment H, Page 3, Line 13 | 9,285,435 | 0.00999 | 9,517,571 |
| 16 | Highway and vehicle | Actual Attachment H, Page 3, Line 14 | - | - | - |
| 17 | PLANT RELATED |  |  |  |  |
| 18 | Gross Receipts | Actual Attachment H, Page 3, Line 17 | 10,007,659 | 0.01077 | 10,257,850 |
| 19 | Other | Actual Attachment H, Page 3, Line 18 | 1,995,415 | 0.00215 | 2,045,300 |
| 20 | Payment in Lieu of Taxes | Actual Attachment H, Page 3, Line 19 | - | - | - |

## Estimated - For the 12 months ended 12/31/2022

(b) (b)

Item
Reference
Actual
Charge Factor
Projected

## PROPERTY TAXES

1 Net Plant in Service for Actual (Note C)
2 Net Plant in Service for Projected (Note C)
3 Property Taxes
200.15.b
200.15.b

Actual Attachment H, Page 3, Line 16

3,111,766,372
28,273,987

3,267,177,889
29,686,080

## NOTES:

A Charge Factor: Actual O\&M expenses \& Other Taxes divided by total actual net plant from Actuals Attachment H. This is used as one of the basis to calculate projected O\&M costs and projected Other Taxes.
B -When the Net Plant Change \% falls within a minimum or maximum threshold, Projected Costs = Row 2, Col. (f) times Col. (d) -When the Net Plant Change \% is greater than the maximum threshold, Projected Costs $=$ Col. (c ) times Maximum Percentage -When the Net Plant Change \% is less than the minimum threshold, Projected Costs $=$ Col. (c ) times Minimum Percentage

Net Plant Change \%
Maximum percentage change applied
Minimum percentage change applied

| $1.7 \%$ | Use Calculated Factors in column 4 |
| :--- | :--- |
| $2.5 \%$ | Use Maximum Percentage Change |
| $0.0 \%$ | Use Minimum Percentage Change |

## Result: <br> Use Maximum Percentage Change

C Property tax expenses relate to plant balances as of December 31, 2 Years prior to the expense period. FERC Form 1 Reporting Period for Actual
FERC Form 1 Reporting Period for Projected
2020

D Transmission rate case cost amortization balance is the remaining balance of total projected rate case costs amortized over a 3 year period.

## El Paso Electric Company

## Worksheet P3

Projected Divisor - Network Transmission Load
Page 1 of 1
Line No.

1 Peak Network Load (MW) During:
2021
=
3,325

|  | a | b | c | d |
| :---: | :---: | :---: | :---: | :---: |
|  | Month | Actual Transmission Network Load (Worksheet A-6) | Percentage of Maximum <br> Transmission Network Load | Projected Transmission Network Load (Col c x Line 1) |
| 2 | January | 2,352 | 68.23\% | 2,269 |
| 3 | February | 2,407 | 69.83\% | 2,322 |
| 4 | March | 2,289 | 66.41\% | 2,208 |
| 5 | April | 2,660 | 77.17\% | 2,566 |
| 6 | May | 2,924 | 84.83\% | 2,821 |
| 7 | June | 3,206 | 93.01\% | 3,093 |
| 8 | July | 3,447 | 100.00\% | 3,325 |
| 9 | August | 3,374 | 97.88\% | 3,255 |
| 10 | September | 3,144 | 91.21\% | 3,033 |
| 11 | October | 2,723 | 79.00\% | 2,627 |
| 12 | November | 2,316 | 67.19\% | 2,234 |
| 13 | December | 2,371 | 68.78\% | 2,287 |
| 14 | Total | 33,213 |  | 32,037 |
| 15 | 12-CP | 2,768 |  | 2,670 |

Note: Maximum Transmission Network Load is the maximum hourly load measured on the system for the listed year at the time of the Projection.

| $\underline{\text { Line }}$ |  |  |  |  |  |  |  | Incentive Projects |  |  |  |  |  |  |  |  |  |  |  |  | Page |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\frac{1}{1}$ |  |  |  |  |  |  |  |  | Project: |  | ject 1 |  |  |  |  |  | Project: | Project 2 |  |  |  |  |
| 2 |  |  |  |  |  |  |  |  | Proj. ID |  | n/a |  |  |  |  |  | Proj. ID | n/a |  |  |  |  |
| 3 |  |  |  |  |  |  |  |  | Deprec. Rate/Month: |  |  |  |  |  | (Note A) |  | Deprec. Rate/Month: |  |  |  |  | Note A) |
| 4 |  |  |  |  |  |  |  |  | ROE Adder |  |  |  |  |  | (Note B) |  | ROE Adder |  |  |  |  | Note B) |
| 5 |  |  |  |  |  |  |  |  | Weighted ROE Adder: |  |  |  |  |  |  |  | Weighted ROE Adder: |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |  | Beginning Bal: |  |  |  |  |  |  |  | Beginning Bal: |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |  | Beginning Dep: |  |  |  |  |  |  |  | Beginning Dep: |  |  |  |  |  |
| 8 |  |  |  |  | tal |  |  |  | Beginning Year: |  |  |  |  |  |  |  | Beginning Year: |  |  |  |  |  |
|  | Mon/Yr <br> (a) | Gross Plant <br> (b) |  | Depreciation <br> (c) |  | Accum. Dep. <br> (d) | Incentive Ret <br> (e) |  | Gross Plant <br> (f) |  | Depreciatio <br> (g) |  | Accum. Dep. <br> (h) |  | Net Plant <br> (i) |  | Gross Plant <br> (j) | Depreciatio <br> (k) |  | Accum. Dep. <br> (1) |  | Net Plant (m) |
|  |  |  |  |  |  |  |  |  | \$ |  |  |  |  |  |  |  | \$ |  |  |  |  |  |
| 9 | Jan-21 | \$ | - \$ |  | - \$ |  |  |  | \$ | \$ |  |  | \$ - |  | \$ | - | \$ | \$ | - | \$ |  | \$ |
| 10 | Feb-21 | \$ | - \$ |  | \$ |  |  |  | \$ | \$ |  |  | - |  | \$ | - | \$ | \$ | - | \$ | \$ | \$ |
| 11 | Mar-21 | \$ | - \$ |  | \$ |  |  |  | \$ | \$ |  |  | \$ - |  | \$ | - | \$ - | \$ | - | \$ |  | \$ |
| 12 | Apr-21 | \$ | - \$ |  | - |  |  |  | \$ | \$ |  | - |  |  | \$ | - | \$ - | \$ | - | \$ |  | \$ |
| 13 | May-21 | \$ | - \$ |  | \$ |  |  |  | \$ | \$ |  |  |  |  | \$ | - | \$ | \$ | - | \$ |  | \$ |
| 14 | Jun-21 | \$ | - \$ |  | - |  |  |  | \$ | \$ |  |  |  |  | \$ | - | \$ | \$ |  | \$ |  | \$ |
| 15 | Jul-21 | \$ | - \$ |  | \$ |  |  |  | \$ | \$ |  |  | \$ - |  | \$ | - | \$ | \$ | - | \$ |  | \$ |
| 16 | Aug-21 | \$ | - \$ |  | \$ |  |  |  | \$ | \$ |  | - | - |  | \$ | - | \$ | \$ | - | \$ |  | \$ |
| 17 | Sep-21 | \$ | - \$ |  | - |  |  |  | \$ | \$ |  | - | - |  | \$ | - | \$ - | \$ | - | \$ |  | \$ |
| 18 | Oct-21 | \$ | - \$ |  | \$ |  |  |  | \$ | \$ |  |  | - |  | \$ | - | \$ | \$ | - | \$ |  | \$ |
| 19 | Nov-21 | \$ | - \$ |  | \$ |  |  |  | \$ | \$ |  |  | - |  | \$ | - | \$ | \$ | - | \$ |  | \$ |
| 20 | Dec-21 | \$ | - \$ |  | - |  |  |  | \$ | \$ |  | - | \$ - |  | \$ | - | \$ | \$ | - | \$ |  | \$ |
| 21 | Jan-22 | \$ | - \$ |  | \$ |  |  |  | \$ | \$ |  | - |  |  | \$ | - | \$ - | \$ | - | \$ |  | \$ |
| 22 | Feb-22 | \$ | - \$ |  | - |  |  |  | \$ | \$ |  | - | \$ - |  | \$ | - | \$ | \$ | - | \$ |  | \$ |
| 23 | Mar-22 | \$ | - \$ |  | \$ |  |  |  | \$ | \$ |  | - | - |  | \$ | - | \$ | \$ | - | \$ | \$ | \$ |
| 24 | Apr-22 | \$ | - \$ |  | \$ |  |  |  | \$ - | \$ |  | - | - |  | \$ | - | \$ - | \$ | - | \$ |  | \$ |
| 25 | May-22 | \$ | - \$ |  | \$ |  |  |  | \$ - | \$ |  |  | - |  | \$ |  | \$ - | \$ | - | \$ |  | \$ |
| 26 | Jun-22 | \$ | - \$ |  | \$ |  |  |  | \$ | \$ |  | - | - |  | \$ | - | \$ | \$ | - | \$ |  | \$ |
| 27 | Jul-22 | \$ | - \$ |  | \$ |  |  |  | \$ | \$ |  |  | - |  | \$ | - | \$ | \$ | - | \$ |  | \$ |
| 28 | Aug-22 | \$ |  |  | \$ |  |  |  | \$ | \$ |  |  | - |  | \$ | - | \$ | \$ | - | \$ |  | \$ |
| 29 | Sep-22 | \$ | - \$ |  | - \$ |  |  |  | \$ | \$ |  |  |  |  | \$ | - | \$ | \$ | - | \$ |  | \$ |
| 30 | Oct-22 | \$ | - \$ |  | \$ |  |  |  | \$ | \$ |  |  |  |  | \$ | - | \$ | \$ | - | \$ |  | \$ |
| 31 | Nov-22 | \$ | - \$ |  | \$ |  |  |  | \$ | \$ |  | - | \$ |  | \$ | - | \$ | \$ | - | \$ |  | \$ |
| 32 | Dec-22 | \$ | - \$ |  | - |  |  |  | \$ | \$ |  | - | - |  | \$ |  | \$ | \$ | - | \$ |  | \$ |
| 33 | 12 Mon Tot |  | \$ |  | - |  |  |  |  | \$ |  |  |  |  |  |  |  | \$ | - |  |  |  |
| 34 | 13 Mon Avg | \$ | - |  | \$ |  |  |  | \$ |  |  |  | \$ - |  | \$ | - | \$ - |  |  | \$ |  | \$ |
| 35 | Total Incentiv | e Return |  |  |  |  | \$0.00 |  |  |  |  |  |  |  |  | 00 |  |  |  |  |  | \$0.00 |

[^16]$\qquad$

Worksheet P5-1

## Projected Accumulated Deferred Income Taxes

Estimated - For the $\mathbf{1 2}$ months ended 12/31/2022
Exhibit No. EPE-0008
Page 45 of 56

Page 1 of 3

| Days in Period |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (a) | (b) | (c) | (d) | (e) |  |
| Month | Days in the <br> Month | Number of <br> Days <br> Prorated | Total Days in <br> Future <br> Portion of <br> Test Period | Proration <br> Amount (c /d) |  |


| Averaging with Proration - Projected |  |  |
| :---: | :---: | :---: |
| (f) | (g) | (h) |
|  | Prorated | Prorated Projected |
| Projected | Projected | Balance (Cumulative |
| Monthly Activity | Monthly Activity <br> (e x f) | Sum of g) |

4
5 December 31st balance Prorated Items (P5-2.61.f)

| 6 January | 31 | 335 | 365 | $91.78 \%$ |
| :--- | ---: | ---: | ---: | ---: |
| 7 February | 28 | 307 | 365 | $84.11 \%$ |
| 8 March | 31 | 276 | 365 | $75.62 \%$ |
| 9 April | 30 | 246 | 365 | $67.40 \%$ |
| 10 May | 31 | 215 | 365 | $58.90 \%$ |
| 11 June | 30 | 185 | 365 | $50.68 \%$ |
| 12 July | 31 | 154 | 365 | $42.19 \%$ |
| 13 August | 31 | 123 | 365 | $33.70 \%$ |
| 14 September | 30 | 93 | 365 | $25.48 \%$ |
| 15 October | 31 | 62 | 365 | $16.99 \%$ |
| 16 November | 30 | 32 | 365 | $8.77 \%$ |
| 17 December | 31 | 1 | 365 | $0.27 \%$ |
| 18 Total | 365 |  |  |  |


|  |  | $17,730,853$ |
| :---: | :---: | :---: |
| - | - | $17,730,853$ |
| - | - | $17,730,853$ |
| - | - | $17,730,853$ |
| - | - | $17,730,853$ |
| - | - | $17,730,853$ |
| - | - | $17,730,853$ |
| - | - | $17,730,853$ |
| - | - | $17,730,853$ |
| - | - | $17,730,853$ |
| - | - | $17,730,853$ |
| - | - | $17,730,853$ |
| - |  |  |

19 Beginning Balance-Total
20 Beginning Balance-Not Subject to Proration
21 Beginning Balance-Subject to Proration
22 Ending Balance-Total
23 Ending Balance-Not Subject to Proration
24 Ending Balance-Subject to Proration
25 Average Balance
26 Reserved
27 Amount for Attachment H

Worksheet P5-2.58.f
Worksheet P5-2.64.f
(Line 5, Col H )
Worksheet P5-2.58.g
Worksheet P5-2.64.g
Worksheet P5-2.61.g
Line $17 \mathrm{ColN}+($ Lines $20+23 \mathrm{ColN}) / 2$
23,657,755
(Line 25 less line 26)
23,657,755
$\qquad$

El Paso Electric Company
Worksheet P5-1
Projected Accumulated Deferred Income Taxes
Estimated - For the 12 months ended 12/31/2022

Exhibit No. EPE-0008
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Page 2 of 3


## Projected Accumulated Deferred Income Taxes

Estimated - For the $\mathbf{1 2}$ months ended 12/31/2022
Page 3 of 3

| 5657 | Days in Period |  |  |  |  | Averaging with Proration - Projected |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (a) Month | (b) Days in the Month | (c ) <br> Number of <br> Days <br> Prorated | (d) <br> Total Days in <br> Future <br> Portion of <br> Test Period | (e) <br> Proration Amount (c /d) | (f) Projected Monthly Activity | (g) <br> Prorated <br> Projected <br> Monthly Activity <br> (e x f) | (h) <br> Prorated Projected Balance (Cumulative Sum of g) |
| 58 |  |  |  |  |  |  |  |  |
| 59 December 31st balance Prorated Items (P5-2.126.f) |  |  |  |  |  |  |  |  |
| 60 | January | 31 | 334 | 365 | 0.915 |  | - | - |
| 61 | February | 28 | 306 | 365 | 0.838 | - | - | - |
| 62 | March | 31 | 275 | 365 | 0.753 | - | - | - |
| 63 | April | 30 | 245 | 365 | 0.671 | - | - | - |
| 64 | May | 31 | 214 | 365 | 0.586 | - | - | - |
| 65 | June | 30 | 184 | 365 | 0.504 | - | - | - |
| 66 | July | 31 | 153 | 365 | 0.419 | - | - | - |
| 67 | August | 31 | 122 | 365 | 0.334 | - | - | - |
| 68 | September | 30 | 92 | 365 | 0.252 | - | - | - |
| 69 | October | 31 | 61 | 365 | 0.167 | - | - | - |
| 70 | November | 30 | 31 | 365 | 0.085 | - | - | - |
| 71 | December | 31 | 1 | 365 | 0.003 | - | - | - |
| 72 | Total | 365 |  |  |  | - | - |  |
| 73 Beginning Balance-Total |  |  |  |  | Worksheet P5 |  |  | - |
| 74 Beginning Balance-Not Subject to Proration |  |  |  |  | Worksheet P5-2 |  |  | - |
| 75 Beginning Balance-Subject to Proration |  |  |  |  | (Line 59, Col H) |  |  | - |
| 76 Ending Balance-Total |  |  |  |  | Worksheet P5-2 |  |  | - |
| 77 Ending Balance-Not Subject to Proration |  |  |  |  | Worksheet P5 |  |  | - |
| 78 Ending Balance-Subject to Proration |  |  |  |  | Worksheet P5-2 |  |  | - |
| 79 Average Balance |  |  |  |  | Line 71 Col H | ines $74+77 \mathrm{Col} \mathrm{H}$ |  | - |
| 80 Reserved |  |  |  |  |  |  |  |  |
| 81 Amount for Attachment H |  |  |  |  | (Line 79 less li |  |  | - |

[^17]Projected Accumulated Deferred Income Taxes/Accumulated Deferred Investment Tax Credits - Details Estimated - For the 12 months ended 12/31/2022

| No. | (a) | Dec-2020 <br> (b) | Dec-2021 <br> (c) | (e) | $\begin{gathered} \text { Dec-2020 } \\ (\mathrm{f}) \end{gathered}$ | $\begin{gathered} \text { Dec-2021 } \\ (\mathrm{g}) \\ \hline \end{gathered}$ | (h) | (i) | Page 1 of 4 (j) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Line No. | Item | BOY Balance | EOY Balance | Allocator | $\begin{aligned} & \text { BOY Allocated } \\ & \text { Amount } \end{aligned}$ | $\begin{aligned} & \text { EOY Allocated } \\ & \text { Amount } \end{aligned}$ | Prorated <br> (Yes/No) <br> (Note C) | Explanation (Note B) | Projection <br> Classification <br> (Note D) |
|  | ACCOUNT 190 ACCUMULATED DEFERRED INCOME TAXES |  |  |  |  |  |  |  |  |
| 1 | Plant | 70,288,139 | 70,288,139 | NP 25.226\% | 17,730,853 | 17,730,853 | Yes | Plant | A |
| 2 | Other | 79,864,250 | 79,864,250 | NA $0.000 \%$ | - | - | No | ONT | A |
| 3 | Pension and Benefits | 28,129,230 | 28,129,230 | W/S 21.070\% | 5,926,901 | 5,926,901 | No | Labor | A |
| 4 | Reserved | - | - | 0.000\% | - |  |  |  |  |
| 5 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 6 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 7 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 8 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 9 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 10 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 11 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 12 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 13 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 14 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 15 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 16 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 17 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 18 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 19 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 20 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 21 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 22 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 23 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 24 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 25 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 26 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 27 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 28 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 29 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 30 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 31 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 32 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 33 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 34 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 35 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 36 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 37 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 38 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 39 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 40 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 41 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 42 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 43 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 44 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 45 | Reserved | - | - | 0.000\% | - | - |  |  |  |

Projected Accumulated Deferred Income Taxes/Accumulated Deferred Investment Tax Credits - Details Estimated - For the 12 months ended 12/31/2022


| No. | (a) | $\begin{aligned} & \text { Dec-2020 } \\ & \text { (b) } \end{aligned}$ | Dec-2021 <br> (c) | (e) | $\begin{gathered} \text { Dec-2020 } \\ (\mathrm{f}) \\ \hline \end{gathered}$ | $\begin{gathered} \text { Dec-2021 } \\ (\mathrm{g}) \\ \hline \end{gathered}$ | (h) | (i) | Page 3 of 4 <br> (j) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Line No. | Item | BOY Balance | EOY Balance | Allocator | $\begin{gathered} \text { BOY Allocated } \\ \text { Amount } \\ \hline \end{gathered}$ | $\begin{gathered} \text { EOY Allocated } \\ \text { Amount } \\ \hline \end{gathered}$ | Prorated (Yes/No) (Note C) | Explanation (Note B) | Projection <br> Classification <br> (Note D) |
|  | ACCOUNT 283 ACCUMULATED DEFERRED INCOME TAXES - OTHER (Enter Negative) |  |  |  |  |  |  |  |  |
| 83 | Electric | (42,801,748) | $(42,801,748)$ | NA $0.000 \%$ | - | - | No | ONT | A |
| 84 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 85 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 86 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 87 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 88 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 89 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 90 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 91 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 92 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 93 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 94 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 95 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 96 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 97 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 98 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 99 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 100 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 101 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 102 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 103 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 104 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 105 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 106 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 107 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 108 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 109 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 110 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 111 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 112 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 113 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 114 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 115 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 116 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 117 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 118 | Reserved | - | - | 0.000\% | - | - |  |  |  |
| 119 | Reserved | - |  | 0.000\% | - | - |  |  |  |
| 120 | Total Account 283 | (42,801,748) | (42,801,748) |  | - |  |  |  |  |


|  |  |  |  |  |  |  |  |  | Page 4 of 4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Dec-2020 | Dec-2021 |  | Dec-2020 | Dec-2021 |  |  |  |
| No. | (a) | (b) | (c) | (e) | (f) | (g) | (h) | (i) | (j) |
| Line No. | Item | BOY Balance | EOY Balance | Allocator | BOY Allocated Amount | EOY Allocated Amount | $\begin{gathered} \hline \text { Prorated } \\ \text { (Yes/No) } \\ \text { (Note C) } \end{gathered}$ | Explanation <br> (Note B) | Projection <br> Classification <br> (Note D) |

Tax Reg Asset / Liab Adjustments (Note A)
121 Remove regulatory gross-ups for Excess Deferred Taxes
122 Reserved
123 Total Account 283 After Adjustments
4 Prorated Balances
125 Tax Reg Asset / Liab Adjustments
126 Prorated Account 283 Balances After Adjustments $\qquad$

Non-Prorated Balances
128 Tax Reg Asset / Liab Adjustments
129 Non-Prorated Account 283 Balances After Adjustments

| ACCOUNT 255: ACCUMULATED DEFERRED INVESTMENT TAX CREDITS (Enter Negative) (Note E) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Intangible |  |  | NP | 25.226\% | - | - |  |
| Production | (19,339,718) | (19,339,718) | NA | 0.000\% | - | - | A |
| Transmission |  |  | DA | 100.000\% | - | - |  |
| Distribution |  |  | NA | 0.000\% | - | - |  |
| General Plant |  |  | NP | 25.226\% | - | - |  |
| Total Account 255 (266.8.b \& 267.8.h) | (19,339,718) | (19,339,718) |  |  |  |  |  |

135 Total Account 255 (266.8.b \& 267.8.h)
36 Unrealized ITC Adjustment
137 Account 255 balance after Unrealized Adjustment
138 Average ITC Balance for Attachment H
$\qquad$

Notes:
A The balances in Accounts 190, 281, 282 and 283, as adjusted by any amounts associated with tax-related regulatory assets and liabilities other than excess / deficient deferred income taxes ("EDIT") EDIT is calculated in schedules P6-1 and P6-2 and presented in Att-H separately from ADIT.
B Each ADIT item is categorized into 1 of 7 categories. The selected category will will determine the Allocator applied to the ADIT balance

1) Prod: The ADIT balance is $100 \%$ related to production of electricity and the NA Allocator is applied.
2) Retail: The ADIT balance is $100 \%$ related to retail operations and the NA Allocator is applied.
3) ONT: Other $100 \%$ Non-Transmission (Items other than Prod \& Retail) related ADIT for which the NA Allocator is applied. Such items shall include

- ADIT related to the Income Tax Regaultory Assets and Liabilities
- ADIT related to Pension and PBOP
- Any other ADIT if not separately removed in other categories that relates to regulatory assets and liabilities that are not included in rate base

4) Trans: The ADIT balance is $100 \%$ related to transmission operations and the DA Allocator is applied
5) Plant: The ADIT balance is related to Property, Plant, \& Equipment "PP\&E" and the NP Allocator is applied.
6) NPO: ADIT balances other than PP\&E where the NP Allocator is applied.
7) Labor: The ADIT balance is labor related and the W/S Allocator is applied.

C Each ADIT Item must be categorized into balances that require proration and those that do not. ADIT items with a "Plant" Explanation code will be designated "Yes" for proration treatment and all other Items will be designated "No".
D A=Actuals from most recent FERC Form 1 are used. $\mathrm{P}=\mathrm{A}$ projection of the ADIT balance is calculated.
E The balance in Account 255 is directly allocated among types of depreciable plant based the amount of investment tax credit (ITC) allowed for each type of property. In accordance with the normalization requirements applicable to utilities, the Company has elected to reduce rate base by unamortized ITC rather than to reduce income tax expense by ITC amortization. Rate base is not reduced by
unamortized ITC until the ITC has been utilized by the Company on its tax return.

Page 1 of 1
Proration Used for Projected Revenue Requirement Calculation


| No. | (a) | $\begin{aligned} & \text { Dec-2020 } \\ & \text { (b) } \end{aligned}$ | $2021$ <br> (c) | 2021 <br> (d) | Dec-2021 <br> (e) |  | (f) | $\underset{(\mathrm{g})}{\mathrm{Dec}-2020}$ | $2021$ <br> (h) | $\begin{gathered} \text { Dec-2021 } \\ \text { (i) } \end{gathered}$ | (j) | (k) | (1) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Item | BOY Balance (Note D) | Current Period Amortization | Current Period Other Activity (Note C) | EOY Balance (Note D) |  | Allocator | BOY Allocated Amount | Amortization Allocated | EOY Allocated Amount | Prorated <br> (Yes/No) <br> (Note B) | Amort <br> Period or Method | Explanatio <br> n (Note A) |
| Line No. | NON-PLANT UNPROTECTED EDIT INCLUDED WITHIN ACCOUNTS 182.3 \& 254 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | Excess 2017 TCJA | 18,930,446 | (4,732,612) |  | 14,197,834 | W/S | 21.070\% | 3,988,694 | $(997,174)$ | 2,991,520 | No | Rev S. GA | Labor |
| 2 | Excess State from normalization | 9,224,040 | $(1,051,104)$ |  | 8,172,936 | NP | 25.226\% | 2,326,852 | $(265,151)$ | 2,061,701 | Yes | Rev S. GA | Plant |
| 3 | Excess 2017 TCJA | $(70,816,242)$ | - |  | $(70,816,242)$ | NA | 0.000\% | - | - | - | No | - | ONT |
| 4 | Reserved | - | - |  | - | NA | 0.000\% | - | - | - | No | - | ONT |
| 5 | Reserved | - | - |  | - | NA | 0.000\% | - | - | - | No | - | ONT |
| 6 | Reserved | - | - |  | - | NA | 0.000\% | - | - | - | No | - | ONT |
| 7 | Reserved | - | - |  | - | NA | 0.000\% | - | - | - | No | - | ONT |
| 8 | Reserved | - | - |  | - | NA | 0.000\% | - | - | - | No | - | ONT |
| 9 | Reserved | - | - |  | - | NA | 0.000\% | - | - | - | No | - | ONT |
| 10 | Reserved | - | - |  | - | NA | 0.000\% | - | - | - | No | - | ONT |
| 11 | Reserved | - | - |  | - | NA | 0.000\% | - | - | - | No | - | ONT |
| 12 | Reserved | - | - |  | - | NA | 0.000\% | - | - | - | No | - | ONT |
| 13 | Reserved | - | - |  | - | NA | 0.000\% | - | - | - | No | - | ONT |
| 14 | Reserved | - | - |  | - | NA | 0.000\% | - | - | - | No | - | ONT |
| 15 | Reserved | - | - |  | - | NA | 0.000\% | - | - | - | No | - | ONT |
| 16 | Reserved | - | - |  | - | NA | 0.000\% | - | - | - | No | - | ONT |
| 17 | Reserved | - | - |  | - | NA | 0.000\% | - | - | - | No | - | ONT |
| 18 | Reserved | - | - |  | - | NA | 0.000\% | - | - | - | No | - | ONT |
| 19 | Reserved | - | - |  | - | NA | 0.000\% | - | - | - | No | - | ONT |
| 20 | Reserved | - | - |  | - | NA | 0.000\% | - | - | - | No | - | ONT |
| 21 | Reserved | - | - |  | - | NA | 0.000\% | - | - | - | No | - | ONT |
| 22 | Reserved | - | - |  | - | NA | 0.000\% | - | - | - | No | - | ONT |
| 23 | Reserved | - | - |  | - | NA | 0.000\% | - | - | - | No | - | ONT |
| 24 | Reserved | - | - |  | - | NA | 0.000\% | - | - | - | No | - | ONT |
| 25 | Reserved | - | - |  | - | NA | 0.000\% | - | - | - | No | - | ONT |
| 26 | Reserved | - | - |  | - | NA | 0.000\% | - | - | - | No | - | ONT |
| 27 | Reserved | - | - |  | - | NA | 0.000\% | - | - | - | No | - | ONT |
| 28 | Reserved | - | - |  | - | NA | 0.000\% | - | - | - | No | - | ONT |
| 29 | Reserved | - | - |  | - | NA | 0.000\% | - | - | - | No | - | ONT |
| 30 | Reserved | - | - |  | - | NA | 0.000\% | - | - | - | No | - | ONT |
| 31 | Reserved | - | - |  | - | NA | 0.000\% | - | - | - | No | - | ONT |
| 32 | Reserved | - | - |  | - | NA | 0.000\% | - | - | - | No | - | ONT |
| 33 | Reserved | - | - |  | - | NA | 0.000\% | - | - | - | No | - | ONT |
| 34 | Reserved | - | - |  | - | NA | 0.000\% | - | - | - | No | - | ONT |
| 35 | Reserved | - | - |  | - | NA | 0.000\% | - | - | - | No | - | ONT |
| 36 | Reserved | - | - |  | - | NA | 0.000\% | - | - | - | No | - | ONT |
| 37 | Reserved | - | - |  | - | NA | 0.000\% | - | - | - | No | - | ONT |
| 38 | Reserved | - | - |  | - | NA | 0.000\% | - | - | - | No | - | ONT |
| 39 | Reserved | - | - |  | - | NA | 0.000\% | - | - | - | No | - | ONT |
| 40 | Reserved | - | - |  | - | NA | 0.000\% | - | - | - | No | - | ONT |
| 41 | Reserved | - | - |  | - | NA | 0.000\% | - | - | - | No | - | ONT |
| 42 | Reserved | - | - |  | - | NA | 0.000\% | - | - | - | No | - | ONT |



A Each EDIT item is categorized into 1 of 7 categories. The selected category will will determine the Allocator applied to the EDIT balance.

1) Prod: The EDIT balance is $100 \%$ related to production of electricity and the NA Allocator is applied.
2) Retail: The EDIT balance is $100 \%$ related to retail operations and the NA Allocator is applied
3) ONT: Other $100 \%$ Non-Transmission (Items other than Prod \& Retail) related EDIT for which the NA Allocator is applied. Such items shall include

EDIT related to Pension and PBOP
Any other EDIT if not separately removed in other categories that relates to regulatory assets and liabilities that are not included in rate base.
4) Trans: The EDIT balance is $100 \%$ related to transmission operations and the DA Allocator is applied.
5) Plant: The EDIT balance is related to Property, Plant, \& Equipment "PP\&E" and the NP Allocator is applied
6) NPO: EDIT balances other than PP\&E where the NP Allocator is applied.
7) Labor: The EDIT balance is labor related and the W/S Allocator is applied.

B Each EDIT Item must be categorized into balances that require proration and those that do not. EDIT items with a "Plant" Explanation code will be designated "Yes" for proration treatment and all other Items will be designated "No
C Includes the impact of tax rate changes enacted during the period.
D EDIT balances exclude income tax gross-ups recorded to accounts 182.3 and 254

## El Paso Electric Company

Worksheet P7
Projected Adjustments to Rate Base
Estimated - For the $\mathbf{1 2}$ months ended 12/31/2022

| Line No | Month <br> (a) |  |  | Page 1 of 1 |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Unamortized Regulatory Asset (b) | Unamortized Abandoned Plant (c) | CWIP <br> (d) |
| 1 | December Prior Year |  | - | - |
| 2 | January | - | - | - |
| 3 | February | - | - | - |
| 4 | March | - | - | - |
| 5 | April | - | - | - |
| 6 | May | - | - | - |
| 7 | June | - | - | - |
| 8 | July | - | - | - |
| 9 | August | - | - | - |
| 10 | September | - | - | - |
| 11 | October | - | - | - |
| 12 | November | - | - | - |
| 13 | December | - | - | - |
| 14 | Average of the 13 Monthly Balances | - | - | - |

## El Paso Electric Company

Schedule 1

## Ancillary Services, Schedule No. 1 - Scheduling System Control and Dispatch Service <br> Estimated - For the 12 months ended 12/31/2022

Page 1


## Notes

A Net Schedule 1 Annual Revenue Requirement projection is set to Actual amount from previous year plus Sch 1 True Up Adjustment
B Explanatory comment(s) for Originally Projected Sch 1 Rev Req without True Up Adjustment from Previous Filing:
True Up Adjustment is not applicable to first year when transitioning from stated rate to formula rate, so this line is set equal to
Line 15 in order to set True-Up Amount (before interest) to zero.

## EPE OATT Rates \& Revenue

Schedules 7 \& 8

## PER UNIT RATES IN OATT

| \# | Service | Present Rate (\$/MW) |  |  | (\$/MW) | Increase (\%) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Native | PV-WW | PV-JO-KY | All |  | Native |  | PV-WW | PV-JO-KY |
|  | (a) | (b) | (c) | (d) | (e) |  | (f) |  | (g) | (h) |
| 1 | Long Term Firm |  |  |  |  |  |  |  |  |  |
| 2 | Yearly | 27,720.00 | 4,060.00 | 10,400.00 | 47,160.00 |  | 70\% |  | 1062\% | 353\% |
| 3 | Short Term Firm PTP |  |  |  |  |  |  |  |  |  |
| 4 | Monthly | 2,310.00 | 340.00 | 870.00 | 3,930.00 |  | 70\% |  | 1056\% | 352\% |
| 5 | Weekly | 530.00 | 78.11 | 200.04 | 910.00 |  | 72\% |  | 1065\% | 355\% |
| 6 | Daily On Peak | 88.85 | 13.01 | 33.34 | 151.67 |  | 71\% |  | 1066\% | 355\% |
| 7 | Daily Off Peak | 76.15 | 11.15 | 28.58 | 130.00 |  | 71\% |  | 1066\% | 355\% |
| 8 | Hourly On Peak | 5.55 | 0.81 | 2.08 | 9.48 |  | 71\% |  | 1070\% | 356\% |
| 9 | Hourly Off Peak | 3.17 | 0.46 | 1.19 | 5.42 |  | 71\% |  | 1078\% | 355\% |
| 10 | Non-Firm PTP |  |  |  |  |  |  |  |  |  |
| 11 | Monthly | 2,310.00 | 340.00 | 870.00 | 3,930.00 |  | 70\% |  | 1056\% | 352\% |
| 12 | Weekly | 530.00 | 78.11 | 200.04 | 910.00 |  | 72\% |  | 1065\% | 355\% |
| 13 | Daily On Peak | 88.85 | 13.01 | 33.34 | 151.67 |  | 71\% |  | 1066\% | 355\% |
| 14 | Daily Off Peak | 76.15 | 11.15 | 28.58 | 130.00 |  | 71\% |  | 1066\% | 355\% |
| 15 | Hourly On Peak | 5.55 | 0.81 | 2.08 | 9.48 |  | 71\% |  | 1070\% | 356\% |
| 16 | Hourly Off Peak | 3.17 | 0.46 | 1.19 | 5.42 |  | 71\% |  | 1078\% | 355\% |
| 17 |  |  |  |  |  |  |  |  |  |  |
| 18 | ANNUAL REVENUES |  |  |  |  |  |  |  |  |  |
| 19 |  |  |  |  |  |  |  |  |  |  |
| 20 |  | 2020 Revenue (\$) |  |  | PRESENT |  | OPOSED |  |  |  |
| 21 | Service | Native | PV-WW | PV-JO-KY | TOTAL |  | W TOTAL |  | NCREASE | \% |
| 22 |  |  |  |  |  |  |  |  |  |  |
| 23 | Long Term Firm |  |  |  |  |  |  |  |  |  |
| 24 | Yearly | 11,420,640 | 1,014,999 | 1,476,801 | 13,912,440 |  | 23,669,215 |  | 9,756,776 | 70\% |
| 25 | Short Term Firm PTP |  |  |  |  |  |  |  |  |  |
| 26 | Monthly | 704,550 | 17,000 | - | 721,550 |  | 1,227,572 |  | 506,022 | 70\% |
| 27 | Weekly | 62,540 | 11,717 | - | 74,257 |  | 127,497 |  | 53,241 | 72\% |
| 28 | Daily On Peak | 1,439,637 | 24,069 | - | 1,463,705 |  | 2,498,540 |  | 1,034,835 | 71\% |
| 29 | Daily Off Peak | 177,514 | 1,182 | - | 178,696 |  | 305,061 |  | 126,366 | 71\% |
| 30 | Hourly On Peak | 1,752,246 | 73,093 | 1,546,705 | 3,372,971 |  | 5,760,893 |  | 2,387,922 | 71\% |
| 31 | Hourly Off Peak | 785,491 | 14,018 | 1,071,481 | 1,871,668 |  | 3,198,171 |  | 1,326,503 | 71\% |
| 32 | Subtotal | 4,921,977 | 141,078 | 2,618,185 | 7,682,846 | \$ | 13,117,734 | \$ | 5,434,888 | 71\% |
| 33 | Non-Firm PTP |  |  |  |  |  |  |  |  |  |
| 34 | Monthly | 92,400 | - | - | 92,400 | \$ | 157,200 | \$ | 64,800 | 70\% |
| 35 | Weekly | - | - | - |  |  |  |  |  |  |
| 36 | Daily On Peak | 168,904 | 30,209 | 2,501 | 201,614 |  | 344,154 |  | 142,540 | 71\% |
| 37 | Daily Off Peak | 10,737 | 7,248 | - | 17,985 |  | 30,703 |  | 12,718 | 71\% |
| 38 | Hourly On Peak | 773,859 | 439,596 | 32,804 | 1,302,859 |  | 2,225,228 |  | 922,369 | 71\% |
| 39 | Hourly Off Peak | 306,187 | 110,630 | 16,006 | 441,690 |  | 754,727 |  | 313,038 | 71\% |
| 40 | Subtotal | 1,352,087 | 587,683 | 51,310 | 2,056,547 | \$ | 3,512,012 | \$ | 1,455,465 | 71\% |
| 41 |  |  |  |  |  |  | - |  |  |  |
| 42 | TOTAL | 17,694,704 | 1,743,759 | 4,146,295 | \$ 23,651,833 | \$ | 40,298,961 | \$ | 16,647,129 | 70\% |

# UNITED STATES OF AMERICA <br> BEFORE THE <br> FEDERAL ENERGY REGULATORY COMMISSION 

)
El Paso Electric Company )
Docket No. ER22 -000

## PREPARED DIRECT TESTIMONY OF

BRYN T. DAVIS

ON BEHALF OF
EL PASO ELECTRIC COMPANY

OCTOBER 29, 2021

# UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION 

El Paso Electric Company () Docket No. ER22-__-000

## PREPARED DIRECT TESTIMONY OF

## BRYN T. DAVIS

## Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Bryn T. Davis. My business address is El Paso Electric Company, P.O. Box 982, El Paso, Texas, 79960.
Q. BY WHOM ARE YOU EMPLOYED?
A. I am employed by El Paso Electric Company ("EPE" or the "Company") as Senior Director, Asset Management Services.
Q. ON WHOSE BEHALF ARE YOU SUBMITTING THIS TESTIMONY?
A. I am testifying on behalf of EPE.
Q. PLEASE DESCRIBE YOUR EDUCATIONAL AND PROFESSIONAL BACKGROUND.
A. I have a Bachelor of Science degree in Mechanical Engineering from Pennsylvania State University. I have been employed by EPE since 2016.
Q. WHAT ARE YOUR RESPONSIBILITIES IN YOUR CURRENT POSITION?
A. My current responsibilities include oversight of EPE's asset management function, which includes project management, financial analysis and planning, and land management. EPE's System Planning Department reports to me.

## Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE FERC OR BEFORE OTHER REGULATORY AGENCIES ON UTILITY-RELATED MATTERS?

A. No.
Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?
A. The purpose of my testimony in this proceeding is to:
(1) identify EPE's demarcation between transmission and distribution facilities;
(2) describe how EPE plans for new transmission projects; and
(3) identify the transmission projects EPE has planned for 2022.
Q. ARE YOU SPONSORING ANY EXHIBITS WITH YOUR TESTIMONY?
A. Yes. I am sponsoring Exhibit No. EPE-0011 - EPE's Year 2022 Planned Transmission Projects.
Q. WAS YOUR TESTIMONY PREPARED BY YOU OR UNDER YOUR DIRECT SUPERVISION?
A. Yes.

## Q. WHICH OF EPE'S FACILITIES COMPRISE EPE'S TRANSMISSION SYSTEM?

A. EPE's transmission system consists of its transmission lines and related facilities that operate at or above 69 kV . EPE has long used 69 kV as a generally applicable line of demarcation between distribution and transmission on the EPE system.
Q. AS A GENERAL MATTER, IS EPE THE SOLE OWNER OF ITS TRANSMISSION FACILITIES?
A. No. For certain transmission facilities, EPE is one of multiple co-owners, each of which holds an assigned ownership share. For purposes of EPE's plant records and
other purposes, the Company's transmission assets are comprised of EPE's applicable ownership share only.

## Q. HOW DOES EPE IDENTIFY THE NEED FOR AND PLAN NEW TRANSMISSION PROJECTS?

A. EPE's expansions and improvements to its transmission system are driven by a number of factors, including the long-term transmission services subscribed by customers, the transmission system upgrades or additions identified as necessary to provide generator interconnection services, and infrastructure to maintain transmission system reliability and serve load growth.

## Q. HOW DOES RELIABILITY PLANNING AFFECT EPE'S TRANSMISSION PROJECT PLANNING?

A. EPE is subject to operating and planning requirements and criteria at the federal level. FERC reliability requirements are largely driven by the North American Electric Reliability Corporation ("NERC") reliability standards. Regional operating criteria also plays a role. Various regional entities across the nation implement NERC's operating and reliability standards. The NERC regional entity that is in charge of the western United States is the Western Electricity Coordinating Council ("WECC"). NERC reliability standards and WECC criteria affect EPE's transmission planning.

## Q. PLEASE DESCRIBE EPE'S SYSTEM PLANNING DEPARTMENT AND HOW IT HELPS TO IDENTIFY THE NEED FOR TRANSMISSION PROJECTS.

A. EPE's System Planning Department plays a major role in the process of identifying needed transmission infrastructure improvement projects. This department is responsible for assessing the performance and capability of EPE's transmission
assets. Transmission lines, substations, interconnections with neighboring systems, and associated transmission equipment such as transformers, are evaluated by the System Planning Department to determine how they perform under various system conditions. The results of the evaluations are considered in EPE's transmission planning in identifying needed transmission infrastructure improvement projects.

## Q. PLEASE DESCRIBE THE PROCESS FOR THE IDENTIFICATION OF NEW TRANSMISSION PROJECTS.

A. Transmission projects are identified in a 10-year Transmission System Expansion Plan that EPE produces each year. As part of the annual transmission planning process, EPE reviews the prior year's plan and makes modifications, updates and additions to the plan, based upon then-current information.
Q. ARE ALL TRANSMISSION PROJECTS IDENTIFIED AND DEFINED THROUGH THE SYSTEM PLANNING EFFORTS DESCRIBED ABOVE?
A. No. At times, the need for transmission infrastructure is identified during the regular course of EPE's field inspections. EPE patrols the routes of its transmission lines looking for right-of-way changes or obstructions, and conducts a visual inspection of transmission infrastructure. EPE also regularly performs aboveground and sub-surface structural inspections and testing of wood pole transmission structures. Sometimes, this field work reveals the need for transmission facility replacements or additions.

## Q. DOES EPE'S CURRENT 10-YEAR TRANSMISSION PLAN IDENTIFY ANY TRANSMISSION PROJECTS FOR YEAR 2022?

A. Yes. See my Exhibit No. EPE-0011.

## Q. HOW LIKELY IS IT THAT THE PROJECTS IDENTIFIED IN THE TRANSMISSION PLAN FOR CALENDAR YEAR 2022 WILL BE INSERVICE BEFORE YEAR-END 2022?

A. It is likely that many, but not all, of those projects will be in service before yearend 2022. The Apollo-Cox, Jornado-Arroyo and Moongate-Apollo projects are likely to be in service in year 2023.

## Q. ARE ALL OF THE 2022 PROJECTS AND THEIR COSTS SUBJECT TO TRUE-UP?

A. Yes. As Mr. Wolfram explains in his testimony, differences between the project cost projections in the rate filing, and EPE's actual project costs will be subject to true-up in a subsequent annual update filing. EPE's true-up filing will capture differences between the project cost projections and actual project costs (up or down) with interest.

## Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

# UNITED STATES OF AMERICA <br> BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION 

El Pas Electric Company
)
Docket No. ER22--000

## VERIFICATION

Pursuant to 28 U.S.C. $\S 1746$ (2000), I state under penalty of perjury that I am the Bryn T. Davis referred to in the foregoing "Prepared Direct Testimony of Bran T. Davis on Behalf of El Paso Electric Company," that I have read the same and am familiar with the contents thereof, and that the facts set forth therein are true and correct to the best of my knowledge, information, and belief.

Executed this 29th day of October, 2021.


## Transmission Projects in 2022

## PLANNED PROJECTS

YEAR 2022

Project Name: Newman-Chaparral 115 kV Line (Reconductor)
Operating Voltage: $\quad 115 \mathrm{kV}$

Project Number: TL294

In Service Date: March 2022
Peak Modeling Year: 2022

Project Description: The project consists of reconductoring the Newman to Chaparral 115 kV transmission line with conductor that provides a normal capacity rating of 185 MVA and an emergency capacity rating of 246 MVA.

Project Justification: This project has been identified as part of a facilities upgrade required to relieve conditional limitations identified as part of a third-party request. The reconductoring of the line is needed to address overloads on this line during certain $\mathrm{N}-1$ contingencies.

## PLANNED PROJECTS

YEAR 2022

| Project Name: | In-and-Out into Picante 345 kV Substation from Caliente- <br> Amrad 345 kV Line and Associated Line Reactor at <br> Picante |
| :--- | :--- |
| Operating Voltage: | 345 kV |
| Project Number: | TS125 |
| In Service Date: | April 2022 |
| Peak ModelingYear: | 2022 |

Project Description: EPE's Caliente to Amrad 345 kV transmission line runs adjacent to Picante Substation and will be reconfigured to connect to this substation's ring bus. This requires the addition of three 345 kV Gas Circuit Breakers as well as disconnect switches with motor operated devices. A new in-line 345 kV reactor will be installed at Picante Substation of what will become the Amrad-Picante 345 kV line.

Project Justification: EPE's existing Caliente-Amrad 345 kV will be reconfigured to be the Amrad-Picante 345 kV and the Picante-Caliente 345 kV lines. As a result of this re-configuration, two parallel transmission lines from Picante Substation to Caliente Substation will now exist. The project will provide increased reliability within the area.

# IN-AND-OUT INTO PICANTE 345 kV SUBSTATION FROM CALIENTE-AMRAD 345 kV LINE AND ASSOCIATED LINE REACTOR AT PICANTE YEAR 2022 



Existing 345 kV Line
Circuit 1

NOTE: FOR ILLUSTRATION PURPOSES ONLY.
FINAL DESIGN WILL BE COMPLETED
BY TRANSMISSION LINE DESIGN
AND SR ENGINEERING

## PLANNED PROJECTS

YEAR 2022

Project Name: Caliente-MPS 16700115 kV Line (Reconductor)
Operating Voltage: $\quad 115 \mathrm{kV}$

Project Number: TBD

In Service Date: May 2022
Peak Modeling Year: 2022

Project Description: The project consists of reconductoring the Caliente-MPS 16700115 kV line transmission line with conductor that provides a normal capacity rating of 185 MVA and an emergency capacity rating of 246 MVA.

Project Justification: System Planning studies have indicated that this line has the potential to load above its emergency rating under certain planning event contingencies.

## PLANNED PROJECTS

YEAR 2022

Project Name: Diamond Head Capacitor Banks
Operating Voltage: $\quad 115 \mathrm{kV}$

Project Number: TBD

In Service Date: May 2022
Peak Modeling Year: 2022

Project Description: The project consists of two 15.6 MVAR bus shunt capacitor banks connected to the 115 kV bus.

Project Justification: This project has been identified to provide reactive and voltage support in the eastern El Paso area.

## PLANNED PROJECTS

YEAR 2022

Project Name: Talavera Capacitor Banks
Operating Voltage: $\quad 115 \mathrm{kV}$

Project Number: TBD

In Service Date: $\quad$ May 2022
Peak Modeling Year: 2022

Project Description: The project consists of two 15.6 MVAR bus shunt capacitor banks connected to the 115 kV bus.

Project Justification: This project has been identified to provide reactive and voltage support in the Las Cruces area.

## PLANNED PROJECTS

YEAR 2022

Project Name: Apollo-Cox Line (Conversion/Reconductor) 69 kV to 115 kV
Operating Voltage: $\quad 115 \mathrm{kV}$

Project Number: TL194

In Service Date: July 2022
Peak Modeling Year: 2023

Project Description: This project consists of converting from a nominal operating voltage of 69 kV to a nominal operating voltage of 115 kV . It also calls for the reconductor of the Apollo-Cox transmission line with at least a normal capacity rating of 185 MVA and emergency capacity rating of 246 MVA.

Project Justification: The existing Apollo to Cox 69 kV line will be converted to 115 kV and upgraded to mitigate $\mathrm{N}-1$ contingency conditions. As part of this conversion, the removal of the Cox 69 kV substation is planned, and the portion of the line that formerly terminated at the Cox 69 kV bus will now be terminated at the Arroyo 115 kV bus.

## LAS CRUCES LOOP

YEAR (2021-2022)


NOTE: FOR ILLUSTRATION PURPOSES ONLY.
FINAL DESIGN WILL BE COMPLETED
BY TRANSMISSION LINE DESIGN
AND SR ENGINEERING

## PLANNED PROJECTS

YEAR 2022

Project Name: $\quad$ McCombs Substation (New) and Related 115 kV Line Reconfiguration

## Operating Voltage: $\quad 115 \mathrm{kV}$

Project Number: DT420
In Service Date: September 2022
Peak Modeling Year: 2023

Project Description: The new McCombs will be built to serve the load from Shearman and Shearman Temporary substations that will be removed after McCombs Substation is in-service. In addition, there are several existing lines and line segments that will connect to McCombs Substation resulting in an EPE transmission system reconfiguration.

Project Justification: Distribution planning project that results in an EPE transmission system reconfiguration. Shearman Substation is being replaced to improve capacity, address legacy equipment, and location issues impacting access and operation.

## MCCOMBS SUBSTATION (NEW) AND RELATED 115 kV LINE RECONFIGURATION YEAR 2022



## PLANNED PROJECTS

YEAR 2022

Project Name: Jornada-Arroyo 115 kV Line (Reconductor/Rebuild)

## Operating Voltage: $\quad 115 \mathrm{kV}$

Project Number: TL186
In Service Date: October 2022
Peak Modeling Year: 2023
Project Description: This project consists of reconductoring the Arroyo to Jornada 115 kV line to increase the capacity of the line with at least a normal capacity rating of 185 MVA and emergency capacity rating of 246 MVA.

Project Justification: The line experiences an increase in loading under heavy summer conditions. The increase in line rating with at least a normal capacity rating of 185 MVA and emergency capacity rating of 246 MVA will relieve identified overloads.

## PLANNED PROJECTS

YEAR 2022

| Project Name: | Moongate-Apollo 115 kV Line (New) |
| :--- | :--- |
| Operating Voltage: | 115 kV |
| Project Number: | TL241 |
| In Service Date: | December 2022 |

## Peak Modeling Year: <br> 2023

Project Description: This project consists of constructing a new Moongate 115 kV Substation in the Las Cruces New Mexico area, with two transmission lines connecting the Moongate Substation to the Jornada and Apollo (rebuilt from a 69 kV substation) 115 kV substations. The JornadaMoongate 115 kV line will use a conductor that provides at least a normal capacity rating of 185 MVA and an emergency capacity rating of 246 MVA.

Project Justification: Moongate Substation will be constructed to meet load growth and will be part of the planned Las Cruces Loop Project.

# UNITED STATES OF AMERICA <br> BEFORE THE <br> FEDERAL ENERGY REGULATORY COMMISSION 

PREPARED DIRECT TESTIMONY OF
CYNTHIA S. PRIETO
ON BEHALF OF
EL PASO ELECTRIC COMPANY

OCTOBER 29, 2021

# UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION 

El Paso Electric Company )<br>Docket No. ER22--000

## PREPARED DIRECT TESTIMONY OF

 CYNTHIA S. PRIETO
## I. INTRODUCTION

## Q. PLEASE STATE YOUR NAME, POSITION, AND BUSINESS ADDRESS.

A. My name is Cynthia S. Prieto. I am the Vice President and Controller at El Paso Electric Company ("EPE"). My business address is P.O. Box 982, El Paso, Texas 79960.
Q. ON WHOSE BEHALF ARE YOU TESTIFYING?
A. I am testifying on behalf of EPE.
Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE.
A. I earned a Bachelor of Business Administration Degree with a concentration in Accounting from the University of New Mexico in 1985. I was employed by Ernst \& Young in the Audit section from 1985 to 1992 where I was assigned to various clients, including oil and gas companies. I was employed as an Audit Senior Manager by KPMG LLP from 1993 to 1996 where I was assigned to various clients. I accepted a position with EPE in 2006 as a financial accountant, a position I held until I was transferred to the Tax department in 2007. Since that time, I held various positions until I was promoted to my current position in September 2020.

## Q. WHAT ARE YOUR DUTIES IN YOUR CURRENT POSITION?

A. I serve under the general direction of the Chief Financial Officer, and I direct the establishment and maintenance of the Company's accounting principles, practices, and procedures for the maintenance of its fiscal records and the preparation of its financial reports. I also oversee the activities of the Financial and Regulatory Accounting, Revenue and Energy Accounting, Tax, Plant Accounting, and Payroll Departments. Finally, I am responsible for appraising operating results in terms of costs, budgets, operating policies, trends and increased profit opportunities.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE FEDERAL
ENERGY REGULATORY COMMISSION OR BEFORE OTHER
REGULATORY AGENCIES AND COURTS ON UTILITY-RELATED
MATTERS?
A. Yes. I have filed testimony and testified before the New Mexico Public Regulation Commission ("NMPRC") and have filed testimony before the Public Utility Commission of Texas ("PUCT").
Q. WAS YOUR TESTIMONY PREPARED BY YOU OR UNDER YOUR DIRECT SUPERVISION?
A. Yes.

## II. BACKGROUND

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?
A. In this proceeding, EPE is submitting a transmission formula rate ("Formula Rate") and accompanying formula rate protocols. The purpose of my testimony is to:

1) Describe the accounting procedures and practices for EPE and explain how the accounting is consistent with Federal Energy Regulatory Commission ("FERC" or the "Commission") precedent;
2) Describe the accounting procedures and practices for EPE related to administrative and general ("A\&G") expense and taxes other than income taxes, the extent to which such expenses are directly assigned to particular functions, and how the methodology is consistent with the Commission Uniform System of Accounts ("USofA").
3) Describe how the Pensions and Post-Employment Benefits Other than Pensions ("PBOP") expenses are determined, and the actuarial support relied upon by EPE for those expenses; and
4) Support the federal and state income taxes included in this filing and the rate base impacts associated with accumulated deferred income tax balances ("ADIT"), including excess accumulated deferred income taxes ("EDIT") as a result of the Tax Cuts and Jobs Act of 2017 ("TCJA").

## Q. ARE YOU SPONSORING ANY EXHIBITS IN SUPPORT OF YOUR TESTIMONY IN THIS CASE?

A. Yes. These include:

1) Exhibit No. EPE-0013 Actuarial Report for Pension Plan and PBOP as of December 31, 2020;
2) Exhibit No. EPE-0014 Combined State Income Tax Rate Derivation; and
3) Exhibit No. EPE-0015

EDIT Worksheets.

## III. EPE ACCOUNTING PROCEDURES AND SYSTEMS

## Q. ARE EPE'S ACCOUNTING METHODS CONSISTENT WITH THE USofA? <br> A. Yes, they are. EPE's books, accounts and records are kept in compliance with the Commission's USofA.

## IV. ADMINISTRATIVE AND GENERAL EXPENSES

Q. WHAT TYPE OF EXPENSES FALL UNDER A\&G EXPENSES AND HOW ARE THEY RECORDED?
A. A\&G expenses at EPE consist of employee time and expenses devoted to A\&G work, office supplies and expenses, outside services employed, insurance, injuries and damages, employee pension and benefit costs, general regulatory expenses, maintenance of general plant and miscellaneous general expenses. These expenses are recorded on EPE's books and records in accordance with the USofA and in the appropriate accounts designated by the USofA.

## Q. HOW ARE A\&G EXPENSES REFLECTED IN EPE'S PROPOSED TRANSMISSION FORMULA RATE?

A. For purposes of the Formula Rate, A\&G expenses are, for the most part, allocated to transmission (and thus included in the formula rate) using allocation factors. The exception is Commission-related regulatory costs, which are directly assigned to particular jurisdictions. As such, it is appropriate to assign Commission-related regulatory costs directly to the transmission function.

I understand EPE witness Mr. Wolfram utilizes a Wages \& Salaries allocator for all the remaining A\&G expenses except property insurance costs, for which he uses a gross plant allocator to allocate to transmission.

## Q. WHAT ARE TAXES OTHER THAN INCOME TAXES AND HOW ARE THEY RECOVERED IN RATES?

A. Taxes other than income taxes ("Other Taxes") include payroll taxes, property taxes, gross receipts taxes and other taxes (regulatory commission fees, use taxes and compensating taxes). These expenses are recorded on EPE's books and records in accordance with the USofA and in the appropriate accounts designated by the USofA. Payroll taxes are allocated by Mr. Wolfram utilizing a Wages \& Salaries allocator, property taxes are allocated using a Net Plant allocator and other taxes are allocated using a Gross Plant allocator.

## V. PENSIONS AND POST-EMPLOYMENT BENEFITS OTHER THAN PENSIONS

## Q. WHAT ARE PENSION COSTS AND HOW ARE THEY RECOVERED IN RATES?

A. Prepaid and accrued pension costs arise when a utility makes contributions to meet employee pension plan obligations. A prepaid pension expense is when a utility's pension contributions exceed cumulative pension expenses. An accrued pension expense is when a cumulative pension expense exceeds cumulative contributions.

The costs associated with pension plans that are reported on a utility's income statement are referred to as the utility's pension expense or net periodic pension cost. Utilities generally receive recovery of pension costs based on the amount of the pension expense recorded on the books.

## Q. WHAT IS PBOP?

A. PBOP are benefits (other than pensions) that are provided to retired employees. These benefits typically involve health care and life insurance benefits. While the
acronym "OPEB" is also sometimes used instead of PBOP, both terms mean the same thing.

## Q. WHERE CAN PBOP EXPENSES BE FOUND IN EPE'S FORMULA RATE TEMPLATE?

A. EPE shows PBOP expenses on Actual Attachment H, page 3, line 4d.

## Q. HOW DOES EPE PROPOSE TO RECOVER PBOP COSTS IN THE FORMULA RATE?

A. EPE is basing its recovery of PBOP costs as A\&G expense in the Formula Rate based on actual expense incurred. The PBOP amounts are supported by the actuarial report performed by an independent third party, attached to this filing as Exhibit No. EPE-0013. In particular, the amount included in Exhibit No. EPE0008, Actual Attachment H-, page 3, line 4d is the amount of EPE's net periodic benefit cost for the test year, which is found in Section 2.5 - Summary and comparison of benefit cost and cash flows of Exhibit No. EPE-0013 on page 87, line A8.
Q. UNDER THE FORMULA RATE, CAN THE RECOVERABLE PBOP EXPENSE BE MODIFIED AS A RESULT OF THE ANNUAL UPDATE?
A. No. As reflected in the Formula Rate template, page 3, Exhibit No. EPE-0008, Projected Attachment H, the stated PBOP amounts may only be changed pursuant to a separate Federal Power Act section 205 or section 206 filing. This treatment is consistent with Trans-Allegheny Interstate Line Co., 124 FERC II 61,075 (2008).

## VI. ACCUMULATED DEFERRED INCOME TAXES

## Q. WHAT IS ADIT?

A. Deferred income taxes arise when there is a difference between income taxes recovered in a utility's rates and the actual taxes paid by a utility. ADIT is the
cumulative amount of income taxes EPE will either pay to or receive from the Internal Revenue Service ("IRS") or state governmental authorities in the future as a result of tax reporting on prior or current tax returns that is different from EPE's book accounting under generally accepted accounting principles ("GAAP"). The temporary differences and associated deferrals or prepayments of tax will reverse on income tax returns to be filed in the future. ADIT is recorded in after-tax dollars, currently reflected using a $21 \%$ federal income tax rate and a $3.44 \%$ combined state income tax rate, derived as shown in Exhibit No. EPE-0014.

## Q. WHAT KINDS OF ADIT HAS EPE INCLUDED IN THE FORMULA RATE TEMPLATE?

A. EPE has included in the Formula Rate template plant-related ADIT, which is allocated to transmission using a net plant allocator, and pension-related ADIT, which is allocated to transmission using a Wages and Salaries allocator. For purposes of the transmission Formula Rate, all other ADIT is assigned a 0\% allocator.

## Q. HOW DOES ADIT IMPACT THE REVENUE REQUIREMENT?

A. ADIT is reflected as a reduction to rate base.
Q. PLEASE DESCRIBE THE ADIT WORKSHEET IN THE FORMULA RATE TEMPLATE.
A. The A3-2 ADIT-ITC Details worksheet in Exhibit No. EPE-0008 provides additional detail regarding the specific book/tax timing differences that are included in the FERC ADIT accounts 190, 282 and 283. Lines 1, 6 and 12 of that worksheet provide the break-down between plant, pension-related, and other non-transmission ADIT balances in account 190. The gross-up for regulatory assets and liabilities
included in account 190 and related to the EDIT and investment tax credit ("ITC") is removed from this balance on lines 56 and 57 of the worksheet. Lines 65 to 68 of the worksheet include the ADIT liability balances in account 282, and adjustments to remove gross-ups for plant-related regulatory assets and liabilities are included on line 74. Other non-transmission ADIT balances in account 283 are listed on line 86 of the worksheet and the gross-ups for regulatory assets and liabilities included in account 283 are removed on lines 121 and 122. Lastly, accumulated deferred ITC balances in account 255 are included on line 131 of the worksheet.

## Q. HAS ADIT BEEN FUNCTIONALIZED IN THIS FILING?

A. No. EPE does not record ADIT on a functionalized basis.
VII. EXCESS/DEFICIENT ACCUMULATED DEFERRED INCOME TAXES
Q. WHAT IS EDIT?
A. EDIT is excess or deficient accumulated deferred income taxes created as a result of governmental tax rate changes. ADIT is recorded at the federal and state tax rates in effect when temporary differences arise. When tax rates change, the ADIT balance is adjusted to reflect the new tax rates. The change in ADIT is called EDIT and is recorded as a regulatory asset in Account 182.3 for increases in tax rates or as a regulatory liability in Account 254.3 for decreases in tax rates. The EDIT in Accounts 182.3 and 254.3 will be either recovered from customers or provided to customers in the future through the amortization of the regulatory asset or liability, respectively.

## Q. WHAT IS THE TCJA AND HOW DOES IT AFFECT EPE'S INCOME TAX CALCULATIONS IN THE FORMULA RATE TEMPLATE?

A. The TCJA reduced the federal corporate tax rate from a maximum of $35 \%$ under the graduated rate structure, to a flat $21 \%$ rate, effective January 1, 2018. The reduction in the federal corporate tax rate resulted in EDIT balances for EPE and many other transmission owners. At the time TCJA was enacted, EPE had stated rates and therefore was subject to a Commission order to show cause why its stated transmission rates should not be revised to reflect the reduced federal income tax rate. EPE demonstrated that since its transmission rates were adopted in 1998, EPE had experienced a significant increase in its transmission plant, such that even after reflecting the tax reduction resulting from the TCJA, a rate reduction with respect to taxes was not justified. The Commission found EPE had shown cause, determined no revisions were needed to its stated transmission rates, and terminated the show cause proceeding by order issued November 15, 2018, in Docket No. EL18-95-000. Now that EPE is filing a formula transmission rate, it needs to demonstrate compliance with Public Utility Transmission Rate Changes to Address Accumulated Deferred Income Taxes, Order No. 864, 169 FERC II 61,139 (2019) ("ADIT Rule"), order on reh'g \& clarification, Order No. 864-A, 171 FERC If 61,033 (2020).

## Q. DOES EPE'S PROPOSED TRANSMISSION FORMULA COMPLY WITH THE ADIT RULE?

A. Yes. Consistent with the ADIT Rule, EPE has included in its transmission Formula Rate the following components: (1) a mechanism to decrease or increase the income tax allowance by any amortized excess or deficient ADIT, respectively; (2) a
mechanism to deduct any excess ADIT from, or add any deficient ADIT to, its rate base; and (3) permanent worksheets that will annually track information related to excess or deficient ADIT. Excess ADIT resulting from the TCJA is being returned to customers. These line items are also explained further in Exhibit No. EPE-0008, in Note W on page 5 of Actual Attachment H.
Q. HOW DOES THE INCOME TAX CALCULATION IN THE EPE FORMULA RATE ACCOUNT FOR THE EXCESS DEFERRED TAXES ARISING FROM THE TCJA AND THE RETURN TO CUSTOMERS OF THOSE EXCESS DEFERRED TAXES, AS REQUIRED BY THE ADIT RULE?
A. To address the amortization of the EDIT related to the TCJA and EDIT related to other rate changes on an on-going basis, the Formula Rate template reflects the EDIT adjustment to the income tax allowance on Exhibit No. EPE-0008, line 24 under Income Taxes on Projected Attachment H, page 3. The EDIT calculations on Exhibit No. EPE-0008, Worksheets P6-1 and P6-2 support the EDIT adjustment on line 24. These calculations are further supported by Exhibit No. EPE-0015. By adding line 24 to the Formula Rate template and the related worksheets, EPE has adopted the general approach that the Commission accepted in 2018 to resolve this same issue for International Transmission Company (d/b/a ITC Transmission), Michigan Electric Transmission Company, LLC, and ITC Midwest LLC in Docket No. ER16-208-000, and for Ameren Services Company in Docket No. ER17-2323000. The approach is also consistent with the principles set forth by the Commission in the ADIT Rule.

## Q. DOES EDIT IMPACT RATE BASE?

A. Yes. Decreases in income tax rates require reducing the net temporary income tax savings, recorded as ADIT. This results in a regulatory liability, which is subtracted from rate base. ${ }^{1}$ Until the net EDIT regulatory liability is refunded to customers via amortization reducing deferred income tax expense, EDIT will be reflected as a reduction to rate base. The adjustment to rate base for EDIT is included in Exhibit No. EPE-0008, Projected Attachment H, on page 2, line 13 and is supported by Worksheets P6-1 and P6-2 and Exhibit No. EPE-0015.

## Q. PLEASE DESCRIBE THE EDIT WORKSHEETS A8-1, A8-2, P6-1 AND P62 IN EXHIBIT NO. EPE-0008.

A. Exhibit No. EPE-0008, Worksheets A8-1 and A8-2 provide additional detail on the breakdown of EDIT included in Accounts 182.3 and 254.3 for the test year ended December 31, 2020. The shaded highlighting in the Formula Rate template is intended to accommodate expansion or contraction, as necessary, of the specific excess deferred tax items recorded in Accounts 182.3 and 254 as reported in the FERC Form 1 in future years, including any items recorded due to subsequent changes in federal or state income tax law. Line 62 in Worksheet A8-2 is a summary of the EDIT presented in FERC Form 1. Lines 1-61 include the details of EDIT that are contained in each account. EDIT balances are divided into two sections - non-plant and plant EDIT. Both sections contain columns to adjust out balances not considered in ratemaking or balances not related to transmission in order to develop the transmission-related ADIT balances. Finally, in lines 1-61,

[^18]columns (g)-(1), the transmission-related EDIT is prorated. Plant-related (protected) EDIT is prorated using the Net Plant allocator and non-plant (unprotected) related EDIT is prorated based on the type of EDIT. EDIT related to pensions and benefits is prorated using the Wages \& Salaries allocator and other EDIT is not allocated to transmission rates, similar to ADIT balances. EDIT related to state income tax changes is primarily related to plant EDIT and is prorated using the Net Plant allocator. Worksheets P6-1 and P6-2 provide the EDIT balances included in the formula rate and the amortization of EDIT included in the income tax calculation in the formula rate requested.

## Q. PLEASE DESCRIBE THE DIFFERENT KINDS OF EDIT.

A. EDIT includes both protected and unprotected EDIT. Protected EDIT is for plantrelated balances, primarily resulting from accelerated depreciation. Unprotected EDIT is not capital-related and includes both deferred tax assets and liabilities.

## Q. PLEASE DESCRIBE HOW PROTECTED EDIT IS AMORTIZED.

A. "Protected" EDIT refers to the reduction in depreciation-related ADIT that is subject to the normalization requirements of the Internal Revenue Code ("IRC") and the TCJA. This is EDIT associated with particular property accounts. The EDIT normalization rules restrict the timing of the reduction of income tax expense related to amortization of depreciation-related EDIT and limit the amount of EDIT that may reduce income tax expense. In general, the amortization of protected EDIT may reduce income tax expense over the remaining book lives of the underlying depreciable plant assets as the book/tax differences reverse. This methodology is referred to as the Average Rate Assumption Method ("ARAM").

## Q. PLEASE FURTHER DESCRIBE THE ARAM.

A. Under the ARAM, the amortization of EDIT begins when the amount of tax depreciation taken with respect to each asset (generally determined with respect to all assets with the same vintage and asset class) is less than the amount of the book depreciation with respect to the asset on an annual basis. If a utility does not have books and records to support a full ARAM computation, it may rely on an alternative method of amortization known as the Reverse South Georgia Method ("RSGM"). Under the RSGM, the EDIT is amortized ratably over the average estimated book life of the underlying assets without any restriction regarding when the amortization may begin. EPE has employed the ARAM for amortizing protected EDIT.

## Q. PLEASE ADDRESS UNPROTECTED EDIT.

A. "Unprotected" EDIT refers to the reduction in ADIT that is not subject to the normalization requirements. The TCJA does not specify what method a public utility must use for unprotected EDIT. Amortization periods are evaluated by the Commission on a case-by-case basis. Pension and state book/tax differences are examples of unprotected EDIT. EPE has utilized the RSGM to calculate the amortization period for the unprotected EDIT. The average life of the unprotected EDIT that resulted from the TCJA as calculated by the RSGM was approximately four years.

## Q. HAS EPE AMORTIZED PROTECTED EDIT FROM THE TCJA?

A. No. EPE has not amortized EDIT from the TCJA as of December 31, 2020.

## Q. HOW DOES EPE PROPOSE TO AMORTIZE THE EDIT FROM THE TCJA IN THIS FILING?

A. EPE is proposing that the EDIT from the TCJA that would have been amortized between January 1, 2018 and December 31, 2021 be included as an additional EDIT amortization for a period of four years. A four-year period was chosen because the protected EDIT was not amortized for four years (2018-2021) and the average life of the unprotected EDIT is four years. EPE is proposing to combine the amortization of the protected EDIT as calculated under ARAM for 2018 to 2021 with the amortization of the entire balance of unprotected EDIT. The combined EDIT amortization for both protected and unprotected EDIT from the TCJA for 2018 to 2021 is $\$ 2,693,425$ and is calculated at Exhibit No. EPE-0015 on Worksheet WP4 Excess TCJA 2018-2021. When this amount is allocated to the four-year recovery period, the additional amortization is $\$ 673,356$.

## Q. DOES EPE HAVE EDIT RELATED TO STATE INCOME TAXES?

A. Yes. In the last transmission rate case filed by EPE in 1996, EPE utilized the flowthrough method for the calculation of state income taxes. However, on January 1, 2016, EPE changed its method of calculating state income taxes to the normalization method. EPE recorded a regulatory asset of $\$ 18,930,305$ on January 1, 2016, for the state-related ADIT that had not previously been collected from customers.

Additionally, after January 1, 2016, the state income tax rates in Arizona and New Mexico decreased, which resulted in excess state ADIT which was recorded as a regulatory liability of $\$ 3,163,736$. The excess state ADIT is recorded on separate lines in Exhibit No. EPE-0008, Worksheet P6-2 in line 2 Excess state

ADIT is primarily related to plant ADIT and was therefore assigned to transmission using the Net Plant allocator. The amortization of the excess state ADIT was calculated using the RSGM because the detail needed to calculate the amortization using ARAM is not available at the state level. Under the RSGM, the average life of the state EDIT was calculated as 15 years and therefore, the amortization period proposed for the state EDIT is 15 years. The use of the RSGM and the 15-year life were approved for use on the excess state ADIT by the PUCT and the NMPRC. The calculation of the amortization of the state EDIT is included in Exhibit No. EPE-0015 on Worksheet WP 2-EDSIT.

## Q. DOES EPE HAVE ANY OTHER PERMANENT DIFFERENCES IN INCOME TAXES THAT REQUIRE AN ADJUSTMENT TO INCOME TAX EXPENSE?

A. Yes. EPE has permanent differences that are required to adjust current tax expense. Permanent differences include non-deductible meals and entertainment expenses, Allowance for Funds Used During Construction, and certain employee benefits. Because permanent differences are treated differently in EPE's GAAP books than in EPE's income tax returns and these differences will not reverse over time, no deferred taxes are recorded for permanent differences. Therefore, a direct adjustment is recorded to income tax expense to reflect the permanent difference.

## Q. AS A PART OF THIS FILING, IS EPE SEEKING TO HAVE THE COMMISSION FIND THAT ITS TRANSMISSION FORMULA RATE COMPLIES WITH THE ADIT RULE?

A. No. EPE will submit a separate compliance filing shortly after the filing of this transmission formula rate case demonstrating that EPE's Formula Rate complies with the ADIT Rule.

## Q. WHAT IS THE ITC AND HOW DOES EPE TREAT IT FOR RATEMAKING PURPOSES?

A. The ITC, which has gone in and out of existence over the years, lowers income tax expense permanently if certain qualifying investments are made. It is intended as an incentive for companies to invest in qualifying assets. To make sure that its objectives are met for regulated utilities, the IRC prescribes methods of sharing the benefit between the customers and the shareholders.

The ITC is a direct reduction to income taxes payable in a given year. Unlike accelerated depreciation and other book/tax differences that will eventually reverse over time, the ITC is akin to a rebate. The ITC provides an incentive for capital investment by granting a tax credit (a direct dollar-for-dollar offset to current taxes payable) based on a percentage applied to investment in qualifying tangible personal property (most generation, transmission, and distribution assets).

Most utilities, like EPE, account for the ITC by reducing current income taxes payable in the year the credit is earned by the full amount of the credit, while recognizing an equal and offsetting amount of deferred income tax expense. The amount of the credit is then amortized to reduce income tax expense over the book life of the property giving rise to the ITC. This is referred to as "Method 2."

In 1972, for ratemaking purposes, the IRS required utilities to elect how they intended to share the ITC between customers and shareholders. EPE elected to share the ITC using Method 2, as described in the preceding paragraph, by including the annual amortization of the credit amount as a reduction to income tax
expense. Reduced income tax expense benefits customers when it is included in rates.

## Q. DOES ACCUMULATED DEFERRED ITC IN ACCOUNT 255 IMPACT RATE BASE?

A. No. Under Method 2, ITC is recorded as a reduction to income tax expense and not a reduction to rate base. The ITC is detailed in Exhibit No. EPE-0008, Worksheet A3-2-ADIT-ITC Details. The resulting income tax expense reduction is reflected in line 25b of Actual Attachment H. However, because all EPE's ITC is related to production, the amount allocated to transmission is zero.
IX. CONCLUSION
Q. DOES THIS CONCLUDE YOUR TESTIMONY?
A. Yes.

# UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION 

El Paso Electric Company
)
Docket No. ER22--000

## VERIFICATION

Pursuant to 28 U.S.C. § 1746 (2000), I state under penalty of perjury that I am the Cynthia S. Prieto referred to in the foregoing "Prepared Direct Testimony of Cynthia S. Prieto on Behalf of El Paso Electric Company," that I have read the same and am familiar with the contents thereof, and that the facts set forth therein are true and correct to the best of my knowledge, information, and belief.

Executed this 29th day of October, 2021.


# WillisTowers Watson |.IIIII 

El Paso Electric Company
Retirement Income Plan

## Actuarial Valuation Report

## Employer Contributions for Plan Year <br> Beginning January 1, 2020 <br> Benefit Cost for Fiscal Year Beginning <br> January 1, 2020 under US GAAP

September 30, 2020

Exhibit No. EPE-0013
Page 2 of 105

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## Purposes of valuation

El Paso Electric Company (the Company) retained Willis Towers Watson US LLC ("Willis Towers Watson"), to perform an actuarial valuation of the Retirement Income Plan for Employees of El Paso Electric Company for the purpose of determining the following:

1. The minimum required contribution in accordance with ERISA and the Internal Revenue Code (IRC) for the plan year beginning January 1, 2020.
2. The estimated maximum tax-deductible contribution for the tax year in which the 2020 plan year ends in accordance with ERISA as allowed by the IRC. The maximum tax-deductible contribution should be finalized in consultation with the Company's tax advisor.
3. An assessment of ERISA $\S 4010$ reporting requirements for the plan for 2020.
4. Determination of the Funding Target Attainment Percentage (FTAP) under IRC $\S 430(\mathrm{~d})(2)$, as reported in the Annual Funding Notice required under ERISA §101(f).
5. The value of benefit obligations as of January 1, 2020 and El Paso Electric Company‘s pension cost for fiscal year ending December 31, 2020 in accordance with FASB Accounting Standards Codification Topic 715 (ASC 715-30).
6. As requested by El Paso Electric Company, a "specific certification" of the Adjusted Funding Target Attainment Percentage (AFTAP) for the Retirement Income Plan for Employees of El Paso Electric Company under IRC §436 for the plan year beginning January 1, 2020. Please see Section 4 for additional information. Note that the AFTAP certification included herein may be superseded by a subsequent AFTAP certification for the Retirement Income Plan for Employees of El Paso Electric Company for the plan year beginning January 1, 2020.

## Limitations

This valuation has been conducted for the purposes described above and may not be suitable for any other purpose. In particular, please note the following:

1. This report does not determine the plan's liquidity shortfall requirements (if any) under IRC $\S 430(j)(4)$. If applicable, we will determine such requirements separately as requested by the Company.
2. This report does not present liabilities on a plan termination basis, for which a separate extensive analysis would be required. No funded status measure included in this report is intended to assess, and none may be appropriate for assessing, the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations, as all such measures differ in some way from plan termination obligations. For example, measures shown in this report may reflect smoothed assets or interest rates, rather than current values, in accordance with funding and
accounting rules. In addition, funded status measures shown in this report do not reflect the current costs of settling the plan obligations by offering immediate lump sum payments to participants and/or purchasing annuity contracts for the remaining participants (e.g., insurer profit, insurer pricing of contingent benefits and/or provision for anti-selection in the choice of a lump sum vs. an annuity).
3. The cost method for the minimum required contribution is established under IRC $\S 430$ and may not in all circumstances produce adequate assets to pay benefits under all optional forms of payment available under the plan when benefit payments are due.
4. The comparison of the plan's funding target to its actuarial value of assets (the funding shortfall (surplus) shown in Section 1) is used in determining required contributions for the coming year, and a contribution made on the valuation date equal to the shortfall would be considered to "fully fund" the plan for benefits accrued as of the valuation date under the funding rules, and thus is useful for assessing the need for and amount of future contributions. However, the funding shortfall (surplus) cannot be relied upon to determine either the need for or the amount of future contributions. The funding shortfall (surplus) is based on the interest rates elected to be used for funding purposes, which may be smoothed rates not reflecting current market conditions and will in any event change over time. It is also based on the actuarial value of assets, so if an asset smoothing method is used, it would be different than if based on market value of assets. In addition, asset gains and losses, demographic experience different from assumed, and future benefit accruals (if any) will all affect the need for and amount of future contributions.
5. There may be certain events that occurred since the valuation date that are not reflected in this valuation. See Subsequent Events (under the "Basis for valuation" portion of Section 1 below) for more information.
6. This valuation reflects our understanding of the relevant provisions of the Pension Protection Act of 2006 (PPA); the Worker, Retiree and Employer Recovery Act of 2008 (WRERA); the Preservation of Access to Care for Medicare Beneficiaries and Pension Relief Act of 2010 (PRA); the Moving Ahead for Progress in the 21 ${ }^{\text {st }}$ Century Act (MAP-21); the Highway and Transportation Funding Act of 2014 (HATFA); and the Bipartisan Budget Act of 2015. The IRS has yet to issue final guidance with respect to certain aspects of these laws. It is possible that future guidance may conflict with our understanding of these laws based on currently available guidance and could therefore affect results shown in this report.
7. This report does not provide information for plan accounting and financial reporting under ASC 960.

## Section 1: Summary of results

## Summary of valuation results

| Plan Year Beginning | 01/01/2020 | 01/01/2019 ${ }^{1}$ |
| :---: | :---: | :---: |
| Funding |  |  |
| Market value of plan assets with discounted receivable contributions | 334,318,551 | 279,967,233 |
| Actuarial value of plan assets | 316,157,560 | 302,164,872 |
| Funding balances | 32,768,713 | 24,489,067 |
| Funding target | 280,463,565 | 268,950,352 |
| Target normal cost ${ }^{2}$ | 9,030,381 | 8,194,905 |
| Funding shortfall (surplus) | $(2,925,282)$ | $(8,725,453)$ |
| Funding target attainment percentage (FTAP) | 101.04\% | 103.24\% |
| Minimum required contribution |  |  |
| Prior to application of funding balances | 6,105,099 | 0 |
| Net of available funding balances | 0 | 0 |
| Effective interest rate | 5.38\% | 5.54\% |
| U.S. GAAP Accounting (ASC 715) as of Measurement Date | 01/01/2020 | 01/01/2019 |
| Projected benefit obligation (PBO) | 394,749,268 | 335,931,648 |
| Fair value of plan assets, excluding receivable contributions | 327,152,316 | 272,803,260 |
| Funded status | $(67,596,952)$ | $(63,128,388)$ |
| Pension cost (excluding effects of settlements, curtailments and termination benefits) for fiscal year | 4,591,228 | 3,004,987 |
| Benefit cost/(income) due to special events | 0 | 0 |
| Total benefit cost/(income) | 4,591,228 | 3,004,987 |
| Equivalent Single Discount Rate for Benefit Obligations | 3.39\% | 4.42\% |
| Equivalent Single Discount Rate for Service Cost | 3.60\% | 4.50\% |
| Equivalent Single Discount Rate for Interest Cost | 2.99\% | 4.12\% |
| Participants as of Census Date | 01/01/2020 ${ }^{3}$ | 01/01/2019 |
| Active employees | 1,126 | 1,090 |
| Participants with deferred benefits | 341 | 344 |
| Participants receiving benefits | 803 | 771 |
| Total | 2,270 | 2,205 |

[^19]
# Minimum required contribution and funding policy 

| All monetary amounts shown in US Dollars |  |  |
| :--- | ---: | ---: |
| Plan Year Beginning | $\mathbf{0 1 / 0 1 / 2 0 2 0}$ | $\mathbf{0 1 / 0 1 / 2 0 1 9}$ |
| Minimum Required Contribution (MRC) | $6,105,099$ | 0 |
| Prior to application of funding balances | 0 | 0 |
| Net of available funding balances | $\$ 7,300,00$ <br> (budgeted) | $\$ 7,300,000$ |
| Sponsor's Funding Policy Contribution |  |  |

The plan sponsor's funding policy is to make the minimum required contribution with consideration for amounts included in customer rates. At its discretion, the Company may determine from time to time whether to make additional contributions. We understand the sponsor may deviate from this policy based on cash, tax or other considerations.

The minimum required contribution includes a contribution to cover the benefits expected to accrue in the coming year (if any) plus any expenses expected to be paid from the trust in the coming year (target normal cost), as well as a 7-year amortization (with a somewhat longer amortization period for shortfall amortization bases established in any year for which funding relief was elected) of any funding shortfall (amortization installments) (See Section 2.4 for a break-down of the minimum required contribution into target normal cost and amortization installments, and see Section 2.5 for a schedule of amortization installments for future years.) Thus, assuming that all actuarial assumptions are realized and do not change and the plan sponsor contributes the minimum required contribution each year (target normal cost plus amortization installments), the plan would generally be expected to be fully funded in 7 years, and the minimum required contribution would be expected to drop to target normal cost. During the 7 year period, there will be some variability in minimum required contributions due to amortization installments from prior years dropping out as the 7-year amortization period ends (and for deferred asset gains or losses becoming reflected in assets if an asset smoothing method is used for the actuarial value of assets). In reality, gains and losses will occur, and the plan sponsor may fail to contribute the minimum required contribution (or may contribute more than the minimum required contribution in accordance with the funding policy described above), which may cause the plan to take more or less than 7 years to become fully funded. Note that being fully funded under the funding rules is not the same as being fully funded on a plan termination basis, as different assumptions apply (e.g., the cost of annuity contracts or lump sums to participants) on plan termination.

Target normal cost for individual participants accruing benefits will grow from year to year as participants age (and as their salaries increase, if benefit accruals are pay related), but the changes in total target normal cost will depend on the numbers of participants earning benefits and their ages. Because the number and ages of active participants covered by the plan are not expected to change significantly from year to year, target normal cost is expected to remain level. Of course, changes in discount rates and other assumptions in future years will also influence the pattern of future required contributions.

The minimum required contribution for the 2020 plan year must be satisfied by September 15, 2021. This requirement may be satisfied through contributions and/or an election to apply the available funding balances. No quarterly installments are required. The minimum required contribution is determined assuming it is paid as of the valuation date for the plan year. Contributions made on a date other than the valuation date must be adjusted for interest at the plan's effective interest rate.

A schedule reflecting budgeted employer contributions to satisfy the 2020 minimum required contribution (MRC) is shown below (subject to change).

| All monetary amounts shown in US Dollars |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Date | Funding Balance Applied | Current Plan Year Contributions | Discounted Value of Contributions as of Valuation Date | Sum of Funding Balance Elections and Discounted Contributions |
| January 3, 2021 | 0 | 811,112 | 769,478 | 769,478 |
| February 3, 2021 | 0 | 811,111 | 766,124 | 766,124 |
| March 3, 2021 | 0 | 811,111 | 762,786 | 762,786 |
| April 3, 2021 | 0 | 811,111 | 759,462 | 759,462 |
| May 3, 2021 | 0 | 811,111 | 756,153 | 756,153 |
| June 3, 2021 | 0 | 811,111 | 752,858 | 752,858 |
| July 3, 2021 | 0 | 811,111 | 749,578 | 749,578 |
| August 3, 2021 | 0 | 811,111 | 746,311 | 746,311 |
| September 3, 2021 | 0 | 811,111 | 743,059 | 743,059 |
| Total |  |  |  | 6,805,809 |

Because the plan does not have a funding shortfall, no quarterly contributions will be required for the 2021 plan year based on this year's valuation results.

## Change in minimum funding requirement and funding shortfall (surplus)

The minimum funding requirement increased from $\$ 0$ for the 2019 plan year to $\$ 6,105,099$ for the 2020 plan year, and the funding shortfall (surplus) increased from $\$(8,725,453)$ on January 1, 2019 to $\$(2,925,282)$ on January 1, 2020.

Significant reasons for these changes include the following:

- The return on the actuarial value of assets since the prior valuation was greater than expected, which reduced the minimum funding requirement and the funding shortfall.
- The plan's effective interest rate declined 16 basis points compared to the prior year, which increased the minimum funding requirement and the funding shortfall.
- The valuation reflects the updated static mortality tables and updated IRC §417(e) mortality tables provided by IRS for 2020 plan years, which reduced the minimum funding requirement and the funding shortfall.


## Funding ratios

The Pension Protection Act of 2006 (PPA) defines several Funding Ratios. All of these ratios are based on a ratio of plan assets to plan liabilities, but the assets and liabilities are defined differently for different purposes. Depending on the purpose, the assets may be market value or, if different, a smoothed actuarial value of assets, and may be reduced by the prefunding balance or all funding balances. The liabilities may be based on the funding target, funding target disregarding at-risk assumptions, or the funding target calculated using at-risk assumptions (see the At-Risk status section below), and may or may not reflect stabilized interest rates.

Following are the key funding ratios and their implications for the 2020 or 2021 plan years. See Appendix D for details on how each ratio is calculated.

## January 1, 2019 Funding ratios



## Benefit limitations

The Adjusted Funding Target Attainment Percentage (AFTAP) for the plan year beginning January 1, 2020 is $112.72 \%$. This AFTAP may be changed by subsequent events.

Under the PPA, a plan may become subject to various benefit limitations if its AFTAP falls below certain thresholds.

If the AFTAP is below 60\% (100\%, calculated ignoring stabilized interest rates, if the plan sponsor is in bankruptcy), plans are prohibited from paying lump sums or other accelerated forms of distribution (such as Social Security level payment options). If the AFTAP is at least $60 \%$ but less than $80 \%$, the amounts that can be paid are limited. In addition, lump sums to the 25 highest paid employees may be restricted if a plan's AFTAP is below $110 \%$. These limitations do not apply to mandatory lump sum cash-outs of $\$ 5,000$ or less. In addition, plans that were completely frozen before September 2005 are exempt from the restrictions on lump sums and other accelerated forms of distribution.

If the AFTAP is below $60 \%$, benefit accruals must cease, amendments to improve benefits cannot take effect, and plant shutdown benefits and other Unpredictable Contingent Event Benefits (UCEBs) cannot be paid without being fully paid for. In addition, if the AFTAP would be below $80 \%$ reflecting a proposed amendment, the plan amendment cannot take effect unless actions are taken to increase plan assets.

To avoid these benefit limitations, a plan sponsor may take a variety of steps, including reducing the funding balances, contributing additional amounts to the plan for the prior plan year, contributing special "designated IRC $\S 436$ contributions" for the current plan year, or providing security outside the plan. Not all of these approaches are available for all of the restrictions discussed above. For example, restrictions on accelerated distributions cannot be avoided by making designated IRC §436 contributions.

As requested by El Paso Electric Company in your letter dated September 15, 2020, this report is intended to constitute a "specific certification" of the AFTAP, effective as of September 30, 2020, for the plan year beginning January 1, 2020 for the purpose of determining benefit restrictions under IRC $\S 436$ for the Retirement Income Plan for Employees of El Paso Electric Company. This AFTAP certification is based on the data, methods, assumptions, plan provisions, annuity purchase information, and other information provided in this report. Please see the Appendices for additional information. Note that the AFTAP certification provided herein may be superseded by a subsequent AFTAP certification for the plan year beginning January 1, 2020. Please see Section 4 for a discussion of the implications of this certified AFTAP.

## PBGC reporting requirements

Certain financial and actuarial information (i.e., a "4010 filing") must be provided to the PBGC if the PBGC Funding Target Attainment Percentage (PBGC FTAP) is less than $80 \%$ for any plan in the contributing sponsor's controlled group. However, this reporting requirement may be waived for controlled groups with no more than $\$ 15$ million in aggregate funding shortfall (PBGC 4010 FS), or with fewer than 500 participants in all defined benefit plans. Note that interest rate stabilization does not apply for purposes of determining the PBGC FTAP or the PBGC 4010 FS.

The 2020 PBGC FTAP is $85.81 \%$. In addition, we understand that there are no other pension plans within the Company's controlled group. As a result, no 4010 filing is expected to be required for 2020 as a result of the plans' funded status. However, the only plan we have considered in this analysis is the Retirement Income Plan; if there are other plans within the controlled group, a filing may be required.

## At-Risk status for determining minimum required contributions

The plan is not in at-risk status, as defined in the PPA, for the 2020 plan year, because the plan's FTAP for the 2019 plan year was at least $80 \%$, and/or the plan's FTAP measured using "at-risk assumptions" was at least $70 \%$.

The plan will not be in at-risk status, as defined in the PPA, for the 2021 plan year, because the plan's FTAP for the 2020 plan year is at least $80 \%$, and/or the plan's FTAP measured using "at-risk assumptions" is at least $70 \%$.

When a plan is in at-risk status as defined in the PPA:

The plan is subject to potentially higher minimum contribution requirements. The funding target and target normal cost for purposes of determining the minimum required contribution must be measured reflecting certain mandated assumptions ("at-risk assumptions"). Specifically, participants eligible to retire within the next 11 years must be assumed to retire immediately when first eligible (but not before the end of the current year, except in accordance with the regular valuation assumptions), and all participants must be assumed to elect the most valuable form of payment available when they begin receiving benefits. In addition, plans that have been at-risk in past years may also be required to increase the funding target and target normal cost for prescribed assumed expenses. The net effect of these assumptions and expense adjustments in most cases is to increase required contributions and PBGC variable premiums.

The plan sponsor must indicate in the annual funding notice for the plan that the plan is at-risk and disclose additional at-risk funding targets.

Immediate taxation of non-qualified pension or deferred compensation for certain employees may occur if the plan sponsor is a public company. This may result when non-qualified pension or deferred compensation for such employees is funded during a period when a plan sponsored by the plan sponsor or another member of the plan sponsor's controlled group is in at-risk status.

## Pension cost and funded position

The cost of the pension plan is determined in accordance with ASC 715. The Fiscal 2020 pension cost for the plan is $\$ 4,591,228$.

Under ASC 715, the funded position (fair value of plan assets less the projected benefit obligation, or "PBO") of each pension plan at the plan sponsor's fiscal year-end (measurement date) is required to be reported as an asset (for overfunded plans) or a liability (for underfunded plans). The PBO is the actuarial present value of benefits attributed to service rendered prior to the measurement date, taking into consideration expected future pay increases for pay-related plans. The plan's overfunded/(underfunded) PBO as of January 1, 2020 was $\$(67,596,952)$, based on the fair value of plan assets of $\$ 327,152,316$ and the PBO of $\$ 394,749,268$.

Fiscal year-end financial reporting information and disclosures are prepared before detailed participant data and full valuation results are available. Therefore, the funded position at December 31, 2019 was derived from a roll forward of the January 1, 2019 valuation results, adjusted for the year-end discount rate, changes in other key assumptions and asset values, as well as significant changes in plan provisions and participant population. The fiscal year-end December 31, 2020 financial reporting information will be developed based on the results of the January 1, 2020 valuation, projected to the end of 2020 and similarly adjusted for the year-end discount rate and asset values, as well as significant changes in plan provisions and participant population.

## Change in pension cost and funded position

The pension cost increased from $\$ 3,004,987$ in fiscal 2019 to $\$ 4,591,228$ in fiscal 2020 and the funded position declined from $\$(63,128,388)$ to $\$(67,596,952)$, as set forth below:

Significant reasons for these changes include the following:

- The actual return on the fair value of plan assets since the prior measurement date was greater than expected, which improved the funded position.
- Contributions to the plan during the prior year improved the funded status and therefore reduced the net periodic cost.
- The single equivalent discount rate used to measure PBO declined 103 basis points compared to the prior year and the single equivalent discount rate used to measure interest cost declined 113 basis points, which resulted in a net increase in the pension cost and caused the funded position to deteriorate.


## Basis for valuation

Appendix A summarizes the assumptions and methods used in the valuation. Appendix B summarizes the principal provisions of the plan being valued. Both of these appendices include a summary of any changes since the prior valuation. Unless otherwise described below under Subsequent Events, assumptions were selected based on information known as of the measurement date.

## Changes in assumptions

- For funding purposes, the segment interest rates used to calculate the funding target and target normal cost were updated from an applicable month of January 2019 to January 2020.
- For funding purposes, the assumed plan-related expenses added to the target normal cost were changed from $\$ 469,681$ for 2019 to $\$ 868,426$ for 2020.
- For funding purposes, the mortality table used to calculate the funding target and target normal cost was updated to include one additional year of projected mortality improvement, as required by IRC $\S 430$.
- For accounting purposes, the single equivalent discount rate used to measure PBO decreased from 4.42 to $3.39 \%$.
- For accounting purposes, the mortality assumption was updated from the RP-2014 Total Data Set Mortality Tables, with projection from 2006 to 2014 using Scale MP-2014 improvement removed, then projected generationally using Scale MP-2018 to the Pri-2012 Collar-Adjusted Mortality tables with separate base tables used for actives and retirees and the retiree base table used for contingent survivors and projected generationally using Scale MP-2019.


## Changes in methods

Change in enrolled actuary and change in actuarial consulting firm.

## Changes in estimation techniques

The valuation software used for the plan was changed as part of the actuarial transition to Willis Towers Watson.
For accounting purposes, El Paso Electric Company adopted the Willis Towers Watson RATE:Link 40:90 yield curve model for determining discount rates beginning January 1, 2020.

## Changes in benefits valued

None.

## Subsequent events

The results provided in this report reflect data and assumptions appropriate for the purpose of the measurement. Effects of COVID-19 on the financial markets, regulations, and experience are uncertain and still evolving. The results in this report make no allowances for the effects of COVID-
19. There may be significant effects on plan experience and/or assumptions, both demographic and economic, used for future measurements.

## Additional information

None.

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## Actuarial certification

This valuation has been conducted in accordance with generally accepted actuarial principles and practices. However, please note the information discussed below regarding this valuation.

## Reliances

In preparing the results presented in this report, we have relied upon information regarding plan provisions, participants, plan assets and sponsor elections provided by El Paso Electric Company and other persons or organizations designated by El Paso Electric Company. See the Sources of Data and Other Information section in Appendix A for further information. In addition, the results in this report are dependent on contributions reported for the prior plan year and maintenance of funding balance elections after the valuation date.

We have reviewed this information for overall reasonableness and consistency, but have neither audited nor independently verified this information. Based on discussions with and concurrence by the plan sponsor, assumptions or estimates may have been made if data were not available. We are not aware of any errors or omissions in the data that would have a significant effect on the results of our calculations.

We have relied on all the information provided as complete and accurate. The results presented in this report are directly dependent upon the accuracy and completeness of the underlying data and information. Any material inaccuracy in the data, assets, plan provisions or information regarding contributions or funding balance elections provided to us may have produced results that are not suitable for the purposes of this report and such inaccuracies, as corrected by El Paso Electric Company, may produce materially different results that could require that a revised report be issued.

## Assumptions and methods under ERISA and the Internal Revenue Code for funding purposes

The plan sponsor selected, as prescribed by regulation, key assumptions and funding methods (including the mortality assumption, asset valuation method and the choice among prescribed interest rates) employed in the development of the contribution amounts and communicated them to us in the letter dated September 15, 2020.

To the extent not prescribed by ERISA, the Internal Revenue Code and regulatory guidance from the Treasury and the IRS, or selected by the sponsor, the actuarial assumptions and methods employed in the development of the contribution amounts have been selected by Willis Towers Watson, with the concurrence of the plan sponsor. It is beyond the scope of this actuarial valuation to analyze the reasonableness and appropriateness of prescribed methods and assumptions, or to analyze other sponsor elections from among the alternatives available for prescribed methods and assumptions.

Other than prescribed assumptions, ERISA and the Internal Revenue Code require the use of assumptions each of which is "reasonable (taking into account the experience of the plan and reasonable expectations), and which, in combination, offer the actuary's best estimate of anticipated experience under the plan." The results shown in this report have been developed based on actuarial assumptions that, to the extent evaluated or selected by Willis Towers Watson, we consider to be reasonable. Other actuarial assumptions could also be considered to be reasonable. Thus, reasonable results differing from those presented in this report could have been developed by selecting different reasonable assumptions.

A summary of the assumptions, methods and sources of data and other information used is provided in Appendix A. Note that any subsequent changes in methods or assumptions for the 2020 plan year will change the results shown in this report and could result in plan qualification issues under IRC $\S 436$ if the application of benefit restrictions is affected by the change.

## Assumptions and methods under U.S. GAAP

The methods employed in the development of the pension cost and other disclosures have been selected by the plan sponsor, with the concurrence of Willis Towers Watson. The actuarial assumptions were also selected by the plan sponsor as required by U.S. GAAP, but without using the work of Willis Towers Watson. Evaluation of the actuarial assumptions was outside the scope of Willis Towers Watson's assignment and would have required substantial additional work that we were not engaged to perform. U.S. GAAP requires that each significant assumption "individually represent the best estimate of a particular future event."

The results shown in this report have been developed based on actuarial assumptions that, to the extent evaluated by Willis Towers Watson, we consider to be reasonable. Other actuarial assumptions could also be considered to be reasonable. Thus, reasonable results differing from those presented in this report could have been developed by selecting different reasonable assumptions.

A summary of the assumptions, methods and sources of data and other information used is provided in Appendix A. Note that any subsequent changes in methods or assumptions for the January 1, 2020 measurement date will change the results shown in this report.

Accumulated other comprehensive (income)/loss amounts shown in the report are shown prior to adjustment for tax effects. Any tax effects in AOCI should be determined by El Paso Electric Company in consultation with its tax advisors and independent accountants.

## Nature of actuarial calculations

The results shown in this report are estimates based on data that may be imperfect and on assumptions about future events that cannot be predicted with any certainty. The effects of certain plan provisions may be approximated, or determined to be insignificant and therefore not valued. Reasonable efforts were made in preparing this valuation to confirm that items that are significant in the context of the actuarial liabilities or costs are treated appropriately, and are not excluded or included inappropriately. Any rounding (or lack thereof) used for displaying numbers in this report is not intended to imply a degree of precision, which is not a characteristic of actuarial calculations.

If overall future plan experience produces higher benefit payments or lower investment returns than assumed, the relative level of plan costs or contribution requirements reported in this valuation will likely increase in future valuations (and vice versa). Future actuarial measurements may differ significantly from the current measurements presented in this report due to many factors, including: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for the measurements (such as the end of an amortization period) or additional contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. It is beyond the scope of this valuation to analyze the potential range of future pension contributions, but we can do so upon request. See Appendix C for disclosures required under ASOP No. 51 of significant risks related to the plan.

See Basis for Valuation in Section 1 above for a discussion of any material events that have occurred after the valuation date that are not reflected in this valuation.

## Limitations on use

This report is provided subject to the terms set out herein and in our engagement letter dated March 9, 2020 and any accompanying or referenced terms and conditions.

The information contained in this report was prepared for the internal use of El Paso Electric Company and its auditors and any organization that provides benefit administration services for the plan, in connection with our actuarial valuation of the pension plan as described in Purposes of Valuation above. It is not intended for and may not be used for other purposes, and we accept no responsibility or liability in this regard. El Paso Electric Company may distribute this actuarial valuation report to the appropriate authorities who have the legal right to require El Paso Electric Company to provide them this report, in which case El Paso Electric Company will use best efforts to notify Willis Towers Watson in advance of this distribution. Further distribution to, or use by, other parties of all or part of this report is expressly prohibited without Willis Towers Watson's prior written consent. Willis Towers Watson accepts no responsibility for any consequences arising from any other party relying on this report or any advice relating to its contents.

## Professional qualifications

The undersigned consulting actuaries are members of the Society of Actuaries and meet the "Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States" relating to pension plans. Our objectivity is not impaired by any relationship between El Paso Electric Company and our employer, Willis Towers Watson US LLC.

## Cat Kenagy

Cat Kenagy, FSA, EA
Senior Director, Retirement 20-07490
September 30, 2020


David Anderson, ASA, EA
Director, Retirement 20-07493
September 30, 2020


Lead Associate, Retirement 20-08703
September 30, 2020
Willis Towers Watson US LLC

September 30, 2020

## Section 2: Actuarial exhibits

### 2.1 Summary of liabilities for minimum funding purposes

All monetary amounts shown in US Dollars
Plan Year Beginning

## 01/01/2020

01/01/2019 ${ }^{1}$
A Funding Target (Disregarding At-risk Assumptions)
1 Funding target

| a Active employees - non-vested benefits $^{5}$ | $8,100,868$ | $15,974,026$ |
| :--- | ---: | ---: |
| b Active employees - vested benefits ${ }^{5}$ | $111,961,336$ | $97,813,859$ |
| c Participants with deferred benefits | $15,733,050$ | $15,454,597$ |
| d Participants receiving benefits | $144,668,311$ | $139,707,870$ |
| e Total funding target | $280,463,565$ | $268,950,352$ |
| Target normal cost | $9,030,381$ | $8,194,905$ |

B Funding Target (At-risk Assumptions)
1 Funding target N/A N/A
2 Target normal cost N/A N/A

C Funding Target

| 1 Number of consecutive years at-risk | 0 | 0 |
| :--- | ---: | ---: |
| 2 Funding target |  |  |
| a Active employees - non-vested benefits ${ }^{5}$ | $8,100,868$ | $15,974,026$ |
| b Active employees - vested benefits ${ }^{2}$ | $111,961,336$ | $97,813,859$ |
| c Participants with deferred benefits | $15,733,050$ | $15,454,597$ |
| d Participants receiving benefits | $144,668,311$ | $139,707,870$ |
| e Total funding target | $280,463,565$ | $268,950,352$ |
| Target normal cost | $9,030,381$ | $8,194,905$ |

[^20]
### 2.2 Change in plan assets during plan year

All monetary amounts shown in US Dollars
Plan Year Beginning January 1, 2019
A Reconciliation of Market Value of Plan Assets
1 Market value of plan assets at January 1, 2019 (including discounted 279,967,233 contributions receivable)
2 Discounted contributions receivable at January 1, 2019 7,163,973
3 Market value of plan assets at January 1, 2019 (excluding contributions 272,803,260 receivable)
4 Employer contributions
a For prior plan year 7,300,000
b For current plan year
c IRC $\S 436$ contributions for current plan year
0

5 | d Total | $7,300,000$ |
| :--- | ---: |
| Employee contributions | 0 |

6 Benefit payments
$(15,955,118)$
7 Administrative expenses paid by plan
(1,364,016)
8 Transfers from/(to) other plans
9 Investment return
a Interest and dividends 0
b Investment expenses 0
c Realized gains/(losses) 64,368,190

| d Change in unrealized appreciation |  |
| :--- | ---: |
| e Total | $64,368,190$ |
| Market value of plan assets at January 1, 2020 (excluding contributions | $327,152,316$ | receivable)

11 Discounted contributions receivable at January 1, 2020
7,166,235
12 Market value of plan assets at January 1, 2020 (including discounted 334,318,551
contributions receivable)
B Rate of Return on Invested Plan Assets (i.e., for crediting unused funding balances)

1 Weighted invested plan assets 268,951,782
2 Rate of return 23.93\%
C Discounted Receivable Contributions at January 1, 2020

| Date | Prior Year Contributions | Discounted Value at <br> January 1, 2020 |
| :--- | ---: | ---: |
| January 21, 2020 | 811,112 | 808,686 |
| February 4, 2020 | 811,111 | 807,112 |
| March 3, 2020 | 811,111 | 803,614 |
| April 2, 2020 | 811,111 | 800,131 |
| May 4, 2020 | 811,111 | 796,305 |
| June 2, 2020 | 811,111 | 792,972 |
| August 4, 2020 | 811,111 | 785,643 |
| September 2, 2020 | 811,111 | 782,355 |
| July 2, 2020 | 811,111 | 789,417 |
| Total |  | $7,166,235$ |

### 2.3 Development of actuarial value of plan assets

All monetary amounts shown in US Dollars
Plan Year Beginning
January 1, 2020
A Preliminary Actuarial Value of Plan Assets before Corridor as of January 1, 2020
1 Market value of plan assets as of January 1, 2020 327,152,316
2 Discounted receivable employer contributions 7,166,235
3 Deferred investment gains/(losses) for prior periods

| Period Beginning | Gain/(Loss) | Percent Deferred | Deferred Amount |
| :--- | ---: | ---: | ---: |
| 10/01/2019 | $5,947,569$ | $88.889 \%$ | $5,286,728$ |
| $07 / 01 / 2019$ | $7,608,464$ | $77.778 \%$ | $5,917,694$ |
| $04 / 01 / 2019$ | $10,255,310$ | $66.667 \%$ | $6,836,873$ |
| $01 / 01 / 2019$ | $23,091,379$ | $55.556 \%$ | $12,828,544$ |
| $10 / 01 / 2018$ | $(24,497,202)$ | $44.444 \%$ | $(10,887,645)$ |
| $07 / 01 / 2018$ | 947,921 | $33.333 \%$ | 315,974 |
| $04 / 01 / 2018$ | $(4,894,404)$ | $22.222 \%$ | $(1,087,645)$ |
| $01 / 01 / 2018$ | $(9,445,790)$ | $11.111 \%$ | $(1,049,532)$ |
| Total |  |  | $18,160,990$ |

4 Preliminary actuarial value of plan assets before application of corridor
$316,157,560$

B Lower Bound of Corridor 300,886,696

C Upper Bound of Corridor 367,750,406

D Actuarial Value of Plan Assets after Corridor as of January 1, 2020
$316,157,560$

E Rate of Return used for Calculation
6.29\% for 2018
6.11\% for 2019

### 2.4 Calculation of minimum required contribution

All monetary amounts shown in US Dollars
Reconciliation of Funding Balances as of January 1, 2020

## Funding <br> Standard <br> Carryover <br> Balance <br> Prefunding <br> Balance

A Determination of Funding Balances
1 Funding balance as of January 1, $2019 \quad 0 \quad$ 24,489,067 24,489,067
2 Amount used to offset prior year minimum required contribution ${ }^{1} \quad 0$
$\begin{array}{lll}0 & 0 & 0\end{array}$
3 Adjustment for investment experience
$0 \quad 5,860,234 \quad 5,860,234$
4 Amount of additional prefunding balance created by election

N/A 2,419,412
$2,419,412$
5 Amount of funding balance reduction for current year by election or deemed election
$\begin{array}{lll}0 & 0 & 0\end{array}$
6 Funding balance as of January 1, 2020
$0 \quad 32,768,713 \quad 32,768,713$

Plan Year Beginning
January 1, 2020
B Calculation of Minimum Required Contribution
1 Target normal cost 9,030,381

2 Funding surplus
3 Net shortfall amortization installment (see section 2.5)

| 4 | Waiver amortization installment | 0 |
| :--- | ---: | ---: |
| 5 | Minimum required contribution | $3,105,099$ |
| 6 | Funding balance available | $32,768,713$ |

7 Remaining cash requirement (assuming sponsor elects full use of the available funding balances)

The minimum required contribution is determined as of the plan's valuation date. Any payment made on a date other than the valuation date must be adjusted for interest using the plan's effective interest rate of $5.38 \%$.

Additional details regarding the calculation of the minimum required contribution may be obtained from the Form 5500 Schedule SB forms and attachments.

[^21]
### 2.5 Schedule of minimum funding amortization bases

| All monetary amounts shown in US Dollars |  |  |  |  |  |  |  |
| :--- | :---: | ---: | ---: | ---: | :---: | :---: | :---: |
| Remaining |  |  |  |  |  |  |  |
| Type of Base | Date Established | Amortization <br> Period (Years) | Outstanding <br> Balance | Amortization <br> Payment |  |  |  |
| Total |  |  |  |  |  |  |  |

### 2.6 Calculation of estimated maximum deductible contribution

| Based on Plan Year | 2020 |
| :---: | :---: |
| A Basic Maximum |  |
| 1 Funding target | 330,215,292 |
| 2 Target normal cost | 11,035,364 |
| 3 Actuarial value of plan assets | 316,157,560 |
| $450 \%$ of funding target | 165,107,646 |
| 5 Additional funding target for future compensation or benefit increases | 28,427,436 |
| 6 Basic maximum deductible contribution | 218,628,178 |
| B At-risk Maximum ${ }^{1}$ |  |
| 1 Funding target (at-risk assumptions) | N/A |
| 2 Target normal cost (at-risk assumptions) | N/A |
| 3 Actuarial value of plan assets | N/A |
| 4 At-risk maximum deductible contribution | N/A |
| C Minimum Required Contribution | 6,105,099 |
| D Estimated Maximum Deductible Contribution | 218,628,178 |

The estimated maximum deductible contribution applies to the tax year in which the plan year ends, and is based on our understanding of IRC $\S 404(a)(1)$. No regulatory guidance has been provided by the IRS/Treasury. Allocations of costs to inventory have not been considered, and amounts deductible for state income tax purposes may differ. Deductibility can be influenced by timing of contributions, differences between fiscal year and plan year, and differences (if any) between the years to which prior contributions were assigned for minimum funding purposes and the years in which they were deducted. Our results have not been adjusted for non-deducted contributions included in the valuation assets, nor is it clear that such adjustment is appropriate post-PPA. We recommend the plan sponsor review with tax counsel the tax-deductibility of all contributions as Willis Towers Watson does not provide legal or tax advice.

In addition, the actuarial value of plan assets shown is the same as used for determining the minimum required contribution. Thus contributions receivable (if any) are discounted at stabilized rates, and the limit on the expected return on assets reflected in asset smoothing (if applicable) is the 3rd segment rate, reflecting stabilized rates as expressly allowed by IRS Notice 2012-61 when the stabilized 3rd segment rate is higher than the rate ignoring the corridors.

This limit has been determined without regard to the special rule of IRC §404(o)(2)(B) providing a potentially higher maximum deduction based on at-risk assumptions, which is available for plans that are not at risk.

[^22]
### 2.7 Calculation of PBGC variable rate premium



[^23]
### 2.8 Pension obligations and funded position under U.S. GAAP (ASC 715)

All monetary amounts shown in US Dollars

| Measurement Date | 01/01/2020 | 01/01/2019 ${ }^{1}$ |
| :---: | :---: | :---: |
| A Obligations |  |  |
| 1 Accumulated Benefit Obligation (ABO) |  |  |
| a. Active participants | 163,032,582 | Not available |
| b. Participants with deferred benefits | 22,164,766 | Not available |
| c. Participants receiving benefits | 175,830,377 | Not available |
| d. Total | 361,027,725 | Not available |
| 2 Future salary increases | 33,721,543 | Not available |
| 3 Projected benefit obligation (PBO) | 394,749,268 | 335,931,648 |
| B Plan Assets |  |  |
| 1 Fair value [FV], excluding receivable contributions | 327,152,316 | 272,803,260 |
| 2 Investment losses/(gains) not yet in market-related value | $(15,430,932)$ | 19,507,166 |
| 3 Market-related value | 311,721,384 | 292,310,426 |
| C Funded Position |  |  |
| 1 Overfunded/(underfunded) PBO | $(67,596,952)$ | $(63,128,388)$ |
| 2 PBO funded percentage | 82.9\% | 81.2\% |

D Amounts in Accumulated Other Comprehensive Income

| 1 | Prior service cost/(credit) | $(13,475,378)$ | $(16,942,456)$ |
| :--- | :--- | :---: | :---: |
| 2 | Net actuarial loss/(gain) | $118,263,564$ | $112,967,065$ |
| 3 | Total | $104,788,186$ | $96,024,609$ |

## E Key Assumptions

1a Equivalent single discount rate for benefit obligations

| $3.39 \%$ | $4.42 \%$ |
| :--- | :--- |
| $3.60 \%$ | $4.50 \%$ |
| $2.99 \%$ | $4.12 \%$ |
| $4.50 \%$ | $4.50 \%$ |

F Census Date
01/01/2020
01/01/2019

The results above may differ from the amounts reported in El Paso Electric Company's December 31, 2019 financial statements because year-end financial reporting is prepared before the corresponding valuation results are available.

[^24]
### 2.9 Changes in plan benefit obligations and assets

All monetary amounts shown in US Dollars
Period Beginning
01/01/2020
01/01/2019 ${ }^{1}$
A Change in Projected Benefit Obligation (PBO)
1 PBO at beginning of prior fiscal year

| $335,931,648$ | $362,689,644$ |
| ---: | ---: |
| $9,490,539$ | $10,607,747$ |
| $13,451,291$ | $12,013,062$ |
| $53,194,924$ | $(30,176,034)$ |
| 0 | 0 |

5 Plan participants' contributions
$(15,955,118)$
$(17,680,828)$
6 Benefits paid from plan assets
$(1,364,016)$
$(1,521,943)$ service cost
$(1,364,016)$
0
8 Plan change
9 Acquisitions/divestitures 0
10 Curtailments
0
11 Settlements
0

| 12 | Special/contractual termination benefits | 0 | 0 |
| :--- | ---: | ---: | ---: |
| 13 | PBO at beginning of current fiscal year | $394,749,268$ | $335,931,648$ |

## B Change in Plan Assets

1 Fair value of plan assets at beginning of prior fiscal year
2 Actual return on plan assets
272,803,260
304,388,588

3 Employer contributions
64,368,190
$(19,682,557)$
4 Plan participants' contributions
7,300,000
7,300,000
5 Benefits paid
(15,955,118)
$(17,680,828)$
6 Administrative expenses paid
(1,364,016)
$(1,521,943)$
7 Acquisitions/divestitures
0
0
8 Settlements
0
0
9 Fair value of plan assets at beginning of current fiscal year
$327,152,316$
272,803,260

[^25]
### 2.10 Pension cost under U.S. GAAP (ASC 715)

| Fiscal Year Ending | 12/31/2020 | 12/31/2019 ${ }^{1}$ |
| :---: | :---: | :---: |
| A Pension Cost |  |  |
| 1 Service cost ${ }^{2}$ | 11,628,833 | 9,490,539 |
| 2 Interest cost | 11,517,230 | 13,451,291 |
| 3 Expected return on plan assets | $(22,977,561)$ | $(21,492,142)$ |
| 4 Net prior service cost/(credit) amortization | $(3,467,078)$ | $(3,467,078)$ |
| 5 Net loss/(gain) amortization/recognition | 7,889,804 | 5,022,377 |
| 6 Net periodic pension cost/(income) | 4,591,228 | 3,004,987 |
| 7 Curtailments | 0 | 0 |
| 8 Settlements | 0 | 0 |
| 9 Special/contractual termination benefits | 0 | 0 |
| 10 Total pension cost | 4,591,228 | 3,004,987 |
| B Key Assumptions (See Appendix A for interim measurements, if any) |  |  |
| 1a Equivalent single discount rate for benefit obligations | 3.39\% | 4.42\% |
| 1b Equivalent single discount rate for service cost | 3.60\% | 4.50\% |
| 1c Equivalent single discount rate for interest cost | 2.99\% | 4.12\% |
| 2 Expected long-term rate of return on plan assets | 7.50\% | 7.50\% |
| 3 Rate of compensation increase | 4.50\% | 4.50\% |
| 4 Cash balance (or similar formula) interest crediting rate | 3.80\% | 3.80\% |
| C Census Date | 01/01/2020 | 01/01/2019 |

[^26]$\qquad$ -000
Exhibit No. EPE-0013
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### 2.11 Development of market-related value of plan assets under U.S. GAAP (ASC 715)

| All monetary amounts shown in US Dollars |  |  |  |
| :---: | :---: | :---: | :---: |
| Fiscal Year Ending |  |  | 12/31/2020 |
| Market-Related Value of Plan Assets as of January 1, 2020 |  |  |  |
| 1 Fair value of plan assets as of January | , 2020 |  | 327,152,316 |
| 2 Deferred investment (gains)/losses for | rior periods |  |  |
| Fiscal Year | (Gain)/Loss | Percent Deferred | Deferred Amount |
| a 12/31/2019 | 44,188,641 | 66.67\% | 29,459,241 |
| b 12/31/2018 | $(42,084,086)$ | 33.33\% | $(14,028,309)$ |
| c $12 / 31 / 2017$ | 25,646,673 | 0.00\% | N/A |
| d Total |  |  | $(15,430,932)$ |
| 3 Market-Related Value of Plan Assets |  |  | 311,721,384 |

### 2.12 Summary of net balances

All monetary amounts shown in US Dollars

| Measurement Date Established | Original Amount | Net Amount at prior financial year end | Remaining Amortization Period | Amortization Amount | Effect of Curtailments | Other Events |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 02/28/2014 | $(33,700,000)$ | $(13,475,378)$ | 3.88666 | $(3,467,078)$ | 0 | 0 |
| Total |  | $(13,475,378)$ |  | $(3,467,078)$ | 0 | 0 |

All monetary amounts shown in US Dollars
B Reconciliation of Net Loss/(Gain) (see Appendix A for a description of amortization method)
Net Amount at

$01 / 01 / 2020^{1}$$\quad$| Amortization |
| ---: |
| Amount in |
| 2020 |$\quad$| Effect of |
| ---: |
| Curtailments |$\quad$| Effect of |
| ---: |
| Settlements |$\quad$| Other Events |
| ---: |
| (Identify) |

[^27]$\qquad$ $-000$

## Section 3: Participant data

### 3.1 Summary of participant data

| All monetary amounts shown in US Dollars |  |  |  |
| :---: | :---: | :---: | :---: |
| Census Date |  | 01/01/2020 ${ }^{1}$ | 01/01/2019 |
| A Active Employees |  |  |  |
|  | 1 Number | 1,126 | 1,090 |
|  | 2 Average plan compensation | 87,036 | 87,865 |
|  | 3 Average age | 46.02 | 46.34 |
|  | 4 Average credited service | 14.20 | 15.07 |
| B | Participants with Deferred Benefits |  |  |
|  | 1 Number | 341 | 344 |
|  | 2 Deferred annuity benefit |  |  |
|  | Total | 2,022,062 | 2,156,522 |
|  | Average | 6,379 | 6,496 |
|  | 3 Deferred cash balance accounts |  |  |
|  | Total | 652,859 | 452,090 |
|  | Average | 10,363 | 9,226 |
|  | 4 Average age | 53.43 | 54.02 |
| C | Participants Receiving Benefits |  |  |
|  | 1 Number | 803 | 771 |
|  | 2 Total annual pension | 13,001,200 | 12,568,191 |
|  | 3 Average annual pension | 16,191 | 16,301 |
|  | 4 Average age | 71.35 | 70.06 |
|  | 5 Distribution at January 1,2020 |  |  |
|  | Age | Number | Annual Pension |
|  | Under 55 | 6 | 49,057 |
|  | 55-59 | 31 | 518,258 |
|  | 60-64 | 118 | 2,157,360 |
|  | 65-69 | 239 | 3,961,240 |
|  | 70-74 | 187 | 3,179,930 |
|  | 75-79 | 99 | 1,460,951 |
|  | 80-84 | 68 | 964,016 |
|  | 85 and over | 55 | 710,388 |

[^28]
### 3.2 Participant reconciliation

|  | Active | Deferred <br> Inactive | Currently <br> Receiving <br> Benefits | Total |
| :--- | :---: | ---: | ---: | ---: |
| 1 Included in January 1, 2019 valuation | 1,090 | 344 | 771 | 2,205 |
| 2 Change due to: | 0 | 0 | 0 | 0 |
| a New hire and rehire | 89 | $(1)$ | 0 | 88 |
| b Non-vested termination | 0 | 0 | 0 | 0 |
| c Vested termination | $(19)$ | 19 | 0 | 0 |
| d Retirement | $(23)$ | $(18)$ | 41 | 0 |
| e Disability | 0 | 0 | 0 | 0 |
| f Death without beneficiary | 0 | 0 | $(15)$ | $(15)$ |
| g Death with beneficiary | 0 | 0 | $(6)$ | $(6)$ |
| h Cashout | $(11)$ | $(1)$ | 0 | $(12)$ |
| i Miscellaneous | 0 | 0 | 1 | 1 |
| j QDROs | 0 | 0 | 3 | 3 |
| k Beneficiary Commencement | 0 | $(2)$ | 8 | 6 |
| l Net change | 36 | $(3)$ | 32 | 65 |
| 3 Included in January 1, 2020 valuation 1 | 1,126 | 341 | 803 | 2,270 |
|  |  |  |  |  |

[^29]$\qquad$

### 3.3 Age and service distribution of participating employees

## Number distributed by attained age and attained years of credited service

| Attained Age | Attained Years of Credited Service ${ }^{1}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | 2 | 3 | 4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40 \& Over | Total |
| Under 25 | 16 | 0 | 6 | 14 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 41 |
| 25-29 | 22 | 1 | 15 | 17 | 11 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 88 |
| 30-34 | 14 | 8 | 10 | 25 | 10 | 58 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 132 |
| 35-39 | 17 | 2 | 8 | 9 | 8 | 61 | 32 | 5 | 0 | 0 | 0 | 0 | 0 | 142 |
| 40-44 | 3 | 1 | 4 | 6 | 7 | 44 | 28 | 16 | 8 | 0 | 0 | 0 | 0 | 117 |
| 45-49 | 9 | 1 | 2 | 7 | 4 | 39 | 33 | 31 | 10 | 16 | 0 | 0 | 0 | 152 |
| 50-54 | 3 | 1 | 2 | 3 | 3 | 24 | 24 | 17 | 11 | 23 | 17 | 2 | 0 | 130 |
| 55-59 | 3 | 0 | 0 | 3 | 3 | 12 | 13 | 12 | 11 | 36 | 35 | 15 | 7 | 150 |
| 60-64 | 1 | 0 | 2 | 0 | 0 | 8 | 7 | 6 | 7 | 28 | 18 | 15 | 29 | 121 |
| 65-69 | 0 | 0 | 0 | 0 | 0 | 1 | 6 | 3 | 0 | 1 | 3 | 8 | 25 | 47 |
| 70 \& over | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 1 | 0 | 0 | 0 | 2 | 6 |
| Total | 88 | 14 | 49 | 84 | 47 | 274 | 150 | 92 | 48 | 104 | 73 | 40 | 63 | 1,126 |
| Average: | Age | 46 | Number of Participants: |  |  | Fully vested |  | 951 |  | Males |  | 812 |  |  |
|  | Service | 14 |  |  |  | Partially vested |  |  | 0 | Females |  | 314 |  |  |
| Census data as of January 1, 2020 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

[^30]This page is intentionally blank

## Section 4: Adjusted Funding Target Attainment Percentage (AFTAP)


#### Abstract

El Paso Electric Company retained Towers Watson Delaware Inc., a subsidiary of Willis Towers Watson PLC ("Willis Towers Watson") to perform a valuation of its pension plan for the purpose of measuring the plan's AFTAP for the plan year beginning January 1, 2020 in accordance with ERISA and the Internal Revenue Code. This valuation has been conducted in accordance with generally accepted actuarial principles and practices.


The enrolled actuaries making this certification are members of the Society of Actuaries and other professional actuarial organizations and meet their "Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States."

We hereby certify that the plan's AFTAP for the plan year beginning January 1,2020 is $112.72 \%$. This percentage is based on the assumptions, participant data, and plan provisions we relied upon to prepare the results shown in this report, reflects the valuation limitations discussed in this report and is also based on the following additional information:

## Annuity Purchases

- El Paso Electric Company's representation is that there were no annuity purchases made for nonhighly compensated employees by the plan in the plan years beginning in 2018 and 2019.


## Funding Balances

- Our understanding is that El Paso Electric Company has not elected to reduce the plan's funding balance as of the first day of the 2020 plan year.
- Our understanding is that the plan is not subject to a deemed election to reduce the funding balances in 2020.
- Our understanding is that El Paso Electric Company has not elected to apply any of the plan's funding balances to the 2020 minimum required contribution.
- Our understanding is that El Paso Electric Company has elected to increase the prefunding balance as of the first day of the 2020 plan year as follows:

| Date | Amount |
| :--- | ---: |
| January 1, 2020 | $\$ 2,419,412$ |
| Total | $\$ 2,419,412$ |

## Contributions

- Our understanding is that El Paso Electric Company has made the following employer contributions after December 31, 2019 and before September 30, 2020, for the 2019 plan year, as follows:

| Date | Amount |
| :--- | ---: |
| January 21, 2020 | 811,112 |
| February 4, 2020 | 811,111 |
| March 3, 2020 | 811,111 |
| April 2, 2020 | 811,111 |
| May 4, 2020 | 811,111 |
| June 2, 2020 | 811,111 |
| July 2, 2020 | 811,111 |
| August 4, 2020 | 811,111 |
| September 2, 2020 | 811,111 |
| Total | $\$ 7,300,000$ |

## Subsequent Events

- There were no plan amendments that took effect in the current plan year that were taken into account for the current plan year's AFTAP certification.
- There were no unpredictable contingent event benefits (UCEBs) that took effect in the current plan year that were taken into account for the current plan year's AFTAP certification.
- There were no previously suspended accruals restored during the current plan year that were taken into account for the current plan year's AFTAP certification.


## Elections

- Our understanding of sponsor elections required under the Pension Protection Act of 2006 (PPA) , with respect to interest rates, Actuarial Value of Plan Assets and other methods and/or assumptions, as confirmed in the Sponsor's letter dated September 15, 2020.

In making this certification, we relied on asset, contribution, funding balance election, and annuity purchase information provided by the Company, including dates and amounts of contributions made to the plan through the date of this certification, dates and amounts of funding balance elections by the Company through the date of this certification, and amounts of annuity purchases in the past two years, as shown above. We have reviewed this information for overall reasonableness and consistency but, consistent with the scope of our engagement, have neither audited nor independently verified this information. We do not certify to the accuracy or completeness of asset, contribution, funding balance election and annuity purchase information, and this certification relies on and is contingent on the accuracy and completeness of this information.

The development of the AFTAP is shown below:

| Plan Year Beginning | 01/01/2020 |
| :---: | :---: |
| Actuarial value of plan assets as of January 1, $2020{ }^{1}$ | 316,157,560 |
| Funding standard carryover balance at January 1, $2020^{2}$ | 0 |
| Prefunding balance at January 1, $2020{ }^{20}$ | 32,768,713 |
| Funding target (disregarding at-risk assumptions) | 280,463,565 |
| AVA/funding target (disregarding at-risk assumptions) | 112.72\% |
| Plan assets for AFTAP calculation ${ }^{3}$ | 316,157,560 |
| Annuity purchases for NHCEs during 2018 and 2019 | 0 |
| Specific AFTAP |  |
| Adjusted Funding Target Attainment Percentage (AFTAP) | 112.72\% |

## Immediate Implications of AFTAP Certification

We believe that the certified AFTAP of $112.72 \%$ for the 2020 plan year has the following implications for benefit limitations described in IRC §436. El Paso Electric Company should review these conclusions with ERISA counsel:

Benefit accruals called for under the plan without regard to IRC $\S 436$ must continue.

Accelerated distributions called for under the plan without regard to IRC $\S 436$ must continue in full.

Amendments that increase benefits must be evaluated at the time they would take effect to determine if they are permissible.

Plant shutdown and other UCEBs must be evaluated at the time they would take effect to determine if they are permissible. However, El Paso Electric Company has advised us that the plan does not provide any benefits that would constitute UCEBs.

[^31]
## Implications of 2020 AFTAP for Presumptions in Next Plan Year

Because the AFTAP for the 2020 plan year is at least $90 \%$, the presumed AFTAP for 2021 will remain equal to the 2020 certified AFTAP, and changes in benefit restrictions will not occur, before the 2021 AFTAP is certified, provided that the 2021 AFTAP is certified before the first day of the tenth month of the plan year.

Note, however, that adoption of plan amendments and/or payment of UCEBs may change this result.


Cat Kenagy, FSA, EA
Senior Director, Retirement 20-07490
September 30, 2020


David Anderson, ASA, EA Director, Retirement 20-07493
September 30, 2020


Elizabeth Welborne, ASA, EA
Lead Associate, Retirement 20-08703
September 30, 2020

Willis Towers Watson US LLC

## Appendix A: Statement of actuarial assumptions, methods and data sources

Assumptions and methods for contribution purposes

| Economic Assumptions |  |  |
| :--- | :--- | :--- |
| Interest rate basis |  |  |
| - Applicable month | January |  |
| - Interest rate basis | Segment Rates from Valuation <br> Date |  |
| Interest rates | Reflecting <br> Stabilization | Not Reflecting <br> Stabilization |
| - First segment rate | $3.64 \%$ | $2.77 \%$ |
| - Second segment rate | $5.21 \%$ | $3.83 \%$ |
| - Third segment rate | $5.94 \%$ | $4.28 \%$ |
| - Effective interest rate | $5.38 \%$ | $3.97 \%$ |

Annual rates of increase

- Compensation: 4.50\%
- Statutory limits on compensation $2.40 \%$

Plan-related expenses \$868,426
Cash balance interest crediting rate $3.80 \%$

Rates not reflecting stabilization are used to determine PBGC variable rate premiums if the alternative method is used, and are used to determine the PBGC FTAP and the PBGC 4010 FS.

Demographic Assumptions

Inclusion date

New or rehired employees

The valuation date coincident with or next following the date on which the employee becomes a participant.

## Mortality

It was assumed there will be no new or rehired employees.

- Healthy
- Disabled


## Termination

Separate rates for non-annuitants (based on RP-2014 "Employees" table without collar or amount adjustments, adjusted backward to 2006 with MP-2014, and then projected forward with a static projection as specified in the regulations under $\S 1.430(\mathrm{~h})(3)$-1 using Scale MP-2018 and annuitants (based on RP-2014 "Healthy Annuitants" table without collar or amount adjustments, adjusted backward to 2006 with MP2014, and then projected forward with a static projection as specified in the regulations under $\S 1.430(\mathrm{~h})(3)$-1 using Scale MP-2018.

Separate rates for non-annuitants (based on RP-2014 "Employees" table without collar or amount adjustments, adjusted backward to 2006 with MP-2014, and then projected forward with a static projection as specified in the regulations under $\S 1.430(\mathrm{~h})(3)$-1 using Scale MP-2018 and annuitants (based on RP-2014 "Healthy Annuitants" table without collar or amount adjustments, adjusted backward to 2006 with MP2014, and then projected forward with a static projection as specified in the regulations under $\S 1.430(\mathrm{~h})(3)$-1 using Scale MP-2018.

Rates varying by age and gender
Representative Termination Rates

|  | Percentage leaving during the year |  |
| :---: | :---: | :---: |
| Attained Age | Males | Females |
| 20 | $5.00 \%$ | $6.00 \%$ |
| 25 | $5.00 \%$ | $6.00 \%$ |
| 30 | $5.00 \%$ | $6.00 \%$ |
| 35 | $4.00 \%$ | $6.00 \%$ |
| 40 | $3.00 \%$ | $6.00 \%$ |
| 45 | $2.00 \%$ | $4.00 \%$ |
| 50 | $1.00 \%$ | $2.00 \%$ |

## Disability

## Retirement

## Benefit commencement

date:

- Preretirement death benefit

The rates at which participants become disabled by age and gender are shown below:

| Percentage becoming disabled during the year |  |
| :---: | :---: |
| Age | Males and Females |
| 20 | $0.14 \%$ |
| 25 | $0.15 \%$ |
| 30 | $0.16 \%$ |
| 35 | $0.19 \%$ |
| 40 | $0.30 \%$ |
| 45 | $0.45 \%$ |
| 50 | $0.69 \%$ |

Rates varying by age

For purposes of determining the Funding Target and Target Normal Cost (both disregarding at-risk assumptions), the rates at which participants retire by age are shown below.

## Percentage assumed to retire during the year

Active Participants

|  | Final Average Pay |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Reduced Early <br> Retirement | Unreduced <br> Retirement |  | Terminated <br> Vested <br> Participants |
| 55 | $3 \%$ | $5 \%$ | $10 \%$ | $3 \%$ |
| $56-59$ | $3 \%$ | $5 \%$ | $10 \%$ | $3 \%$ |
| 60 | $3 \%$ | $10 \%$ | $10 \%$ | $15 \%$ |
| 61 | $3 \%$ | $10 \%$ | $10 \%$ | $5 \%$ |
| 62 | $20 \%$ | $20 \%$ | $20 \%$ | $5 \%$ |
| 63 | $10 \%$ | $10 \%$ | $10 \%$ | $5 \%$ |
| 64 | $10 \%$ | $10 \%$ | $10 \%$ | $20 \%$ |
| $65-69$ | $25 \%$ | $25 \%$ | $25 \%$ | $40 \%$ |
| $70+$ | $100 \%$ | $100 \%$ | $100 \%$ | $100 \%$ |

The later of the death of the active participant or the date the participant would have attained age 55

- Deferred vested The later of age 55 or termination of employment benefit
- Disability benefit
- Retirement benefit


## Form of payment

- Final Average Pay Participants
- Cash Balance Participants

Lump Sum \& Annuity Conversion

100\% are assumed to elect a Single Life Annuity
$90 \%$ of participants are assumed to elect a lump sum form of payment and $10 \%$ are assumed to elect a Single Life Annuity. Lump sums were valued using the substitution of annuity form under IRS Regulation §1.430(d)-1(f)(4) without application of generational mortality.

Percent married

Spouse age

Covered pay

Cash balances are converted to annuities using "annuity substitution" with valuation interest rates and the "applicable mortality table" under Code Section 417(e)(B). Cash balance participants' frozen FAP benefits are converted to lump sum using "annuity substitution" with valuation interest rates and the "applicable mortality table" under Code Section 417(e)(B).
$75 \%$ of participants eligible for pre-retirement death benefits are assumed to have an eligible spouse.

Wife three years younger than husband.

Assumed plan compensation for the year beginning on the valuation date was determined as an employee's annualized rate of basic compensation, excluding overtime, bonuses, expense allowances, profit sharing, and any other extra compensation in any form.

## Methods

## Funding target

First day of plan year

Present value of accrued benefits as required by regulations under IRC $\S 430$.

## Target normal cost <br> Decrement timing <br> Actuarial value of assets for determining minimum required contributions

## Benefits not valued

Present value of benefits expected to accrue during the plan year plus plan-related expenses expected to be paid from plan assets during the plan year as required by regulations under IRC $\S 430$.

The approach used is called rounded middle of year (rounded MOY) decrement timing. Most events are assumed to occur at the middle of year during which the eligibility condition will be met or the start/end date will occur. For death and disability decrements, the rate applied is based on the participant's rounded age (nearest integer age) at the beginning of the year, to align with the methodology generally used to create those rate tables. For retirement and withdrawal decrements: the age is generally the participant's rounded age at the middle of the year.

Average of the fair market value of assets on the valuation date and $3,6,9,12,15,18,21$, and 24 months preceding the valuation date, adjusted for contributions, benefits, administrative expenses and expected earnings (with such expected earnings limited as described in IRS Notice 200922). The average asset value must be within $10 \%$ of market value, including discounted contributions receivable (discounted using the effective interest rate for the 2019 plan year.)

The method of computing the actuarial value of assets complies with rules governing the calculation of such values under the Pension Protection Act of 2006 (PPA). These rules produce smoothed values that reflect the underlying market value of plan assets but fluctuate less than the market value. As a result, the actuarial value of assets will be lower than the market value in some years and greater in other years. However, over the long term under PPA's smoothing rules, the method has a significant bias to produce an actuarial value of assets that is below the market value of assets.

All benefits described in the Plan Provisions section of this report were valued. Willis Towers Watson has reviewed the plan provisions with the plan sponsor and, based on that
review, is not aware of any significant benefits required to be valued that were not.

## Sources of Data and Other Information

The plan sponsor furnished participant data as of 1/1/2020. Information on assets, contributions and plan provisions was supplied by the plan sponsor. Data and other information were reviewed for reasonableness and consistency, but no audit was performed. Based on discussions with the plan sponsor, assumptions or estimates were made when data were not available. Since hours of service were not provided by the plan sponsor, it was assumed that all employees who were both active at 01/01/2019 and 01/01/2020 earned 1,000 hours during the 2019 plan year.

We are not aware of any errors or omissions in the data that would have a significant effect on the results of our calculations.

## Assumptions Rationale - Significant Economic Assumptions

Discount rate
Cash Balance Interest crediting
rate

The basis chosen was selected by the plan sponsor from among choices prescribed by law, all of which are based on observed market data over certain periods of time.

The plan credits interest to cash balance accounts using the 30-year Treasury rate, but with a minimum interest credit rate of $3.80 \%$.

As required by IRC $\S 430$, cash balances are converted to annuities using "annuity substitution", so that the interest rates assumed are effectively the same as described above for the discount rate.

As required by regulations, plan-related expenses are calculated by estimating the expenses to be paid from the trust during the coming year (including, for example, expected PBGC premiums and actuarial, accounting, legal, administration and trustee fees to be paid from the trust).

## Rates of increase in:

- Compensation

Assumed compensation increases are based on plan sponsor expectations.

- Increases in statutory limits (CPI)

The assumed CPI increases are based on forecasts prepared by Russell Investments.

- Assumed return for asset smoothing

The assumed return used for asset smoothing is the third segment rate.

Assumptions Rationale - Significant Demographic Assumptions

Healthy Mortality

Disabled Mortality

## Termination

## Disability

Retirement

Assumptions used for funding purposes are as prescribed by IRC §430(h).

Assumptions used for funding purposes are as prescribed by IRC §430(h).

Termination rates were based on an experience study conducted in 2017, with annual consideration of whether any conditions have changed that would be expected to produce different results in the future.

Disability rates were based on an experience study conducted in 2017, with annual consideration of whether any conditions have changed that would be expected to produce different results in the future.

Retirement rates were based on an experience study conducted in 2017, with annual consideration of whether any conditions have changed that would be expected to produce different results in the future.

## Benefit commencement date for deferred benefits:

- Preretirement death benefit
- Deferred vested benefit


## Form of payment

Surviving spouses are assumed to begin benefits at the earliest permitted commencement date because ERISA requires benefits to start then unless the spouse elects to defer. If the spouse elects to defer, actuarial increases from the earliest commencement date must be given, so that a later commencement date is expected to be of approximately equal value, and experience indicates that most spouses do take the benefit as soon as it is available.

Based on plan sponsor's historical experience and expectations for the future with periodic adjustment based on observed gains and losses.

The percentage of retiring participants assumed to take lump sums or an annuity is based on historical experience and best

## Percent married

## Spouse age

## Prescribed Methods

Funding methods
expectations for the future with consideration of whether any conditions have changed that would be expected to produce different results in the future.

The assumed percentage married is based on historical experience of marital statuses, with consideration of changes expected to occur in marriage patterns of retirement age individuals in the future.

The assumed age difference for spouses is based on plan sponsor expectations.

The methods used for funding purposes as described in Appendix A, including the method of determining plan assets, are "prescribed methods set by law", as defined in the actuarial standards of practice (ASOPs). These methods are required by IRC §430, or were selected by the plan sponsor from a range of methods permitted by IRC $\S 430$.

## Changes in Assumptions and Methods

Change in assumptions since prior valuation

The segment interest rates used to calculate the funding target and target normal cost were updated to the current valuation date as required by IRC $\S 430$.

The mortality table used to calculate the funding target and target normal cost was updated to include one additional year of projected mortality improvement, as required by IRC $\S 430$.

The assumed plan-related expenses added to the target normal cost were changed from $\$ 469,681$ for the prior valuation to $\$ 868,426$ for the current valuation to account for higher expected expenses to be paid from the trust.

Change in methods since prior valuation

The valuation software used to produce the actuarial information in this report is different than used for the previous valuation due to a change in both the enrolled actuary for the plan and the business organization providing actuarial services to the plan, and such change in software may be considered to be a method change. The new method is substantially the same as the method used by the prior enrolled actuary and is consistent with the description of the method contained in the prior actuarial valuation report and Schedule SB of Form 5500 (disregarding the effects of any changes that are automatically approved under final IRC 430 regulations). The funding target
and target normal cost (without regard to any adjustments for employee contributions and plan-related expenses), as determined for the prior plan year by the new enrolled actuary (using the actuarial assumptions of the prior enrolled actuary and disregarding the effects of any changes that are automatically approved under final IRC 430 regulations) are both within $3 \%$ of those values as determined by the prior enrolled actuary. The actuarial value of plan assets, as determined by the new enrolled actuary as of the valuation date for the prior plan year (using actuarial assumptions of the prior enrolled actuary), is within $2 \%$ of the value for that prior plan year as determined by the prior enrolled actuary. Therefore the change in funding method receives automatic approval under IRS Rev. Proc. 2017-56.

## Assumptions and methods for pension cost purposes

## Actuarial Assumptions and Methods - Pension Cost

## Economic Assumptions

## Pre-tax rate of return on assets for

## Discount rate:

- Equivalent single discount rate for benefit obligations
- Equivalent single discount rate for service cost 3.60\%
- Equivalent single discount rate for interest cost 2.99\%


## Annual rates of increase:

- Inflation $2.40 \%$
- Compensation:
4.50\%

■ Statutory limits on compensation and benefits $2.40 \%$

- Cash balance interest credit rate $\quad 3.80 \%$

Annuity conversion
Cash balances are converted to annuities using "annuity substitution" with valuation interest rates and the "applicable mortality table" under Code Section 417(e)(B)

The return on assets shown above is gross of investment expenses. Administrative expenses are accounted for as an addition to Service Cost, as described below.

Demographic Assumptions
(where different from those used for contribution purposes)
Mortality:

- Healthy mortality rates

Base Mortality Table (Male Table used for males; Female Table used for Females)

1. Base table: Pri-2012
2. Base mortality table year: 2012
3. Table type: White Collar for non-union participants, BlueCollar for union participants, and Total Dataset for participants with an unknown union status
4. Healthy or Disabled: Healthy
5. Table weighting: Benefit
. Blending of annuitants and non-annuitants. Separate rates for annuitants and non-annuitants (based on Employees table)
6. Blending of retirees and contingent annuitants: Combined non-disabled annuitant mortality.

Mortality Improvement Scale (Male Table used for males; Female Table used for Females)

1. Base scale: MP-2019
2. Projection Type: Generational

- Disabled life mortality rates

Base Mortality Table

1. Base table: Pri-2012 Disabled Retiree
2. Base mortality table year: 2012
3. Table type: No Collar
4. Healthy or Disabled: Disabled
5. Blending of annuitants and non-annuitants: Single blended table of rates for annuitants and non-annuitants

Mortality Improvement Scale

1. Base scale: MP-2019
2. Projection Type: Generational

## Additional Assumptions

## Administrative expenses

## Cash flow

■ Decrement timing

■ Timing of benefit payments

- Amount and timing of contributions

Funding policy

Service cost includes $\$ 1,635,762$ in administrative expenses expected to be paid from the trust during the current year.

The assumptions used are collectively called rounded middle of year (rounded MOY) decrement timing. Most events are assumed to occur at the middle of year during which the eligibility condition will be met or the start/end date will occur. For death and disability decrements, the rate applied is based on the participant's rounded age (nearest integer age) at the beginning of the year, to align with the methodology generally used to create those rate tables. For retirement and withdrawal decrements: the age is generally the participant's rounded age at the middle of the year.

Benefit payments are assumed to be made uniformly throughout the year and, on average, at mid-year.

Contributions are assumed to be made on the schedule specified by the Company.

El Paso Electric Company's funding policy is to contribute an amount equal to the minimum required contribution with consideration for amounts included in customer rates. El Paso Electric Company
considers each year whether to contribute additional amounts (e.g., to reach certain funded status thresholds to avoid benefit restrictions, at-risk status, ERISA §4010 filings or other requirements).

## Methods - Pension Cost and Funded Position

Census date
Measurement date
Service cost and projected benefit obligation

January 1, 2020
January 1, 2020
The Unit Credit Cost Method is used to determine the Projected Benefit Obligation (PBO) and related current service cost. Under this method, the accrued benefit is calculated based upon service as of the measurement date. The PBO is the present value of this benefit and the service cost is the present value of the increase in the benefit due to service in the upcoming year. In normal circumstances the "accrued benefit" is based upon the Plan's accrual formula. However, if service in later years leads to a materially higher level of benefit than in earlier years, the "accrued benefit" is calculated by attributing benefits on a straight-line basis over the relevant period.

The benefits described above are used to determine both ABO and PBO except that final average pay is assumed to remain constant in the future when calculating ABO .

PBO and service cost are measured by separately discounting the projected benefit payments underlying these measures, determined using the methodology described above, using the spot rates on the December 31, 2019 Willis Towers Watson RATE:Link 40:90 yield curve. Interest cost was measured by summing the individual interest costs associated with each future benefit payment underlying the PBO and service cost. These individual interest costs are developed by multiplying the present value of each benefit payment, discounted using the applicable spot rate on the yield curve relating to the future benefit payment, by that spot rate. Equivalent single discount rates that would reproducing the resulting benefit obligation, service cost and interest cost have been determined and disclosed.

## Market-related value of assets

Marketrelated value of assets
The market-related value of assets is determined by adjusting the market value of assets to reflect the investment gains and losses (the difference between the actual investment return and the expected investment return) during each of the last 2 years at the rate of $33 \%$ per year. Expected investment return is a component of NPBC.

## Amortization of unamortized

amounts:

- Recognition of past service
cost/(credit)
- Recognition of gains or losses

Amortization of net prior service cost/(credit) resulting from a plan change is included as a component of Net Periodic Benefit Cost/(Income) in the year first recognized and every year thereafter until it is fully amortized. The annual amortization payment is determined in the first year as the increase in PBO due to the plan change divided by the average remaining service period of active participants expected to receive benefits under the plan.

However, when a plan change reduces the PBO, existing positive prior service costs are reduced or eliminated starting with the earliest established before a new prior service credit base is established.

Amortization of the net gain or loss resulting from experience different from that assumed and from changes in assumptions (excluding asset gains and losses not yet reflected in market-related value) is included as a component of Net Periodic Benefit Cost/(Income) for a year.

If, as of the beginning of the year, that net gain or loss exceeds 10\% of the greater of the PBO and the market-related value of plan assets, the amortization is that excess divided by the average remaining service period of active plan participants.

Under this methodology, the gain/loss amounts recognized in AOCI are not expected to be fully recognized in benefit cost until the plan is terminated (or an earlier event, like a settlement, triggers recognition) because the average expected remaining service of active participants expected to benefit under the plan over which the amounts are amortized is redetermined each year and amounts that fall within the corridor described above are not amortized.

## Benefits not valued

All benefits described in the Plan Provisions section of this report were valued. Willis Towers Watson has reviewed the plan provisions with the plan sponsor and, based on that review, is not aware of any significant benefits required to be valued that were not.

## Sources of Data and Other Information

The plan sponsor furnished participant data and claims data as of January 1, 2020. Information on assets, contributions and plan provisions was supplied by the plan sponsor. Data and other information were reviewed for reasonableness and consistency, but no audit was performed. Based on discussions with the plan sponsor, assumptions or estimates were made when data were not available. Since hours of service were not provided by the plan sponsor, it was assumed that all employees who were both active at $01 / 01 / 2019$ and $01 / 01 / 2020$ earned 1,000 hours during the 2019 plan year.

Accumulated other comprehensive (income)/loss amounts shown in the report are shown prior to adjustment for deferred taxes. Any deferred tax effects in AOCl should be determined in consultation with the Company's tax advisors and auditors.

We are not aware of any errors or omissions in the data that would have a significant effect on the results of our calculations.

## Assumptions Rationale - Significant Economic Assumptions

Discount rate(s)
Expected return on plan
assets

## Cash balance interest

 crediting rateAs required by U.S. GAAP the discount rate methodology was chosen by the plan sponsor based on market information on the measurement date.

We understand that the expected return on assets assumption reflects the plan sponsor's estimate of future experience for trust asset returns, reflecting the plan's current asset allocation and any expected changes during the current plan year, current market conditions and the plan sponsor's expectations for future market conditions.
Based on 20-year expectation of long-term government bonds, since the plan credits interest to cash balance accounts using the 30-year Treasury rate, but with a minimum interest credit rate of 3.80\%.

Annuity conversion rate Cash balances are converted to annuities using "annuity substitution".

## Rates of increase in compensation

Assumed increases were chosen by the plan sponsor and, as required by U.S. GAAP they represent an estimate of future experience.
Administrative expenses Administrative expenses are estimated based on an assumption of past expenses paid from the trust assets as a percentage of held assets.
Assumptions Rationale - Significant Demographic Assumptions (where different from those used for contribution purposes)

Healthy Mortality

Disabled Mortality

Assumptions were selected by the plan sponsor and, as required by U.S. GAAP represent a best estimate of future experience.

Assumptions used for accounting purposes were selected by the plan sponsor and, as required by U.S. GAAP represent a best estimate of future experience.
Source of Prescribed Methods (Required for ASOP compliance, otherwise optional)

## Accounting methods

The methods used for accounting purposes as described in Appendix A, including the method of determining the market-related value of plan assets, are "prescribed methods set by another party", as defined in the actuarial standards of practice (ASOPs). As
required by U.S. GAAP, these methods were selected by the plan sponsor.

## Changes in Assumptions, Methods and Estimation Techniques

Change in assumptions since The single equivalent PBO discount rate decreased from $4.42 \%$ as prior valuation

## Change in methods since

 prior valuationChange in estimation techniques since prior valuation
of January 1, 2019 to $3.39 \%$ as of January 1, 2020 to reflect the change in yields on high-quality corporate bonds.
The single equivalent service cost discount rate decreased from $4.50 \%$ as of January 1, 2019 to $3.60 \%$ as of January 1, 2020 to reflect the change in yields on high-quality corporate bonds

The single equivalent interest cost discount rate decreased from $4.12 \%$ as of January 1, 2019 to $2.99 \%$ as of January 1, 2020 to reflect the change in yields on high-quality corporate bonds.

The mortality assumption was updated from the RP-2014 Total Data Set Mortality Tables, with projection from 2006 to 2014 using Scale MP-2014 improvement removed, then projected generationally using Scale MP-2018 to the Pri-2012 Collar-Adjusted Mortality Tables with separate base tables used for actives and retirees and the retiree base table used for contingent survivors and projected generationally using Scale MP-2019.

The annuity conversion assumptions were updated to the IRC Section 417(e)(3) applicable interest rates for August 2019 and applicable mortality table for lump sum payments in 2020

None.

The valuation software used for the plan was changed as part of the actuarial transition to Willis Towers Watson.

El Paso Electric Company adopted the Willis Towers Watson RATE:Link 40:90 yield curve model for determining discount rates beginning January 1, 2020 as a result of actuarial transition. Previously, Ryan ALM Above Median Yield Curve was used.

## Appendix B: Summary of principal plan provisions

## Plan Provisions

The most recent amendment reflected in the following plan provisions was adopted on April 1, 2014.

## Covered employees

## Participation date

## All employees

Prior to April 1, 2014, each employee who has completed a year of Eligibility Service shall become a Member in the plan. An employee receives a year of Eligibility Service if he completes 1,000 or more Hours of Service within a 12-month period commencing with his date of employment or any anniversary date.

Effective April 1, 2014, an employee hired or re-hired on or after April 1, 2014 shall become a Cash Balance Member on his employment commencement date or re-employment commencement date. An employee who is hired or re-hired after December 31, 2013 and before April 1, 2014 shall become a Cash Balance Member on April 1, 2014.

## Definitions

Vesting service
One year for each 1,000-hour calendar year of employment with El Paso Electric Company

## Benefit service:

- Final Average Pay
- Cash Balance


## Pensionable pay

One year for each 1,000-hour calendar year of employment.

Prior to January 1, 2014, a Member receives credit for one full year for each Plan Year in which he completes 1,000 or more hours of service. A Cash Balance Member (other than a Cash Balance Member who is hired or re-hired after December 31, 2013 and before April 1, 2014) who completes at least one Hour of Service during the period beginning January 1,2014 and ending March 31, 2014 shall receive credit for 0.25 year of Benefit Accrual Service for the 2014 Plan Year. After March 31, 2014, no additional Benefit Service shall be earned by a Cash Balance Member.

An employee's annualized rate of basic compensation, excluding overtime, bonuses, expense allowances, profit sharing, and any other extra compensation in any form.

## Average earnings:

- Final Average Pay
- Cash Balance


## Normal retirement date (NRD)

The monthly average of a participant's pensionable pay computed by summing his pensionable pay as of any date and for each of the days beginning the four years preceding such date and dividing by sixty.

For a Cash Balance Member who is employed by the employer as of April 1, 2014 and becomes a Cash Balance Member as of April 1, 2014, the monthly average of a Member's pensionable pay computed by summing his pensionable pay as of March 31, 2014 and as of March 31 of the preceding four calendar years and dividing by sixty.

First day of the month coinciding with or next following the attainment of age 65 with five years of benefit service

The monthly accrued benefit payable as a single life annuity upon Normal Retirement is the greater of (a), (b), (c) or (d) below, less any frozen benefit provided under group annuity contracts deemed purchased prior to August 1, 1989 as illustrated in Appendix A of the plan document:
(a) 1-1/4\% of Average Monthly Earnings multiplied by years of benefit service.
(b) $\$ 25.00$ multiplied by years of projected benefit service at normal retirement date, not to exceed 10.

This amount multiplied by the ratio of years of benefit service earned to date, divided by years of projected benefit service at normal retirement date. This benefit shall be no greater than \$250 per month.
(c) Amount of benefit payable in accordance with the Plan in effect on June 30, 1982 with Earnings frozen at the rate on June 30, 1982.
(d) Amount of accrued benefit earned as of October 17, 1990 under the prior benefit formula
The Accrued Benefit for a Cash Balance Member is
(a) plus (b), as follows:
(a) The benefit accrued under the Plan prior to becoming a Cash Balance Member, as determined under the Final Average Pay formula above.
(b) The Cash Balance Account, consisting of pay credits and interest credits.

- Pay Credits
- Interest Credits

For each Plan Year beginning on January 1, 2014, a Cash Balance Member shall receive a pay credit to his Cash Balance Account as of the last day of the Plan year (or termination date, if earlier). The pay crediting rate is based on the member's age and years of Vesting Service, as shown below:

| Age Plus Vesting <br> Service | Percentage of Base Pay <br> for the Plan Year |
| :---: | :---: |
| Less than 30 | $3.00 \%$ |
| $30-39$ | $4.00 \%$ |
| $40-49$ | $5.00 \%$ |
| $50-59$ | $6.00 \%$ |
| $60-69$ | $7.00 \%$ |
| $70-79$ | $8.00 \%$ |
| 80 or More | $9.00 \%$ |

Interest credits are allocated to the Cash Balance Account as of the last day of each month. The interest credit is determined by multiplying the Cash Balance Account as of the last day of the preceding month by the 30-Year Treasury Bond Rate for the month, which when compounded monthly for the 12 months of the Plan Year, is equal to the 30-Year Treasury Bond Rate for August of the preceding year (but no less than $3.80 \%$ for the Plan Year, compounded monthly).

## Monthly preretirement death benefit:

[^32]- After Normal Retirement Age If the participant dies after his Normal Retirement Age but before benefit payments commence, survivorship benefits will be paid in accordance with the form in which the participant's benefits would be paid if he had retired on the first day of the month following his date of death.


## Eligibility for Benefits

Retirement on NRD

## Early retirement:

- Final Average Pay
- Cash Balance

Postponed retirement

Deferred vested termination

Disability

Preretirement death benefit

After attainment of age 55 and completion of 5 years of Vesting Service, the participant may elect to commence his Accrued Benefit on a reduced basis prior to age 65. If the participant retires with at least 20 years of Vesting Service, he may receive his Accrued benefit as early as age 62 without any reduction. If the sum of the participant's age and years of Vesting Service equals or exceeds 85 , he may receive his Accrued Benefit without any reduction.

Early retirement under the plan is age 55 and completion of 3 years of Vesting Service.

Retirement after NRD

Termination for reasons other than death or retirement after completing five years of vesting service for a Final Average Pay participant or three years of vesting service for a Cash Balance Member

Permanent and total disability prior to NRD, and participant is receiving a Social Security disability benefit

Death while eligible for normal, early, postponed, or deferred vested retirement benefits, with a surviving spouse

## Benefits Paid Upon the Following Events

Normal retirement
The monthly pension benefit determined as of NRD

## Early retirement:

- Final Average Pay

The monthly pension benefit determined as of NRD reduced $6.667 \%$ for each of the first five years and $3.333 \%$ for each of the next five years that payment precedes the participant's NRD.

- Cash Balance


## Postponed retirement

## Deferred vested termination:

- Final Average Pay
- Cash Balance


## Disablement:

- Final Average Pay
- Cash Balance

Preretirement death

The frozen accrued benefit excluding his Cash Balance Benefits determined as of NRD actuarially reduced to the commencement date. The Cash Balance Benefit determined as of the commencement date will be actuarially reduced to be equivalent to the member's Cash Balance Account.

The monthly pension benefit determined as of the actual retirement date.

The participant may elect to commence as early as their Early Retirement with the monthly pension benefit determined as of NRD reduced $6.667 \%$ for each of the first five years and $3.333 \%$ for each of the next five years that payment precedes the participant's NRD.

The frozen accrued benefit excluding Cash Balance Benefits will be payable as of NRD or may elect to commence at any time after termination with actuarial reductions. $100 \%$ of the Cash Balance account is payable on the first day of any month following termination.

Payable to a participant beginning at NRD after becoming totally and permanently disabled while employed by the company. The annuity payable is based on Average Monthly Earnings at date of Disability and Benefit Service, including all credit for all years while disabled, at NRD. The qualified joint and spouse survivor death benefit will apply.

Payable to a participant immediately after becoming totally and permanently disabled while employed by the company. The benefit payable is the Frozen Final Average Pay Accrued Benefit as of March 31, 2014 and the Cash Balance Account based on Earnings and Vesting Service through date of Disability.

If participant has attained age 50 and earned at least 10 years of vesting service, then the monthly preretirement death benefit payable on behalf of an active employee is unreduced for form of payment and early retirement.

In all other cases, the monthly preretirement death benefit payable is reduced $6.667 \%$ for each of the first five years and $3.333 \%$ for each of the next five years that payment precedes the participant's NRD.

## Other Plan Provisions

## Forms of payment

Pension Increases
None

## Plan participants' contributions None

Automatic Cash Out Upon termination of service, if the lump sum value of the accrued benefit is less than $\$ 1,000$, the lump sum amount is paid as soon as practical after termination.

Maximum limits on benefits and All benefits and pay for any calendar year may not exceed the pay maximum limitations for that year as defined in the Internal Revenue Code. The plan provides for increasing the dollar limits automatically as such changes take effect.

## Future Plan Changes

No future plan changes were recognized in determining pension cost or funding requirements. Willis Towers Watson is not aware of any future plan changes that are required to be reflected.

## Changes in Benefits Valued Since Prior Year

There have been no changes in benefits valued since the prior year.

# Appendix C: Statement of funding-related risks of plan in accordance with ASOP No. 

## Potentially Significant Risks Associated with the Plan

The following sections discuss certain risks associated with the Retirement Income Plan. The specific risks discussed below do not represent a comprehensive list of all risks that could potentially affect the plan, its participants, the sponsor, or any other party. In our professional judgment, we believe these risks to be most relevant to the plan's future financial condition. Not all possible sources of risk were considered. We have not assessed the likelihood or consequences of potential future changes in applicable law. Nothing contained in this report is intended to provide investment advice.

The results shown in this report rely on assumptions regarding future economic and demographic experience. Actual future experience will deviate from the actuarial assumptions, and thus future actuarial measurements and future contribution requirements will differ (perhaps significantly) from the current measurements and contribution requirements presented in this report. Following is a discussion of some of the risks that have the potential to significantly increase the future contributions needed to satisfy legal requirements and secure the benefits of participants. While the discussion below focuses on elements that can increase contributions, contributions may also significantly decline, if these elements move in the opposite direction than discussed below. Note also that any assessment of the risk provided below is speculative and made by the actuary who may not have all the information necessary to evaluate the significance of the risk to the company or plan participants of changes in the plan's funded status; the plan sponsor and its advisors should consider the assessment and any reasons given, and other information, and come to their own conclusions as to the significance of the risk presented. A more complete understanding of these or other risks would require a separate analysis. Such analysis would provide information about the consequences of different plausible experience and about the severity of adverse experience that could be tolerated within a range of funding levels. We recommend that such an analysis be performed or considered.

We also note that the financial condition of a plan, as well as the contributions caused by this condition, tend to be highly leveraged amounts. When referring to a plan's financial condition below, we generally mean the difference between the plan's assets and its liabilities. As each of these numbers is typically much larger than their difference, even a small change in either one can cause a large percentage change in the financial condition and the resulting contributions.

## Financial Risks

Willis Towers Watson's Cost \& Risk Management Channel is updated each year based on the most recent funding actuarial valuation and performs a high-level projection of funding requirements over the next few years, taking into account the projected stabilized interest rates. El Paso Electric Company has access to this tool as well as the ability to perform their own "what-if" scenarios if so desired. This tool can assist in El Paso Electric Company's understanding and assessment of the financial risks in this plan.

## Asset-Liability Mismatch Risk

There is generally a substantial risk to a plan's financial condition if the changes in asset values are not matched by changes in the value of liabilities. This risk exists because much of the plan's assets are invested in securities that would not be expected to move in any predictable pattern relative to plan liabilities. That said, there is a portion of the plan's assets which are invested in securities that are expected to move in the same direction as liabilities, which may serve to partially mitigate a portion of this risk.

## Investment Risk

Much of the plan's assets are invested in return-seeking asset classes that can experience volatile returns. Several consecutive years of moderately poor returns or a single year of exceptionally poor returns may cause a significant increase in minimum required contributions or in contributions required to reach desired funding targets (e.g., to fully fund plan termination liability, to fully fund the plan under the minimum funding rules, to avoid PBGC variable rate premiums or an ERISA §4010 filing, to avoid benefit restrictions or to meet other goals of the plan sponsor). Failure to compensate for adverse investment experience with increased contributions could result in further degradation of the funded status of the plan over time, even if investments return at expected rates thereafter.

Generally there is a substantial risk to a plan's financial condition if investment returns are lower than expected. In this situation the risk is present because some of the plan's assets are allocated to investments that would not be expected to move in any predictable pattern relative to plan liabilities.

## Interest Rate Risk

The funding requirements use a measure of plan obligations based on recent high quality (rated A or better) corporate bond yields, adjusted so that they do not deviate by more than a specified percentage (which differs by year) from a 25-year average of such yields. If yields trend downward, the pension obligations and required contributions may increase significantly and the higher contribution rates may persist for a long period of time. The 25 -year average currently results in the use of interest rates that are higher than current market yields. Under current law the effect of the averaging will decline over time because the specified percentage will be increased from the current $10 \%$ to $30 \%$. Together these two facts mean that the interest rates used to measure liabilities will
decline over time if market yields remain at current levels, Therefore, we expect interest rates used to measure liabilities to decline, the plan's funded status to deteriorate and minimum required contributions to increase.

There is generally a substantial risk to a plan's financial condition due to changes in interest rates because plan liabilities increase as interest rates decline. In this situation the risk is somewhat mitigated because the plan's liabilities used to determine required contributions are determined based on stabilized interest rates that do not reflect current market conditions.

## Demographic Risks

The demographic risks discussed below are typically not as significant as the economic risks discussed above since both the degree of variation from assumptions and the effect on funded status tend to be smaller. However, situations do exist such as certain plan designs or corporate activity where the risks below may be more significant.

## Longevity Risk

Measurements of the plan obligations are based on the assumptions of participant longevity described in Appendix A. Expert opinions about future longevity vary widely. If lifespans of plan participants exceed those expected under the assumptions used in preparing the results presented in this report, future measures of the plan obligation and future contribution requirements will gradually increase over time. Furthermore, an emerging pattern of longer lifespans or new research that increases the plausibility of longer lifespans may require a future adjustment in the mortality assumptions that results in a permanent significant increase in the plan obligation measurements and contribution requirements.

## Retirement Risk

The plan includes valuable early retirement subsidies. As a result, plan costs will increase if participants retire at younger ages than assumed. This might occur, for example, if business conditions were to cause reductions in force. Currently, retirements are expected to occur at various ages, using the retirement rates summarized in Appendix $A$.

## Lump Sum Risk

The plan includes an annuity conversion of the cash balance accounts determined using interest rates under IRC $\S 417(\mathrm{e})$. Due to the required use of annuity substitution under IRS funding rules, the amount of funding target included in the valuation will differ from the actual annuity amounts.

The risk of plan financial decline due to this assumption is mitigated under the current HATFA legislation given the funding target amount included in the valuation tends to exceed the actual annuity payments.

## Other Risks

Additional risks exist, including but not limited to liquidity risk, inflation risk, business-specific risk, and compliance risk. However, at this time we do not believe these risks to be as relevant or significant to the plan's future financial condition as those outlined above. It is possible one or more of these risks (in addition to some that are not listed) could become more prevalent and significant in the future depending on a wide range of factors including, but not limited to, changes in employee demographics, de-risking activities, legislative changes, unexpected economic movements, etc.

## Historical Information

The following information is provided to demonstrate how fair value of assets, funding target, and funded percentage have varied over time. In order to better illustrate market movements, the effect of interest rate stabilization (first enacted in the Moving Ahead for Progress in the 21st Century (MAP 21) and since extended by subsequent legislation) has been excluded (i.e., the measures summarized below are calculated without reflecting stabilized interest rates). Note that the asset values and funding targets shown below were affected by the levels of plan sponsor contributions and benefits accruing, respectively, in addition to interest rates, asset gains and losses, and other experience.

| Plan Year | Fair Market <br> Value of Assets | Funding Target | Funded <br> Percentage |
| :---: | :---: | :---: | :---: |
| 2020 | $327,152,316$ | $330,215,292$ | $99.07 \%$ |
| 2019 | $272,803,260$ | $318,093,168$ | $85.76 \%$ |

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# Appendix D: Descriptions of funded status measures 

## Calculations for Funding Ratios Chart in Section 1: Summary of Results

## Prior Year Ratios

## Purpose of Ratio

Asset Measure Obligation Measure

1 Test ability to apply funding balances to current year MRC
2 Quarterly contribution exemption test for current year
3 At-risk Prong 1 Test for current year
AVA - FSCB - PFB
FTO
4 At-risk Prong 2 Test for current year
AVA - FSCB - PFB
FTAR, but without loads

## Current Year Ratios

## Purpose of Ratio

Asset Measure
Obligation Measure
1 Test ability to apply funding balances to next year's MRC
2 Quarterly contribution exemption test for next year
3 At-risk Prong 1 Test for next year
4 At-risk Prong 2 Test for next year
5 PBGC 4010 filing gateway test (PBGC FTAP) (to determine whether a filing is required next year for the current plan year)
6 Exemption from establishing SAB in current year:

- If PFB applied to current year MRC
- If PFB not applied to current year MRC

7 Eliminate SABs in current year

AVA - FSCB - PFB FTO ignoring interest rate stabilization
Same as for analogous Prior Year Ratio

## Benefit Restriction Ratios

| Purpose of Ratio for Plan | Plan assets | Obligations | Year Ratio is <br> Year |
| :--- | :---: | :---: | :---: |
| Adjusted Funding Target | [AVA if AVA/FTO >= | FTO $^{1}+$ annuity | Current |
| Attainment Percentage (AFTAP) - | 100\%; AVA - FSCB - | purchases for NHCEs |  |
| Application of Benefit Restrictions | PFB otherwise] + | in previous 2 years |  |
| under IRC 436 | annuity purchases for |  |  |
|  | NHCEs in previous 2 |  |  |
|  | years |  |  |

[^33]
## Definitions of terms

| Term | Short for | Definition |
| :---: | :---: | :---: |
| FTAP | Funding target attainment percentage | (AVA - FSCB - PFB) / FTO |
| PBGC FTAP | FTAP for exemption from ERISA 4010 | (AVA - FSCB - PFB) / (FTO ignoring interest rate stabilization) |
| FSCB | Funding standard carryover balance | Accumulated contributions in excess of those required in pre-PPA plan years, less amounts applied to MRC or forfeited |
| PFB | Prefunding balance | Accumulated contributions in excess of those required since PPA applied to the plan, to the extent the plan sponsor elected to create PFB, less amounts subsequently applied to MRC or forfeited |
| Funding balance | FSCB + PFB |  |
| FTO | Ongoing funding target | Funding target as described in IRC 430, ignoring at-risk assumptions; equals FT for a plan that is not at-risk. ${ }^{1}$ |
| FTO ignoring stabilization | FTO calculated ignoring interest rate stabilization | Same as FTO if the full yield curve is used, or stabilized segment rates fall within the corridors |
| FTAR | At-risk funding target | Funding target reflecting at-risk assumptions and any applicable loads, as described in IRC 430(i), with no phase-in |
| FT | Funding target | Funding target used to calculate MRC. Equals: <br> - FTO if the plan is not at-risk. <br> - FTAR if the plan has been at risk for at least 5 consecutive plan years. <br> - Otherwise, FTO + 20\% * (\# of consecutive years at-risk) * (the excess, if any, of FTAR over FTO). |
| FS | Funding shortfall (surplus) | FT - (AVA - funding balances) |
| PBGC 4010 FS | Funding shortfall for determining whether a controlled group is exempt from an ERISA 4010 filing | FT (ignoring interest rate stabilization) AVA <br> See PBGC reporting requirements section of the report for more information. |

[^34]| Term | Short for | Definition |
| :---: | :---: | :---: |
| SAB | Shortfall amortization base | An SAB is established each year equal to the FS less the present value of the SAls related to SABs established in earlier years. A plan may be exempt from establishing an SAB for a plan year in accordance with the test in the Funding Ratios chart in section 1. |
| TNC | Target normal cost | Present value of benefits expected to accrue, and expenses expected to be paid from plan assets, for the year. Reflects at-risk assumptions if the plan is at-risk (phased-in if plan has been at-risk for fewer than 5 consecutive years as described above) |
| SAI | Shortfall amortization installment | Amortization for an SAB established in a particular year. SAls are eliminated if FS is less than or equal to $\$ 0$. |
| MRC | Minimum required contribution | TNC plus SAls as of the valuation date (assumes no funding waivers and plan is not fully funded). See section 2.4 for more details on this calculation. |
| AVA | Actuarial value of plan assets | "Plan assets" under PPA, including discounted receivables and reflecting any smoothing. See section 2.3 for more details. |

## WillisTowers Watson lıIIIIII

El Paso Electric Company<br>Postretirement Benefit Programs for Employees of El Paso Electric Company

Actuarial Valuation Report
Benefit Cost for Fiscal Year Beginning
January 1, 2020 under US GAAP
October 2020

Exhibit No. EPE-0013
Page 72 of 105

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Exhibit No. EPE-0013

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## Purposes of valuation

El Paso Electric Company engaged Willis Towers Watson US LLC (Willis Towers Watson) to value the Company's other postretirement benefit plan.

As requested by El Paso Electric Company (the Company), this report documents the results of an actuarial valuation of the Postretirement Benefit Programs (the Plan) as of January 1, 2020.

The primary purpose of this valuation is to determine the Net Periodic Postretirement Benefit Cost/(Income) (Benefit Cost), in accordance with FASB Accounting Standards Codification Topic 715 (ASC 715) for the fiscal year beginning January 1, 2020. It is anticipated that a separate report will be prepared for year-end financial reporting purposes.

## Limitations

This valuation has been conducted for the purposes described above and may not be suitable for any other purpose, In particular, please note the following:

1. The expected contribution to the other postretirement benefits plan(s) has been set at $\$ 450,000$.

Note that any significant change in the amounts contributed or expected to be contributed in 2020 may require disclosure in the interim financial statements, but should not affect the expected return on plan assets absent a remeasurement for another purpose.
2. There may be certain events that have occurred since the valuation date that are not reflected in the current valuation. See Subsequent Events in the Basis for Valuation section below for more information.
3. This report does not provide information for plan accounting and financial reporting under ASC 960 or ASC 965.
4. This report does not present liabilities on a plan termination basis, for which a separate extensive analysis would be required. No funded status measure included in this report is intended to assess, and none may be appropriate for assessing, the sufficiency of plan assets to cover the estimated cost of settling benefit obligations, as all such measures differ in some way from plan termination obligations. In addition, funded status measures shown in this report do not reflect the current costs of settling obligations by offering immediate lump sum payments to participants and/or purchasing annuity contracts for the remaining participants (e.g., insurer profit, insurer pricing of contingent benefits and/or provision for anti-selection in the choice of a lump sum vs. an annuity).
5. The comparisons of plan obligations as determined for accounting and financial reporting purposes to plan assets presented in this report cannot be relied upon to determine the need for nor the amount of required future plan contributions. Nevertheless, such comparisons may be useful to assess the need for future contributions because they reflect current interest rates at the measurement date in determining benefit obligations. However, asset gains and losses,
demographic experience different from assumed, changes in interest rates, future benefit accruals, if any, and other factors will all affect the need for and amount of future contributions. In addition, if a plan is not required by law to be funded, benefit payments may also be paid directly by the plan sponsor as they come due.
$\qquad$

## Section 1: Summary of key results

## Benefit cost, plan assets \& obligations

| Fiscal Year Beginning |  | 01/01/2020 | 01/01/2019 ${ }^{1}$ |
| :---: | :---: | :---: | :---: |
| Benefit Cost/ (Income) | Net Periodic Postretirement Benefit Cost/(Income) | $(3,848,723)$ | $(4,851,791)$ |
|  | Benefit Cost/(Income) due to Special Events | 0 | 0 |
|  | Total Benefit Cost/(Income) | $(3,848,723)$ | $(4,851,791)$ |
| Measurement Date |  | 01/01/2020 | 01/01/2019 |
| Plan Assets | Fair Value of Plan Assets (FVA) | 41,810,927 | 36,287,094 |
|  | Actual Return on Fair Value of Plan Assets during Prior Year | 18.57\% | (7.48\%) |
| Benefit Obligations | Accumulated Postretirement Benefit Obligation (APBO) | $(60,760,057)$ | (60,234,631) |
| Funded Ratio | Fair Value of Plan Assets to APBO | 68.8\% | 60.2\% |
| Accumulated Other Comprehensive (Income)/Loss (Pre-tax) | Net Prior Service Cost/(Credit) | $(23,472,150)$ | (28,706,014) |
|  | Net Loss/(Gain) | (42,271,720) | (37,517,571) |
|  | Total Accumulated Other Comprehensive (Income)/Loss (pre-tax) | $(65,743,870)$ | (66,223,585) |
| Assumptions | Equivalent Single Discount Rate for Benefit Obligations | 3.54\% | 4.44\% |
|  | Equivalent Single Discount Rate for Service Cost | 3.86\% | 4.51\% |
|  | Equivalent Single Discount Rate for Interest Cost | 3.09\% | 4.15\% |
|  | Expected Long-Term Rate of Return on Plan Assets | 6.00\% | 6.00\% |
| Participant Data | Census Date | 01/01/2020 | 01/01/2019 |

[^35]
## Comments on results

The actuarial gains/(losses) due to demographic experience, including any assumption changes and impact of the actuarial transition, and investment return different from assumed during the prior year were $\$ 2,615,494$ and $\$ 4,515,569$ respectively.

## Change in net periodic cost and funded position

The net periodic cost increased from $\$(4,851,791)$ in fiscal 2019 to $\$(3,848,723)$ in fiscal 2020 and the funded position improved from $\$(23,947,537)$ to $\$(18,949,130)$. Significant reasons for these changes include the following:

- The actual return on the fair value of plan assets since the prior measurement date was greater than expected, which improved the funded position.
- A large prior service credit base was fully recognized in fiscal year 2019, which increased the net periodic cost for fiscal year 2020.
- The single equivalent discount rate used to measure (A)PBO declined 90 basis points compared to the prior year, which increased the net periodic cost and caused the funded position to deteriorate.


## Basis for valuation

Appendix $A$ summarizes the assumptions and methods used in the valuation. Appendix $B$ summarizes our understanding of the principal provisions of the plan being valued. Both of these appendices include a summary of any changes since the prior valuation. Unless otherwise described below under Subsequent Events, assumptions were selected based on information known as of the measurement date,

## Subsequent events

The results provided in this report reflect data and assumptions appropriate for the purpose of the measurement. Effects of COVID-19 on the financial markets, regulations, and experience are uncertain and still evolving. The results in this report make no allowances for the effects of COVID-19 There may be significant effects on plan experience and/or assumptions, both demographic and economic, used for future measurements.

## Additional information

None.

## Actuarial certification

This valuation has been conducted in accordance with generally accepted actuarial principles and practices. However, please note the information discussed below regarding this valuation.

## Reliances

In preparing the results presented in this report, we have relied upon information regarding plan provisions, participants, assets, and sponsor accounting policies and methods provided by the Company and other persons or organizations designated by the Company. See the Sources of Data and Other Information section of Appendix A for further details. We have relied on all the data and information provided as complete and accurate. We have reviewed this information for overall reasonableness and consistency, but have neither audited nor independently verified this information. Based on discussions with and concurrence by the plan sponsor, assumptions or estimates may have been made if data were not available. We are not aware of any errors or omissions in the data that would have a significant effect on the results of our calculations. The results presented in this report are directly dependent upon the accuracy and completeness of the underlying data and information. Any material inaccuracy in the data, assets, plan provisions or other information provided to us may have produced results that are not suitable for the purposes of this report and such inaccuracies, as corrected by the Company, may produce materially different results that could require that a revised report be issued.

## Measurement of benefit obligations, plan assets and balance sheet adjustments

## Census date/measurement date

The measurement date is January 1,2020 . The benefit obligations were measured as of January 1 , 2020 and are based on participant data as of the census date, January 1, 2020.

## Plan assets and balance sheet adjustments

Information about the fair value of plan assets for the other postretirement benefit plan cost at December 31, 2019, which reflect the expected funded status of the plan before adjustment to reflect the funded status based on the year-end measurements, was reviewed for reasonableness and consistency, but no audit was performed.

Accumulated other comprehensive (income)/loss amounts shown in the report are shown prior to adjustment for tax effects. Any tax effects in AOCl should be determined by the Company in consultation with its tax advisors and independent accountants.

## Assumptions and methods under U.S. GAAP

The methods employed in the development of the other postretirement benefit cost and other financial reporting have been selected by the Company, with the concurrence of Willis Towers Watson. The actuarial assumptions were also selected by the Company, but without using the work of Willis Towers Watson. Evaluation of the actuarial assumptions was outside the scope of Willis Towers Watson's assignment and would have required substantial additional work that we were not engaged to perform. U.S. GAAP requires that each significant assumption "individually represent the best estimate of a particular future event."

The results shown in this report have been developed based on actuarial assumptions that, to the extent evaluated by Willis Towers Watson, we consider to be reasonable. Other actuarial assumptions could also be considered to be reasonable. Thus, reasonable results differing from those presented in this report could have been developed by selecting different reasonable assumptions.

A summary of the assumptions, methods and sources of data and other information used is provided in Appendix A. Note that any subsequent changes in methods or assumptions for the January 1, 2020 measurement date will change the results shown in this report.

## Nature of actuarial calculations

The results shown in this report are estimates based on data that may be imperfect and on assumptions about future events that cannot be predicted with any certainty. The effects of certain plan provisions may be approximated, or determined to be insignificant and therefore not valued. Reasonable efforts were made in preparing this valuation to confirm that items that are significant in the context of the actuarial liabilities or costs are treated appropriately, and are not excluded or included inappropriately. Any rounding (or lack thereof) used for displaying numbers in this report is not intended to imply a degree of precision, which is not a characteristic of actuarial calculations.

If overall future plan experience produces higher benefit payments or lower investment returns than assumed, the relative level of plan costs reported in this valuation will likely increase in future valuations (and vice versa). Future actuarial measurements may differ significantly from the current measurements presented in this report due to many factors, including: plan experience differing from that anticipated by the economic or demographic assumptions, changes in economic or demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for the measurements (such as the end of an amortization period), and changes in plan provisions or applicable law. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of such future measurements. Retiree group benefits models necessarily rely on the use of approximations and estimates, and are sensitive to changes in these approximations and estimates. Small variations in these approximations and estimates may lead to significant changes in actuarial measurements.

See Basis for Valuation in Section 1 above for a discussion of any material events that have occurred after the valuation date that are not reflected in this valuation.

## Limitations on use

This report is provided subject to the terms set out herein and in our engagement letter dated March 9 , 2020 and any accompanying or referenced terms and conditions.

The information contained in this report was prepared for the internal use of the Company and its independent accountants in connection with our actuarial valuation of the other postretirement benefit plan as described in Purposes of Valuation above. It is not intended for and may not be used for other purposes, and we accept no responsibility or liability in this regard. The Company may distribute this actuarial valuation report to the appropriate authorities who have the legal right to require the Company to provide them this report, in which case the Company will use best efforts to notify Willis Towers Watson in advance of this distribution, Further distribution to, or use by, other parties of all or part of this report is expressly prohibited without Willis Towers Watson's prior written consent. Willis Towers Watson accepts no responsibility for any consequences arising from any other party relying on this report or any advice relating to its contents.

## Professional qualifications

The undersigned are members of the Society of Actuaries and meet the "Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States" relating to other postretirement benefit plans. Our objectivity is not impaired by any relationship between the plan sponsor and our employer, Willis Towers Watson US LLC.


Cat Kenagy, FSA, EA
Senior Director, Retirement
20-07490
October 2, 2020


David Anderson, ASA, EA
Director, Retirement
20-07493
October 2, 2020


Elizabeth Welborne, ASA, EA
Lead Associate, Retirement
20-08703
October 2, 2020

Exhibit No. EPE-0013

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## Section 2: Accounting exhibits

### 2.1 Balance sheet asset/(liability)

All monetary amounts shown in US Dollars

| Measurement Date | $01 / 01 / 2020$ | $01 / 01 / 2019^{1}$ |
| :--- | :--- | :--- |

A Development of Balance Sheet Asset/(Liability)

| $\mathbf{2}$ |  |  |
| :--- | :--- | :--- |
| Accumulated postretirement benefit obligation (APBO) | $(60,760,057)$ | $(60,234,631)$ |
| 2 Fair value of plan assets (FVA) | $41,810,927$ | $36,287,094$ |
| 3 Net balance sheet asset/(liability) | $(18,949,130)$ | $(23,947,537)$ |

B Current and Noncurrent Classification ${ }^{3}$

| 1 | Noncurrent asset | 0 | 0 |
| :--- | :--- | ---: | ---: |
| 2 | Current liability | 0 | 0 |
| 3 | Noncurrent liability | $(18,949,130)$ | $(23,947,537)$ |
| 4 | Net balance sheet asset/(liability) | $(18,949,130)$ | $(23,947,537)$ |

C Accumulated Other Comprehensive (Income)/Loss

| 1 Net prior service cost/(credit) | $(23,472,150)$ | $(28,706,014)$ |
| :--- | :--- | :--- |
| 2 Net loss/(gain) | $(42,271,720)$ | $(37,517,571)$ |
| 3 Accumulated other comprehensive (income)/loss ${ }^{4}$ | $(65,743,870)$ | $(66,223,585)$ |

D Assumptions and Dates

| 1 Equivalent single discount rate for benefit obligations | $3.54 \%$ | $4.44 \%$ |
| :--- | ---: | ---: |
| 2 Equivalent Single Discount Rate for Service Cost | $3.86 \%$ | $4.51 \%$ |
| 3 Equivalent Single Discount Rate for Interest Cost | $3.09 \%$ | $4.15 \%$ |
| 4 Census date | $01 / 01 / 2020$ | $01 / 01 / 2019$ |

[^36]
### 2.2 Changes in plan obligations and assets

## All monetary amounts shown in US Dollars <br> Period Beginning 01/01/2020 01/01/20191

| A Change in Accumulated Postretirement Benefit Obligation (APBO) |  |  |
| :---: | :---: | :---: |
| 1 APBO at beginning of prior fiscal year | 60,234,631 | 66,785,274 |
| 2 Employer service cost | 2,423,100 | 2,795,327 |
| 3 Interest cost | 2,456,400 | 2,252,371 |
| 4 Actuarial loss/(gain) | $(2,615,494)$ | $(9,417,495)$ |
| 5 Plan participants' contributions | 1,261,866 | 1,168,256 |
| 6 Benefits paid from plan assets ${ }^{1}$ | $(2,642,680)$ | $(3,003,553)$ |
| 7 Benefits paid from Company assets ${ }^{2}$ | $(176,331)$ | $(141,182)$ |
| 8 Medicare Part D subsidy | 0 | 0 |
| 9 Administrative expenses paid ${ }^{3}$ | $(181,435)$ | $(204,367)$ |
| 10 Plan amendments | 0 | 0 |
| 11 Acquisitions/(divestitures) | 0 | 0 |
| 12 Curtailments | 0 | 0 |
| 13 Settlements | 0 | 0 |
| 14 Special/contractual termination benefits | 0 | 0 |
| 15 APBO at beginning of current fiscal year | 60,760,057 | 60,234,631 |

## B Change in Plan Assets

| 1 Fair value of plan assets at beginning of prior fiscal year | $36,287,094$ | $40,873,484$ |
| :--- | ---: | ---: |
| 2 Actual return on plan assets | $6,636,082$ | $(2,996,726)$ |
| 3 Employer contributions | 450,000 | 450,000 |
| 4 Plan participants' contributions | $1,261,866$ | $1,168,256$ |
| 5 Benefits paid ${ }^{1}$ | $(2,642,680)$ | $(3,003,553)$ |
| 6 Administrative expenses paid | $(181,435)$ | $(204,367)$ |
| 7 Acquisitions/(divestitures) | 0 | 0 |
| 8 | 0 | 0 |
| 9 Settlements | 0 | 0 |

[^37]
### 2.3 Summary of net balances

All monetary amounts shown in US Dollars

| Measurement Date Established | Original Amount | Net Amount at 01/01/2020 | Remaining Amortization Period | Amortization Amount in 2020 | Effect of Curtailments | Other Events |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10/03/2013 | $(97,440)$ | $(32,716)$ | 3.15609 | $(10,366)$ | 0 | 0 |
| 12/31/2015 | $(823,872)$ | $(491,332)$ | 5.91005 | $(83,135)$ | 0 | 0 |
| 10/01/2016 | $(32,697,299)$ | $(22,948,102)$ | 7.65000 | $(2,999,753)$ | 0 | 0 |
| Total |  | $(23,472,150)$ |  | $(3,093,254)$ | 0 | 0 |
| All monetary amounts shown in US Dollars |  |  |  |  |  |  |
| B Summary of Net Loss/(Gain) (see Appendix A for a description of amortization method) |  |  |  |  |  |  |
|  | $\begin{array}{r} \text { Net Amo } \\ 01 / 01 \\ \hline \end{array}$ |  |  | Effect of Curtailments | Effect of Settlements | Other Events (Identify) |
|  | (42,27 | ) (2,727,822) |  | 0 | 0 | 0 |

[^38]
### 2.4 Development of plan assets for benefit cost

|  | Fair Value | Market-Related Value |
| :---: | :---: | :---: |
| A Reconciliation of Plan Assets |  |  |
| 1 Plan assets at 12/31/2018 | 36,287,094 | 36,287,094 |
| 2 Actual return on plan assets | 6,636,082 | 6,636,082 |
| 3 Employer contributions | 450,000 | 450,000 |
| 4 Plan participants' contributions | 1,261,866 | 1,261,866 |
| 5 Benefits paid | $(2,642,680)$ | $(2,642,680)$ |
| 6 Administrative expenses paid | $(181,435)$ | $(181,435)$ |
| 7 Acquisitions/(divestitures) | 0 | 0 |
| 8 Settlements | 0 | 0 |
| 9 Plan assets at 12/31/2019 | 41,810,927 | 41,810,927 |
| B Rate of Return on Invested Assets |  |  |
| 1 Weighted invested assets | 35,730,969 |  |
| 2 Rate of return | 18.57\% |  |
| C Investment Loss/(Gain) |  |  |
| 1 Actual return | 6,636,082 |  |
| 2 Expected return | 2,120,513 |  |
| 3 Loss/(gain) | $(4,515,569)$ |  |

### 2.5 Summary and comparison of benefit cost and cash flows

| All monetary amounts shown in US Dollars |  |  |
| :--- | :--- | ---: | ---: |
| Fiscal Year Ending | $12 / 31 / 2020$ | $12 / 31 / 20191$ |
| A Total Benefit Cost |  |  |
| 1 Employer service cost ${ }^{2}$ | $2,577,806$ | $2,423,100$ |
| 2 Interest cost | $1,848,918$ | $2,456,400$ |
| 3 Expected return on plan assets | $(2,454,371)$ | $(2,120,513)$ |
| 4 Subtotal | $1,972,353$ | $2,758,987$ |
| 5 Net prior service cost/(credit) amortization | $(3,093,254)$ | $(5,233,864)$ |
| 6 Net loss/(gain) amortization | $(2,727,822)$ | $(2,376,914)$ |
| 7 Subtotal | $(5,821,076)$ | $(7,610,778)$ |
| 8 Net periodic postretirement benefit cost/(income) | $(3,848,723)$ | $(4,851,791)$ |
| 9 Curtailments | 0 | 0 |
| 10 Settlements | 0 | 0 |
| 11 Special/contractual termination benefits | $(3,848,723)$ | $(4,851,791)$ |
| 12 Total benefit cost | 0 | 0 |

B Assumptions (See Appendix A for interim measurements, if any)

| 1 Equivalent single discount rate for benefit obligations | $3.54 \%$ | $4.44 \%$ |
| :--- | :--- | ---: |
| 2 Equivalent single discount rate for service cost | $3.86 \%$ | $4.51 \%$ |
| 3 Equivalent single discount rate for interest cost | $3.09 \%$ | $4.15 \%$ |
| 4 Expected long-term rate of return on plan assets | $6.00 \%$ | $6.00 \%$ |
| 5 Census date | $01 / 01 / 2020$ | $01 / 01 / 2019$ |

C Fair Value of Assets at Beginning of Year
$41,810,927 \quad 36,287,094$
D Cash Flows Net of Medicare Part D Subsidy
1 Employer contributions

| Expected | Actual |
| ---: | ---: |
| 450,000 | 450,000 |
| $1,298,756$ | $1,261,866$ |
| 0 | 176,331 |
| $3,140,132$ | $2,642,680$ |

E Amortization Period
1 For gain/loss amortization, if applicable
13,26909
13.25000

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## Section 3: Participant data

### 3.1 Summary of participant data



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# Appendix A: Statement of actuarial assumptions, methods and data sources 

Plan Sponsor
El Paso Electric Company

## Statement of Assumptions

The assumptions disclosed in this Appendix are for the fiscal year 2020 benefit cost.
Assumptions and methods for other postretirement benefit cost purposes

Actuarial Assumptions and Methods - Other Postretirement Benefit Cost
Economic Assumptions

## Discount Rate

Equivalent single discount rate for benefit obligations $3.54 \%$
$\begin{array}{ll}\text { Equivalent single discount rate for service cost } & 3.86 \%\end{array}$
$\begin{array}{ll}\text { Equivalent single discount rate for interest cost } & 3.09 \%\end{array}$
Annual rates of increase

- Consumer Price Index (CPI) $2.40 \%$
- Return on plan assets
6.00\% after-tax return.

The return on assets shown above is gross of investment expenses and administrative expenses assumed to be paid from the trust.

## Demographic and Other Assumptions

Inclusion date

New or rehired employees
Benefit commencement dates:

- Disability benefit
- Retirement benefit

The valuation date coincident with or next following the date on which the employee is hired.

It was assumed there will be no new or rehired employees.

Upon disablement if participant is at least age 41, with age and service greater than 65

Upon termination of participant on or after eligibility
$\qquad$

| Participation Assumptions for Plan | Current Retirees | Future Retirees |
| :--- | :--- | :--- |
| Participation | Based on valuation <br> census data | $85 \%$ of future retirees are assumed to elect <br> medical coverage at retirement. Current <br> retired plan participants are assumed to <br> continue coverage. |
| Medical Plan Participation | Based on valuation <br> census data | $72 \%$ of future retirees are assumed to elect <br> the $\$ 1,000$ Plan and 28\% of future retirees <br> are assumed to elect the $\$ 2,250$ Plan |
| Percentage married | Based on valuation <br> census data | $70 \%$ of males; 40\% of females |
| Spouse age | Based on valuation <br> census data | Wife 3 years younger than husband |
| Non-spouse dependent coverage | Not included in this <br> valuation | Not included in this valuation |

## Demographic Assumptions

## Mortality:

- Healthy mortality rates

Base Mortality Table (Male Table used for males; Female Table used for Females)

1. Base table: Pri-2012
2. Base mortality table year: 2012
3. Table type: White Collar for non-union participants, BlueCollar for union participants, and Total Dataset for participants with an unknown union status
4. Healthy or Disabled: Healthy
5. Table weighting: Benefit
6. Blending of annuitants and non-annuitants: Separate rates for annuitants and non-annuitants
7. Blending of retirees and contingent annuitants: Combined non-disabled annuitant mortality.

Mortality Improvement Scale (Male Table used for males; Female Table used for Females)

1. Base scale: MP-2019
2. Projection Type: Generational

- Disabled life mortality rates

Termination (not due to disability or retirement) rates

Base Mortality Table (Male Table used for males; Female Table used for Females)

1. Base table: Pri-2012
2. Base mortality table year: 2012
3. Table type: No Collar
4. Healthy or Disabled: Disabled
5. Blending of annuitants and non-annuitants: Single blended table of rates for annuitants and non-annuitants

Mortality Improvement Scale

1. Base scale: MP-2019
2. Projection Type: Generational

The rates at which participants are assumed to become disabled by age are shown below:
Percentage assumed to become disabled during the year Attained Age

| 45 | $0.45 \%$ |
| ---: | ---: |
| 55 | $1.19 \%$ |
| $65+$ | $1.93 \%$ |

The rates at which participants are assumed to terminate employment by age and gender are shown below:

| Percentage assumed to leave during the year |  |  |
| :---: | :---: | :---: |
| Attained Age | Males | Females |
| 25 | $5.0 \%$ | $6.0 \%$ |
| 30 | $5.0 \%$ | $6.0 \%$ |
| 35 | $4.0 \%$ | $6.0 \%$ |
| 40 | $3.0 \%$ | $6.0 \%$ |
| 45 | $2.0 \%$ | $4.0 \%$ |
| 50 | $1.0 \%$ | $2.0 \%$ |
| $55+$ | $0.0 \%$ | $0.0 \%$ |

$\qquad$

| Retirement | Rates at which participants are assumed to retire by age and eligibility for an unreduced early retirement are shown below. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage assumed to retire during the year |  |  |  |  |
|  | Final Average Pay |  |  |  | Cash Balance |
|  | Age | Reduced Early Retirement | Unreduced Retirement |  |  |
|  | 55 | 3.0\% |  |  | 10.0\% |
|  | 56-59 | 3.0\% |  |  | 10.0\% |
|  | 60 | 3.0\% |  |  | 10.0\% |
|  | 61 | 3.0\% |  |  | 10.0\% |
|  | 62 | 20.0\% |  |  | 20.0\% |
|  | 63 | 10.0\% |  |  | 10.0\% |
|  | 64 | 10.0\% |  |  | 10.0\% |
|  | 65-69 | 25.0\% |  |  | 25.0\% |
|  | 70 | 100.0\% | 100 |  | 100.0\% |
| Trend Rates |  |  |  |  |  |
| Health care cost trend rate | Plan trend rates are the annual rates of increase expected for benefits payable from the plan; these rates include Health Care Cost Trend plus any leveraging effect of plan design. Assumed plan trend rates are shown below: |  |  |  |  |
|  | Year |  |  |  | Post-65 |
|  |  | Medical | Drug | Medical | 1 Drug |
|  | 2020 | 5.75\% | 6.75\% | 4.50\% | 7.00\% |
|  | 2021 | 5.50\% | 6.50\% | 4.50\% | 6.75\% |
|  | 2022 | 5.25\% | 6.25\% | 4.50\% | 6.50\% |
|  | 2023 | 5.00\% | 5.75\% | 4.50\% | 6.00\% |
|  | 2024 | 4.75\% | 5.25\% | 4.50\% | 5.50\% |
|  | 2025 | 4.50\% | 4.75\% | 4.50\% | 5.00\% |
|  | $2026+$ | 4.50\% | 4.50\% | 4.50\% | 4.50\% |


| Per Capita Claims Cost |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Basis for per capita claim cost assumptions | The average annual per capita health rates for 2020 are shown below. These medical baseline costs were developed by the prior actuary from the PwC retiree medical claims cost database and the actual EI Paso retiree medical claims experience. |  |  |  |  |
|  | Average per capita claims cost |  |  |  |  |
|  | \$1,000 Deductible |  |  | \$2,250 Deductible |  |
|  | Age | Male | Female | Male | Female |
|  | 55 | \$7,549 | \$7,601 | \$6,846 | \$6,774 |
|  | 60 | \$9,764 | \$8,866 | \$8,901 | \$7,949 |
|  | 64 | \$11,512 | \$9,625 | \$10,521 | \$8,647 |
|  | 65 and over | $\$ 16.86 \mathrm{pe}$ | onth for M month | are Advan art D drug | $\$ 168.28 \text { per }$ |
| Additional Assumptions |  |  |  |  |  |
| Administrative expenses | Assumed expenses of $0.5 \%$ of plan assets are added to the Service Cost component of expense. |  |  |  |  |
| Cash flow: |  |  |  |  |  |
| - Decrement timing | The assumptions used are collectively called rounded middle of year (rounded MOY) decrement timing. Most events are assumed to occur at the middle of year during which the eligibility condition will be met or the start/end date will occur. For death and disability decrements, the rate applied is based on the participant's rounded age (nearest integer age) at the beginning of the year, to align with the methodology generally used to create those rate tables. For retirement and withdrawal decrements: the age is generally the participant's rounded age at the middle of the year. Retiree medical claims costs are based on the nearest age at the beginning of the year, to align with how claims costs tables are typically developed. |  |  |  |  |
| - Timing of benefit payments | Benefit payments are assumed to be made uniformly throughout the year and, on average, at mid-year. |  |  |  |  |
| - Amount and timing of contributions | Contributions are assumed to be made throughout the year and, on average, at mid-year. |  |  |  |  |
| Methods - Other Postretirement Benefit Cost and Funded Position |  |  |  |  |  |
| Census date | January 1, 2020 |  |  |  |  |
| Measurement date | January 1, 2020 |  |  |  |  |

## Service cost and accumulated postretirement benefit obligation

## Market-related value of assets

Amortization of unamortized amounts:

-     - Recognition of past service cost/(credit)


## - Recognition of gains or

 lossesCosts are determined using the Projected Unit Credit Cost Method. The annual service cost is equal to the present value of the portion of the projected benefit attributable to service during the upcoming year, and the Accumulated Postretirement Benefit Obligation (APBO) is equal to the present value of the portion of the projected benefit attributable to service before the measurement date. Service from hire date through the expected full eligibility date is counted in allocating costs.

APBO and service cost are measured by separately discounting the projected benefit payments underlying these measures, determined using the methodology described above, using the spot rates on the December 31, 2019 Willis Towers Watson RATE:Link 40:90 yield curve. Interest cost was measured by summing the individual interest costs associated with each future benefit payment underlying the APBO and service cost. These individual interest costs are developed by multiplying the present value of each benefit payment, discounted using the applicable spot rate on the yield curve relating to the future benefit payment, by that spot rate. Equivalent single discount rates that would produce the resulting benefit obligation, service cost and interest cost have been determined and disclosed.
The fair value of assets is used to determine the expected investment return during the year.

Amortization of net prior service cost/(credit) resulting from a plan change is included as a component of Net Periodic Postretirement Benefit Cost/(Income) in the year first recognized and every year thereafter until it is fully amortized. The annual amortization payment is determined in the first year as the increase in APBO due to the plan change divided by the average remaining service period to full eligibility for active participants expected to receive benefits under the plan,

However, when a plan change reduces the APBO, existing positive prior service costs are reduced or eliminated starting with the earliest established before a new prior service credit base is established.

Amortization of the net gain or loss resulting from experience different from that assumed and from changes in assumptions (excluding asset gains and losses not yet reflected in marketrelated value) is included as a component of Net Periodic Postretirement Benefit Cost/(Income) for a year.

## Benefits not valued


#### Abstract

If, as of the beginning of the year, that net gain or loss exceeds $10 \%$ of the greater of the APBO and the market-related value of plan assets, the amortization is that excess divided by the average remaining service period of active plan participants. Under this methodology, the gain/loss amounts recognized in AOCl are not expected to be fully recognized in benefit cost until the plan is terminated (or an earlier event, like a settlement, triggers recognition) because the average expected remaining service of active participants expected to benefit under the plan over which the amounts are amortized is redetermined each year and amounts that fall within the corridor described above are not amortized. All benefits described in the Plan Provisions section of this report were valued. Willis Towers Watson has reviewed the plan provisions with the plan sponsor and, based on that review, is not aware of any significant benefits required to be valued that were not.


## Sources of Data and Other Information

The plan sponsor furnished participant data and claims data as of $1 / 1 / 2020$. Information on assets, contributions and plan provisions was supplied by the plan sponsor. Data and other information were reviewed for reasonableness and consistency, but no audit was performed. Based on discussions with the plan sponsor, assumptions or estimates were made when data were not available, and the data was adjusted to reflect any significant events that occurred between the date the data was collected and the measurement date.

Accumulated other comprehensive (income)/loss amounts shown in the report are shown prior to adjustment for deferred taxes. Any deferred tax effects in AOCI should be determined in consultation with EI Paso Electric Company's tax advisors and auditors.

We are not aware of any errors or omissions in the data that would have a significant effect on the results of our calculations.

## Assumptions Rationale - Significant Economic Assumptions

## Discount rate(s)

## Expected return on plan assets

## Administrative expenses

As required by U.S. GAAP the discount rate methodology was chosen by the plan sponsor based on market information on the measurement date.

We understand that the expected return on assets assumption reflects the plan sponsor's estimate of future experience for trust asset returns, reflecting the plan's current asset allocation and any expected changes during the current plan year, current market conditions and the plan sponsor's expectations for future market conditions.
Administrative expenses are estimated based on an assumption of past expenses paid from the trust assets as a percentage of held assets.
Claims cost trend rates
Participant contribution trend rates

Per capita claims costs

Assumed increases were chosen by the plan sponsor and, as required by U.S. GAAP they represent an estimate of future experience, informed by an analysis of recent plan experience, leading to select and ultimate assumed trend rates and reflecting the expected near-term effect of recently enacted plan changes.
Assumed increases were chosen by the plan sponsor and, as required by U.S. GAAP they represent an estimate of future experience.

Per capita claims costs were chosen by the plan sponsor to be the best estimate of the plan's per capita claims costs including expenses in the plan year beginning on the measurement date (with any expected changes in future years reflected in the trend rate assumption).

Per capita claims cost assumptions were developed by the prior actuary.

## Assumptions Rationale - Significant Demographic Assumptions

Healthy Mortality
Disabled Mortality

## Termination

Disability

## Retirement

Assumptions were selected by the plan sponsor and, as required by U.S. GAAP represent a best estimate of future experience.

Assumptions used for accounting purposes were selected by the plan sponsor and, as required by U.S. GAAP represent a best estimate of future experience.
Termination rates were based on an experience study conducted in 2017, with annual consideration of whether any conditions have changed that would be expected to produce different results in the future.

Disability rates were based on historical experience with annual consideration of whether any conditions have changed that would be expected to produce different results in the future.
Retirement rates were based on an experience study conducted from 2014 to 2017, with annual consideration of whether any conditions have changed that would be expected to produce different results in the future.

## Participation:

- Participants
- Covered spouses

Assumed participation rates reflect historical experience as well as expectations for the future with periodic consideration of whether any conditions have changed that would be expected to produce different results in the future.

Assumed coverage rates for spouses reflect historical experience as well as anticipated future experience.

| Benefit commencement date: | Retirees are assumed to begin benefits immediately on eligible <br> retirement because the plan does not permit a delay without <br> forfeiting the right to participate. |
| :--- | :--- |
| Medical Plan Election | Assumed medical plan election rates reflect historical experience <br> as well as anticipated future experience. |
| Marital Assumptions | The assumed age and percentage married is based on an <br> experience study conducted in 2017, with annual consideration of <br> whether any conditions have changed that would be expected to <br> produce different results in the future. |

## Source of Prescribed Methods (Required for ASOP compliance, otherwise optional)

The methods used for accounting purposes as described in Appendix A, including the method of determining the marketrelated value of plan assets, are "prescribed methods set by another party", as defined in the actuarial standards of practice (ASOPs). As required by U.S. GAAP, these methods were selected by the plan sponsor.

## Changes in Assumptions, Methods and Estimation Techniques

## Change in assumptions since prior valuation

The single equivalent PBO discount rate decreased from 4.44\% as of January 1, 2019 to $3.54 \%$ as of January 1, 2020 to reflect the change in yields on high-quality corporate bonds.

The single equivalent service cost discount rate decreased from $4.51 \%$ as of January 1, 2019 to $3.86 \%$ as of January 1, 2020 to reflect the change in yields on high-quality corporate bonds
The single equivalent interest cost discount rate decreased from 4.15\% as of January 1, 2019 to $3.09 \%$ as of January 1, 2020 to reflect the change in yields on high-quality corporate bonds.

The mortality assumption was updated from the RP-2014 Total Data Set Mortality Tables, with projection from 2006 to 2014 using Scale MP-2014 improvement removed, then projected generationally using Scale MP-2018 to the Pri-2012 CollarAdjusted Mortality Tables with separate base tables used for actives and retirees and the retiree base table used for contingent survivors and projected generationally using Scale MP-2019.

The per capita costs were updated for 2020 by the prior actuary. Per the December 31, 2019 disclosure report, the pre-65 rates were increased by $1.5 \%$, based on the increase in the pre-65 COBRA rates provided by El Paso. Post-65 rates were set equal to the 2020 fully-insured rates, which includes the Health Insurer Fee in 2020. The Fee was removed for projected post-65 costs for 2021 and beyond, as the Fee was eliminated per the Appropriations Act signed on December 20, 2019.

|  | Retiree contribution amounts for 2020 were updated to reflect actual rates provided by El Paso. In addition, it was assumed that the post-65 contribution rates would be held flat until they reach $50 \%$ of post-65 costs, which is assumed to occur in 2025 given the assumed trend rates. |
| :---: | :---: |
| Change in methods since prior valuation | None. |
| Change in estimation techniques since prior valuation | The valuation software used for the plan was changed as part of the actuarial transition to Willis Towers Watson. <br> El Paso Electric Company adopted the Willis Towers Watson RATE:Link 40:90 yield curve model for determining discount rates beginning January 1, 2020 as a result of actuarial transition. Previously, Ryan ALM Above Median Yield Curve was used. |

## Appendix B: Summary of principal other postretirement benefit plan provisions

| Substantive Plan Provisions |  |  |  |
| :---: | :---: | :---: | :---: |
| Covered employees | All employees |  |  |
| Participation date | Date of becoming a covered employee |  |  |
| Definitions |  |  |  |
| Eligibility service | Years and months of service as a covered participant |  |  |
| Spouse | A spouse who was married to the participant both on the participant's retirement date and on the measurement date |  |  |
| Surviving spouse | A spouse who was married to the participant both on the participant's retirement date and on the date of his or her death |  |  |
| Dependent | A child or other legal dependent of the retiree, who was such before attaining the age of 18 . Eligible dependents shall remain eligible dependents until they reach age 26. |  |  |
| Medical Benefits |  |  |  |
| Eligibility | Age 55 with 5 years of service, or disabled with at least age 41 and 65 years of age and service combined. |  |  |
| Dependent eligibility | Spouse, and children under age 26 |  |  |
| Survivor eligibility | Eligibility continues beyond death of retiree as long as Surviving Spouse remains unmarried. |  |  |
| Retiree contributions | The tables below shows monthly retiree contributions for 2020: |  |  |
|  | Pre-65 monthly retiree contributions for 2020 |  |  |
|  |  | $\begin{gathered} \$ 1,000 \\ \text { Deductible Plan } \end{gathered}$ | $\begin{gathered} \$ 2,250 \\ \text { Deductible Plan } \\ \hline \end{gathered}$ |
|  | Retiree Only | \$324.13 | \$280.03 |
|  | Retiree + Spouse | \$586.42 | \$506.64 |
|  | Retiree + Child(ren) | \$487.80 | \$421.43 |
|  | Retire + Family | \$777.56 | \$671.85 |
|  | Post-65 monthly | etiree contributio | s for 2020 |
|  |  | 1,000 D | ductible Plan |
|  | Individual |  | 16.21 |
|  | Individual + One |  | 32.43 |
|  | Individual + Two |  | 48.64 |
|  | Individual + Three |  | 64.85 |


| Under age 65 benefits | See table starting on page 29. <br> Medical Benefits: Fully-insured Humana Medicare Advantage <br> Alan. The 2020 monthly premium rate is $\$ 16.86$ |
| :--- | :--- |
|  | Pharmacy Benefits: Medicare Part D Plan administered by <br> Express Scripts. The 2020 monthly premium rate is $\$ 168.28$. |
| Life Insurance Benefits | Age 55 with 5 years of service, or disabled with at least age 41 <br> and 65 years of age and service combined |
| Eligibility | Retirements prior to $1 / 1 / 2006$ : <br> One times salary at retirement with coverage reduction <br> according to age as follows: |

- Age 65 but less than age 70: 65\%
* Age 70 but less than age 75:50\%
- Age 75 or older: $30 \%$

Retirements $1 / 1 / 2006$ and after: $\$ 10,000$

## Future Plan Changes

No future plan changes were recognized in determining postretirement welfare cost.

## Changes in Benefits Valued Since Prior Year

There have been no changes in benefits valued since the prior year

Postretirement Medical Plan Provisions as of January 1, 2020 (Retirees - Pre Age 65)

| Carrier | Pre-65 Retiree BCBSTX - Medical |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Option | Option 2 - Plan A (New) |  | Option 2 - Plan B (New) |  |
| Benefit Plan | \$1,000 Deductible |  | \$2,250 Deductible |  |
|  | In-Network | Non-Network (1) | In-Network | Non-Network (1) |
| Lifetime Maximum | \$1,000,000 |  | \$1,000,000 |  |
| Coinsurance | 80\% | 60\% | 80\% | 60\% |
| Individual Calendar Year Deductible (Individual/ Family) | \$1,000 / \$3,000 | \$3,000 / \$9,000 | \$2,250/\$6,750 | \$6,750 / \$20,250 |
| Medical Maximum Coinsurance Limit Maximum Out of Pocket (deductible does not apply, copayment amount are applied but will continue to be required after the benefit percentage increases to 100\%) (Individual / Family) | \$4,500 / \$9,000 | \$13,500 / \$27,000 | \$6,850 / \$13,700 | \$20,550 / \$41,100 |
| Out of Network Deductible \& Out of Pocket Maximum will NOT apply toward Network Deductible \& Out of Pocket Maximum |  |  |  |  |
| Hospital Inpatient | 80\%, no ded | $60 \%$ after $\$ 500$ per admission ded | 80\%, no ded | $60 \%$ after $\$ 500$ per admission ded |
| Emergency Room Facility (2) Accidental Injury \& Emergency Care | 100\% after \$225 Copay |  | 100\% after \$300 Copay |  |
| Emergency Room Physician Charges Accidental Injury \& Emergency Care | 80\% after ded |  | 80\% after ded |  |
| Emergency Room Facility (2) Non-Emergency Care | 80\% after \$375 Copay | 60\% after \$375 Copay | 80\% after \$450 Copay | 60\% after \$450 Copay |
| Emergency Room Physician Charges Non-Emergency Care | 80\% after ded | 60\% after ded | 80\% after ded | 60\% after ded |
| Urgent Care Center visit, including lab services (does not include X-Rays, surgical services and Certain Diagnostic Procedures) | \$50 copay | 70\% after ded | \$75 copay | 70\% after ded |
| X-Rays, Surgical Services and Certain Diagnostic Procedures; such as Bone Scan, Cardiac Stress Test, CT-Scan, Ultrasound, MRI, Myelogram, PET Scan, surgical procedures and all other services and supplies | 80\% after ded | 60\% after ded | 80\% after ded | 60\% after ded |
| Preventative Services | 100\% (\$0 copay) | 70\% after ded | 100\% (\$0 copay) | $70 \%$ after ded |
| Physician Office Visit Copay including lab services(excludes X-rays, Surgery and Certain Diagnostic Procedures; such as Bone Scan, Cardiac Stress Test, CT-Scan, Ultrasound, MRI, Myelogram, PET Scan, surgical procedures and all other services and supplies) (3) | \$25 PCP / \$40 Spec | $70 \%$ after ded | \$30 PCP / \$50 Spec | 70\% after ded |


| Carrier | Pre-65 Retiree BCBSTX - Medical |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Option | Option 2-Plan A (New) |  | Option 2 - Plan B (New) |  |
| Benefit Plan | \$1,000 Deductible |  | \$2,250 Deductible |  |
|  | In-Network | Non-Network (1) | In-Network | Non-Network (1) |
| X-Rays, Surgical Services and Certain Diagnostic Procedures; such as Bone Scan, Cardiac Stress Test, CT-Scan, Ultrasound, MRI, Mye logram, PET Scan, surgical procedures and all other services and supplies | 80\% after ded | 60\% after ded | 80\% after ded | 60\% after ded |
| Outpatient Lab | 100\% (\$0 copay) | 70\% after ded | 100\% (\$0 copay) | 70\% after ded |
| (1) All out-of-network benefits listed are based on the carrier's allowable charges. Charges exceeding tis amount will be the member's responsibility. <br> (2) Copay waived if admitted to a network hospital. |  |  |  |  |
| (3) X-Rays, Surgical Services and Advanced Imaging PET, MRI, CAT, SPECT subject to deductible and coinsurance |  |  |  |  |


| Carrier | Pre-65 Retiree Express Scripts - Pharmacy |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | In-Network | Non-Network (1) | In-Network | Non-Network (1) |
| Prescription Benefit - up to 30-day supply | \$20/\$50 / \$70 | N/A | \$25/\$55 / \$75 | N/A |
| Mail Order Prescriptions - up to 90-day supply | \$45/\$120/\$170 | N/A | \$50/\$125/\$175 | N/A |
| Specialty Medications - up to 30 -day supply | \$65 / \$90 / \$140 | N/A | \$65/\$90 / \$140 | N/A |

(1) All out-of-network benefits listed are based on the carrier's allowable charges. Charges exceeding tis amount will be the member's responsibility.
(2) Copay waived if admitted to a network hospital.
(3) X-Rays, Surgical Services and Advanced Imaging PET, MRI, CAT, SPECT subject to deductible and coinsurance

# UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION 

El Paso Electric Company ) Docket No. ER22-___000

# DIRECT TESTIMONY OF <br> ADRIEN M. MCKENZIE, CFA 

ON BEHALF OF
EL PASO ELECTRIC COMPANY

October 29, 2021

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## TABLE OF EXHIBITS

## Exhibit No. Description

EPE-0017 Curriculum Vitae of Adrien M. McKenzie
EPE-0018 Summary of Results
EPE-0019 Proxy Group Risk Measures
EPE-0020 Two-Step DCF Model
EPE-0021 Capital Asset Pricing Model
EPE-0022 Market Rate of Return
EPE-0023 Risk Premium Method
EPE-0024 Expected Earnings Approach
EPE-0025 Constant Growth DCF Model
EPE-0026 Empirical Capital Asset Pricing Model
EPE-0027 Capital Structure - Electric Group
EPE-0028 Capital Structure - Electric Group Operating Cos.

## GLOSSARY OF ACRONYMS

| CAPM | Capital Asset Pricing Model |
| :--- | :--- |
| Commission | Federal Energy Regulatory Commission |
| D.C. Circuit | United States Court of Appeals for the District of Columbia <br> Circuit |
| DCF | discounted cash flow |
| ECAPM | Empirical Capital Asset Pricing Model |
| EEI | Edison Electric Institute |
| EIA | Energy Information Administration |
| EPE or "the Company" | El Paso Electric Company |
| EPS | earnings per share |
| FPA | Federal Power Act |
| FERC | Federal Energy Regulatory Commission |
| FOMC | Federal Open Market Committee |
| GDP | Gross Domestic Product |
| IBES | Institutional Brokers' Estimate System |
| MISO TOs | Transmission-owning members of the Midcontinent <br> Independent System Operator, Inc. |
| Moody's | Moody's Investors Service |
| NYSE | New York Stock Exchange |
| OPEC | Organization of the Petroleum Exporting Countries |
| ROE | return on equity |
| RRA | S\&P Global Market Intelligence, RRA Regulatory Focus <br> (formerly Regulatory Research Associates, Inc. |
| S\&P | S\&P Global Ratings |
| Value Line | The Value Line Investment Survey |
| Zacks | Zacks Investment Research |

## I. INTRODUCTION

## Q1. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A1. My name is Adrien M. McKenzie. My business address is 3907 Red River St., Austin, Texas 78751.

## Q2. IN WHAT CAPACITY ARE YOU EMPLOYED?

A2. I am President of FINCAP, Inc., a firm providing financial, economic, and policy consulting services to business and government.

Q3. PLEASE DESCRIBE YOUR QUALIFICATIONS AND EXPERIENCE.
A3. The details of my qualifications and experience are included in Exhibit No. EPE0017 attached to my testimony.

## A. Overview

Q4. WHAT IS THE PURPOSE OF YOUR TESTIMONY?
A4. The purpose of my testimony is to present to the Commission my independent analysis of a just and reasonable ROE for EPE. In addition, I present EPE's capital structure and examine industry benchmarks supporting the reasonableness of the Company's actual capitalization ratios.

## Q5. HOW IS YOUR TESTIMONY ORGANIZED?

A5. I first summarize my conclusions and recommendations regarding a just and reasonable ROE for EPE. I then present the details of the technical studies I relied on in reaching my conclusions. Consistent with the Commission's current ROE methodology, ${ }^{1}$ my evaluation includes applications of the two-step DCF model, the CAPM, and the Risk Premium method. I refer to this analysis as the "Three-Model Approach."

In addition, my testimony supports supplementing the Three-Model Approach to include the results of the Expected Earnings approach. I refer to this analysis that including the Expected Earnings method as the "Four-Model Approach."

I also present alternative benchmarks that should be considered as additional reference points in evaluating a just and reasonable ROE. Specifically, I apply the constant growth DCF method and ECAPM to the utilities in my proxy group. These methodologies are well-established and widely relied upon to evaluate investors' required ROE. Finally, I describe EPE's current capital structure and explain why it is appropriate to use the Company's actual capitalization to develop the weighted cost of capital on which the company's transmission service rates will be based.

## Q6. WHAT ROE DO YOU RECOMMEND FOR EPE BASED ON YOUR ANALYSES?

A6. Based on the results of my analyses, I recommend an ROE of $10.38 \%$ for EPE, which corresponds to the median value produced by the Four-Model Approach.

[^40]
## Q7. WHAT IS YOUR RECOMMENDATION WITH RESPECT TO EPE'S CAPITAL STRUCTURE?

A7. I recommend that a capitalization consisting of $47.97 \%$ long-term debt and $52.03 \%$ common equity be used to compute the Company's weighted cost of capital. This capitalization, which represents EPE's actual capital structure at December 31, 2020 , is consistent with industry benchmarks and should be approved.

## B. Regulatory Standards

## Q8. WHAT IS THE ROLE OF THE ROE IN SETTING A UTILITY'S RATES?

A8. The ROE compensates shareholders for the use of their capital to finance the investment necessary to provide utility service. Investors commit capital only if they expect to earn a return on their investment commensurate with returns available from alternative investments with comparable risks. To be consistent with sound regulatory economics and the standards set forth by the U.S. Supreme Court in Bluefield ${ }^{2}$ and Hope, ${ }^{3}$ a utility's allowed ROE should be sufficient to: (1) fairly compensate capital invested in the utility; (2) enable the utility to offer a return adequate to attract new capital on reasonable terms; and (3) maintain the utility's financial integrity.

[^41]
## Q9. WHAT ULTIMATELY GOVERNS THE SELECTION OF A FAIR ROE?

A9. The Commission has recognized that a reasonable point-estimate ROE should be determined based on the facts specific to each proceeding. ${ }^{4}$ That point-estimate must also meet the standards mandated by the U.S. Supreme Court. ${ }^{5}$ As the Commission has reaffirmed, "[t]he Commission's ultimate task is to ensure that the resulting ROE satisfies the requirements of Hope and Bluefield." ${ }^{"}$ This determination requires the Commission to consider all of the available evidence and identify an ROE that is just, reasonable, and sufficient to support EPE's need to attract capital and earn a competitive return and, at the same time, promote the Commission's goal of encouraging investment in electric utility infrastructure.

## Q10. HOW DOES FIXING A JUST AND REASONABLE ROE RELATE TO ATTRACTING PRIVATE CAPITAL TO UTILITY INFRASTRUCTURE INVESTMENT?

A10. Under the competitive market paradigm that serves as the foundation for investment choices, investors' expected ROE is the key economic signal that allocates finite

[^42]capital among competing opportunities. The allowed ROE and a reasonable opportunity to earn it are the key factors in ensuring the flow of investment capital to new utility facilities. Apart from the impact that economic and market turmoil can have on the availability of capital, electric utility facilities must compete with alternative investments. Utilities and their investors must commit huge sums of money when they invest in electric utility infrastructure. The additional funding necessary to expand the transmission grid with new and upgraded facilities will be provided only if investors anticipate an opportunity to earn a return that is sufficient to compensate for the associated risks and commensurate with returns available from alternative investments of comparable risk.

## Q11. IS EPE FACED WITH FINANCIAL PRESSURES ASSOCIATED WITH PLANNED CAPITAL EXPENDITURES?

A11. Yes. EPE's plans call for significant incremental capital investment to address system needs. EPE's anticipated capital investment in transmission facilities is addressed further by EPE witness Mr. James Schichtl. In light of these substantial capital requirements and financial pressures, support for the Company's financial integrity and flexibility will be instrumental in attracting the capital necessary to fund these requirements.

## Q12. IS IT IMPORTANT THAT INVESTORS HAVE CONFIDENCE THAT THE REGULATORY ENVIRONMENT IS STABLE AND CONSTRUCTIVE?

A12. Yes. Past challenges for the economy and capital markets highlight the benefits of a fair and balanced ROE, and any departure from the path of supporting utility financial strength through a stable and balanced ROE policy would be extremely shortsighted. Uncertainty and volatility undermine investor confidence, and
regulatory signals are the primary driver of investors' risk assessments for utilities. Securities analysts study FERC and state commission orders and regulatory policy statements closely to gauge the financial impact of regulatory actions and to advise investors accordingly. If regulatory actions instill confidence that the regulatory environment is supportive, investors will provide the capital necessary to support needed investment. As a corollary, absent a commitment by regulators to promote a sound and stable environment for utility investment and follow through on expectations for ROEs that are competitive with alternative investment opportunities, the flow of capital into utility infrastructure may not continue. As a result, the need for a stable and constructive regulatory environment, as well as regulatory certainty in supporting utility infrastructure investment, is as relevant today as ever.

## Q13. WHAT DO YOU MEAN BY "REGULATORY CERTAINTY?"

A13. Regulatory certainty exists when investors have confidence that prior regulatory decisions are predictive of future regulatory actions under similar facts. As the Commission has stated, it "strives to provide regulatory certainty through consistent approaches and actions." ${ }^{7}$ The Commission's policy efforts focus on constructive and predictable rate regulation and have attracted large commitments of private capital to expand transmission infrastructure, reduce congestion, improve reliability, and secure access to new generation, including wind and other renewable resources. Nevertheless, with respect to ROE, the Commission has recognized the

[^43]potential disincentive to investment stemming from uncertainties in the administrative process for determining a just and reasonable ROE. In Order No. 679-A, the Commission concluded that "our hearing procedures for determining ROE can create uncertainty for investors," and noted that:

Although our processes are designed to provide a just and reasonable return, we recognize that there can be significant uncertainty as to the ultimate return because of the uncertainties associated with administrative determinations (e.g., selection of the proxy group, changes in growth rates, etc.) This can itself constitute a substantial disincentive to new investment. ${ }^{8}$

Having recognized the problems associated with uncertainty in its ROE policies, the Commission should do what it can to eliminate inconsistencies in the end results of its ROE determinations that hinder the regulatory certainty needed for transmission infrastructure investment.

## II. RETURN ON EQUITY FOR EPE

## Q14. WHAT IS THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY?

A14. This section of my testimony presents my independent evaluation of a just and reasonable ROE for EPE. In this section, I:

- summarize the Commission's current ROE policies and examine conditions in the capital markets and the general economy;
- present the results of the Three-Model and Four-Model Approaches and my conclusion that an ROE of $10.38 \%$ is warranted for EPE; and

[^44]- address how my recommended ROE of $10.38 \%$ meets the Commission's policy goal of supporting investment in electric transmission infrastructure.


## A. Commission ROE Policy

## Q15. PLEASE DESCRIBE YOUR UNDERSTANDING OF THE COMMISSION'S CURRENT ROE POLICY.

A15. In Opinion No. 569-A, the Commission relied on three financial models to establish a just and reasonable ROE for the MISO TOs: (1) a two-step DCF model, (2) the CAPM, and (3) the Risk Premium approach. Under the methodology adopted in Opinion No. 569-A, the composite zone of reasonableness is computed by averaging the low and high boundaries of each model, ${ }^{9}$ with the presumptive ROE being equal to the average of the central tendency values for the three financial models. For purposes of administering section 206 of the FPA, the Commission elected to stratify the composite zone of reasonableness into three equal parts, which it asserted to correspond to "below-average risk," "average risk," and "above-average risk" ranges. ${ }^{10}$ With the exception of minor corrections to certain inputs to the Risk Premium approach, the Commission affirmed these findings in Opinion No. 569-B.

In Opinion No. $569-\mathrm{A}$, the Commission also rejected rehearing of its decision in Opinion No. 569 not to rely on the Expected Earnings approach to establish the ROE for the MISO TOs. However, the Commission noted that "we

[^45]do not necessarily foreclose its use in future proceedings," so long as concerns expressed in Opinion No. 569 and reiterated in Opinion No. 569-A are addressed. ${ }^{11}$

## B. Impact of Economic and Capital Market Conditions

## Q16. PLEASE SUMMARIZE CURRENT ECONOMIC AND CAPITAL MARKET CONDITIONS.

A16. U.S. real GDP contracted $3.5 \%$ during 2020, including a decline of $31.2 \%$ in the second quarter and a rebound of $33.8 \%$ in the third quarter. The economic outlook appears brighter for 2021 as the U.S. COVID-19 vaccine rollout continues apace, with annualized GDP growth of $6.3 \%$ and $6.7 \%$ in the first and second quarters of 2021. Although weekly claims for unemployment remain historically high, the national unemployment rate in September 2021 fell slightly to $4.8 \%$. While marking a significant recovery from the peak of $14.7 \%$ reached in April 2020, the jobless rate remains above the level immediately preceding the COVID-19 pandemic.

With respect to inflation, the Personal Consumption Expenditure Price Index has risen from $1.2 \%$ in December 2020 to $4.3 \%$ in August 2021, its highest level since September 2008. Continuation of hyper-stimulative monetary and fiscal policies have led to increasing concern that inflation could remain significantly above the $2 \%$ longer-run benchmark cited by the Federal Reserve. The September 2021 Survey of Consumer Expectations conducted by the New York Fed reported that expectations for year-ahead inflation rose to $5.3 \%$, which is the highest reading

[^46]on record in the survey's eight-year history. ${ }^{12}$ Meanwhile, the Social Security Administration announced that beneficiaries would receive a cost-of-living adjustment of $5.9 \%$ for 2022, up from $1.3 \%$ a year earlier. ${ }^{13}$ While continuing to maintain that higher inflation rates are likely to be transitory, Fed Chair Jerome Powell has also noted that " $[\mathrm{t}] \mathrm{he}$ process of reopening the economy is unprecedented," and that "bottlenecks, hiring difficulties, and other constraints could again prove to be greater and longer-lasting than anticipated, posing upside risks to inflation. ${ }^{14}$

The underlying risk and unease have been felt worldwide as countries have struggled to manage the pandemic. In Britain, the economy and financial markets have been challenged by the severity of the COVID-19 pandemic and uncertainties regarding the impact of Brexit, which has led to shortages of gasoline and consumer goods. The European Union experienced a $6.0 \%$ decline in economic growth during 2020, although GDP is expected to expand by approximately $4.8 \%$ during 2021. Economic activity has been volatile in many emerging market economies, including Brazil and Mexico. China, however, reported that its economy expanded by $2.3 \%$ in 2020 , after experiencing a sharp contraction in the first quarter of the year. China's economic growth accelerated dramatically during the first half of

[^47]2021, but concerns over the potential collapse of a major property developer and a highly leveraged real estate market pose serious challenges for investors and the Chinese economy. Meanwhile, severe constraints in the global supply chain and a significant increase in oil prices come on top of ongoing geopolitical tensions in the Middle East, which in the past have led to concerns over possible disruptions in crude oil supplies and attendant price volatility.

## Q17. HOW HAVE COMMON EQUITY MARKETS BEEN IMPACTED BY COVID-19?

A17. The threat posed by the coronavirus pandemic led to extreme volatility in the capital markets as investors dramatically revised their risk perceptions and return requirements in the face of the severe disruptions to commerce and the world economy. Despite the actions of the world's central banks to ease market strains and bolster the economy, global financial markets experienced precipitous declines in asset values in March 2020. While the broader stock market has fully recovered and currently stands near all-time highs, investors continue to face the prospect of volatility as capital markets respond to uncertainties surrounding the trajectory of the economy in light of ongoing risks associated with the COVID-19 pandemic. ${ }^{15}$

[^48]
## Q18. HAVE UTILITIES AND THEIR INVESTORS FACED SIMILAR TURMOIL?

A18. Yes. Concerns over weakening credit quality prompted S\&P to revise its outlook for the regulated utility industry from "stable" to "negative." ${ }^{16} \mathrm{As} \mathrm{S} \mathrm{\& P} \mathrm{explained:}$

Even before the current downturn and COVID-19, a confluence of factors, including the adverse impacts of tax reform, historically high capital spending, and associated increased debt, resulted in little cushion in ratings for unexpected operating challenges. ${ }^{17}$

While recognizing that regulatory protections have helped to mitigate the worst of the coronavirus pandemic, S\&P concluded that credit quality in the U.S. utility industry weakened during 2020 , noting that "[a]t the beginning of the year about $18 \%$ of the industry had a negative outlook or ratings on CreditWatch with negative implications. By the end of the year that percentage had doubled, to about $36 \%$." ${ }^{18}$ S\&P further observed that "[o]ne of the enduring effects of COVID-19 was regulatory lag," and noted that "[ f$]$ or the first time in a decade we expect downgrades will outpace upgrades by about 7 to $1 .{ }^{\prime 19} \mathrm{~S} \& \mathrm{P}$ recently observed that "2021 could become the second consecutive year that downgrades outpace

[^49]upgrades" in the utility sector. ${ }^{20}$ Meanwhile, rising inflation expectations also pose a challenge for utilities, with S\&P noting that "the threat of inflation comes at a time when credit metrics are already under pressure relative to downside ratings thresholds." ${ }^{21}$

Moody's noted that utilities were forced to seek alternatives to volatile commercial paper markets in order to fund operations, while emphasizing the importance of maintaining adequate liquidity in the sector to weather a prolonged period of financial volatility and turbulent capital markets. ${ }^{22}$ As Moody's has repeatedly concluded in its review of electric utilities:

The rapid spread of the coronavirus outbreak, severe global economic shock, low oil prices and asset price volatility are creating a severe and extensive credit shock across many sectors, regions and markets. The combined credit effects of these developments are unprecedented. ${ }^{23}$

[^50]Q19. DO CHANGES IN UTILITY COMPANY BETA VALUES SINCE THE PANDEMIC BEGAN CORROBORATE AN INCREASE IN INDUSTRY RISK?

A19. Yes. Beta measures a stock's price volatility relative to the overall market and reflects the tendency of a stock's price to follow changes in the market. The investment community relies on beta as an important guide to investors' risk perceptions. A stock that tends to respond less to market movements has a beta less than 1.00, while stocks that tend to move more than the market have betas greater than 1.00 . Generally, a higher beta means the market perceives the stock to be riskier than a stock with a lower beta. As shown on page 1 of Exhibit No. EPE0019 , the current average beta for the firms in the proxy group I use to estimate the cost of equity is 0.91 . Prior to the pandemic, the average beta for the same group of companies was $0.56 .{ }^{24}$ This dramatic increase in a primary gauge of investors' risk perceptions is further proof of the rise in the risk of electric company common stocks.

Q20. WHAT ACTIONS HAS THE FEDERAL RESERVE TAKEN IN RESPONSE TO THE THREAT TO THE ECONOMY POSED BY THE CORONAVIRUS PANDEMIC?

A20. In early 2020, the Federal Reserve quickly lowered its target Federal Funds rate to close to zero to support economic activity, stabilize markets and bolster the flow of credit to households, businesses, and communities. In March 2020, the Federal Reserve lowered the target range for its benchmark federal funds rate by a total of

[^51]150 basis points, to the current range of $0 \%$ to $0.25 \%$. The FOMC expects to maintain this target range until it is confident that the economy has weathered recent events. ${ }^{25}$

In addition, the Federal Reserve has undertaken a broad range of unprecedented programs designed to support financial market liquidity and economic stability. The quantitative easing measures initially adopted in response to the 2008 financial crisis were reintroduced by directing the purchase of Treasury securities and agency mortgage-backed securities "in the amounts needed to support the smooth functioning of markets, ${ }^{, 26}$ while continuing to reinvest all principal repayments from its existing holdings. In addition, the Federal Reserve also implemented wide-ranging initiatives designed to support credit markets and ensure liquidity, including credit facilities to support households, businesses, and state and local governments, as well as the purchase of corporate bonds on the secondary market. ${ }^{27}$

As illustrated in Figure EPE-1 below, the Federal Reserve's asset holdings exceed $\$ 8.2$ trillion, which is an all-time high, and the resulting effect on capital market conditions has likely never been more pronounced. While the Federal Reserve's aggressive monetary stimulus may help to ensure market liquidity and

[^52] support the economy, these actions also support financial asset prices, which in turn place artificial downward pressure on bond yields, which provide one commonly cited gauge of capital costs.

FIGURE EPE-1
FEDERAL RESERVE BALANCE SHEET (BILLION \$)

https://fred.stlouisfed.org/series/WALCL

## Q21. ARE BOND YIELDS EXPECTED TO REMAIN AT CURRENT LEVELS OVER THE NEXT FEW YEARS?

A21. No. Economic forecasters anticipate that bond yields will increase significantly over the near term. For example, Table EPE-1 below presents recent projections from the long-term forecasts published by Blue Chip Financial Forecasts, IHS Markit, and Value Line. This evidence suggests that investors anticipate higher interest rates over the near-term.

TABLE EPE-1
INTEREST RATE TRENDS

## Change (bps)

$\underline{2021} \underline{2022} \underline{2023} \underline{2024} \underline{2025} \underline{2021-25}$

| 10-Yr. Treasury |  |  |  |  |  |  |
| :---: | ---: | :--- | :--- | :--- | :--- | ---: |
| Blue Chip | $1.7 \%$ | $2.0 \%$ | $2.4 \%$ | $2.7 \%$ | $3.0 \%$ | 132 |
| IHS Markit | $1.2 \%$ | $1.7 \%$ | $2.0 \%$ | $2.2 \%$ | $2.5 \%$ | 124 |
| Value Line | $1.3 \%$ | $1.6 \%$ | $2.0 \%$ | $2.3 \%$ | $2.5 \%$ | 120 |
|  |  |  |  |  |  |  |
| 30-Yr. Treasury |  |  |  |  |  |  |
| Blue Chip | $2.4 \%$ | $2.6 \%$ | $2.9 \%$ | $3.3 \%$ | $3.6 \%$ | 121 |
| IHS Markit | $2.0 \%$ | $2.4 \%$ | $2.7 \%$ | $2.8 \%$ | $3.0 \%$ | 104 |
| Value Line | $2.0 \%$ | $2.3 \%$ | $2.3 \%$ | $2.5 \%$ | $2.7 \%$ | 70 |
|  |  |  |  |  |  |  |
| Aaa Corporate |  |  |  |  |  |  |
| Blue Chip | $3.1 \%$ | $3.3 \%$ | $3.7 \%$ | $4.1 \%$ | $4.5 \%$ | 143 |
| IHS Markit | $2.3 \%$ | $2.2 \%$ | $2.5 \%$ | $2.8 \%$ | $3.0 \%$ | 68 |
| Value Line | $2.3 \%$ | $2.4 \%$ | $2.8 \%$ | $3.1 \%$ | $3.3 \%$ | 100 |

[^53]As evidenced above, there is a consensus that the cost of permanent capital will rise over the 2021-2025 timeframe. As a result, current cost of capital estimates likely understate investors' requirements during the time the rates set in this proceeding will be effective.

## Q22. ARE THESE EXPECTATIONS OF HIGHER BOND YIELDS CONSISTENT WITH THE VIEWS OF THE FOMC?

A22. Yes. In conjunction with their regular meetings, policymakers at the FOMC submit their projections about where short-term interest rates are headed. The result is the dot plot-a visual representation of where members think rates will go over the short, medium, and longer run. The most recent dot plot indicates that one-half of
the FOMC participants expect rates to rise in $2022 .{ }^{28}$ For 2023, a majority of members expect that the target range for the federal funds rate will increase, and over the longer-run horizon of the FOMC's outlook (five to six years), all Fed policymakers on the FOMC expect the federal funds benchmark to be dramatically higher than current levels. ${ }^{29}$

## Q23. HAS THE COMMISSION PREVIOUSLY ACKNOWLEDGED THE INTER-RELATIONSHIP BETWEEN CAPITAL MARKET CONDITIONS AND A DETERMINATION OF A JUST AND REASONABLE ROE?

A23. Yes. In Opinion No. 531, the Commission determined that capital market conditions were anomalous, specifically that atypically low interest rates led to midpoint results of the Commission's then-preferred DCF analysis that were too low to be just and reasonable. The Commission considered yields on 10-year constant maturity Treasury bonds as an indicator of a broad range of capital market conditions that affect utilities and the inputs to the DCF model. ${ }^{30}$ The Commission explained that:

Until the financial crisis of 2008, the yield on U.S. Treasury bonds had not fallen below 3 percent since the 1950s. . . U.S. Treasury bond yields are not an input in the DCF model, but they reflect current capital market conditions, which could have an indirect impact on the two inputs in the DCF model-dividend yield and growth rate. ${ }^{31}$

28 Summary of Economic Projections (Sept. 22, 2021), https://www.federalreserve.gov/monetarypolicy/files/fomcprojtabl20210922.pdf.
${ }^{29}$ The FOMC members are projecting a midpoint federal funds rate in the range of $2.0 \%$ to $3.0 \%$, versus the current level of $0.125 \%$.
${ }^{30}$ See, e.g., Opinion No. 531-B at P 49.
${ }^{31}$ Opinion No. 531 at P 145 n .285 (citation omitted).

In addition, as the Commission noted in Opinion No. 531, the record in that proceeding included evidence concerning the implications of Federal Reserve monetary policies and expectations that interest rates would rise significantly over the near-term. ${ }^{32}$

In Opinion No. 551, which was issued in September 2016, the Commission again noted that record evidence for the six-month study period ending June 2015 "reflect the type of unusual conditions that the Commission identified in Opinion No. 531. ${ }^{33}$ The Commission observed that the yield on 10-year Treasury notes, which had been below two percent in the Docket No. EL11-66 record period, "was at 2.07 percent during the study period. ${ }^{, 34}$ Opinion No. 551 also cited "unprecedented levels of U.S. Treasury bonds and mortgage-backed securities" on the Federal Reserve's balance sheet as an indicator of the ongoing anomaly, noting that "the Federal Reserve continues to hold approximately $\$ 4.25$ trillion of those bonds, a level only slightly below record highs." 35 The Commission concluded that, " $[t]$ his record evidence is indicative of the same type of unusual capital market that the Commission found concerning in Opinion No. 531.,36 The size of Federal Reserve's current balance sheet dwarfs what the Commission previously found to call into question the reliability of its two-step DCF approach for determining utility

[^54]ROEs. Therefore, the atypical capital market conditions that led the Commission to conclude that the two-step DCF results were unreasonable continue to exist, but to a higher degree.

## Q24. WOULD IT BE REASONABLE TO DISREGARD THE IMPLICATIONS OF CURRENT CAPITAL MARKET CONDITIONS IN ESTABLISHING A FAIR ROE FOR EPE?

A24. No. One of the hallmarks of capital market conditions that the Commission found to be problematic for the application of the DCF model was long-term bond yields that are artificially suppressed due to the Federal Reserve's unprecedented intervention in the capital markets. Six-month average yields on both 10 -year and 30-year Treasury bonds are now far below those that prevailed during the periods the Commission characterized as anomalous in Opinion Nos. 531 and 551. Yields on 10 -year Treasury bonds averaged $1.83 \%$ and $2.07 \%$ during the study periods referenced in Opinion Nos. 531 and 551, respectively, versus $1.50 \%$ for the six months ending August 2021. Yields on 30-year Treasury bonds averaged 3.00\% and $2.72 \%$ during the study periods referenced in Opinion Nos. 531 and 551, respectively, versus $2.16 \%$ for the six months ending August 2021. Apart from being well below levels that the Commission previously highlighted as problematic,,${ }^{37}$ these current yields also are far below historical levels. ${ }^{38}$

[^55]The Commission previously concluded that, "evidence in the record regarding historically low interest rates and Treasury bond yields as well as the Federal Reserve's large and persistent intervention in markets for debt securities are sufficient to find that current capital market conditions are anomalous." ${ }^{39} \mathrm{By}$ this standard, the Commission must recognize that the potential for distorted results again exists in this case. This further supports reference to the Expected Earnings approach and other ROE benchmarks in evaluating a just and reasonable ROE for EPE.

## C. Recommended ROE for EPE

Q25. PLEASE SUMMARIZE YOUR RESULTS UNDER THE THREE-MODEL APPROACH.

A25. The ROE estimates produced by the Three-Model Approach for the twelve riskcomparable electric utilities in the proxy group ("Electric Group") described subsequently in my testimony are summarized in Table EPE-2 below.

TABLE EPE-2
SUMMARY OF RESULTS - THREE-MODEL APPROACH

| Method | Range | Median | Midpoint |  |
| :--- | ---: | :--- | ---: | ---: |
| Two-Step DCF | $6.09 \%$ | -- | $11.43 \%$ | $8.89 \%$ |
| CAPM | $9.76 \%$ | $--13.82 \%$ | $11.82 \%$ | $11.79 \%$ |
| Risk Premium | $7.23 \%$ | $--11.93 \%$ | $9.58 \%$ | $9.58 \%$ |
| Composite ROE | $\mathbf{7 . 6 9 \%}$ | -- | $\mathbf{1 2 . 3 9 \%}$ | $\mathbf{1 0 . 0 9 \%}$ |
|  | $\mathbf{1 0 . 0 4 \%}$ |  |  |  |

[^56]Because EPE's Moody's credit rating is identical to the average for the Electric Group (Exhibit No. EPE-0019), the median and midpoint values specified above correspond to a utility of average risk and do not consider the risk-based ranges adopted in Opinion No. 569-A. ${ }^{40}$

## Q26. WHAT ARE YOUR FINDINGS REGARDING THE EXPECTED EARNINGS APPROACH?

A26. In responding to the concerns articulated in Opinion Nos. 569 and 569-A, my evidence demonstrates that the Expected Earnings approach offers a meaningful and necessary benchmark in assessing the return necessary for EPE to maintain financial integrity and attract capital. The Expected Earnings approach serves as a direct measure of the expected returns on equity that investors associate with companies of comparable risk and provides regulators with a direct guide to the return the utility should be expected to earn on the embedded cost of its book equity investment. The traditional regulatory paradigm explicitly recognizes the validity of book value of equity by choosing to measure rate base and capital structure components based on book value, rather than market value. The Expected Earnings approach is uniquely matched to this standard and complements the use of the Three-Model Approach to ensure that the end-result of the Commission's ROE methodology satisfies the requirements of Hope and Bluefield.

[^57]
## Q27. PLEASE SUMMARIZE YOUR RESULTS UNDER THE FOUR-MODEL APPROACH.

A27. The ROE estimates produced by the Four-Model Approach for the Electric Group are summarized in Table EPE-3 below.

TABLE EPE-3
SUMMARY OF RESULTS - FOUR-MODEL APPROACH

| Method | Range | Median | Midpoint |  |  |
| :--- | ---: | :--- | ---: | ---: | ---: |
| Two-Step DCF | $6.09 \%$ | -- | $11.43 \%$ | $8.89 \%$ | $8.76 \%$ |
| CAPM | $9.76 \%$ | -- | $13.82 \%$ | $11.82 \%$ | $11.79 \%$ |
| Expected Earnings | $7.69 \%$ | -- | $14.35 \%$ | $11.24 \%$ | $11.02 \%$ |
| Risk Premium | $6.90 \%$ | -- | $12.25 \%$ |  | $9.58 \%$ |
| Composite ROE | $\mathbf{7 . 6 1 \%}$ | -- | $\mathbf{1 2 . 9 6 \%}$ | $\mathbf{1 0 . 3 8 \%}$ | $\mathbf{1 0 . 2 9 \%}$ |

## Q28. CAN A MECHANICAL APPLICATION OF ANY SPECIFIC ROE

 METHODOLOGY BE EXPECTED TO PRODUCE REASONABLE OUTCOMES IN EVERY CASE AND UNDER ALL CIRCUMSTANCES?A28. No. The Commission has previously recognized that a just and reasonable ROE should be determined based on the facts specific to each proceeding, and noted, "[a]s an initial matter, we emphasize that the primary question to be considered here is not what constitutes the best overall method for determining ROE generically. . . ."41 Rather, the question involves a determination of what ROE is most appropriate in each specific case. ${ }^{42}$

[^58]As the Commission has recognized, this evaluation should not be based on the mechanical application of a single quantitative methodology (or for that matter a mechanical application of a series of models). ${ }^{43}$ No single financial model predicts the required ROE with absolute precision and all financial models are based on a series of assumptions that are affected differently by market conditions.

Investors inform their investment decisions by considering multiple methodologies, as do financial analysts. These include the DCF, CAPM, and Risk Premium models, as well as variations of those approaches (e.g., the constant growth DCF and the ECAPM) and other methods (e.g. the Expected Earnings approach). As the Commission has recognized, all models, including the two-step DCF model, have flaws. Accordingly, in addition to the results of the Three-Model and Four-Model approaches, my testimony also presents the results of alternative ROE benchmarks. Specifically, I apply the constant growth DCF method and ECAPM to the utilities in the Electric Group.

Q29. ARE THESE METHODOLOGIES WELL-ESTABLISHED IN EVALUATING INVESTORS' REQUIRED ROE?

A29. Yes. The Commission has concluded that the two-step DCF method produces an end-result that fails the requirements of Hope and Bluefield, ${ }^{44}$ but should also recognize that diluting the downward bias of the two-step DCF method by averaging its results with those produced by other methods merely masks the bias, rather than removing it. In addition, the Commission has determined that "we must

[^59]look to how investors analyze and compare their investment opportunities ${ }^{35}$ when evaluating a just and reasonable ROE. As documented in my testimony, there is no demonstrable evidence that investors look to GDP growth rates in the far distant future in assessing their expectations for utility common stocks. Investors recognize that the electric utility industry is relatively stable and mature. The fact that analysts' EPS growth estimates are routinely referenced in the financial media and in investment advisory publications, while long-term GDP growth rates are not, clearly implies that investors use current earnings forecasts, not long-term trends in GDP, as a primary basis for their growth expectations. In view of these facts, the constant growth form of the DCF model provides a meaningful benchmark in evaluating a just and reasonable base ROE for EPE.

I also include the ECAPM, which is an extension of the traditional CAPM model. The ECAPM is supported by recognized financial research and has been relied on in various utility rate proceedings, and by regulatory agencies and their staffs. The ECAPM is designed to refine the CAPM to better reflect the observed relationship between risk and investors' required return. My testimony supports this approach as a useful indicator in determining a just and reasonable ROE under the general framework adopted in Opinion No. 569-A.

## Q30. WHAT RESULTS ARE PRODUCED BY THE ALTERNATIVE ROE BENCHMARKS?

A30. As summarized on page 2 of Exhibit No. EPE-0018:

[^60]- Application of the constant growth DCF model to the proxy group of electric utilities implies a range of $5.72 \%$ to $12.39 \%$, with a median of 9.17\%.
- The forward-looking ECAPM estimates produce an ROE range of $10.41 \%$ to $13.69 \%$ with a median of $11.98 \%$.

These results demonstrate a continued downward bias in the $8.89 \%$ median value resulting from the Commission's two-step DCF method and indicate that the average ROE resulting from the Three-Model Approach is correspondingly understated.

Q31. WHAT THEN IS YOUR RECOMMENDATION AS TO A JUST AND REASONABLE ROE FOR EPE?

A31. Based on the results of my analyses, I recommend an ROE of $10.38 \%$ for EPE, which corresponds to the median value produced by the Four-Model Approach.

## III. DEVELOPMENT AND SELECTION OF THE PROXY GROUP

## Q32. WHAT IS THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY?

A32. This section describes how I identify the proxy group of publicly traded electric utilities used to apply the financial models described in my testimony.

## Q33. HOW DO YOU IMPLEMENT QUANTITATIVE METHODS TO

 ESTIMATE THE COST OF COMMON EQUITY FOR EPE?A33. Application of quantitative methods to estimate the cost of common equity requires observable capital market data, such as stock prices and beta values. Moreover, even for a firm with publicly traded stock, the cost of common equity can only be estimated. As a result, applying quantitative models using observable market data only produces an estimate that inherently includes some degree of observation
error. Thus, the accepted approach to increase confidence in the results is to apply alternative quantitative methods to a proxy group of publicly traded companies that investors regard as comparable in risk. The results of the analysis for the sample of companies are relied upon to establish a range of reasonableness for the cost of equity for the specific company at issue.

Q34. WHAT SPECIFIC CRITERIA DO YOU INITIALLY EXAMINE TO IDENTIFY A PROXY GROUP OF REGULATED ELECTRIC UTILITIES?

A34. Consistent with the Commission's accepted approach, I begin with the following criteria to identify a proxy group of electric utilities:

1. Companies that are included in the Electric Utility Industry groups compiled by Value Line.
2. Electric utilities that paid common dividends over the last six months and have not announced a dividend cut since that time.
3. Electric utilities with no ongoing involvement in a major merger or acquisition that would distort quantitative results.

In addition, the Commission has determined that credit ratings from both major agencies-S\&P and Moody's-should be considered independently as screening criteria when evaluating comparable risk. In evaluating credit ratings to identify a proxy group of utilities with comparable risks, the Commission has adopted a "comparable risk band," interpreted as one "notch" higher or lower than the corporate credit ratings of the utility at issue and within the investment grade ratings scale.

## Q35. WHAT CORPORATE CREDIT RATINGS HAVE BEEN ASSIGNED TO EPE BY MOODY'S AND S\&P?

A35. EPE has been assigned an issuer credit rating of Baa2 by Moody's. The Company is not rated by $\mathrm{S} \& \mathrm{P}$.

Q36. WHAT PROXY GROUP SCREENING CRITERIA ARE INDICATED BY EPE'S CREDIT RATINGS?

A36. Applying the one notch lower or higher band under the Commission's guidelines results in a screening criterion of Baa1 to A3, based on EPE's Moody's issuer rating.

Q37. IS THERE ANY OTHER PUBLICLY TRADED UTILITY THAT IS RELEVANT IN ESTABLISHING A PROXY GROUP?

A37. Yes. Emera Inc.'s operations are comparable to those of other electric utilities in the proxy group. Although Value Line currently includes Emera Inc. in its power industry group, rather than its electric utility groups, Emera Inc.'s operations are dominated by its regulated electric and gas utility operations, which account for approximately $95 \%$ of total revenues. U.S. operations constitute $68 \%$ of Emera Inc.'s total earnings, and its Florida electric utility operations account for $58 \%$ of total rate base investment. ${ }^{46}$ Thus, investors would regard Emera Inc. as a comparable investment alternative that is relevant to an evaluation of the required rate of return for EPE.

As shown on Exhibit No. EPE-0019, applying the criteria outlined above results in a proxy group of twenty-six utilities, which I refer to as the "Electric Group."

## IV. APPLICATION OF FINANCIAL MODELS

## Q38. WHAT IS THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY?

A38. This section briefly outlines my application of the two-step DCF, CAPM, and Risk Premium methods. In addition, I address the Commission's concerns regarding the Expected Earnings approach and present the results of this methodology.

## A. Two-Step DCF Model

Q39. WHAT MARKET VALUATION PROCESS UNDERLIES DCF MODELS?
A39. DCF models assume that the price of a share of common stock is equal to the present value of the expected cash flows (i.e., future dividends and stock price appreciation) that will be received while holding the stock, discounted at investors' required rate of return. Thus, the cost of equity is the discount rate that equates the current price of a share of stock with the present value of all expected cash flows from the stock.

## Q40. WHAT FORM OF THE DCF MODEL IS CUSTOMARILY USED TO ESTIMATE THE COST OF EQUITY?

A40. Rather than developing annual estimates of cash flows into perpetuity, the DCF model can be simplified to a "constant growth" form: ${ }^{47}$

[^61]$$
P_{0}=\frac{D_{1}}{k_{e}-g}
$$
\[

$$
\begin{array}{ll}
\text { where: } & \mathrm{P}_{0}=\text { Current price per share; } \\
& \mathrm{D}_{1}=\text { Expected dividend per share in the coming year; } \\
& \mathrm{k}_{\mathrm{e}}=\text { Cost of equity; and } \\
& g=\text { Investors' long-term growth expectations. }
\end{array}
$$
\]

The cost of common equity $\left(\mathrm{k}_{\mathrm{e}}\right)$ can be isolated by rearranging terms within the equation:

$$
k_{e}=\frac{D_{1}}{P_{0}}+g
$$

This constant growth form of the DCF model recognizes that the rate of return to stockholders consists of two parts: (1) dividend yield ( $\mathrm{D}_{1} / \mathrm{P}_{0}$ ) and (2) growth ( $g$ ). In other words, investors expect to receive a portion of their total return in the form of current dividends and the remainder through stock price appreciation.

Q41. WHAT IS THE DISTINCTION BETWEEN THE TWO-STEP DCF METHOD FOR ELECTRIC UTILITIES AND THE CONSTANT GROWTH DCF MODEL OUTLINED ABOVE?

A41. The Commission's two-step DCF method for electric utilities assumes that investors differentiate between near-term growth forecasts, such as the EPS growth rates published by securities analysts, and some notion of longer-term growth extending into the distant future. Under the Commission's two-step DCF method,

[^62]the first growth rate is represented by analysts' consensus EPS growth projections specific to each individual utility in the proxy group, while the second growth rate is based on long-term forecasts of growth in nominal GDP. Based on this assumption of disparate growth expectations, the two-step DCF method employs two separate growth rates for each company, which are weighted to arrive at a single value for the " $g$ " component. However, as I discuss below, the assumptions about investor expectations and growth that motivate the two-step DCF approach are not substantiated by the evidence.

## Q42. HOW DO YOU DETERMINE THE DIVIDEND YIELD FOR THE UTILITIES IN YOUR PROXY GROUP?

A42. An average dividend yield is developed for each utility in the Electric Group during the six months from March through August 2021. This calculation is made by dividing the indicated dividend in each month by the corresponding average of the monthly low and high stock prices. The resulting six-month average historical dividend yields are presented on page 1 of Exhibit No. EPE-0020.

## Q43. WHAT GROWTH RATE DO YOU USE TO ADJUST THIS HISTORICAL DIVIDEND YIELD?

A43. Consistent with the Commission's recent guidance, I adjust the historical dividend yield using only the analysts' EPS growth estimate. ${ }^{48}$

[^63]
## Q44. WHAT IS THE SOURCE OF THE ANALYSTS' CONSENSUS EPS GROWTH RATES USED IN YOUR APPLICATION OF THE COMMISSION'S TWO-STEP DCF METHOD?

A44. I obtain IBES earnings growth rates for the utilities in the Electric Group from Yahoo! Finance.

Q45. HOW DO YOU ARRIVE AT YOUR PROJECTED GROWTH RATE IN NOMINAL GDP, REPRESENTING THE SECOND STAGE OF THE COMMISSION'S DCF MODEL?

A45. I rely on recent long-term projections published by IHS Markit and the EIA, as well as the Social Security Administration forecast over the next 50 years. This resulted in an average GDP growth rate of $4.20 \%$. The calculation of the long-term growth rate in nominal GDP used in my application of the Commission's two-step DCF model is presented on page 2 of Exhibit No. EPE-0020.

Q46. WHAT WEIGHTING DO YOU ASSIGN THESE RESPECTIVE GROWTH RATES TO ARRIVE AT THE SINGLE " $G$ " COMPONENT OF THE TWO-STEP DCF MODEL?

A46. Following the practice adopted in Opinion No. 569-A, I weight the individual analysts' EPS growth rates by $80 \%$ and the GDP growth projection by $20 \%$ to compute a single, two-step growth rate for each of the utilities in the proxy group.

## Q47. WHERE DO YOU PRESENT THE RESULTS OF YOUR TWO-STEP DCF

 ANALYSES?A47. After combining the dividend yields and the weighted average of the respective analysts' projections and GDP growth forecast for each utility, the resulting cost of common equity estimates for the Electric Group are shown on page 1 of Exhibit No. EPE-0020.

Q48. IN EVALUATING THE RESULTS OF THE DCF MODEL, IS IT APPROPRIATE TO ELIMINATE ILLOGICAL COST OF EQUITY ESTIMATES?

A48. Yes. Consistent with Opinion No. 569-A, in applying quantitative methods to estimate the cost of equity, it is essential that the resulting values pass fundamental tests of reasonableness and economic logic. Accordingly, DCF estimates that are implausibly low or high should be eliminated when evaluating the results of this method.

Q49. WHAT LOW-END THRESHOLD HAS THE COMMISSION ADOPTED?
A49. Starting with the average yield on Baa-rated public utility bonds for the six-month study period, the Commission adds an increment equal to $20 \%$ of the market risk premium used to apply the CAPM. ${ }^{49}$ Combining an average yield on Baa utility bonds of $3.45 \%$ for the six months ending August 2021 with $20 \%$ of the $10.43 \%$ CAPM market risk premium (Exhibit No. EPE-0021) results in a low-end threshold of $5.54 \%$.

## Q50. DID YOU EXCLUDE ANY LOW-END DCF ESTIMATES FROM YOUR

 ANALYSES?A50. No. As shown on page 1 of Exhibit No. EPE-0020, all of the two-step DCF results exceeded the $5.54 \%$ threshold. The resulting retention of low-end values in the $6 \%$ range-which are far below any credible estimate of the cost of equity-continues to impart a downward bias to the DCF results.

[^64]Q51. WHAT IS THE COMMISSION'S CURRENT POSITION WITH RESPECT TO EVALUATING DCF VALUES AT THE HIGH END OF THE RANGE?

A51. With respect to the evaluation of individual cost of equity estimates, the Commission has established a high-end test based on $200 \%$ of the median value from each financial model before eliminating estimates at the low or high end of the range. ${ }^{50}$

Q52. WHAT IS YOUR CONCLUSION WITH RESPECT TO AN EVALUATION OF TWO-STEP DCF VALUES AT THE HIGH END OF THE RANGE?

A52. As shown on page 1 of Exhibit No. EPE-0020, the upper end of the two-step DCF results for the Electric Group is set by a cost of equity estimate of $11.43 \%$, which falls well below the Commission's high-end test.

Q53. WHAT OTHER CONSIDERATION HAS THE COMMISSION RAISED IN EVALUATING COST OF EQUITY ESTIMATES?

A53. The Commission has also suggested that cost of equity estimates should be subject to a "natural break" analysis, based on the difference between individual values and the next-lowest or next-highest estimate. ${ }^{51}$

Q54. DO YOU AGREE THAT THE DIFFERENCE BETWEEN INDIVIDUAL COST OF EQUITY ESTIMATES CAN BE USED AS A GAUGE OF REASONABLENESS?

A54. No. The dispersion between a particular cost of equity result and the next lowest value provides no relevant information in evaluating the reasonableness of estimates at the upper end of the range. The key fallacy underlying the "natural break" analysis is the belief that estimating the cost of equity involves a process of

[^65]sampling. On the contrary, through application of proxy group criteria, the Commission has identified all of the utilities deemed to be of comparable risk. In other words, the array of cost of equity estimates produced by the ROE analyses represents the entire population, not a sample of the population. We are not drawing 20 colored marbles from an urn containing hundreds and seeking to make inferences regarding the makeup of the unobserved remainder. Rather, we are analyzing all of the marbles (or all of the relevant, comparable-risk companies). As a result, the dispersion of individual values is not a valid test of how well a specific cost of equity estimate reflects investors' expectations and required returns.

If there is any statistical observation to be made regarding the cost of equity estimates produced by any single financial model, it is that the relatively small size of the population (the proxy group) makes it more likely that there will be a "break" in the data set relative to an analysis for a larger population. That is not evidence of a flaw in the results. Rather, it is a predictable function of the size of the proxy group of comparable-risk utilities. Trimming so-called "outliers" on this basis has the unreasonable effect of arbitrarily making that small population even smaller, and thereby skewing the results.

Moreover, the goal in evaluating the results of financial models, such as the DCF and CAPM approaches, is not to identify "outliers," it is to remove estimates that are clearly illogical for purposes of identifying the "broad range of potentially lawful ROEs" that constitutes the zone of reasonableness. The identification of clearly illogical results should be a case-specific determination relying on the specific evidence at hand. The notion of an "outlier" in the context of statistics and
sampling theory is an entirely separate concept from the evaluation of cost of equity estimates for the population of comparable risk utilities. Apart from the fact that the arithmetic difference between two individual cost of equity estimates does not provide a sound basis to evaluate the economic validity of either value, the amount of any "break" that might be suggestive of an "outlier" is arbitrary and lacks any empirical foundation.

Q55. THIS NOTWITHSTANDING, WOULD THERE BE ANY ARGUABLE BASIS TO EXCLUDE THE 11.43\% HIGH-END VALUE FROM YOUR TWO-STEP DCF ANALYSIS BASED ON A "NATURAL BREAK" ANALYSIS?

A55. No. The "break" between the $11.43 \%$ value and the next lowest result is 93 basis points, which is less than the dispersion between other observations in the array of two-step DCF estimates. Thus, not only is a "natural break" analysis misguided and lacking any objective basis, it provides no evidence that the $11.43 \%$ value at the top end of the two-step DCF range is "truly irrational or anomalously high."52

## Q56. WHAT ARE THE RESULTS OF YOUR TWO-STEP DCF ANALYSIS?

A56. As shown on page 1 of Exhibit No. EPE-0020, the two-step DCF analysis for the Electric Group results in a range of $6.09 \%$ to $11.43 \%$, with a median of $8.89 \%$.

## B. Capital Asset Pricing Model

## Q57. PLEASE DESCRIBE THE CAPM.

A57. The CAPM approach is generally considered to be the most widely referenced method for estimating the cost of equity among academicians and professional practitioners, with the pioneering researchers of this method receiving the Nobel

[^66]Prize in 1990. The CAPM is a theory of market equilibrium that measures risk using the beta coefficient. Assuming investors are fully diversified, the relevant risk of an individual asset (e.g., common stock) is its volatility relative to the market as a whole, with beta reflecting the tendency of a stock's price to follow changes in the market. A stock that tends to respond less to market movements has a beta less than 1.00, while stocks that tend to move more than the market have betas greater than 1.00. The CAPM is mathematically expressed as:

$$
\mathrm{R}_{\mathrm{j}}=\mathrm{R}_{\mathrm{f}}+\beta_{\mathrm{j}}\left(\mathrm{R}_{\mathrm{m}}-\mathrm{R}_{\mathrm{f}}\right)
$$

where: $\mathrm{R}_{\mathrm{j}}=$ required rate of return for stock j ;
$\mathrm{R}_{\mathrm{f}}=$ risk-free rate;
$\mathrm{R}_{\mathrm{m}}=$ expected return on the market portfolio; and
$B_{j}=$ beta, or systematic risk, for stock j .
Like the DCF model, the CAPM is an ex-ante, or forward-looking, model based on expectations of the future. As a result, in order to produce a meaningful estimate of investors' required rate of return, the CAPM must be applied using estimates that reflect the expectations of actual investors in the market, not with backward-looking, historical data.

## Q58. WHAT MARKET RATE OF RETURN HAS THE COMMISSION USED TO APPLY THE CAPM?

A58. Under the approach considered by the Commission in Opinion No. 569-A, the expected market rate of return was estimated by conducting a DCF analysis on the dividend paying firms in the S\&P 500. ${ }^{53}$

[^67]
## Q59. WHAT BETA VALUES DID THE COMMISSION ADOPT TO APPLY THE CAPM IN OPINION NO. 569-A?

A59. The Commission relied on the beta values reported by Value Line, which in my experience is the most widely referenced source for beta in regulatory proceedings and is widely relied upon by investors. As noted in New Regulatory Finance:

Value Line is the largest and most widely circulated independent investment advisory service, and influences the expectations of a large number of institutional and individual investors. . . . Value Line betas are computed on a theoretically sound basis using a broadly based market index, and they are adjusted for the regression tendency of betas to converge to $1.00 .{ }^{54}$

The fact that investors rely on Value Line betas in evaluating expected returns for utility common stocks provides strong support for this approach.

## Q60. THE COMMISSION HAS SUGGESTED THAT IT MAY BE

 THEORETICALLY INCORRECT TO APPLY THE CAPM USING VALUE LINE BETAS AND A MARKET RETURN BASED ON THE S\&P 500. ${ }^{55}$ WHAT IS THE CRUX OF THIS ARGUMENT?A60. Opinion No. 569-A stated that there is an "imperfect correspondence" between a market risk premium based on the dividend-paying firms in the S\&P 500 and Value Line betas, which are determined based on a comparison of each stock's volatility relative to the stocks in the NYSE, rather than the S\&P 500. While observing that there is substantial evidence that investors rely on Value Line betas, ${ }^{56}$ in its recent decision in Mystic the Commission accepted Trial Staff's proposal to use

[^68]Bloomberg-based, alternative betas derived from the returns to the S\&P 500 Index. ${ }^{57}$

## Q61. DO YOU AGREE THAT THERE IS A LACK OF CORRESPONDENCE BETWEEN A MARKET RETURN BASED ON THE S\&P 500 AND VALUE LINE BETA VALUES?

A61. No. Under the CAPM, the volatility at issue theoretically relates the market price of the stock with the market price of every other possible investment opportunity in the "market," including collectible cars and gold bullion. Just as it is not possible to precisely define the growth expectations necessary to apply the DCF model directly to utilities, forward-looking market returns and beta values are unobservable. Application of the DCF approach to the dividend-paying firms in the S\&P 500 provides a sound proxy for investors' expected return on the "market." Similarly, reference to Value Line's published beta values also offer an objective proxy for an unobservable, forward-looking beta. There is no "mismatch," as Opinion No. 569-A and Mystic seem to imply.

The contention that there is an "imperfect correspondence" between a market return that references the S\&P 500 and beta values estimated against the NYSE is further disproved by reference to studies in the financial research. Marston and Harris noted that it derived an estimate of the market rate of return for a sample of approximately 400 companies selected from the S\&P 500, while the beta values used in the study were calculated "against . . . all NYSE

[^69]securities. ${ }^{58}$ This approach, used by recognized researchers in a peer-reviewed journal sponsored by the Eastern Finance Association, mirrors the CAPM approach adopted in Opinion No. 569-A. Similarly, in applying a market rate of return based on the dividend paying firms in the S\&P 500, the Staff of the Illinois Commerce Commission also relied on published betas from Value Line. ${ }^{59}$

## Q62. IS THERE OTHER EVIDENCE THAT UNDERCUTS THE ARGUMENT OF A LACK OF CORRESPONDENCE BETWEEN A MARKET RETURN FOR THE S\&P 500 AND VALUE LINE BETAS?

A62. Yes. Beta measures the variability of the price of a common stock relative to the broader market. While it is possible to calculate this measure of relative price volatility using alternative market benchmarks (i.e., NYSE or S\&P 500), to the extent that movements in market indices are driven by the stock prices of very large capitalization companies and thus move in tandem, the beta values using similar time periods would be indistinguishable. If there is no systemic difference in the relative movements of the NYSE and the S\&P 500, then there is no basis to suggest that a beta calculated against the NYSE would not apply equally to a market rate of return estimated by reference to the S\&P 500 .

The degree to which movements in the NYSE and S\&P 500 are synchronized can be tested through correlation analysis. The correlation coefficient measures the degree that two variables move together. A correlation coefficient of

[^70] 0.0 would indicate that there is no consistent co-movement between two variables, while a correlation coefficient of 1.0 would indicate perfect correlation, i.e., that $100 \%$ of the change in one variable is reflected in the other variable.

Figure EPE-2 displays the weekly percentage changes in the NYSE and the S\&P 500 over the five-year period ending August 31, 2021:

FIGURE EPE-2


As indicated on the chart, this analysis results in a correlation coefficient of 0.94 , meaning that weekly changes for the NYSE are almost perfectly matched by similar movements in the S\&P 500. The high degree of correlation between movements in the NYSE and movements in the S\&P 500 undercuts any notion of a "mismatch" between Value Line betas and a market return predicated on a subset of the S\&P 500.

## Q63. ARE THERE OTHER FACTORS THAT ALSO WEIGH IN FAVOR OF CONTINUED REFERENCE TO VALUE LINE BETAS, VERSUS THOSE DERIVED FROM BLOOMBERG?

A63. Yes. Value Line is recognized as being the most widely available source of investment information to investors, and citations in many textbooks and other sources support its usefulness as a guide to investors' expectations. ${ }^{60}$ Value Line is available at nominal prices for paper subscription or internet access, as well as being freely available to investors in libraries and through many brokerage offices. Importantly, the beta values reported by Value Line are updated on a weekly basis and calculated using a consistent methodology.

This contrasts with Bloomberg-derived betas, which are dependent on criteria specified by each individual user and subject to the potential for subjective manipulation to produce a desired end-result. Meanwhile, Bloomberg is available only to a select subset of investors that can afford substantial annual subscription fees to obtain the proprietary terminal required to access Bloomberg data. The administrative benefits associated with reliance on beta values from Value Line, including a consistent methodology by an independent third-party and immunity to selective changes in assumptions, support continued reference to Value Line betas in applying the CAPM approach.

[^71]Q64. THIS EVIDENCE NOTWITHSTANDING, HOW DO YOU ADDRESS ANY POTENTIAL CONCERNS REGARDING AN IMPERFECT CORRESPONDENCE BETWEEN THE ESTIMATED MARKET RETURN AND VALUE LINE BETAS?

A64. In order to address any potential concerns regarding the correspondence between Value Line betas and the CAPM market risk premium, I estimate the market rate of return by applying the same DCF methodology adopted in Opinion No. 569-A to the 1,350 dividend-paying firms in the NYSE. As a result, the index used as the basis for the estimated market return is matched with the index used to calculate Value Line's beta values, which resolves any potential for an "imperfect correspondence" between these two model inputs.

To apply the DCF model to the dividend-paying firms in the NYSE, I obtain the dividend yield for each company from Zacks, while the growth rate is based on the EPS growth projections for each firm published by IBES. As shown on Exhibit No. EPE-0022, after removing companies with growth rates that were negative or greater than $20 \%,{ }^{61}$ the weighted average of the projections for the individual firms implies an average growth rate of $10.39 \%$. Combining this average growth rate with a weighted average dividend yield of $2.20 \%$ results in a current cost of common equity estimate for the market as a whole $\left(\mathrm{R}_{\mathrm{m}}\right)$ of $12.59 \%$.

[^72]
## Q65. DO YOU INCLUDE A SIZE ADJUSTMENT IN APPLYING THE CAPM?

A65. Yes. Because financial research indicates that the CAPM does not fully account for observed differences in rates of return attributable to firm size, a modification is required to account for this size effect. As explained by Morningstar:

One of the most remarkable discoveries of modern finance is the finding of a relationship between firm size and return. On average, small companies have higher returns than large ones.... The relationship between firm size and return cuts across the entire size spectrum; it is not restricted to the smallest stocks. ${ }^{62}$

According to the CAPM, the expected return on a security should consist of the riskless rate, plus a premium to compensate for the systematic risk of the particular security. The degree of systematic risk is represented by the beta coefficient. The need for the size adjustment arises because differences in investors' required rates of return that are related to firm size are not fully captured by beta. To account for this, my CAPM analysis incorporates an adjustment to recognize the impact of size distinctions, as measured by the market capitalization for the companies in the Electric Group.

## Q66. WHAT ROE IS IMPLIED FOR THE ELECTRIC GROUP USING THE CAPM?

A66. As detailed on Exhibit No. EPE-0021, referencing a 2.16\% risk-free rate based on the six-month average yield on 30-year Treasury bonds at August 2021, the CAPM implies a cost of equity range of $9.76 \%$ to $13.82 \%$ for the Electric Group, with a median of $11.82 \%$.

[^73]
## C. Risk Premium Approach

## Q67. BRIEFLY DESCRIBE THE RISK PREMIUM APPROACH.

A67. The risk premium approach extends the risk-return tradeoff observed with bonds to estimate investors' required rate of return on common stocks. The cost of equity is estimated by first determining the additional return investors require to forgo the relative safety of bonds and to bear the greater risks associated with common stock, and then adding this equity risk premium to the current yield on bonds.

## Q68. IS THE RISK PREMIUM APPROACH A WIDELY ACCEPTED METHOD FOR ESTIMATING THE COST OF EQUITY?

A68. Yes. The risk premium approach is based on the fundamental risk-return principle that is central to finance. This method is routinely referenced by the investment community, by academics, and in regulatory proceedings, and provides an important tool in estimating a fair ROE.

## Q69. DID THE COMMISSION DIRECT CHANGES TO THE APPLICATION OF THIS METHOD IN OPINION NO. 569-A?

A69. Yes. To address specific concerns regarding the implementation of the Risk Premium approach, Opinion No. 569-A directed certain refinements in its application. Specifically, the Commission:

- developed a separate risk premium for each individual case, rather than using annual averages; ${ }^{63}$
- adopted the six-month period preceding the filing date of the offer of settlement as the basis for establishing the six-month

[^74]average bond yield used to calculate risk premiums attributable to ROEs approved through settled proceedings; ${ }^{64}$

- adopted the six-month study period as the basis for establishing the six-month average bond yield used to calculate risk premiums attributable to ROEs approved through litigated proceedings; ${ }^{65}$ and,
- extended the sample period for the Risk Premium study through the conclusion of the study period, rather than the calendar year. ${ }^{66}$

As documented in Appendix I to Opinion No. 569-A, the Commission removed cases from the Risk Premium study where:

- the utility was merely adopting an existing ROE without consideration of whether that ROE would be determined to be just and reasonable under fresh analysis;
- the ROE was clearly not under consideration;
- there were duplicative findings from a previous case;
- the ROE was set for a definite future date, and the Commission could not have evaluated a risk premium for a future date; and
- the test period predated 2006.

More recently, in Opinion No. 569-B, the Commission corrected a limited number of typographical and other minor errors to the risk premium data set used in Opinion No. 569-A. ${ }^{67}$ Based on these criteria, Opinion No. 569-B adopted a universe of 78 cases to apply the Risk Premium method. The Commission further refined this case set in Mystic. ${ }^{68}$

[^75]
## Q70. DO YOU ADD ANY OBSERVATIONS TO THE RISK PREMIUM CASE SET RELIED ON BY THE COMMISSION IN MYSTIC?

A70. Yes. Apart from updating the observations to reflect ROEs approved by the Commission through August 31, 2021, I made several corrections to the model inputs listed in Mystic. Specifically, I identified four cases the Commission either mistakenly omitted using the criteria listed above or failed to consider altogether. These cases are described on page 6 of Exhibit No. EPE-0023. Finally, I also include the $9.33 \%$ ROE approved in Mystic.

Q71. DO YOU REMOVE ANY OBSERVATIONS FROM THE RISK PREMIUM CASE SET ADPOTED IN MYSTIC?

A71. Yes. I remove a $10.05 \%$ ROE attributed to Docket No. EL15-45, which was a pancaked section 206 complaint proceeding for the MISO TOs. The Commission dismissed this complaint, and no ROE was approved or established in this proceeding.

In applying the risk premium approach in Mystic, the Commission also incorporated cases involving publicly owned entities. Revenue requirements and underlying capital costs for publicly owned utilities are primarily driven by debt service requirements, and there is no relevant equivalent to the market cost of equity for an investor-owned utility. Accordingly, ROE determinations for municipals and cooperatives should not be included in applying the risk premium method to estimate the ROE for investor-owned electric utilities, such as EPE.

## Q72. IS THIS CRITICAL DISTINCTION RECOGNIZED BY THE INVESTMENT COMMUNITY?

A72. Yes. For example, S\&P observed that "[c]ash available from current operating revenues to pay debt service is the principal focus" of its financial analysis of cooperative utilities. ${ }^{69}$ As S\&P concluded:

We believe that fixed costs and imputed charge coverage best gauges a retail utility's total financial capacity. It measures the ability of the retail utility to service both its total debt and debt-like obligations, which together we refer to as fixed costs and imputed charges. ${ }^{70}$

Moody's identified the "[1]ack of a profit motive or need to generate a return on equity" as key characteristics typifying public power utilities. ${ }^{71}$ Meanwhile, Fitch concluded that:

> Public power systems are unique from their investor-owned counterparts. In nearly all cases, public power systems operate on a not-for-profit basis and with the fundamental mission of providing safe, reliable and affordable electric service. Excess cash flow is typically retained and used to build financial cushion, fund capital investment or reduce borrowings. ${ }^{72}$

Similarly, the Presiding Judge in Missouri River Energy Services noted that:
Municipally-owned utilities do not answer to stockholders seeking a return on their investments. They pay no dividends . . . The

[^76]governing members of municipal-owned utilities are their own customers . . . Publicly-owned utilities pay no income taxes. . . . By contrast, investor-owned utilities are profit-making and profitmaximizing private entities that strive to attain the greatest possible ROE for their shareholders. They do so in order to attract investors to their stock in the stock market. . . . In short, unlike investor-owned utilities, it is not the purpose of a municipally-owned utility to earn a profit. Quite the opposite, it is a non-profit institution that is set up that way in order to achieve lower rates for ratepayers. ${ }^{73}$

Publicly owned (cooperative or municipal) utilities do not raise equity in the capital markets and do not seek to make a profit. Consequently, ROE determinations for publicly owned electric systems provide no information relevant to a determination of a just and reasonable ROE for an investor-owned electric utility, such as the Company.

In addition, the bottom panel on page 6 of Exhibit No. EPE-0023 identifies one other minor correction to remove the impact of a post-record period adjustment for changes in bond yields that is necessary to match the ROE to the study period interest rate. The revised inputs to the Risk Premium approach are shown on pages 2-4 of Exhibit No. EPE-0023.

## Q73. WHAT COST OF EQUITY IS IMPLIED BY THE RISK PREMIUM METHOD?

A73. As illustrated on page 1 of Exhibit No. EPE-0023, with an average six-month historical yield on Baa public utility bonds at August 2021 of $3.45 \%$, the Risk Premium method implies a current equity risk premium of $6.13 \%$ for electric

[^77]utilities. Adding this equity risk premium to the average six-month historical yield on Baa utility bonds implies a current cost of equity of $9.58 \%$.

## D. Expected Earnings Approach

## Q74. PLEASE EXPLAIN YOUR EXPECTED EARNINGS STUDY.

A74. Analysis of rates of return available from alternative investments of comparable risk can provide an important benchmark in assessing the return necessary for a firm to maintain financial integrity and attract capital. This approach is consistent with the economic underpinnings for a fair rate of return, as reflected in the comparable earnings test established by the Supreme Court in Hope and Bluefield. Moreover, it avoids the complexities and limitations of capital market methods and instead focuses on the returns earned on book equity, which are readily available to investors. As the Commission recognized in Opinion No. 531:
[T]he . . . expected earnings analysis, given its close relationship to the comparable earnings standard that originated in Hope, and the fact that it is used by investors to estimate the ROE that a utility will earn in the future can be useful in validating our ROE Recommendation. ${ }^{74}$

## Q75. DID THE COMMISSION RELY ON THE EXPECTED EARNINGS APPROACH IN OPINION NO. 569-A?

A75. No. However, the Commission noted that it would not foreclose the use of this approach in future proceedings, so long as the concerns raised in Opinion No. 569

[^78]and reiterated in Opinion No. 569-A are addressed. Specifically, the Commission raised the following concerns in explaining its decision not to rely on this method:

- The Expected Earnings approach is not based on market values.
- Differences between market values and book values undermine the relevance of the Expected Earnings approach.
- There is a lack of data demonstrating that investors use the Expected Earnings approach directly to value utility common stocks.

My subsequent testimony addresses the misguided nature of these concerns, along with the shortcomings of certain demonstrative examples presented in Opinion No.

569-A.
Q76. OPINION NO. 569-A CONCLUDED THAT BECAUSE INVESTORS CANNOT BUY STOCK IN THE MARKET AT BOOK VALUE, THE EXPECTED EARNINGS APPROACH SHOULD BE REJECTED. ${ }^{75}$ DOES THIS FINDING UNDERMINE THE RELEVANCE OF THE EXPECTED EARNINGS APPROACH?

A76. No. I agree that the Expected Earnings method is not market-based, in that it is not dependent directly or indirectly on stock prices or other data from the capital markets. But this does not discount its usefulness as a meaningful approach for investors and regulators to compare expected returns in one utility versus another. Specifically, it is reasonable to expect that investors compare stock investments based on securities analysts' projections of the expected return on common equity, which is analogous to the return on the equity component of a utility's rate base.

As detailed below, this comparison is relevant to investors because it directly measures the returns on book investment that the investment community

[^79]expects from comparable-risk investments, without the need to make the subjective evaluations inherent in market-based models, such as how to best estimate investors' growth expectations or the market required return. In other words, the Expected Earnings approach serves as a direct measure of the expected returns on equity that investors associate with companies of comparable risk, which provides regulators with a meaningful guide to the return the utility should be expected to earn on its book equity investment. And given that rates are established on the basis of the book value of a utility's investment, this is a relevant measure of the ROE that is consistent with regulatory standards of comparable earnings and capital attraction established in Hope and Bluefield.

Q77. HAS THE EXPECTED EARNINGS APPROACH BEEN RECOGNIZED AS A MEANINGFUL METHODOLOGY IN EVALUATING A JUST AND REASONABLE ROE?

A77. Yes. The Expected Earnings approach is analogous to the comparable earnings method, which predominated before the advent of the DCF and other financial models. While the traditional comparable earnings test is often implemented using historical accounting data, it is also common to use projections of returns on book investment. Because these returns on book value equity are analogous to the allowed return on a utility's rate base, this measure of opportunity costs results in a direct, "apples to apples" comparison, and it has long been referenced and relied on
in regulatory proceedings. ${ }^{76}$ For example, in approving an ROE for electric utility operations, the North Carolina Utilities Commission recently concluded that:

In prior cases, the Commission has given significant weight to the results of the Expected Earnings methodology, which stands separate and apart from the market-based methodologies (e.g., the DCF or CAPM) also used by ROE experts. . . The Commission chooses to do so again in this case. ${ }^{77}$

As S\&P observed, "[h]istorically, there have been two approaches in calculating ROE in regulatory proceedings, a comparable earnings approach and a market analysis. In a comparable earnings approach, similar investments with similar risks are analyzed to determine an appropriate ROE.י"78

## Q78. IS REFERENCE TO RETURNS ON BOOK VALUE CONSISTENT WITH HOW UTILITY RATES ARE EVALUATED?

A78. Yes. Regulators do not set the returns that investors earn in the capital marketsthey can only establish the allowed return on the book value of a utility's investment. The expected earnings approach provides a direct guide to ensure that the allowed ROE is similar to what other utilities of comparable risk are expected to earn on invested capital. This opportunity-cost test does not require theoretical models to indirectly infer investors' perceptions from stock prices or other market

[^80]data. As long as the proxy companies are similar in risk, their expected earned returns on invested capital provide a direct benchmark for investors' opportunity costs, independent of fluctuating stock prices, market-to-book ratios, debates over DCF growth rates, or theoretical assumptions about investor behavior.

Indeed, a textbook prepared for the Society of Utility and Regulatory Financial Analysts labels the comparable earnings approach the "granddaddy of cost of equity methods,, ${ }^{, 79}$ and notes that the comparable earnings method is firmly anchored in the regulatory economics underlying the Bluefield and Hope cases. ${ }^{80}$ It also notes that the amount of subjective judgment required to implement this method is "minimal," particularly when compared to the DCF and CAPM methods. ${ }^{81}$ New Regulatory Finance concluded that, "because the investment base for ratemaking purposes is expressed in book value terms, a rate of return on book value, as is the case with Comparable Earnings, is highly meaningful." ${ }^{82}$

## Q79. DOES THE INVESTMENT COMMUNITY REFERENCE EARNED RETURNS ON BOOK VALUE IN THEIR EVALUATION OF ELECTRIC UTILITIES?

A79. Yes. Book value accounting measures, including earned and expected returns on book equity, are instrumental to the financial analysis underpinning investors' evaluation of electric utilities, including credit ratings. S\&P cited the relevance of

[^81]earned returns on book value in highlighting the primary credit considerations in the utility industry, noting that "required rate of return on equity investment is closely linked to a utility company's profitability." ${ }^{" 83}$ S\&P indicated that, "[f]or regulated utilities subject to full cost-of-service regulation and return-on-investment requirements, we normally measure profitability using ROE, the ratio of net income available for common stockholders to average common equity." ${ }^{84}$ While recognizing that "the regulator ultimately bases its decision on an authorized ROE," S\&P observed that "different factors such as variances in costs and usage may influence the return a utility is actually able to earn, and consequently our analysis of profitability for cost-of-service-based utilities centers on the utility's ability to consistently earn the authorized ROE. ${ }^{.85}$ In S\&P's view, the earned return on book value may provide better insight into the financial health of the utility because it reflects the actual impact of regulation, not the theoretical outcome implied by an authorized ROE. Consistent with this paradigm, S\&P examines trends in utility returns on book equity, as compared with authorized ROEs, in evaluating financial performance for the electric utility industry. ${ }^{86}$ Similarly, in a review of financial quality measures for utilities, S\&P noted that

[^82]" $[t]$ he earned return on equity . . . is one of the most widely followed measures of the industry's financial performance. ${ }^{77}$

Moody's also recognizes the relevance of returns on book value in its assessment of a utility's prospects. While noting that " $[\mathrm{t}]$ he authorized ROE is a popular focal point in many regulatory rate case proceedings," Moody's recognized that "earned ROEs, as reported by utilities and adjusted by Moody's," are a key gauge of financial performance. ${ }^{88}$ As Moody's concluded, "utilities are closer to earning their authorized equity returns, which is positive from an equity market valuation perspective. ${ }^{89}$ In explaining its scorecard analysis for a Baa-rated utility, Moody's Investors' Service noted that regulatory outcomes should be "sufficient to attract capital without difficulty," and that this "will translate to returns (measured in relation to equity, total assets, rate base, or regulatory asset value, as applicable) that are average relative to global peers. ${ }^{30}$ Similarly, in a publication entitled "Industry Surveys, Electric Utilities," CFRA ${ }^{91}$ highlighted the relevance of returns on book equity to investors, noting that the earned ROE for electric utilities

[^83]"generally ranges between $10 \%$ and $13 \%$, although the average has trended lower in the past few years." ${ }^{" 2}$

## Q80. DO OPINION NOS. 569 OR 569-A UNDERMINE THE RELEVANCE OF THIS EVIDENCE?

A80. No. The Commission examined some of this evidence in Opinion No. 569, but nevertheless suggested that investors "may not" use the information from the Expected Earnings analysis to inform their investment decisions. ${ }^{93}$ But these investment services would not provide this information if investors did not rely upon it to inform their decisions. The Commission also posited that investors may not use this information specifically to "determine the applicable cost of capital,, ${ }^{94}$ but this again hinges on the notion that only market-based evidence is relevant in evaluating a just and reasonable ROE.

## Q81. WHAT OTHER EVIDENCE SUPPORTS A FINDING THAT RETURNS ON BOOK VALUE INFLUENCE INVESTORS' VALUATION DECISIONS?

A81. In addition to the materials cited above, a research paper by Dr. Aswath Damodaran emphasized the importance of considering returns on book value in evaluating performance and alternative investments. ${ }^{95}$ Contradicting Opinion No. 569's conclusion that returns on book value are unrelated to an evaluation of investors' expected return on investment, ${ }^{96}$ Dr. Damodaran noted that, "[w]hile returns on

[^84]equity and capital are based upon accounting earnings and capital, and are designed to measure the quality of a firm's existing investments, they are correlated with returns you would make investing in the publicly traded equity of the firm. ${ }^{י 97} \mathrm{~A}$ number of other peer-reviewed research studies also confirm the relationship between accounting-based performance measures and market-based measures such as stock returns. ${ }^{98}$

As Dr. Damodaran stated, "we can safely conclude that the key number in a valuation is not the cost of capital that we assign a firm but the return earned on capital that we attribute to it." ${ }^{\text {.99 }}$ This is exactly what the Expected Earnings method seeks to measure. If the allowed ROE is insufficient to provide a return on the book value of a utility's investment as compared with what investors expect other utilities of comparable risk to earn, the utility's ability to compete for capital will be undermined. The Expected Earnings approach provides a measure of this necessary return as one component of the evaluation of a just and reasonable ROE.

[^85]Q82. WHAT OTHER CONSIDERATIONS SUPPORT REFERENCE TO RETURNS ON BOOK VALUE, AS A COMPLEMENT TO MARKET-BASED METHODS?

A82. Opinion No. 569 contends that because investors can only purchase common stocks at market value, expected returns on book value are irrelevant unless the market-to-book ratio is equal to 1.0. ${ }^{100}$ However, this ignores the fact that existing shareholders are continuously investing in a firm's equity at book value every time earnings are retained for reinvestment, rather than being paid as dividends. Retained earnings are reflected on the balance sheet as an increase in the book value of shareholders' equity. When a firm retains that portion of earnings not paid out as common dividends, its shareholders effectively invest in the firm's equity and these investments are made at book value.

Moreover, as the Commission has recognized, in most instances "the public utility companies for which the Commission sets rates are not publicly traded and thus do not have any market-determined stock values." ${ }^{101}$ This was the case in the Supreme Court's Hope decision, where the financial integrity standards were directly related to the book value of a utility's equity and expected earnings. Similarly, one key gauge of a utility's financial integrity is credit metrics, which depend on the book value of equity and earnings on that book value of investment. The Expected Earnings method is directly related to ensuring that the standards underlying a just and reasonable ROE are met.

[^86]Q83. DOES A DIFFERENCE BETWEEN BOOK AND MARKET VALUES ALSO RAISE CONCERNS FOR MARKET-BASED METHODS?

A83. Yes. Differences between market realities and the theoretical constructs underlying market-based methods support the use, rather than rejection, of the Expected Earnings approach. Consider the implications of the example presented in Table EPE-4 below, where the market price of a utility stock is $\$ 20$, or 2.00 times its book value of $\$ 10$ per share. The utility currently earns $12 \%$ on its book investment, or $\$ 1.20$ per share, and pays out $\$ 0.80$ per share as dividends. As a result, retained earnings are $\$ 0.40$ and the growth $(g)$ in earnings and dividends is the same as the growth in book value at $4 \%$.

TABLE EPE-4
MARKET-TO-BOOK AND DCF RESULTS

## Period 0 Period 1

Market Price
\$ $20.00 \quad \$ 20.00$
$\begin{array}{lrr}\text { Book Value } & \frac{\$ 10.00}{2.00} & \frac{\$ 10.00}{2.00} \\ \text { Market-to-Book Ratio } & \end{array}$
Allowed ROE $\quad 12.0 \% \quad 8.0 \%$
(a) Earnings
\$ 1.20 \$ 0.80
Dividends
(b) Retained Earnings

| $\$ \quad 0.80$ |  |
| :--- | :--- | :--- |
| $\$ 0.40$ | $\$ \quad 0.80$ |
| $\$ \quad-$ |  |

(c) Growth
4.0\% $0.0 \%$
(d) Dividend Yield
4.0\%
(e) DCF Cost of Equity
8.0\%
(a) Book Value $x$ Allowed ROE.
(b) Earnings - Dividends.
(c) Retained Earnings / Book Value.
(d) Dividends / Market Price.
(e) Dividend Yield + Growth.

Assume further that an investor is given these facts and purchases a share of stock on the open market at $\$ 20$ per share under the assumption that these
conditions will continue indefinitely. The dividend yield on her market price will be $4 \%$ and growth will be equivalent to retained earnings of $4 \%$. Under the DCF formula, if these conditions continue to infinity, the implied cost of equity will equal $8 \%$. But as illustrated above, using $8 \%$ as the ROE applied to a $\$ 10$ book value of investment produces total earnings of only $\$ 0.80$ per share. Since the utility is paying $\$ 0.80$ in dividends, retained earnings and growth will be zero, instead of the assumed $4 \%$. The critical assumption underlying the investors' evaluation is that the company itself will continue to earn $12 \%$ on its growing book value to infinity.

As one researcher summarized in the early days before the DCF became a regulatory mainstay:

We conclude that the [DCF] formula is logically incorrect for public utility regulation whenever stocks are selling at a price in excess of their book equity per share. . . . Although it purports to satisfy investor expectations, it is in fact designed to defeat the expectations of any investor who pays a market price in excess of book. It satisfies the expectations only of the investor who buys at book and expects market prices to remain at book. ${ }^{102}$

This is not to say that the DCF model is not a useful methodology when considered along with other methods. But as this discussion makes clear, arguments based on "truisms" inherent in the mathematical tautology of DCF theory do not support abandoning the Expected Earnings approach, which focuses on the projected earned returns on book equity supporting the investors' expectations underlying the market price of the stock.

[^87]
## Q84. DO CURRENT CONDITIONS IN THE ECONOMY AND CAPITAL MARKETS PROVIDE ADDITIONAL SUPPORT FOR THE EXPECTED EARNINGS APPROACH?

A84. Yes. As discussed earlier, investors have recently confronted unprecedented market volatility and uncertainty, with common stock prices experiencing dramatic volatility. At the same time, the Federal Reserve has undertaken hyper-stimulative monetary policies on a scale never before seen, while governments have adopted fiscal policies designed to aggressively respond to the economic threat posed by the COVID-19 pandemic. Such tumultuous and highly aberrant conditions violate the general assumptions of market equilibrium and stability underlying market-based financial models.

For example, the CAPM requires a measure of the risk-free rate, which may be uncharacteristically suppressed (as it is currently) due to a "flight to safety" by investors or because of Federal Reserve monetary policies. Alternatively, a temporary spike in yields in reaction to inflationary concerns or changes in Federal Reserve policies (e.g., the 2013 "taper tantrum") could lead to inflated CAPM results. The Expected Earnings model is largely insulated from such distortions and including it in the set of ROE models used by the Commission to determine ROEs provides a useful supplement to market-based methods that helps to ensure satisfaction of the Hope and Bluefield standards.

## Q85. OPINION NO. 569 PRESENTS A NUMERICAL EXAMPLE PURPORTING TO ILLUSTRATE THAT EXPECTED BOOK RETURNS ARE NOT GERMANE TO THE EVALUATION OF A JUST AND REASONABLE ROE. ${ }^{103}$ IS THAT EXAMPLE PERSUASIVE?

A85. No. Opinion No. 569 posits a comparison between two firms, both with a book value of $\$ 100$ and an expected return on book value of $10 \%$, but with the market price of the companies' stocks being $\$ 20$ (Firm A) and $\$ 40$ (Firm B), respectively. The problem with the example is that the assumptions are completely divorced from reality for electric utilities. For example, based on a stock price of \$20, the illustration implies a market-to-book ratio of 0.25 times $(\$ 20 / \$ 100)$ and a price/earnings multiple of $2.0(\$ 20 / \$ 10)$, versus comparable averages for the electric utilities covered by Value Line on the order of 1.94 and 21.0, respectively. ${ }^{104}$ Under an approach where assumptions are simply contrived to "demonstrate" a hypothesis, Opinion No. 569 could have just as easily "invalidated" the DCF model.

For example, extending the illustration to assume that each firm pays a dividend of $\$ 1.00$ and both are expected to grow at $5 \%$, the DCF cost of equity for Firm A would be $10 \%$, versus only 5\% for Firm B. Because the Opinion No. 569 example implicitly presumes that both stocks are of equal risk, ${ }^{105}$ the differential between the implied DCF cost of equity estimates makes no sense. As with Opinion

[^88]No. 569's contrived assumptions, the problem is with the example, not the underlying model.

Q86. OPINION NO. 569 ALSO ASSERTED THAT RELIANCE ON DATA FROM VALUE LINE UNDERMINES THE RELIABILITY OF THE EXPECTED EARNINGS APPROACH. ${ }^{106}$ IS THIS CONSISTENT WITH THE UNDERLYING FACTS?

A86. No. The Commission reversed this finding in Opinion No. 569-A, concluding that Value Line's projections "incorporate the input of multiple analysts." ${ }^{107}$ The Commission also concluded that considering Value Line projections "may better reflect the data sources that investors consider in making investor decisions."108 This provides additional support for the relevance of the Expected Earnings approach in evaluating investors' expectations and requirements.

Q87. OPINION NO. 569-A SUGGESTED THAT THE RELATIVE AMOUNT OF COMMON EQUITY OR ACCUMULATED DEPRECIATION ON A UTILITY'S BALANCE SHEET COULD DISTORT THE RESULTS OF THE EXPECTED EARNINGS APPROACH. ${ }^{109}$ IS THIS ACCURATE?

A87. No. The absolute amount of equity in a utility's capital structure, or the fact that a utility may have a higher or lower equity ratio, does not lead to an "illogical result" under the Expected Earnings approach, as Opinion No. 569 posits. The Expected Earnings method is based on the ratio of earnings available to common stockholders to the outstanding balance of common equity investment. While a higher equity ratio would imply that the numerator would be higher relative to a utility with a

[^89]lower equity ratio, the denominator would also increase. In other words, assuming a constant allowed ROE, differences in equity ratios between one utility and another would have no impact at all on the resulting earned return on book value. ${ }^{110}$

Opinion No. 569's contention that the degree to which a utility's plant in service is depreciated on its books would distort the Expected Earnings results is equally misguided. Consider the simple example in the table below, which assumes that the only difference between the two utilities is the relative age of their respective utility systems and the degree to which their plant investment is depreciated.

TABLE EPE-5 IMPACT OF DEPRECIATION

|  | Utility A | Utility B |
| :---: | :---: | :---: |
| Plant | \$ 1,000 | \$1,000 |
| Accumulated Depreciation | \$ 800 | \$ 100 |
| Net Plant | \$ 200 | \$ 900 |
| Equity Ratio | 50\% | 50\% |
| Common Equity | \$ 100 | \$ 450 |
| ROE | 10\% | 10\% |
| Equity Return | \$ 10 | \$ 45 |

This example shows that, just as with the utility's equity ratio, the degree to which the utility's plant is depreciated affects the amount of common equity investment that earns at the allowed ROE. However, the ratio of equity return to

[^90]book common equity is the same in both cases (i.e., $\$ 10 / \$ 100=10 \%=\$ 45 / \$ 450=$
$10 \%)$. There are no "illogical results" in either instance. ${ }^{111}$

## Q88. WHAT OTHER PRIMARY MISCONCEPTION UNDERLIES THE REJECTION OF THE EXPECTED EARNINGS APPROACH IN OPINION NOS. 569 AND 569-A?

A88. Tangential to the misguided notion that the Expected Earnings approach has no validity because it is not market based, Opinion No. 569-A argues that the Expected Earnings method should be excluded because of a lack of evidence "that investors use such data to directly value equities, determine the cost of equity, or make investment decisions." ${ }^{112}$ Similarly, Opinion No. 569 concluded that "there is insufficient evidence to demonstrate that investors rely on the Expected Earnings model," or that investors "use the Expected Earnings model to determine their required returns on investments in public utilities." ${ }^{113}$

## Q89. DOES THIS LINE OF ARGUMENT SUPPORT EXCLUDING THE EXPECTED EARNINGS APPROACH?

A89. No. As my testimony demonstrates, returns on book value are a key consideration in evaluating investment alternatives, particularly in the regulated sector where book values play a fundamental role in establishing future earnings and cash flows. But in any event, the merit of any specific financial model is not premised on whether individual investors rely directly on that method to "determine their

[^91]required returns" or "to inform their investment decisions." In fact, it is precisely because it is impossible to know the valuation process that gives rise to investors' opportunity costs that such methods have been developed.

Consider the DCF model or the CAPM approach, for example. While each of these methodologies is premised on widely-accepted theoretical concepts, there is no evidence to support a finding that either the DCF or the CAPM is used directly by investors in establishing observable stock prices or other "market-based" parameters. In fact, approximately $75 \%$ of all trading on U.S. stock exchanges is generated by automatic trading systems. Under the logic expounded by Opinion Nos. 569 and 569-A, the DCF or CAPM approaches could be rejected because of insufficient proof that the algorithms underlying such automated trading systems rely on these methods.

It is because we cannot determine the process by which investors arrive at their required return that theoretical models of investor behavior have been developed. Just as with the DCF and CAPM, the Expected Earnings approach provides a sound basis to consider and represent an unobservable artifact of investors' decision-making (i.e., their required ROE). But the relevance of the model is not tied to the assumption that any individual investor actually depends on that specific approach, much less on the Commission's preferred application of each methodology. ${ }^{114}$

[^92]Product marketing provides a similar example. Companies invest heavily to develop models of consumer behavior as a means to guide product development, marketing, and promotional campaigns. The goal of these efforts is to better understand the process underlying consumer choice, including product attributes and pricing considerations that ultimately drive purchasing decisions. Just as with the marginal investor's willingness to provide capital through the purchase of common stock, the exact process by which consumers arrive at a decision to exchange their hard-earned money for a particular good is unobservable. The relevance of behavioral models is not contingent on the idea that consumers themselves use such models when making purchasing decisions. Similarly, the value of the Expected Earnings method-like the DCF and CAPM approaches-is not contingent on a demonstration that investors' behavior is premised on this analysis.

The relevant question, then, is not whether investors use the Expected Earnings approach directly, but whether this model provides useful insight into the considerations that drive investor behavior. The purpose of all ROE models is to better understand investor return requirements, and those requirements cannot be directly observed. While real world investors might not apply the models in exactly the same way as theory dictates, the inputs to the models (e.g., beta, growth rates, dividend yields, forecasted book returns) are widely published in investment
advisory reports discussing utility stocks and industry prospects. Given the importance of both expected earnings and book value investment for utility investors, and the direct link to the Hope and Bluefield regulatory standards, the Expected Earnings approach provides a useful perspective in evaluating a just and reasonable ROE.

## Q90. WHAT RATES OF RETURN ON EQUITY ARE INDICATED FOR ELECTRIC UTILITIES BASED ON THE EXPECTED EARNINGS APPROACH?

A90. The year-end returns on common equity projected by Value Line over its forecast horizon for each of the utilities in the proxy group are shown on Exhibit No. EPE0024. In Southern California Edison Co., the Commission correctly recognized that if the rate of return were based on end-of-year book values, such as those reported by Value Line, it would understate actual returns because of growth in common equity over the year. ${ }^{115}$ Accordingly, consistent with the Commission's findings and the theory underlying this approach, I made an adjustment to compute an average rate of return. ${ }^{116}$

As shown on Exhibit No. EPE-0024, Value Line's projections for the Electric Group resulted in an adjusted range of expected rates of return from 7.69\% to $14.35 \%$, with a median of $11.24 \%$.

[^93]
## V. SUPPLEMENTAL ROE BENCHMARKS

## Q91. WHAT IS THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY?

A91. This section presents additional benchmarks to evaluate a just and reasonable ROE for EPE. Specifically, I examine results of the constant growth DCF model and ECAPM applied to my proxy group of electric utilities. These other benchmarks provide additional guidance that is relevant in evaluating the veracity of the end result of the primary methods discussed previously and provide further support for the Four-Model Approach.

## Q92. HAS THE COMMISSION ACKNOWLEDGED THE POTENTIAL RELEVANCE OF EVIDENCE BEYOND THE RESULTS OF ANY PARTICULAR SET OF FINANCIAL MODELS?

A92. Yes. In the context of applying the first prong of Section 206 of the FPA (i.e., evaluating a utility's existing ROE) the Commission has noted that the ultimate determination of a just and reasonable end result depends "on the particular circumstances of the case," and noted that a broad range of additional evidence may be pertinent in evaluating investors' required return. ${ }^{117}$ There is no sound reason why such evidence would not be equally relevant to ensuring that the ROE established in the context of a Section 205 rate change represents a just and reasonable end result.

[^94]In my experience, this single-stage version of the DCF approach is the model most widely referenced by financial practitioners and regulatory agencies. ${ }^{118}$ Similarly, the ECAPM has been relied on by witnesses for a variety of stakeholders and adopted by a number of regulatory agencies. ${ }^{119}$ Both of these benchmarks support my conclusion that the Four-Model Approach should be used to establish an ROE for EPE in this case.

## A. Constant Growth DCF Model

## Q93. HAS THE COMMISSION RECOGNIZED THAT THE RESULTS OF THE TWO-STEP DCF APPROACH ARE NOT NECESSARILY INDICATIVE OF INVESTORS' COST OF EQUITY?

A93. Yes. The Commission confirmed the potential unreliability of two-step DCF results in Opinion No. 531, noting that an ROE based on the midpoint of the DCF range in that case would violate the Hope and Bluefield standards. ${ }^{120}$ More recently, the Commission affirmed that relying on the two-step DCF methodology alone "will not produce a just and reasonable ROE," and that this method "may no longer singularly reflect how investors make their decisions." ${ }^{121}$

[^95]
## Q94. ARE THERE SIGNIFICANT SHORTCOMINGS ASSOCIATED WITH REFERENCING GDP GROWTH IN APPLYING THE DCF MODEL?

A94. Yes, there are several:

1) Practical application of the DCF model does not require a long-term growth estimate over a horizon of 30 years and beyond-it requires a growth estimate that matches investors' expectations.
2) Evidence supports the conclusion that investors do not reference long-term GDP growth in evaluating expectations for individual common stocks, including those in the utility industry.
3) The theoretical proposition that growth rates for all companies converge to overall growth in the economy over the very long term does not guide investors' views, and growth rates for utilities can and do routinely exceed GDP growth.
4) There is no evidence that investors' growth expectations for regulated electric utilities have begun to converge to that of the economy.

In short, there is no demonstrable evidence that investors look to GDP growth rates in the distant future in assessing their expectations for utility common stocks. Opinion No. 569 took issue with many aspects of the constant growth DCF model, but never appropriately addressed or grappled with this essential argument.

## Q95. DID OPINION NO. 569-A PROVIDE EVIDENTIARY SUPPORT FOR ITS CONTINUED REFERENCE TO GDP GROWTH IN APPLYING THE DCF MODEL TO ELECTRIC UTILITIES?

A95. No. Opinion No. 569-A reduced the weighting assigned to GDP from one-third to one-fifth, but there was no evidentiary basis linking the $20 \%$ weighting factor selected by the Commission to the actual expectations of investors. Rather, Opinion No. 569-A noted that the court has granted the Commission "broad discretion in its
weighting choice. ${ }^{122}$ In lieu of specific evidence demonstrating that investors' growth expectations for electric utilities are linked to long-term trends in GDP, Opinion No. 569-A simply rehashed broad-brush observations from a 1983 gas pipeline proceeding regarding the "infinite stream of future dividends" that is baked into DCF theory. ${ }^{123}$ Similar to Opinion No. 569's reliance on New Regulatory Finance for the theoretical proposition that growth for all companies must "converge to a level consistent with the growth rate of the aggregate economy," ${ }^{124}$ this does not substantiate a finding that investors anticipate growth for all electric utilities to coalesce at a 30-year growth projection for GDP. Dr. Morin himself in more recent testimony has not utilized the two-stage DCF model or factored in long-term growth rates in his DCF model when estimating the ROE for electric utilities. ${ }^{125}$

Equally misguided is Opinion No. 569-A's conclusion that reference to GDP growth is required to "aid in normalizing any distortions that might be reflected in short-term data limited to a narrow segment of the economy." ${ }^{126}$ In fact, the only "distortion" that has been evident in the two-step DCF results is a

[^96]consistent downward bias, which the Commission explicitly recognized in Opinion Nos. 531 and 551. Moreover, concern over any potential for significant distortion of DCF results is properly addressed through application of appropriate low-end and high-end screening tests, not through inclusion of GDP growth at an arbitrary weighting. While Opinion No. 569-A asserted that it is reasonable to consider GDP "to some extent," ${ }^{127}$ it did not cite to any evidence that directly links investors' growth expectations for electric utilities to long-term trends in GDP growth. The Commission has previously cited this same reasoning in rejecting reliance on GDP growth rates when applying the DCF model to electric utilities:

The Commission finds that these rationales do not support the use of GDP to develop a long-term growth rate estimate in this proceeding. Specifically, growth rate estimates for Entergy are not two to three times greater than GDP as were the growth rate estimates that led to the adoption of a two-stage approach for gas pipelines. There is also no evidence that Entergy's 'growth rate will approach that of the economy as a whole.' As such, the notion that Entergy is a company with excessive growth that will decrease in the long-term as it matures and that will eventually equate to GDP is not supported by the record. ${ }^{128}$

Nothing has changed that would justify reliance on GDP growth rates in this proceeding.

[^97]
## Q96. ARE THERE ACADEMIC STUDIES THAT RECOGNIZE THE SHORTCOMINGS OF ADOPTING A GENERIC LONG-TERM GROWTH RATE IN APPLYING THE DCF MODEL?

A96. Yes. Dr. Myron J. Gordon, who pioneered the application of the constant growth DCF approach, stated that reference to a generic long-term growth rate was unsupported. ${ }^{129}$ More specifically, Dr. Gordon concluded that any assumption of a single time horizon for a transition to a generic long-term growth rate was highly questionable and failed to reduce error in DCF estimates. Instead, Dr. Gordon specifically recognized that, "it is the growth that investors expect that should be used" in applying the DCF model, and he concluded: "A number of considerations suggest that investors may, in fact, use earnings growth as a measure of expected future growth." ${ }^{130}$

Similarly, a subsequent paper co-authored by Dr. Gordon concluded that:
[A]nalysts do not predict earnings beyond five years, which suggests that any consensus of opinion among investors probably deteriorates quickly after five years. ${ }^{131}$

Dr. Gordon concluded that "the consensus among investors is that the future has a finite horizon of approximately seven years." ${ }^{132}$ In other words, reference to long-term forecasts of GDP growth in applying the DCF model is inconsistent with investor behavior.

[^98]
## Q97. IS THERE EVIDENCE THAT LONG-TERM GDP GROWTH RATES UNDERSTATE INVESTORS, EXPECTATIONS FOR ELECTRIC UTILITIES?

A97. Yes. Actual historical growth rates for individual companies refute the notion that long-term growth for electric utilities is constrained by GDP. For example, Value Line reports that over $80 \%$ of the companies included in its electric utility industry group achieved earnings growth over the last 10 years that exceeded the GDP growth rate used to apply the Commission's two-step DCF model. ${ }^{133}$ These values indicate that utilities can achieve growth over extended periods well in excess of the expected GDP growth rate, which highlights a serious flaw in the Commission's two-step DCF model.

Q98. WHAT OTHER EVIDENCE CONTRADICTS THE PATTERN OF GROWTH ASSUMED IN THE COMMISSION'S TWO-STEP DCF APPROACH?

A98. According to the rationale underlying the two-step DCF model, company-specific growth rates collapse to the GDP growth rate. In other words, at some point in the intermediate future all the companies in the electric utility industry are assumed to grow at a constant rate equal to the economy as a whole. But such an outcome is entirely at odds with what real-world investors face in the capital markets.

For example, Figure EPE-3 compares Value Line's forecasted EPS growth rates for electric utilities beginning in 1977 with current projections.

[^99]FIGURE EPE-3
ELECTRIC UTILITY INDUSTRY EPS GROWTH PROJECTIONS


Source: The Value Line Investment Survey

Under the paradigm of the Commission's two-step DCF approach, expected growth in EPS should have gradually moved towards the artificial GDP growth ceiling ( $4.20 \%$ in its current rendition) over the past four-plus decades. In fact, however, no such trend is evident. Value Line is now expecting near-term EPS growth to average $6.0 \%$ for the firms in the electric utility industry, versus $6.6 \%$ in 1977 and $6.3 \%$ in 2005. In other words, there has been no convergence to GDP growth observed over the last forty-plus years. This provides another indication that the $4.20 \%$ GDP growth rate used in Commission's two-step DCF model is at odds with the evidence concerning the pattern of investors' growth expectations for electric utilities.

## Q99. DO CURRENT EXPECTATIONS FOR THE UTILITY INDUSTRY SUPPORT A FUNDAMENTAL SHIFT TOWARDS GDP GROWTH?

A99. No. Industry fundamentals do not suggest that investors are anticipating growth rates for electric utilities to uniformly trend downward to the growth rate in the overall economy. At least in part, growth in the electric utility industry is created by additional infrastructure investment. Contrary to the assumption that growth trends will somehow mirror GDP, investors recognize that the electric utility industry is committed to a cycle of significant infrastructure spending.

Q100. WHAT UNDERLYING FUNDAMENTALS SUPPORT INVESTORS' CONCLUSION THAT ELECTRIC UTILITIES HAVE ENTERED A PERIOD OF GROWTH THAT WILL OUTPACE THE ECONOMY AS A WHOLE?

A100. As the Commission has recognized, ${ }^{134}$ the need for additional infrastructure investment in the utility industry is being driven in large part by fundamental changes in generation mix and mandated transitions to renewable resources, and that, "These shifts create a need for more transmission infrastructure to bring generation to load. ${ }^{135}$ More recently, in the Advance Notice of Proposed Rulemaking in Docket No. RM21-17, the Commission acknowledged that " $[t]$ he electricity sector is transforming as the generation fleet shifts from resources located close to population centers toward resources, including renewables, that

[^100]may often be located far from load centers," ${ }^{136}$
The ANOPR reflects the Commission's concern that existing transmission planning processes do not adequately anticipate the transmission investment required to deliver energy from production facilities to load centers as the ongoing transition of the generation mix continues.

Consistent with these observations, the Edison Electric Institute has stated that its members commit more than $\$ 120$ billion annually to electric utility infrastructure investment. ${ }^{137}$ Similarly, the investment community also understands that utilities are facing the prospect of a long-term commitment to infrastructure investment. For example, RRA concluded that:

Projected 2021 capital expenditures for the 47 energy utilities in the [RRA] sample of the publicly traded U.S.-based utility universe currently exceeds $\$ 142$ billion, well above 2020's $\$ 130$ billion investment level. ... The nation's electric and gas utilities are investing in infrastructure to upgrade aging transmission and distribution systems, build new natural gas, solar, and wind generation, and implement new technologies, including smart meter deployment, smart grid systems, cybersecurity measures and battery storage. ${ }^{138}$

The report further concluded that "we expect considerable levels of spending to serve as the basis for solid profit expansion in the sector for the foreseeable future." ${ }^{139}$

[^101]S\&P confirmed this trend, observing that "capital expenditures are increasing across the sector and are now at or near record highs in a multiyear trend that reflects the proactive deployment of capital to modernize and improve utility generation and network assets." ${ }^{140}$ S\&P documented a $9.5 \%$ compound annual growth in utility investment since 2003, as reflected in the chart reproduced as Figure EPE-4, below.

FIGURE EPE-4 North America Regulated Utility - Electric, Gas, And Water Capital Spending


Source: S\&P Global Ratings.

[^102]Q101. DO FORMULATIONS OF THE DCF MODEL OTHER THAN THE COMMISSION'S TWO-STEP VERSION OFFER A RELEVANT BENCHMARK FOR PURPOSES OF EVALUATING A JUST AND REASONABLE ROE FOR ELECTRIC UTILITIES?

A101. Yes. As noted earlier, the Commission has determined that its evaluation should focus on how investors analyze and compare investment opportunities. ${ }^{141}$ There is no evidence to support a finding that investors' current expectations for electric utilities follow the pattern assumed by the two-step DCF model. As documented above, the long-term cycle of capital investment implies higher-not lower-long-term growth and suggests that GDP growth estimates understate investors' expectations for electric utilities. In this light, I believe the constant growth DCF model provides a meaningful benchmark that is more consistent with the way in which investors assess their expectations and evaluate common stocks.

## Q102. WHAT RESULTS ARE PRODUCED USING THE CONSTANT GROWTH DCF MODEL?

A102. Application of the constant growth DCF model employing the evaluation of low and high-end values discussed previously is presented in Exhibit No. EPE-0025. As shown there, the constant growth DCF model results in a range of $5.72 \%$ to $12.39 \%$, with a median of $9.17 \%$.

## B. Empirical CAPM

## Q103. HOW DOES THE ECAPM APPROACH DIFFER FROM TRADITIONAL APPLICATIONS OF THE CAPM?

A103. Empirical tests of the CAPM have shown that low-beta securities earn returns somewhat higher than the CAPM would predict, and high-beta securities earn

[^103]somewhat less than predicted. In other words, the CAPM tends to overstate the actual sensitivity of the cost of capital to beta, with low-beta stocks tending to have higher returns and high-beta stocks tending to have lower returns than predicted by the CAPM. This is illustrated graphically in the figure below:

FIGURE EPE-5
CAPM - PREDICTED VS. OBSERVED RETURNS


Because the betas of utility stocks, including those in the Electric Group, are generally less than 1.0 , this implies that cost of equity estimates based on the traditional CAPM would understate the cost of equity. This empirical finding is widely reported in the finance literature, as summarized in New Regulatory Finance:

As discussed in the previous section, several finance scholars have developed refined and expanded versions of the standard CAPM by relaxing the constraints imposed on the CAPM, such as dividend yield, size, and skewness effects. These enhanced CAPMs typically produce a risk-return relationship that is flatter than the CAPM prediction in keeping with the actual observed risk-return
relationship. The ECAPM makes use of these empirical relationships. ${ }^{142}$

Based on a review of the empirical evidence, New Regulatory Finance concluded that the relationship between the expected return on a security and its risk is represented by the following ECAPM formula:

$$
\mathrm{R}_{\mathrm{j}}=\mathrm{R}_{\mathrm{f}}+0.25\left(\mathrm{R}_{\mathrm{m}}-\mathrm{R}_{\mathrm{f}}\right)+0.75\left[\beta_{\mathrm{j}}\left(\mathrm{R}_{\mathrm{m}}-\mathrm{R}_{\mathrm{f}}\right)\right]
$$

where: $R_{j}=$ required rate of return for stock $j$;
$\mathrm{R}_{\mathrm{f}}=$ risk-free rate;
$\mathrm{R}_{\mathrm{m}}=$ expected return on the market portfolio; and $B_{j}=$ beta, or systematic risk, for stock $j$.

This equation, and the associated weighting factors, recognize the observed relationship between standard CAPM estimates and the cost of capital documented in the financial research, and corrects for the understated returns that would otherwise be produced for low beta stocks.

## Q104. IS THE USE OF THE ECAPM CONSISTENT WITH THE USE OF VALUE LINE BETAS?

A104. Yes. Value Line beta values are adjusted for the observed tendency of beta to converge toward the mean value of 1.00 over time. The purpose of this adjustment is to refine beta values determined using historical data to better match forward-looking estimates of beta, which are the relevant parameter in applying the CAPM or ECAPM models. Meanwhile, the ECAPM does not involve any adjustment to beta whatsoever. Rather, it represents a formal recognition of findings in the financial literature that the observed risk-return tradeoff illustrated in Figure EPE-5 is flatter than predicted by the CAPM. In other words, even if a

[^104]firm's beta value were estimated with perfect precision, the CAPM would still understate the return for low-beta stocks and overstate the return for high-beta stocks. The ECAPM and the use of adjusted betas represent two separate and distinct issues in estimating returns.

## Q105. WHAT COST OF EQUITY ESTIMATES ARE INDICATED BY THE ECAPM?

A105. My application of the ECAPM approach is based on the same forward-looking market rate of return, risk-free rate, and beta values discussed earlier in connection with the traditional CAPM. As shown on Exhibit No. EPE-0026, applying the forward-looking ECAPM approach to the firms in the Electric Group results in a cost of equity range of $10.41 \%$ to $13.69 \%$, with a median of $11.98 \%$.

## Q106. WHAT DO THESE ALTERNATIVE BENCHMARKS INDICATE WITH RESPECT TO A FAIR ROE FOR EPE IN THIS CASE?

A106. Application of the constant growth DCF model and ECAPM document the continued downward bias in the results of the two-step DCF approach, which produces a median value of $8.89 \%$. These benchmarks indicate that the average ROE resulting from the Three-Model Approach is correspondingly understated. Coupled with the evidence presented earlier in my testimony demonstrating the relevance of the Expected Earnings method, this supports reference to the FourModel Approach to evaluate a just and reasonable ROE for EPE.

## VI. CAPITAL STRUCTURE

## Q107. WHAT IS THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY?

A107. This section presents an evaluation of the appropriate capital structure ratios for developing the overall rate of return on which EPE's transmission service rates will be based.

## Q108. HOW DO FIRMS DETERMINE AN APPROPRIATE CAPITAL STRUCTURE FOR THEIR OPERATIONS?

A108. There are many considerations in the capital structure decision. In general, the goal is to employ the mix of capital that minimizes the weighted average cost of capital, while ensuring the financial integrity of the firm and continuous access to capital, even during times of unfavorable market conditions. Given the interplay between costs of debt and equity, the impact of taxes, bankruptcy costs, and the level of business risks, determining a firm's optimal capital structure is an imprecise exercise. In practice, capital structure decisions must be made by considering managements' judgment, numerical analysis, and investors' risk perceptions.

## Q109. HAS THE COMMISSION RECOGNIZED THE PREEMINENCE OF A UTILITY'S ACTUAL CAPITAL STRUCTURE FOR RATEMAKING PURPOSES?

A109. Yes. FERC precedent reflects a long and clear preference for using the actual capital structure of the utility in establishing the overall rate of return, without imposing caps on the equity ratio or ROE adjustments related to capital structure. ${ }^{143}$

[^105]As FERC stated in Kentucky West Virginia, for example: "In our opinion a utility should be regulated on the basis of its being an independent entity; that is, a utility should be considered as nearly as possible on its own merits . . . ."144

## Q110. WHAT IS EPE'S ACTUAL CAPITAL STRUCTURE?

A110. As shown in the table below, as of December 31, 2020, EPE's actual capital structure consisted of $52.03 \%$ common equity and $47.97 \%$ long-term debt:

TABLE EPE-6
CAPITAL STRUCTURE RATIOS

| Description | Balance | Percent |  |
| :--- | :---: | :---: | :---: |
| Long-term debt | $\$ 1,288,017,678$ |  | $47.97 \%$ |
| Common Equity | $\$ 1,397,187,639$ |  | $52.03 \%$ |
|  | $\$ 2,685,205,317$ |  | $100.00 \%$ |

Source: FERC Form No. 1 (filed date Mar. 30, 2021).

## Q111. HOW DOES THIS COMPARE TO THE EQUITY RATIOS MAINTAINED BY THE FIRMS IN THE ELECTRIC GROUP?

A111. Exhibit No. EPE-0027 presents the sources of long-term capital (long-term debt and common equity) used by the publicly traded firms in the group of electric utilities used to estimate the cost of equity. As shown there, at year-end 2020, common equity ratios for the utilities in the Electric Group ranged from $28.6 \%$ to $60.9 \%$. The Company's common equity ratio as of December 31, 2020, of $52.03 \%$ falls within this range.

[^106]
## Q112. HOW DO THESE HISTORICAL CAPITALIZATION RATIOS COMPARE WITH INVESTORS' FORWARD-LOOKING EXPECTATIONS?

A112. As shown on Exhibit No. EPE-0027, Value Line expects an average common equity ratio of $46.4 \%$ for the Electric Group over its three-to-five year forecast horizon, with the individual common equity ratios ranging from $32.5 \%$ to $61.0 \%$.

## Q113. HOW DOES EPE'S EQUITY RATIO COMPARE WITH THE CAPITALIZATION RATIOS MAINTAINED BY OTHER UTILITY OPERATING COMPANIES?

A113. Based on data as of December 31, 2020, Exhibit No. EPE-0028 presents the capital structures for the group of electric utility operating companies owned by the firms in the Electric Group. As shown there, common equity ratios for these utilities averaged $53.0 \%$ and ranged from $39.9 \%$ to $73.4 \%$. Once again, the Company's common equity ratio at December 31, 2020, of $52.03 \%$ falls well within the range established by reference to other comparable electric utility operating companies.

## Q114. WHAT OTHER FACTORS DO INVESTORS CONSIDER IN THEIR ASSESSMENT OF A COMPANY'S CAPITAL STRUCTURE?

A114. Utilities, including EPE, are facing significant capital investment plans. Coupled with the potential for turmoil in capital markets, this warrants a stronger balance sheet to deal with an uncertain environment. A conservative financial profile, in the form of a reasonable common equity ratio, is consistent with the need to accommodate these uncertainties and maintain the continuous access to capital under reasonable terms that is required to fund operations and necessary system investment, even during times of adverse capital market conditions.

## Q115. DO ONGOING ECONOMIC AND CAPITAL MARKET UNCERTAINTIES ALSO INFLUENCE THE APPROPRIATE CAPITAL STRUCTURE FOR EPE?

A115. Yes. Financial flexibility plays a crucial role in ensuring the wherewithal to meet funding needs, and utilities with higher financial leverage may be foreclosed or have limited access to additional borrowing, especially during times of stress. As Moody's observed:

Utilities are among the largest debt issuers in the corporate universe and typically require consistent access to capital markets to assure adequate sources of funding and to maintain financial flexibility. During times of distress and when capital markets are exceedingly volatile and tight, liquidity becomes critically important because access to capital markets may be difficult. ${ }^{145}$

As a result, the Company's capital structure must maintain adequate equity to preserve the flexibility necessary to maintain continuous access to capital even during times of unfavorable market conditions.

## Q116. WHAT DOES THIS EVIDENCE SUGGEST WITH RESPECT TO EPE'S CAPITAL STRUCTURE?

A116. EPE's mix of external financing and its actual $52.03 \%$ common equity ratio are consistent with the range of industry benchmarks, as reflected in the most recent year-end capital structure ratios maintained by the Electric Group, Value Line's forward-looking expectations for these same utilities, and the capitalization maintained by other electric utility operating companies. Taken together, I conclude that EPE's capital structure represents a reasonable basis on which to calculate the overall rate of return.

[^107]2 A117. Yes, it does.

## UNITED STATES OF AMERICA <br> BEFORE THE <br> FEDERAL ENERGY REGULATORY COMMISSION

Docket No. ER22--000

## VERIFICATION

Pursuant to 28 U.S.C. § 1746 (2000), I state under penalty of perjury that I am the Adrien M. McKenzie referred to in the foregoing "Prepared Direct Testimony of Adrien M. McKenzie on Behalf of El Paso Electric Company," that I have read the same and am familiar with the contents thereof, and that the facts set forth therein are true and correct to the best of my knowledge, information, and belief.

Executed this 29th day of October, 2021.


## EXHIBIT NO. EPE-0017

## CURRICULUM VITAE OF ADRIEN M. MCKENZIE

## Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

My name is Adrien M. McKenzie. My business address is 3907 Red River Street, Austin, Texas 78751.

## Q. LEASE STATE YOUR OCCUPATION.

I am a principal in FINCAP, Inc., a firm engaged primarily in financial, economic, and policy consulting in the field of public utility regulation.

## Q. LEASE DESCRIBE YOUR QUALIFICATIONS AND EXPERIENCE.

I received B.A. and M.B.A. degrees with a major in finance from The University of Texas at Austin, and hold the Chartered Financial Analyst $\left(\mathrm{CFA}^{\circledR}\right)$ designation. Since joining FINCAP in 1984, I have participated in consulting assignments involving a broad range of economic and financial issues, including cost of capital, cost of service, rate design, economic damages, and business valuation. I have extensive experience in economic and financial analysis for regulated industries, and in preparing and supporting expert witness testimony before courts, regulatory agencies, and legislative committees throughout the U.S. and Canada. I have personally sponsored direct and rebuttal testimony in over 140 proceedings filed with the Federal Energy Regulatory Commission ("FERC") and regulatory agencies in Alaska, Arkansas, Colorado, Hawaii, Idaho, Indiana, Iowa, Kansas, Kentucky, Maryland, Michigan, Montana, Nebraska, New Mexico, Ohio, Oklahoma, Oregon, South Dakota, Texas, Virginia, Washington, West Virginia, and Wyoming. My testimony addressed the establishment of risk-comparable proxy groups, the application of alternative quantitative methods, and the consideration of regulatory standards and
policy objectives in establishing a fair rate of return on equity for regulated electric, gas, and water utility operations. In connection with these assignments, my responsibilities have included critically evaluating the positions of other parties and preparation of rebuttal testimony, representing clients in settlement negotiations and hearings, and assisting in the preparation of legal briefs.

FINCAP was formed in 1979 as an economic and financial consulting firm serving clients in both the regulated and competitive sectors. FINCAP conducts assignments ranging from broad qualitative analyses and policy consulting to technical analyses and research. The firm's experience is in the areas of public utilities, valuation of closely-held businesses, and economic evaluations (e.g., damage and cost/benefit analyses). Prior to joining FINCAP, I was employed by an oil and gas firm and was responsible for operations and accounting. I am a member of the CFA Institute. A resume containing the details of my qualifications and experience is attached below.

## ADRIEN M. McKENZIE

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Financial Concepts and Applications
Economic and Financial Counsel

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Austin, Texas 78751
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FAX (512) 458-4768
amm.fincap@outlook.com

## Summary of Qualifications

Adrien McKenzie has an MBA in finance from the University of Texas at Austin and holds the Chartered Financial Analyst $\left(\mathrm{CFA}^{\circledR}\right)$ designation. He has over 30 years of experience in economic and financial analysis for regulated industries, and in preparing and supporting expert witness testimony before courts, regulatory agencies, and legislative committees throughout the U.S. and Canada. Assignments have included a broad range of economic and financial issues, including cost of capital, cost of service, rate design, economic damages, and business valuation.

## Employment

## President

FINCAP, Inc.
(June 1984 to June 1987)
(April 1988 to present)

Manager,
McKenzie Energy Company
(Jan. 1981 to May. 1984)

Economic consulting firm specializing in regulated industries and valuation of closely-held businesses. Assignments have involved electric, gas, telecommunication, and water/sewer utilities, with clients including utilities, consumer groups, municipalities, regulatory agencies, and cogenerators. Areas of participation have included rate of return, revenue requirements, rate design, tariff analysis, avoided cost, forecasting, and negotiations. Develop cost of capital analyses using alternative market models for electric, gas, and telephone utilities. Prepare prefiled direct and rebuttal testimony, participate in settlement negotiations, respond to interrogatories, evaluate opposition testimony, and assist in the areas of cross-examination and the preparations of legal briefs. Other assignments have involved preparation of technical reports, valuations, estimation of damages, industry studies, and various economic analyses in support of litigation.

Responsible for operations and accounting for firm engaged in the management of working interests in oil and gas properties.

## Education

M.B.A., Finance, University of Texas at Austin (Sep. 1982 to May. 1984)
B.B.A., Finance, University of Texas at Austin (Jan. 1981 to May 1982)

Simon Fraser University, Vancouver, Canada and University of Hawaii at Manoa, Honolulu, Hawaii
(Jan. 1979 to Dec 1980)

Program included coursework in corporate finance, accounting, financial modeling, and statistics. Received Dean's Award for Academic Excellence and Good Neighbor Scholarship.
Professional Report: The Impact of Construction Expenditures on Investor-Owned Electric Utilities

Electives included capital market theory, portfolio management, and international economics and finance. Elected to Beta Gamma Sigma business honor society. Dean's List 1981-1982.

Coursework in accounting, finance, economics, and liberal arts.

## Professional Associations

Received Chartered Financial Analyst ( $\mathrm{CFA}^{\circledR}$ ) designation in 1990.
Member - CFA Institute.

## Bibliography

"A Profile of State Regulatory Commissions," A Special Report by the Electricity Consumers Resource Council (ELCON), Summer 1991.
"The Impact of Regulatory Climate on Utility Capital Costs: An Alternative Test," with Bruce H. Fairchild, Public Utilities Fortnightly (May 25, 1989).

## Presentations

"ROE at FERC: Issues and Methods," Expert Briefing on Parallels in ROE Issues between AER, ERA, and FERC, Jones Day (Sydney, Melbourne, and Perth, Australia) (April 15, 2014).
Cost of Capital Working Group eforum, Edison Electric Institute (April 24, 2012).
"Cost-of-Service Studies and Rate Design," General Management of Electric Utilities (A Training Program for Electric Utility Managers from Developing Countries), Austin, Texas (October 1989 and November 1990 and 1991).

## Representative Assignments

Mr. McKenzie has prepared and sponsored prefiled testimony submitted in over 150 regulatory proceedings. In addition to filings before regulatory agencies in Alaska, Arkansas, Colorado, Hawaii, Idaho, Indiana, Iowa, Kansas, Kentucky, Maryland, Michigan, Montana, Nebraska, New Mexico, Ohio, Oklahoma, Oregon, South Dakota, Texas, Virginia, Washington, West Virginia, and Wyoming, Mr. McKenzie has considerable expertise in preparing expert analyses and testimony before the Federal Energy Regulatory Commission ("FERC") on the issue of rate of return on equity ("ROE"), and has broad experience in applying and evaluating the results of quantitative methods to estimate a fair ROE. Other representative assignments have included developing cost of service and cost allocation studies, the application of econometric models to analyze the impact of anti-competitive behavior and estimate lost profits; development of explanatory models for nuclear plant capital costs in connection with prudency reviews; and the analysis of avoided cost pricing for cogenerated power.

## I. THREE MODEL APPROACH

| Method | Range | Median | Midpoint |  |  |
| :--- | ---: | :--- | ---: | ---: | ---: |
| Two-Step DCF | $6.09 \%$ | $--11.43 \%$ | $8.89 \%$ | $8.76 \%$ |  |
| CAPM | $9.76 \%$ | $--13.82 \%$ | $11.82 \%$ | $11.79 \%$ |  |
| Risk Premium | $7.23 \%$ | $--11.93 \%$ |  | $9.58 \%$ | $9.58 \%$ |
|  | Composite ROE | $\mathbf{7 . 6 9 \%}$ | $-\mathbf{1 2 . 3 9 \%}$ |  | $\mathbf{1 0 . 0 9 \%}$ |
|  |  | $\mathbf{1 0 . 0 4 \%}$ |  |  |  |

## II. FOUR MODEL APPROACH

| Method | Range | Median | Midpoint |
| :---: | :---: | :---: | :---: |
| Two-Step DCF | 6.09\% -- 11.43\% | 8.89\% | 8.76\% |
| CAPM | 9.76\% -- 13.82\% | 11.82\% | 11.79\% |
| Expected Earnings | 7.69\% -- 14.35\% | 11.24\% | 11.02\% |
| Risk Premium | 6.90\% -- 12.25\% | 9.58\% | 9.58\% |
| Composite ROE | 7.61\% -- 12.96\% | 10.38\% | 10.29\% |

SUMMARY OF RESULTS
Exhibit No. EPE-0018
Page 2 of 2

## ALTERNATIVE BENCHMARKS

| Method | Range | Median | Midpoint |  |
| :--- | ---: | ---: | ---: | ---: |
| Constant Growth DCF | $5.72 \%--12.39 \%$ | $9.17 \%$ | $9.06 \%$ |  |
| ECAPM | $10.41 \%--13.69 \%$ | $11.98 \%$ | $12.05 \%$ |  |
|  | $8.07 \%$ | $--13.04 \%$ | $10.57 \%$ | $10.55 \%$ |

## ELECTRIC GROUP

| Company | SYM | (a) <br> S\&P <br> Corporate Rating | (b) <br> Moody's <br> Long-term Rating | (c) |  |  | (c) Market Cap (\$M) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Value Line |  |  |  |
|  |  |  |  | Safety Rank | Financial Strength | Beta |  |
| ALLETE | ALE | BBB | Baal | 2 | A | 0.90 | \$3,500 |
| 2 Alliant Energy | LNT | A- | Baa2 | 2 | A | 0.85 | \$15,000 |
| 3 Ameren Corp. | AEE | BBB+ | Baal | 1 | A | 0.85 | \$23,000 |
| 4 American Elec Pwr | AEP | A- | Baa2 | 1 | A+ | 0.75 | \$45,000 |
| 5 Avista Corp. | AVA | BBB | Baa2 | 2 | B++ | 0.95 | \$2,900 |
| 6 Black Hills Corp. | BKH | BBB+ | Baa2 | 2 | A | 1.00 | \$4,200 |
| 7 CMS Energy Corp. | CMS | BBB+ | Baa2 | 2 | B++ | 0.80 | \$19,000 |
| 8 Consolidated Edison | ED | A- | Baa2 | 1 | A+ | 0.75 | \$26,000 |
| 9 Dominion Energy | D | BBB+ | Baa2 | 2 | B++ | 0.85 | \$61,000 |
| 10 Duke Energy Corp. | DUK | BBB+ | Baa2 | 2 | A | 0.90 | \$82,000 |
| 11 Edison International | EIX | BBB | Baa3 | 3 | B+ | 1.00 | \$22,000 |
| 12 Emera Inc. | EMA | BBB | Baa3 | 2 | B+ | 0.80 | \$14,300 |
| 13 Entergy Corp. | ETR | BBB+ | Baa2 | 2 | B++ | 0.95 | \$22,000 |
| 14 Evergy Inc. | EVRG | A- | Baa2 | 2 | B++ | 0.95 | \$16,000 |
| 15 Eversource Energy | ES | A- | Baal | 1 | A | 0.90 | \$30,000 |
| 16 Fortis Inc. | FTS | A- | Baa3 | 2 | B++ | 0.75 | \$27,000 |
| 17 IDACORP, Inc. | IDA | BBB | Baal | 1 | A+ | 0.85 | \$5,000 |
| 18 NextEra Energy, Inc. | NEE | A- | Baal | 1 | A+ | 0.95 | \$155,000 |
| 19 NorthWestern Corp. | NWE | BBB | Baa2 | 2 | B++ | 0.95 | \$3,100 |
| 20 OGE Energy Corp. | OGE | BBB+ | Baal | 2 | A | 1.05 | \$7,100 |
| 21 Otter Tail Corp. | OTTR | BBB | Baa2 | 2 | A | 0.90 | \$2,200 |
| 22 Pub Sv Enterprise Grp. | PEG | BBB+ | Baal | 1 | A++ | 0.95 | \$32,000 |
| 23 Sempra Energy | SRE | BBB+ | Baa2 | 2 | A | 1.00 | \$40,000 |
| 24 Southern Company | SO | A- | Baa2 | 2 | A | 0.95 | \$68,000 |
| 25 WEC Energy Group | WEC | A- | Baal | 1 | A+ | 0.80 | \$30,000 |
| 26 Xcel Energy Inc. | XEL | A- | Baal | 1 | A+ | 0.80 | \$37,000 |
|  |  | BBB+ | Baa2 | 2 | A | $\mathbf{0 . 8 9}$ | \$30,473 |

(a) Issuer credit rating from www.standardandpoors.com (retrieved Sep. 7, 2021).
(b) Long-term rating from www.moodys.com (retrieved Sep. 7, 2021).
(c) The Value Line Investment Survey (Jul. 23, Aug, 13 and Sep. 10, 2021).

## ELECTRIC GROUP

|  |  | (a) | (b) | (c) | (d) | (e) | (f) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Company | 6-mo. Avg <br> Dividend Yield | EPS Growth | GDP | Weighted | Adjusted Dividend Yield | DCF <br> Result | Break <br> (b Pts) |
| 1 | Otter Tail Corp. | 3.25\% | 9.00\% | 4.20\% | 8.04\% | 3.39\% | 11.43\% | 93 |
| 2 | Emera Inc. | 4.51\% | 6.27\% | 4.20\% | 5.86\% | 4.65\% | 10.50\% | 19 |
| 3 | Southern Company | 4.14\% | 6.50\% | 4.20\% | 6.04\% | 4.27\% | 10.31\% | 55 |
| 4 | Ameren Corp. | 2.66\% | 7.70\% | 4.20\% | 7.00\% | 2.76\% | 9.76\% | 3 |
| 5 | Avista Corp. | 3.81\% | 6.20\% | 4.20\% | 5.80\% | 3.93\% | 9.73\% | 15 |
| 6 | Dominion Energy | 3.31\% | 6.65\% | 4.20\% | 6.16\% | 3.42\% | 9.58\% | 13 |
| 7 | NextEra Energy, Inc. | 2.02\% | 8.13\% | 4.20\% | 7.34\% | 2.10\% | 9.45\% | 23 |
| 8 | American Elec Pwr | 3.45\% | 6.03\% | 4.20\% | 5.66\% | 3.55\% | 9.21\% | 4 |
| 9 | Duke Energy Corp. | 3.87\% | 5.45\% | 4.20\% | 5.20\% | 3.98\% | 9.18\% | 5 |
| 10 | Eversource Energy | 2.85\% | 6.68\% | 4.20\% | 6.18\% | 2.95\% | 9.13\% | 1 |
| 11 | ALLETE | 3.64\% | 5.67\% | 4.20\% | 5.38\% | 3.74\% | 9.12\% | 8 |
| 12 | WEC Energy Group | 2.91\% | 6.50\% | 4.20\% | 6.04\% | 3.00\% | 9.04\% | 12 |
| 13 | Evergy Inc. | 3.43\% | 5.70\% | 4.20\% | 5.40\% | 3.53\% | 8.93\% | 7 |
| 14 | OGE Energy Corp. | 4.81\% | 3.90\% | 4.20\% | 3.96\% | 4.90\% | 8.86\% | 7 |
| 15 | Fortis Inc. | 3.66\% | 5.30\% | 4.20\% | 5.08\% | 3.75\% | 8.83\% | 3 |
| 16 | CMS Energy Corp. | 2.83\% | 6.18\% | 4.20\% | 5.78\% | 2.92\% | 8.70\% | 13 |
| 17 | Xcel Energy Inc. | 2.69\% | 6.30\% | 4.20\% | 5.88\% | 2.78\% | 8.66\% | 4 |
| 18 | NorthWestern Corp. | 3.89\% | 4.50\% | 4.20\% | 4.44\% | 3.98\% | 8.42\% | 24 |
| 19 | Edison International | 4.60\% | 3.40\% | 4.20\% | 3.56\% | 4.68\% | 8.24\% | 18 |
| 20 | Black Hills Corp. | 3.36\% | 4.67\% | 4.20\% | 4.58\% | 3.44\% | 8.02\% | 22 |
| 21 | Alliant Energy | 2.87\% | 5.10\% | 4.20\% | 4.92\% | 2.94\% | 7.86\% | 16 |
| 22 | Entergy Corp. | 3.69\% | 3.85\% | 4.20\% | 3.92\% | 3.76\% | 7.68\% | 18 |
| 23 | Sempra Energy | 3.31\% | 4.30\% | 4.20\% | 4.28\% | 3.38\% | 7.66\% | 2 |
| 24 | Consolidated Edison | 4.13\% | 2.00\% | 4.20\% | 2.44\% | 4.17\% | 6.61\% | 105 |
| 25 | IDACORP, Inc. | 2.82\% | 3.20\% | 4.20\% | 3.40\% | 2.87\% | 6.27\% | 34 |
| 26 | Pub Sv Enterprise Grp. | 3.33\% | 2.35\% | 4.20\% | 2.72\% | 3.37\% | 6.09\% | 18 |
|  | Lower End (g) |  |  |  |  |  | 6.09\% |  |
|  | Upper End (g) |  |  |  |  |  | 11.43\% |  |
|  | Median (g) |  |  |  |  |  | 8.89\% |  |
|  | Midpoint |  |  |  |  |  | 8.76\% |  |
|  | Median - All Values |  |  |  |  |  | 8.89\% |  |
|  | Low-End Test (h) |  |  |  |  |  | 5.54\% |  |
|  | High-End Test (i) |  |  |  |  |  | 17.79\% |  |

(a) Six-month average dividend yield for Mar. 2021 to Aug. 2021.
(b) www.finance.yahoo.com (retreived Sep. 8, 2021).
(c) Exhibit No. EPE-0020, page 2.
(d) EPS Growth x $80 \%+$ GDP Growth x $20 \%$.
(e) Six-month average dividend yield $x[1+($ EPS Growth Rate / 2) $]$.
(f) $(\mathrm{d})+(\mathrm{e})$.
(g) Excludes highlighted values.
(h) Average Baa utility bond yield for six-months ending Aug. 2021, plus 20\% of CAPM market risk premium.
(i) $200 \%$ of Median - All Values.

## GDP GROWTH RATE

|  | Nominal GDP (\$ Billions) |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Source | $\mathbf{2 0 2 6}$ | $\mathbf{2 0 5 0}$ | $\mathbf{2 0 5 1}$ | $\mathbf{2 0 7 6}$ |
| Compound |  |  |  |  |
| Annual |  |  |  |  |
| Growth Rate |  |  |  |  |$]$

(a) IHS Markit, Long-Term Macro Forecast - Baseline (Mar. 1, 2021).
(b) Energy Information Administration, Annual Energy Outlook 2021 (Feb. 3, 2021).
(c) Social Security Administration, 2021 OASDI Trustees Report, Table VI.G6.-Selected Economic Variables.

## NYSE / IBES

| Company | (a) |  |  | (c) |  | (d) |  | (e) | (f) |  | $\begin{aligned} & \text { Break } \\ & \text { (B Pts) } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Market Return ( $\mathrm{R}_{\mathrm{m}}$ ) |  |  | Risk-Free Rate | Market <br> Risk <br> Premium | Beta | Unadjusted $\mathbf{K}_{\mathrm{e}}$ | Market Cap | Size <br> Adjustment | CAPM Result |  |
|  | $\begin{gathered} \hline \text { Div } \\ \text { Yield } \end{gathered}$ | Proj. Growth | Cost of Equity |  |  |  |  |  |  |  |  |
| 1 OGE Energy Corp. | 2.20\% | 10.39\% | 12.59\% | 2.16\% | 10.43\% | 1.05 | 13.11\% | \$7,100 | 0.71\% | 13.82\% | 48 |
| 2 Black Hills Corp. | 2.20\% | 10.39\% | 12.59\% | 2.16\% | 10.43\% | 1.00 | 12.59\% | \$4,200 | 0.75\% | 13.34\% | 18 |
| 3 Avista Corp. | 2.20\% | 10.39\% | 12.59\% | 2.16\% | 10.43\% | 0.95 | 12.07\% | \$2,900 | 1.09\% | 13.16\% | 0 |
| 4 NorthWestern Corp. | 2.20\% | 10.39\% | 12.59\% | 2.16\% | 10.43\% | 0.95 | 12.07\% | \$3,100 | 1.09\% | 13.16\% | 8 |
| 5 Edison International | 2.20\% | 10.39\% | 12.59\% | 2.16\% | 10.43\% | 1.00 | 12.59\% | \$22,000 | 0.49\% | 13.08\% | 16 |
| 6 Otter Tail Corp. | 2.20\% | 10.39\% | 12.59\% | 2.16\% | 10.43\% | 0.90 | 11.55\% | \$2,200 | 1.37\% | 12.92\% | 28 |
| 7 ALLETE | 2.20\% | 10.39\% | 12.59\% | 2.16\% | 10.43\% | 0.90 | 11.55\% | \$3,500 | 1.09\% | 12.64\% | 8 |
| 8 Entergy Corp. | 2.20\% | 10.39\% | 12.59\% | 2.16\% | 10.43\% | 0.95 | 12.07\% | \$22,000 | 0.49\% | 12.56\% | 0 |
| 9 Evergy Inc. | 2.20\% | 10.39\% | 12.59\% | 2.16\% | 10.43\% | 0.95 | 12.07\% | \$16,000 | 0.49\% | 12.56\% | 19 |
| 10 Sempra Energy | 2.20\% | 10.39\% | 12.59\% | 2.16\% | 10.43\% | 1.00 | 12.59\% | \$40,000 | -0.22\% | 12.37\% | 52 |
| 11 NextEra Energy, Inc. | 2.20\% | 10.39\% | 12.59\% | 2.16\% | 10.43\% | 0.95 | 12.07\% | \$155,000 | -0.22\% | 11.85\% | 0 |
| 12 Pub Sv Enterprise Grp. | 2.20\% | 10.39\% | 12.59\% | 2.16\% | 10.43\% | 0.95 | 12.07\% | \$32,000 | -0.22\% | 11.85\% | 0 |
| 13 Southern Company | 2.20\% | 10.39\% | 12.59\% | 2.16\% | 10.43\% | 0.95 | 12.07\% | \$68,000 | -0.22\% | 11.85\% | 7 |
| 14 IDACORP, Inc. | 2.20\% | 10.39\% | 12.59\% | 2.16\% | 10.43\% | 0.85 | 11.03\% | \$5,000 | 0.75\% | 11.78\% | 7 |
| 15 Alliant Energy | 2.20\% | 10.39\% | 12.59\% | 2.16\% | 10.43\% | 0.85 | 11.03\% | \$15,000 | 0.49\% | 11.52\% | 26 |
| 16 Ameren Corp. | 2.20\% | 10.39\% | 12.59\% | 2.16\% | 10.43\% | 0.85 | 11.03\% | \$23,000 | 0.49\% | 11.52\% | 0 |
| 17 Duke Energy Corp. | 2.20\% | 10.39\% | 12.59\% | 2.16\% | 10.43\% | 0.90 | 11.55\% | \$82,000 | -0.22\% | 11.33\% | 19 |
| 18 Eversource Energy | 2.20\% | 10.39\% | 12.59\% | 2.16\% | 10.43\% | 0.90 | 11.55\% | \$30,000 | -0.22\% | 11.33\% | 0 |
| 19 CMS Energy Corp. | 2.20\% | 10.39\% | 12.59\% | 2.16\% | 10.43\% | 0.80 | 10.50\% | \$19,000 | 0.49\% | 10.99\% | 34 |
| 20 Emera Inc. | 2.20\% | 10.39\% | 12.59\% | 2.16\% | 10.43\% | 0.80 | 10.50\% | \$14,300 | 0.49\% | 10.99\% | 0 |
| 21 Dominion Energy | 2.20\% | 10.39\% | 12.59\% | 2.16\% | 10.43\% | 0.85 | 11.03\% | \$61,000 | -0.22\% | 10.81\% | 18 |
| 22 Consolidated Edison | 2.20\% | 10.39\% | 12.59\% | 2.16\% | 10.43\% | 0.75 | 9.98\% | \$26,000 | 0.49\% | 10.47\% | 34 |
| 23 Fortis Inc. | 2.20\% | 10.39\% | 12.59\% | 2.16\% | 10.43\% | 0.75 | 9.98\% | \$27,000 | 0.49\% | 10.47\% | 0 |
| 24 WEC Energy Group | 2.20\% | 10.39\% | 12.59\% | 2.16\% | 10.43\% | 0.80 | 10.50\% | \$30,000 | -0.22\% | 10.28\% | 19 |
| 25 Xcel Energy Inc. | 2.20\% | 10.39\% | 12.59\% | 2.16\% | 10.43\% | 0.80 | 10.50\% | \$37,000 | -0.22\% | 10.28\% | 0 |
| 26 American Elec Pwr | 2.20\% | 10.39\% | 12.59\% | 2.16\% | 10.43\% | 0.75 | 9.98\% | \$45,000 | -0.22\% | 9.76\% | 52 |
| Lower End (g) |  |  |  |  |  |  |  |  |  | 9.76\% |  |
| Upper End (g) |  |  |  |  |  |  |  |  |  | 13.82\% |  |
| Median (g) |  |  |  |  |  |  |  |  |  | 11.82\% |  |
| Midpoint |  |  |  |  |  |  |  |  |  | 11.79\% |  |
| Median - All Values |  |  |  |  |  |  |  |  |  | 11.82\% |  |
| Low-End Test (h) |  |  |  |  |  |  |  |  |  | 5.54\% |  |
| High-End Test (i) |  |  |  |  |  |  |  |  |  | 23.64\% |  |

(a) Weighted average for dividend-paying stocks in the NYSE based on data from www.zacks.com (retrieved Aug. 12, 2021).
(b) IBES growth rates from Refinitiv, as provided by www.fidelity.com (retrieved Aug. 12, 2021). Eliminated growth rates greater than $20 \%$, as well as all negative values.
(c) Six-month average yield on 30 -year Treasury bonds for Aug. 2021 from https://fred.stlouisfed.org/.
(d) The Value Line Investment Survey, Summary \& Index (Sep. 10, 2021).
(e) The Value Line Investment Survey (Jul. 23, Aug, 13 and Sep. 10, 2021).
(f) Duff \& Phelps, 2021 CRSP Deciles Size Study -- Supplementary Data Exhibits, Cost of Capital Navigator.
(g) Excludes highlighted values.
(h) Average Baa utility bond yield for six-months ending Aug. 2021, plus $20 \%$ of CAPM market risk premium.
(i) $200 \%$ of Median - All Values.

| NYS | IBES (a) |  | (b) | (b) | (b) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | We | ted |
|  |  | Ticke | Dividend Yield | Refinitiv <br> Growth | Cap |  |  | Dividend Yield | Growth Rate |
| 1 | 3M Co. | MMM | 2.94\% | 8.22\% | 116.636 | 116.64 | 0.0064 | 0.000189 | 0.000527 |
| 2 | A. O. Smith Corp. | AOS | 1.44\% | $\mathrm{n} / \mathrm{a}$ | 11.501 | -- | -- | -- | -- |
| 3 | Aarons Holdings Co., Inc. | PRG | 0.19\% | $\mathrm{n} / \mathrm{a}$ | 3.040 | -- | -- | -- | -- |
| 4 | ABB Ltd | ABB | 1.37\% | $\mathrm{n} / \mathrm{a}$ | 76.829 | -- | -- | -- | -- |
| 5 | Abbott Laboratories | ABT | 1.48\% | 12.84\% | 215.326 | 215.33 | 0.0118 | 0.000175 | 0.001520 |
| 6 | AbbVie Inc. | ABBV | 4.57\% | 4.50\% | 200.963 | 200.96 | 0.0110 | 0.000505 | 0.000497 |
| 7 | Aberdeen Japan Equity Fund, Inc. | JEQ | 4.75\% | $\mathrm{n} / \mathrm{a}$ | 0.123 | -- | -- | -- | -- |
| 8 | ABM Industries Inc. | ABM | 1.59\% | $\mathrm{n} / \mathrm{a}$ | 3.217 | -- | -- | -- | -- |
| 9 | Acadia Realty Trust | AKR | 2.77\% | $\mathrm{n} / \mathrm{a}$ | 1.914 | -- | -- | -- | -- |
| 10 | Accenture PLC | ACN | 1.10\% | 11.80\% | 202.955 | 202.96 | 0.0112 | 0.000123 | 0.001317 |
| 11 | Acco Brands Corp. | ACCO | 2.80\% | $\mathrm{n} / \mathrm{a}$ | 0.889 | -- | -- | -- | -- |
| 12 | Acuity Brands Inc | AYI | 0.28\% | 12.46\% | 6.522 | 6.52 | 0.0004 | 0.000001 | 0.000045 |
| 13 | Acushnet Holdings Corp. | GOLF | 1.24\% | $\mathrm{n} / \mathrm{a}$ | 3.945 | -- | -- | -- | -- |
| 14 | Adams Diversified Equity Fund, Inc. | ADX | 5.04\% | $\mathrm{n} / \mathrm{a}$ | 2.267 | -- | -- | -- | -- |
| 15 | Adams Natural Resources Fund, Inc. | PEO | 4.77\% | $\mathrm{n} / \mathrm{a}$ | 0.368 | -- | -- | -- | -- |
| 16 | ADT Inc. | ADT | 1.54\% | -7.00\% | 7.447 | -- | -- | -- | -- |
| 17 | Advance Auto Parts, Inc. | AAP | 1.89\% | 12.41\% | 13.821 | 13.82 | 0.0008 | 0.000014 | 0.000094 |
| 18 | Advanced Drainage Systems, Inc. | WMS | 0.37\% | 49.50\% | 8.375 | -- | -- | --- | -- |
| 19 | Aegon NV | AEG | 2.72\% | $\mathrm{n} / \mathrm{a}$ | 12.175 | -- | -- | -- | -- |
| 20 | Affiliated Managers Group, Inc. | AMG | 0.02\% | 13.82\% | 7.008 | 7.01 | 0.0004 | 0.000000 | 0.000053 |
| 21 | Aflac Inc. | AFL | 2.32\% | $\mathrm{n} / \mathrm{a}$ | 38.199 | -- | -- | -- | -- |
| 22 | AG Mortgage Investment Trust, Inc. | MITT | 7.94\% | -30.28\% | 0.171 | -- | -- | -- | -- |
| 23 | AGCO Corp. | AGCO | 0.56\% | 21.60\% | 10.776 | -- | -- | -- | -- |
| 24 | Agilent Technologies, Inc. | A | 0.50\% | 10.80\% | 47.495 | 47.49 | 0.0026 | 0.000013 | 0.000282 |
| 25 | Agnico Eagle Mines Limited | AEM | 0.94\% | 38.68\% | 14.335 | -- | -- | -- | -- |
| 26 | Agree Realty Corp. | ADC | 3.49\% | $\mathrm{n} / \mathrm{a}$ | 5.141 | -- | -- | -- | -- |
| 27 | Air Lease Corp. | AL | 1.47\% | 16.78\% | 4.965 | 4.97 | 0.0003 | 0.000004 | 0.000046 |
| 28 | Air Products and Chemicals, Inc. | APD | 2.15\% | 12.28\% | 61.701 | 61.70 | 0.0034 | 0.000073 | 0.000417 |
| 29 | Alamo Group, Inc. | ALG | 0.36\% | $\mathrm{n} / \mathrm{a}$ | 1.844 | -- | -- | -- | -- |
| 30 | Alamos Gold Inc. | AGI | 0.46\% | 88.27\% | 3.010 | -- | -- | -- | -- |
| 31 | Albany Int. Corp. | AIN | 1.02\% | $\mathrm{n} / \mathrm{a}$ | 2.523 | -- | -- | -- | -- |
| 32 | Albemarle Corp. | ALB | 0.66\% | 29.83\% | 27.599 | -- | -- | -- | -- |
| 33 | Albertsons Companies, Inc. | ACI | 1.40\% | -11.66\% | 13.324 | -- | -- | -- | -- |
| 34 | Alexander \& Baldwin Holdings, Inc. | ALEX | 3.12\% | $\mathrm{n} / \mathrm{a}$ | 1.489 | -- | -- | -- | -- |
| 35 | Alexanders, Inc. | ALX | 6.64\% | $\mathrm{n} / \mathrm{a}$ | 1.386 | -- | -- | -- | -- |
| 36 | Alexandria Real Estate Equities, Inc. | ARE | 2.19\% | $\mathrm{n} / \mathrm{a}$ | 31.166 | -- | -- | -- | -- |
| 37 | Algonquin Power \& Utilities Corp. | AQN | 1.95\% | 9.13\% | 9.819 | 9.82 | 0.0005 | 0.000011 | 0.000049 |
| 38 | Allegion PLC | ALLE | 1.05\% | 7.46\% | 12.304 | 12.30 | 0.0007 | 0.000007 | 0.000050 |
| 39 | Allete, Inc. | ALE | 3.50\% | $\mathrm{n} / \mathrm{a}$ | 3.762 | -- | -- | -- | -- |
| 40 | Alliance Data Systems Corp. | ADS | 0.89\% | $\mathrm{n} / \mathrm{a}$ | 4.700 | -- | -- | -- | -- |
| 41 | AllianceBernstein Global High Income Fund, In | AWF | 6.32\% | $\mathrm{n} / \mathrm{a}$ | 1.073 | -- | -- | -- | -- |
| 42 | AllianceBernstein Holding L.P. | AB | 7.30\% | 16.14\% | 4.979 | 4.98 | 0.0003 | 0.000020 | 0.000044 |
| 43 | Allison Transmission Holdings, Inc. | ALSN | 1.91\% | 32.77\% | 4.206 | -- | -- | -- | -- |
| 44 | Ally Financial Inc. | ALLY | 1.84\% | 7.33\% | 19.545 | 19.54 | 0.0011 | 0.000020 | 0.000079 |
| 45 | Alpine Income Property Trust, Inc. | PINE | 5.16\% | $\mathrm{n} / \mathrm{a}$ | 0.219 | -- | -- | -- | -- |
| 46 | ALPS REIT Dividend Dogs ETF | RDOG | 4.00\% | $\mathrm{n} / \mathrm{a}$ | 0.032 | -- | -- | -- | -- |
| 47 | Altria Group, Inc. | MO | 7.14\% | 4.45\% | 88.829 | 88.83 | 0.0049 | 0.000349 | 0.000217 |
| 48 | Ambev S.A. | ABEV | 0.47\% | -3.45\% | 49.565 | -- | -- | -- | -- |
| 49 | Amcor PLC | AMCR | 3.86\% | 8.67\% | 19.025 | 19.02 | 0.0010 | 0.000040 | 0.000091 |
| 50 | Ameren Corp. | AEE | 2.50\% | 7.70\% | 22.670 | 22.67 | 0.0012 | 0.000031 | 0.000096 |
| 51 | America Movil, S.A.B. de C.V. | AMX | 2.37\% | 9.33\% | 56.060 | 56.06 | 0.0031 | 0.000073 | 0.000288 |
| 52 | American Assets Trust, Inc. | AAT | 2.94\% | $\mathrm{n} / \mathrm{a}$ | 2.307 | -- | -- | -- | -- |
| 53 | American Campus Communities Inc | ACC | 3.85\% | $\mathrm{n} / \mathrm{a}$ | 6.793 | -- | -- | -- | -- |
| 54 | American Eagle Outfitters, Inc. | AEO | 2.03\% | 7.70\% | 5.956 | 5.96 | 0.0003 | 0.000007 | 0.000025 |
| 55 | American Equity Investment Life Holding Co. | AEL | 0.96\% | $\mathrm{n} / \mathrm{a}$ | 3.078 | -- | -- | -- | -- |
| 56 | American Express Co. | AXP | 1.01\% | 42.30\% | 135.586 | -- | -- | -- | -- |
| 57 | American Financial Group, Inc. | AFG | 1.48\% | $\mathrm{n} / \mathrm{a}$ | 11.464 | -- | -- | -- | -- |
| 58 | American Homes 4 Rent | AMH | 0.98\% | $\mathrm{n} / \mathrm{a}$ | 12.903 | -- | -- | -- | -- |
| 59 | American Int. Group, Inc. | AIG | 2.37\% | 32.66\% | 46.249 | -- | -- | -- | -- |
| 60 | American States Water Co. | AWR | 1.52\% | 6.30\% | 3.260 | 3.26 | 0.0002 | 0.000003 | 0.000011 |
| 61 | American Tower Corp. | AMT | 1.83\% | 18.30\% | 126.174 | 126.17 | 0.0069 | 0.000127 | 0.001270 |
| 62 | American Vanguard Corp. | AVD | 0.52\% | $\mathrm{n} / \mathrm{a}$ | 0.476 | -- | -- | -- | -- |
| 63 | American Water Works Co., Inc. | AWK | 1.37\% | 8.60\% | 31.863 | 31.86 | 0.0018 | 0.000024 | 0.000151 |
| 64 | Americold Realty Trust | COLD | 2.39\% | $\mathrm{n} / \mathrm{a}$ | 9.613 | -- | -- | -- | -- |
| 65 | Ameriprise Financial, Inc. | AMP | 1.67\% | 9.42\% | 30.862 | 30.86 | 0.0017 | 0.000028 | 0.000160 |


| NYSE | IBES (a) |  | (b) | (b) | (b) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | IBES |  |  |  | Wei | hted |
|  |  | Ticker | Dividend Yield | Refinitiv <br> Growth | Cap (Sbillions) | M |  | Dividend Yield | Growth Rate |
| 66 | AmerisourceBergen Corp. | ABC | 1.48\% | 12.31\% | 24.493 | 24.49 | 0.0013 | 0.000020 | 0.000166 |
| 67 | AMETEK, Inc. | AME | 0.58\% | $\mathrm{n} / \mathrm{a}$ | 31.779 | -- | -- | -- | -- |
| 68 | Amphenol Corp. | APH | 0.79\% | 12.00\% | 44.098 | 44.10 | 0.0024 | 0.000019 | 0.000291 |
| 69 | AngloGold Ashanti Limited | AU | 2.32\% | 34.89\% | 6.752 | -- | -- | -- | -- |
| 70 | AnheuserBusch InBev SANV | BUD | 0.72\% | 1.80\% | 121.552 | 121.55 | 0.0067 | 0.000048 | 0.000120 |
| 71 | Annaly Capital Management Inc | NLY | 10.24\% | $\mathrm{n} / \mathrm{a}$ | 12.406 | -- | -- | -- | -- |
| 72 | Antero Midstream Corp. | AM | 9.63\% | $\mathrm{n} / \mathrm{a}$ | 4.464 | -- | -- | -- | -- |
| 73 | Anthem, Inc. | ANTM | 1.23\% | 13.30\% | 89.636 | 89.64 | 0.0049 | 0.000061 | 0.000655 |
| 74 | Aon plc | AON | 0.75\% | $\mathrm{n} / \mathrm{a}$ | 61.667 | -- | -- | -- | -- |
| 75 | Apartment Income REIT Corp. | AIRC | 3.44\% | $\mathrm{n} / \mathrm{a}$ | 7.853 | -- | -- | -- | -- |
| 76 | Apartment Investment and Mngmt Co. | AIV | 22.77\% | $\mathrm{n} / \mathrm{a}$ | 1.004 | -- | -- | -- | -- |
| 77 | Apollo Commercial Real Estate Finance | ARI | 9.09\% | $\mathrm{n} / \mathrm{a}$ | 2.154 | -- | -- | -- | -- |
| 78 | Apollo Global Management, Inc. | APO | 3.37\% | 30.78\% | 13.784 | -- | -- | -- | -- |
| 79 | Apple Hospitality REIT, Inc. | APLE | 0.27\% | $\mathrm{n} / \mathrm{a}$ | 3.427 | -- | -- | -- | -- |
| 80 | Applied Industrial Technologies, Inc. | AIT | 1.46\% | n/a | 3.517 | -- | -- | -- | -- |
| 81 | AptarGroup, Inc. | ATR | 1.15\% | 7.12\% | 8.682 | 8.68 | 0.0005 | 0.000005 | 0.000034 |
| 82 | Aramark | ARMK | 1.25\% | $\mathrm{n} / \mathrm{a}$ | 8.951 | -- | -- | -- | -- |
| 83 | Arbor Realty Trust | ABR | 7.27\% | $\mathrm{n} / \mathrm{a}$ | 2.658 | -- | -- | -- | -- |
| 84 | ARC Document Solutions, Inc. | ARC | 2.62\% | $\mathrm{n} / \mathrm{a}$ | 0.132 | -- | -- | -- | -- |
| 85 | ArcelorMittal | MT | 0.70\% | $\mathrm{n} / \mathrm{a}$ | 36.708 | -- | -- | -- | -- |
| 86 | Archer Daniels Midland Co. | ADM | 2.41\% | 7.50\% | 34.360 | 34.36 | 0.0019 | 0.000046 | 0.000142 |
| 87 | Archrock, Inc. | AROC | 7.11\% | $\mathrm{n} / \mathrm{a}$ | 1.257 | -- | -- | -- | -- |
| 88 | Arcos Dorados Holdings Inc. | ARCO | 0.53\% | $\mathrm{n} / \mathrm{a}$ | 1.180 | -- | -- | -- | -- |
| 89 | Arcosa, Inc. | ACA | 0.39\% | 4.10\% | 2.475 | 2.47 | 0.0001 | 0.000001 | 0.000006 |
| 90 | Ardagh Group S.A. | ARD | 2.27\% | 4.10\% | 0.493 | 0.49 | 0.0000 | 0.000001 | 0.000001 |
| 91 | Ares Commercial Real Estate Corp. | ACRE | 8.97\% | $\mathrm{n} / \mathrm{a}$ | 0.692 | -- | -- | -- | -- |
| 92 | Ares Management Corp. | ARES | 2.65\% | 20.50\% | 18.611 | -- | -- | -- | -- |
| 93 | Argan, Inc. | AGX | 2.18\% | $\mathrm{n} / \mathrm{a}$ | 0.725 | -- | -- | -- | -- |
| 94 | Argo Group Int. Holdings, Ltd. | ARGO | 2.15\% | n/a | 2.008 | -- | -- | -- | -- |
| 95 | Armada Hoffler Properties, Inc. | AHH | 4.86\% | n/a | 1.069 | -- | -- | -- | -- |
| 96 | ARMOUR Residential REIT, Inc. | ARR | 11.24\% | -2.46\% | 0.761 | -- | -- | -- | -- |
| 97 | Armstrong World Industries, Inc. | AWI | 0.75\% | $\mathrm{n} / \mathrm{a}$ | 5.347 | -- | -- | -- | -- |
| 98 | Arthur J. Gallagher \& Co. | AJG | 1.35\% | 12.47\% | 29.416 | 29.42 | 0.0016 | 0.000022 | 0.000202 |
| 99 | Artisan Partners Asset Management Inc. | APAM | 6.67\% | 24.60\% | 3.619 | -- | -- | -- | -- |
| 100 | ASA Gold and Precious Metals Limited | ASA | 0.10\% | $\mathrm{n} / \mathrm{a}$ | 0.406 | -- | -- | -- | -- |
| 101 | ASE Technology Holding Co., Ltd. | ASX | 0.95\% | $\mathrm{n} / \mathrm{a}$ | 20.022 | -- | -- | -- | -- |
| 102 | Ashland Global Holdings Inc. | ASH | 1.40\% | n/a | 5.203 | -- | -- | -- | -- |
| 103 | Associated BancCorp | ASB | 3.38\% | $\mathrm{n} / \mathrm{a}$ | 3.260 | -- | -- | -- | -- |
| 104 | Associated Capital Group, Inc. | AC | 0.55\% | $\mathrm{n} / \mathrm{a}$ | 0.810 | -- | -- | -- | -- |
| 105 | Assurant, Inc. | AIZ | 1.61\% | 17.80\% | 9.646 | 9.65 | 0.0005 | 0.000009 | 0.000094 |
| 106 | Assured Guaranty Ltd. | AGO | 1.77\% | $\mathrm{n} / \mathrm{a}$ | 3.638 | -- | -- | -- | -- |
| 107 | AT\&T Inc. | T | 7.39\% | 1.46\% | 201.062 | 201.06 | 0.0111 | 0.000817 | 0.000161 |
| 108 | Atlas Corp. | ATCO | 3.48\% | $\mathrm{n} / \mathrm{a}$ | 3.549 | -- | -- | -- | -- |
| 109 | Atmos Energy Corp. | ATO | 2.47\% | 7.17\% | 13.228 | 13.23 | 0.0007 | 0.000018 | 0.000052 |
| 110 | Autohome Inc. | ATHM | 2.02\% | 11.65\% | 5.296 | 5.30 | 0.0003 | 0.000006 | 0.000034 |
| 111 | Autoliv, Inc. | ALV | 2.52\% | 48.00\% | 8.618 | -- | -- | -- | -- |
| 112 | AvalonBay Communities, Inc. | AVB | 2.86\% | $\mathrm{n} / \mathrm{a}$ | 31.023 | -- | -- | -- | -- |
| 113 | Avangrid, Inc. | AGR | 3.26\% | 8.57\% | 20.886 | 20.89 | 0.0011 | 0.000037 | 0.000098 |
| 114 | Avery Dennison Corp. | AVY | 1.25\% | 8.98\% | 18.027 | 18.03 | 0.0010 | 0.000012 | 0.000089 |
| 115 | Avient Corp. | AVNT | 1.74\% | n/a | 4.466 | -- | -- | -- | -- |
| 116 | Avista Corp. | AVA | 4.01\% | 6.90\% | 2.939 | 2.94 | 0.0002 | 0.000006 | 0.000011 |
| 117 | Axis Capital Holdings Limited | AXS | 3.16\% | $\mathrm{n} / \mathrm{a}$ | 4.507 | -- | -- | -- | -- |
| 118 | AZZ Inc. | AZZ | 1.26\% | $\mathrm{n} / \mathrm{a}$ | 1.354 | -- | -- | -- | -- |
| 119 | B\&G Foods, Inc. | BGS | 6.23\% | 0.40\% | 1.977 | 1.98 | 0.0001 | 0.000007 | 0.000000 |
| 120 | Badger Meter, Inc. | BMI | 0.69\% | $\mathrm{n} / \mathrm{a}$ | 3.030 | -- | -- | -- | -- |
| 121 | Bain Capital Specialty Finance, Inc. | BCSF | 8.83\% | n/a | 0.995 | -- | -- | -- | -- |
| 122 | Baker Hughes Co. | BKR | 3.35\% | n/a | 22.424 | -- | -- | -- | -- |
| 123 | Ball Corp. | BLL | 0.67\% | 12.88\% | 29.245 | 29.24 | 0.0016 | 0.000011 | 0.000207 |
| 124 | Banc of California, Inc. | BANC | 1.31\% | $\mathrm{n} / \mathrm{a}$ | 0.931 | -- | -- | -- | -- |
| 125 | Banco Bradesco SA | BBD | 0.72\% | $\mathrm{n} / \mathrm{a}$ | 43.833 | -- | -- | -- | -- |
| 126 | Banco Bradesco SA | BBDO | 0.77\% | $\mathrm{n} / \mathrm{a}$ | 37.904 | -- | -- | -- | -- |
| 127 | Banco De Chile | BCH | 2.10\% | 16.40\% | 8.985 | 8.99 | 0.0005 | 0.000010 | 0.000081 |
| 128 | Banco Latinoamericano de Comercio | BLX | 5.91\% | $\mathrm{n} / \mathrm{a}$ | 0.671 | -- | -- | -- | -- |
| 129 | Banco Santander Brasil SA | BSBR | 4.95\% | 9.70\% | 28.794 | 28.79 | 0.0016 | 0.000078 | 0.000154 |
| 130 | Banco Santander Chile | BSAC | 3.43\% | 15.80\% | 9.432 | 9.43 | 0.0005 | 0.000018 | 0.000082 |


| NYSE / IBES |  |  | (b) | (b) (b) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Company | Ticker | Dividend <br> Yield | IBES <br> Refinitiv Growth | Market Cap (\$billions) | Mkt. Cap. | Weight | Weighted |  |
|  |  |  |  |  |  |  |  | Dividend | Growth |
|  |  |  |  |  |  |  |  | Yield | Rate |
| 131 | BanColombia S.A. | CIB | 0.85\% | $\mathrm{n} / \mathrm{a}$ | 6.968 | -- | -- | -- | -- |
| 132 | BancorpSouth Bank | BXS | 2.65\% | $\mathrm{n} / \mathrm{a}$ | 2.948 | -- | -- | -- | -- |
| 133 | Bank of America Corp. | BAC | 1.72\% | 24.32\% | 353.005 | -- | -- | -- | -- |
| 134 | Bank of Hawaii Corp. | BOH | 3.08\% | $\mathrm{n} / \mathrm{a}$ | 3.522 | -- | -- | -- | -- |
| 135 | Bank Of Montreal | BMO | 1.58\% | 23.70\% | 66.873 | -- | -- | -- | -- |
| 136 | Bank of N.T. Butterfield \& Son Limited | NTB | 5.16\% | $\mathrm{n} / \mathrm{a}$ | 1.835 | -- | -- | -- | -- |
| 137 | Bank of Nova Scotia The | BNS | 2.13\% | $\mathrm{n} / \mathrm{a}$ | 78.754 | -- | -- | -- | -- |
| 138 | BankUnited, Inc. | BKU | 2.14\% | n/a | 3.986 | -- | -- | -- | -- |
| 139 | Barclays PLC | BCS | 0.52\% | $\mathrm{n} / \mathrm{a}$ | 44.704 | -- | -- | -- | -- |
| 140 | BARINGS BDC, INC. | BBDC | 7.27\% | $\mathrm{n} / \mathrm{a}$ | 0.528 | -- | -- | -- | -- |
| 141 | Barings Corporate Investors | MCI | 6.26\% | $\mathrm{n} / \mathrm{a}$ | 0.311 | -- | -- | -- | -- |
| 142 | Barings Participation Investors | MPV | 5.73\% | $\mathrm{n} / \mathrm{a}$ | 0.148 | -- | -- | -- | -- |
| 143 | Barnes Group, Inc. | B | 1.28\% | $\mathrm{n} / \mathrm{a}$ | 2.522 | -- | -- | -- | -- |
| 144 | Barrick Gold Corp. | GOLD | 0.84\% | -6.10\% | 36.119 | -- | -- | -- | -- |
| 145 | Bath \& Body Works, Inc. | BBWI | 0.95\% | $\mathrm{n} / \mathrm{a}$ | 17.378 | -- | -- | -- | -- |
| 146 | Baxter Int. Inc. | BAX | 1.51\% | 11.49\% | 36.983 | 36.98 | 0.0020 | 0.000031 | 0.000234 |
| 147 | BCE, Inc. | BCE | 5.70\% | 4.98\% | 46.102 | 46.10 | 0.0025 | 0.000144 | 0.000126 |
| 148 | Becton, Dickinson and Co. | BDX | 1.38\% | 11.65\% | 69.115 | 69.12 | 0.0038 | 0.000052 | 0.000443 |
| 149 | Belden Inc | BDC | 0.36\% | $\mathrm{n} / \mathrm{a}$ | 2.491 | -- | -- | -- | -- |
| 150 | Benchmark Electronics, Inc. | BHE | 2.52\% | $\mathrm{n} / \mathrm{a}$ | 0.933 | -- | -- | -- | -- |
| 151 | Berkshire Hills Bancorp, Inc. | BHLB | 1.71\% | $\mathrm{n} / \mathrm{a}$ | 1.438 | -- | -- | -- | -- |
| 152 | Best Buy Co., Inc. | BBY | 2.37\% | 9.90\% | 29.571 | 29.57 | 0.0016 | 0.000039 | 0.000161 |
| 153 | BGSF, Inc. | BGSF | 2.89\% | $\mathrm{n} / \mathrm{a}$ | 0.143 | -- | -- | -- | -- |
| 154 | BHP Billiton PLC | BBL | 6.22\% | 5.30\% | 68.558 | 68.56 | 0.0038 | 0.000234 | 0.000200 |
| 155 | BHP Group Limited Sponsored ADR | BHP | 5.19\% | 5.30\% | 114.697 | 114.70 | 0.0063 | 0.000327 | 0.000334 |
| 156 | Big Lots, Inc. | BIG | 2.04\% | 0.70\% | 2.039 | 2.04 | 0.0001 | 0.000002 | 0.000001 |
| 157 | Black Hills Corp. | BKH | 3.17\% | 4.67\% | 4.532 | 4.53 | 0.0002 | 0.000008 | 0.000012 |
| 158 | Black Stone Minerals, L.P. | BSM | 6.51\% | $\mathrm{n} / \mathrm{a}$ | 2.228 | -- | -- | -- | -- |
| 159 | BlackRock Debt Strategies Fund, Inc. | DSU | 6.74\% | $\mathrm{n} / \mathrm{a}$ | 0.534 | -- | -- | -- | -- |
| 160 | BLACKROCK INCOM | BKT | 6.45\% | $\mathrm{n} / \mathrm{a}$ | 0.408 | -- | -- | -- | -- |
| 161 | BLACKROCK INVT | BKN | 4.31\% | $\mathrm{n} / \mathrm{a}$ | 0.321 | -- | -- | -- | -- |
| 162 | BlackRock MuniAssets Fund, Inc. | MUA | 3.89\% | $\mathrm{n} / \mathrm{a}$ | 0.585 | -- | -- | -- | -- |
| 163 | BlackRock MuniHoldings CA Quality Fund | MUC | 4.00\% | $\mathrm{n} / \mathrm{a}$ | 0.669 | -- | -- | -- | -- |
| 164 | BlackRock MuniHoldings Invest. Quality Fund | MFL | 3.84\% | $\mathrm{n} / \mathrm{a}$ | 0.568 | -- | -- | -- | -- |
| 165 | BlackRock MuniHoldings NJ Quality Fund | MUJ | 4.71\% | $\mathrm{n} / \mathrm{a}$ | 0.477 | -- | -- | -- | -- |
| 166 | BlackRock MuniHoldings NY Quality Fund | MHN | 4.31\% | $\mathrm{n} / \mathrm{a}$ | 0.468 | -- | -- | -- | -- |
| 167 | BlackRock MuniVest Fund II, Inc. | MVT | 4.23\% | $\mathrm{n} / \mathrm{a}$ | 0.351 | -- | -- | -- | -- |
| 168 | BlackRock MuniVest Fund, Inc. | MVF | 4.11\% | $\mathrm{n} / \mathrm{a}$ | 0.633 | -- | -- | -- | -- |
| 169 | BlackRock MuniYield CA Fund, Inc. | MYC | 3.29\% | $\mathrm{n} / \mathrm{a}$ | 0.336 | -- | -- | -- | -- |
| 170 | BlackRock MuniYield CA Quality Fund, Inc. | MCA | 4.00\% | $\mathrm{n} / \mathrm{a}$ | 0.549 | -- | -- | -- | -- |
| 171 | BlackRock MuniYield Fund, Inc. | MYD | 4.39\% | $\mathrm{n} / \mathrm{a}$ | 0.718 | -- | -- | -- | -- |
| 172 | BlackRock MuniYield MI Quality Fund, Inc. | MIY | 4.20\% | $\mathrm{n} / \mathrm{a}$ | 0.465 | -- | -- | -- | -- |
| 173 | BlackRock MuniYield New Jersey Fund, Inc. | MYJ | 4.71\% | $\mathrm{n} / \mathrm{a}$ | 0.382 | -- | -- | -- | -- |
| 174 | BlackRock MuniYield NY Quality Fund, Inc. | MYN | 4.21\% | $\mathrm{n} / \mathrm{a}$ | 0.571 | -- | -- | -- | -- |
| 175 | BlackRock MuniYield PA Quality Fund | MPA | 4.10\% | $\mathrm{n} / \mathrm{a}$ | 0.214 | -- | -- | -- | -- |
| 176 | BlackRock MuniYield Quality Fund II, Inc. | MQT | 4.32\% | $\mathrm{n} / \mathrm{a}$ | 0.334 | -- | -- | -- | -- |
| 177 | BlackRock MuniYield Quality Fund III, Inc. | MYI | 4.00\% | $\mathrm{n} / \mathrm{a}$ | 1.030 | -- | -- | -- | -- |
| 178 | BlackRock MuniYield Quality Fund, Inc. | MQY | 4.09\% | $\mathrm{n} / \mathrm{a}$ | 0.516 | -- | -- | -- | -- |
| 179 | BlackRock, Inc. | BLK | 1.80\% | 14.95\% | 139.880 | 139.88 | 0.0077 | 0.000138 | 0.001150 |
| 180 | Blackstone Inc. | BX | 2.45\% | 21.09\% | 78.514 | -- | -- | -- | -- |
| 181 | Blackstone Mortgage Trust, Inc. | BXMT | 7.63\% | -2.48\% | 4.777 | -- | -- | -- | -- |
| 182 | BNY Mellon High Yield Strategies Fund | DHF | 7.68\% | $\mathrm{n} / \mathrm{a}$ | 0.244 | -- | -- | -- | -- |
| 183 | BNY Mellon Strategic Muni Bond Fund, Inc. | DSM | 4.28\% | $\mathrm{n} / \mathrm{a}$ | 0.416 | -- | -- | -- | -- |
| 184 | BNY Mellon Strategic Muni.s, Inc. | LEO | 4.45\% | $\mathrm{n} / \mathrm{a}$ | 0.587 | -- | -- | -- | -- |
| 185 | Boise Cascade, L.L.C. | BCC | 0.71\% | -17.30\% | 2.225 | -- | -- | -- | -- |
| 186 | Bonanza Creek Energy, Inc. | BCEI | 3.74\% | $\mathrm{n} / \mathrm{a}$ | 1.156 | -- | -- | -- | -- |
| 187 | Booz Allen Hamilton Holding Corp. | BAH | 1.81\% | 9.84\% | 11.049 | 11.05 | 0.0006 | 0.000011 | 0.000060 |
| 188 | BorgWarner Inc. | BWA | 1.45\% | 20.74\% | 11.222 | -- | -- | -- | -- |
| 189 | Boston Properties, Inc. | BXP | 3.32\% | $\mathrm{n} / \mathrm{a}$ | 18.444 | -- | -- | -- | -- |
| 190 | BOULDER GR\&INC | BIF | 2.90\% | $\mathrm{n} / \mathrm{a}$ | 1.385 | -- | -- | -- | -- |
| 191 | BP Midstream Partners LP | BPMP | 10.70\% | 3.90\% | 1.361 | 1.36 | 0.0001 | 0.000008 | 0.000003 |
| 192 | BP p.l.c. | BP | 4.76\% | $\mathrm{n} / \mathrm{a}$ | 87.988 | -- | -- | -- | -- |
| 193 | BP Prudhoe Bay Royalty Trust | BPT | 2.78\% | $\mathrm{n} / \mathrm{a}$ | 0.075 | -- | -- | -- | -- |
| 194 | Brady Corp. | BRC | 1.65\% | 7.00\% | 2.784 | 2.78 | 0.0002 | 0.000003 | 0.000011 |
| 195 | Brandywine Realty Trust | BDN | 5.48\% | $\mathrm{n} / \mathrm{a}$ | 2.369 | -- | -- | -- | -- |


| YS | BES (a) |  | (b) | (b) | (b) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | IBES | Market |  |  | Weig | hted |
|  |  | Ticker | Dividend Yield | Refinitiv <br> Growth | Cap (\$billions) | Mkt. Cap. | Weight | Dividend Yield | Growth Rate |
| 196 | Brasilagro Cia Brasileira De Prop. Agricolas | LND | 2.09\% | n/a | 0.342 | -- | -- | -- | -- |
| 197 | Brigham Minerals, Inc. | MNRL | 6.65\% | $\mathrm{n} / \mathrm{a}$ | 1.092 | -- | -- | -- | -- |
| 198 | Bright Scholar Education Holdings Ltd. | BEDU | 3.29\% | $\mathrm{n} / \mathrm{a}$ | 0.383 | -- | -- | -- | -- |
| 199 | BrightSphere Investment Group Inc. | BSIG | 0.15\% | 24.20\% | 2.117 | -- | -- | -- | -- |
| 200 | BrightSpire Capital, Inc. | BRSP | 6.09\% | $\mathrm{n} / \mathrm{a}$ | 1.194 | -- | -- | -- | -- |
| 201 | Brinks Co. The | BCO | 1.01\% | $\mathrm{n} / \mathrm{a}$ | 3.960 | -- | -- | -- | -- |
| 202 | Bristol Myers Squibb Co. | BMY | 2.93\% | 7.95\% | 148.593 | 148.59 | 0.0082 | 0.000239 | 0.000649 |
| 203 | British American Tobacco p.l.c. | BTI | 7.91\% | 4.30\% | 79.911 | 79.91 | 0.0044 | 0.000347 | 0.000189 |
| 204 | Brixmor Property Group Inc. | BRX | 3.62\% | -15.08\% | 7.056 | -- | -- | -- | -- |
| 205 | Broadmark Realty Capital Inc. | BRMK | 8.05\% | $\mathrm{n} / \mathrm{a}$ | 1.384 | -- | -- | -- | -- |
| 206 | Broadridge Financial Solutions, Inc. | BR | 1.34\% | 11.60\% | 19.988 | 19.99 | 0.0011 | 0.000015 | 0.000127 |
| 207 | Broadstone Net Lease, Inc. | BNL | 3.87\% | $\mathrm{n} / \mathrm{a}$ | 3.848 | -- | -- | -- | -- |
| 208 | Brookfield Asset Management Inc | BAM | 0.42\% | $\mathrm{n} / \mathrm{a}$ | 94.120 | -- | -- | -- | -- |
| 209 | Brookfield Business Partners L.P. | BBU | 0.30\% | $\mathrm{n} / \mathrm{a}$ | 3.277 | -- | -- | -- | -- |
| 210 | Brookfield Infrastructure Corp. | BIPC | 3.14\% | $\mathrm{n} / \mathrm{a}$ | 2.916 | -- | -- | -- | -- |
| 211 | Brookfield Infrastructure Partners LP | BIP | 1.74\% | $\mathrm{n} / \mathrm{a}$ | 16.459 | -- | -- | -- | -- |
| 212 | Brookfield Renewable Corp. | BEPC | 2.86\% | $\mathrm{n} / \mathrm{a}$ | 7.315 | -- | -- | -- | -- |
| 213 | Brookfield Renewable Partners L.P. | BEP | 1.50\% | $\mathrm{n} / \mathrm{a}$ | 10.594 | -- | -- | -- | -- |
| 214 | Brown \& Brown, Inc. | BRO | 0.67\% | 11.45\% | 15.595 | 15.60 | 0.0009 | 0.000006 | 0.000098 |
| 215 | Brown Forman Corp. | BF.A | 1.11\% | $\mathrm{n} / \mathrm{a}$ | 31.028 | -- | -- | -- | -- |
| 216 | BrownForman Corp. | BF.B | 1.04\% | $\mathrm{n} / \mathrm{a}$ | 33.207 | -- | -- | -- | -- |
| 217 | BRT Apartments Corp. | BRT | 4.92\% | $\mathrm{n} / \mathrm{a}$ | 0.325 | -- | -- | -- | -- |
| 218 | Brunswick Corp. | BC | 1.26\% | $\mathrm{n} / \mathrm{a}$ | 8.272 | -- | -- | -- | -- |
| 219 | Buckle, Inc. The | BKE | 2.92\% | $\mathrm{n} / \mathrm{a}$ | 2.248 | -- | -- | -- | -- |
| 220 | Bunge Limited | BG | 2.52\% | -7.70\% | 11.230 | -- | -- | -- | -- |
| 221 | BWX Technologies, Inc. | BWXT | 1.51\% | 6.42\% | 5.298 | 5.30 | 0.0003 | 0.000004 | 0.000019 |
| 222 | Byline Bancorp, Inc. | BY | 1.41\% | 10.00\% | 0.965 | 0.97 | 0.0001 | 0.000001 | 0.000005 |
| 223 | Cable One, Inc. | CABO | 0.49\% | 18.40\% | 12.221 | 12.22 | 0.0007 | 0.000003 | 0.000124 |
| 224 | Cabot Corp. | CBT | 2.52\% | 44.90\% | 3.150 | -- | -- | -- | -- |
| 225 | Cabot Oil \& Gas Corp. | COG | 2.70\% | $\mathrm{n} / \mathrm{a}$ | 6.503 | -- | -- | -- | -- |
| 226 | Cactus, Inc. | WHD | 0.98\% | 39.10\% | 2.777 | -- | -- | -- | -- |
| 227 | Cadence Bancorp | CADE | 2.89\% | $\mathrm{n} / \mathrm{a}$ | 2.587 | -- | -- | -- | -- |
| 228 | CAI Int., Inc. | CAI | 2.15\% | $\mathrm{n} / \mathrm{a}$ | 0.969 | -- | -- | -- | -- |
| 229 | Caleres, Inc. | CAL | 1.16\% | $\mathrm{n} / \mathrm{a}$ | 0.921 | -- | -- | -- | -- |
| 230 | California Water Service Group | CWT | 1.44\% | $\mathrm{n} / \mathrm{a}$ | 3.242 | -- | -- | -- | -- |
| 231 | Camden Property Trust | CPT | 2.30\% | $\mathrm{n} / \mathrm{a}$ | 14.512 | -- | -- | -- | -- |
| 232 | Cameco Corp. | CCJ | 0.34\% | 61.60\% | 6.925 | -- | -- | -- | -- |
| 233 | Campbell Soup Co. | CPB | 3.46\% | $\mathrm{n} / \mathrm{a}$ | 12.980 | -- | -- | -- | -- |
| 234 | Camping World Holdings Inc. | CWH | 2.43\% | $\mathrm{n} / \mathrm{a}$ | 3.638 | -- | -- | -- | -- |
| 235 | Canadian Imperial Bank of Commerce | CM | 1.89\% | 16.30\% | 53.276 | 53.28 | 0.0029 | 0.000055 | 0.000477 |
| 236 | Canadian National Railway Co. | CNI | 0.82\% | 10.26\% | 76.625 | 76.63 | 0.0042 | 0.000035 | 0.000432 |
| 237 | Canadian Natural Resources Limited | CNQ | 1.94\% | $\mathrm{n} / \mathrm{a}$ | 39.919 | -- | -- | -- | -- |
| 238 | Canadian Pacific Railway Limited | CP | 0.40\% | 10.79\% | 49.026 | 49.03 | 0.0027 | 0.000011 | 0.000291 |
| 239 | Canon, Inc. | CAJ | 2.73\% | $\mathrm{n} / \mathrm{a}$ | 25.372 | -- | -- | -- | -- |
| 240 | Capital One Financial Corp. | COF | 1.38\% | 46.50\% | 77.869 | -- | -- | -- | -- |
| 241 | Capstead Mortgage Corp. | CMO | 9.24\% | n/a | 0.629 | -- | -- | -- | -- |
| 242 | Cardinal Health, Inc. | CAH | 3.80\% | 6.83\% | 14.998 | 15.00 | 0.0008 | 0.000031 | 0.000056 |
| 243 | Carlisle Companies Inc. | CSL | 1.02\% | $\mathrm{n} / \mathrm{a}$ | 10.767 | -- | -- | -- | -- |
| 244 | Carpenter Technology Corp. | CRS | 2.07\% | $\mathrm{n} / \mathrm{a}$ | 1.857 | -- | -- | -- | -- |
| 245 | Carriage Services, Inc. | CSV | 1.03\% | $\mathrm{n} / \mathrm{a}$ | 0.698 | -- | -- | -- | -- |
| 246 | Carrier Global Corp. | CARR | 0.84\% | 17.32\% | 49.364 | 49.36 | 0.0027 | 0.000023 | 0.000470 |
| 247 | Carters, Inc. | CRI | 1.52\% | 21.10\% | 4.637 | -- | -- | -- | -- |
| 248 | CatchMark Timber Trust, Inc. | CTT | 4.59\% | $\mathrm{n} / \mathrm{a}$ | 0.575 | -- | -- | -- | -- |
| 249 | Caterpillar Inc. | CAT | 2.00\% | 31.22\% | 121.353 | -- | -- | -- | -- |
| 250 | Cato Corp. The | CATO | 2.68\% | $\mathrm{n} / \mathrm{a}$ | 0.371 | -- | -- | -- | -- |
| 251 | Cedar Realty Trust, Inc. | CDR | 1.47\% | $\mathrm{n} / \mathrm{a}$ | 0.247 | -- | -- | -- | -- |
| 252 | Celanese Corp. | CE | 1.67\% | 23.11\% | 18.131 | -- | -- | -- | -- |
| 253 | Cementos Pacasmayo S.A.A. | CPAC | 21.67\% | 38.15\% | 0.476 | -- | -- | -- | -- |
| 254 | CenterPoint Energy, Inc. | CNP | 2.39\% | 4.61\% | 15.895 | 15.90 | 0.0009 | 0.000021 | 0.000040 |
| 255 | Centerspace | CSR | 2.98\% | $\mathrm{n} / \mathrm{a}$ | 1.320 | -- | -- | -- | -- |
| 256 | Centrais Eltricas Brasileiras SA | EBR | 5.20\% | $\mathrm{n} / \mathrm{a}$ | 12.049 | -- | -- | -- | -- |
| 257 | Century Communities, Inc. | CCS | 0.83\% | $\mathrm{n} / \mathrm{a}$ | 2.431 | -- | -- | -- | -- |
| 258 | CF Industries Holdings, Inc. | CF | 2.48\% | $\mathrm{n} / \mathrm{a}$ | 10.391 | -- | -- | -- | -- |
| 259 | Chemed Corp. | CHE | 0.30\% | 7.35\% | 7.198 | 7.20 | 0.0004 | 0.000001 | 0.000029 |
| 260 | Cherry Hill Mortgage Investment Corp. | CHMI | 12.04\% | $\mathrm{n} / \mathrm{a}$ | 0.154 | -- | -- | -- | -- |


| YSE | IBES (a) |  | (b) | (b) | (b) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | IBES | Market |  |  | Weig | hted |
|  |  | Ticker | Dividend Yield | Refinitiv <br> Growth | Cap <br> (\$billions) | M | Weight | Dividend Yield | Growth Rate |
| 261 | Chesapeake Utilities Corp. | CPK | 1.48\% | n/a | 2.283 | -- | -- | -- | -- |
| 262 | Chevron Corp. | CVX | 5.21\% | n/a | 198.903 | -- | -- | -- | -- |
| 263 | Chimera Investment Corp. | CIM | 8.72\% | -2.53\% | 3.570 | -- | -- | -- | -- |
| 264 | China Eastern Airlines Corp. Ltd. | CEA | 1.76\% | $\mathrm{n} / \mathrm{a}$ | 5.956 | -- | -- | -- | -- |
| 265 | China Life Insurance Co. Limited | LFC | 4.98\% | $\mathrm{n} / \mathrm{a}$ | 48.276 | -- | -- | -- | -- |
| 266 | China Petroleum \& Chemical Corp. | SNP | 7.69\% | n/a | 56.673 | -- | -- | -- | -- |
| 267 | China Yuchai Int. Limited | CYD | 11.20\% | $\mathrm{n} / \mathrm{a}$ | 0.620 | -- | -- | -- | -- |
| 268 | Choice Hotels Int., Inc. | CHH | 0.76\% | 27.64\% | 6.612 | -- | -- | -- | -- |
| 269 | Chubb Limited | CB | 1.77\% | 22.85\% | 79.447 | -- | -- | -- | -- |
| 270 | Chunghwa Telecom Co., Ltd. | CHT | 2.61\% | $\mathrm{n} / \mathrm{a}$ | 33.054 | -- | -- | -- | -- |
| 271 | Church \& Dwight Co., Inc. | CHD | 1.20\% | 8.10\% | 20.687 | 20.69 | 0.0011 | 0.000014 | 0.000092 |
| 272 | Cigna Corp. | CI | 1.89\% | 12.60\% | 71.865 | 71.86 | 0.0040 | 0.000075 | 0.000498 |
| 273 | Cimarex Energy Co | XEC | 1.64\% | 68.01\% | 6.761 | -- | -- | -- | -- |
| 274 | CIT Group Inc. | CIT | 2.57\% | n/a | 5.409 | -- | -- | -- | -- |
| 275 | Citigroup Inc. | C | 2.75\% | 28.35\% | 150.590 | -- | -- | -- | -- |
| 276 | Citizens Financial Group, Inc. | CFG | 3.44\% | $\mathrm{n} / \mathrm{a}$ | 19.319 | -- | -- | -- | -- |
| 277 | City Office REIT, Inc. | CIO | 4.49\% | $\mathrm{n} / \mathrm{a}$ | 0.581 | -- | -- | -- | -- |
| 278 | Clearway Energy, Inc. | CWEN | 4.26\% | $\mathrm{n} / \mathrm{a}$ | 6.233 | -- | -- | -- | -- |
| 279 | Clipper Realty Inc. | CLPR | 4.57\% | $\mathrm{n} / \mathrm{a}$ | 0.134 | -- | -- | -- | -- |
| 280 | CMS Energy Corp. | CMS | 2.75\% | 6.64\% | 18.303 | 18.30 | 0.0010 | 0.000028 | 0.000067 |
| 281 | CNA Financial Corp. | CNA | 3.40\% | $\mathrm{n} / \mathrm{a}$ | 12.119 | -- | -- | -- | -- |
| 282 | CNO Financial Group, Inc. | CNO | 2.18\% | n/a | 3.052 | -- | -- | -- | -- |
| 283 | Coca Cola Femsa S.A.B. de C.V. | KOF | 4.31\% | -1.90\% | 95.966 | -- | -- | -- | -- |
| 284 | CocaCola Co. The | KO | 2.96\% | 9.11\% | 244.602 | 244.60 | 0.0134 | 0.000398 | 0.001225 |
| 285 | Cohen \& Steers Inc | CNS | 2.04\% | 21.10\% | 4.257 | -- | -- | -- | -- |
| 286 | Cohen \& Steers Tot. Return Realty Fund, Inc. | RFI | 6.19\% | $\mathrm{n} / \mathrm{a}$ | 0.428 | -- | -- | -- | -- |
| 287 | ColgatePalmolive Co. | CL | 2.28\% | 7.89\% | 66.722 | 66.72 | 0.0037 | 0.000084 | 0.000289 |
| 288 | Columbia Property Trust, Inc. | CXP | 5.14\% | $\mathrm{n} / \mathrm{a}$ | 1.878 | -- | -- | -- | -- |
| 289 | Comerica Inc. | CMA | 3.63\% | -10.70\% | 10.030 | -- | -- | -- | -- |
| 290 | Comfort Systems USA, Inc. | FIX | 0.59\% | n/a | 2.821 | -- | -- | -- | -- |
| 291 | Commercial Metals Co. | CMC | 1.34\% | 0.80\% | 4.304 | 4.30 | 0.0002 | 0.000003 | 0.000002 |
| 292 | Community Bank System, Inc. | CBU | 2.21\% | $\mathrm{n} / \mathrm{a}$ | 4.098 | -- | -- | -- | -- |
| 293 | Community Healthcare Trust Inc. | CHCT | 3.56\% | n/a | 1.193 | -- | -- | -- | -- |
| 294 | Comp En De Mn Cemig ADS | CIG | 9.26\% | $\mathrm{n} / \mathrm{a}$ | 4.097 | -- | -- | -- | -- |
| 295 | Comp. de saneamento Basico De Sao Paulo | SBS | 0.89\% | $\mathrm{n} / \mathrm{a}$ | 4.580 | -- | -- | -- | -- |
| 296 | Companhia Brasileira de Distribuicao | CBD | 1.63\% | -34.20\% | 1.559 | -- | -- | -- | -- |
| 297 | Companhia Paranaense de Energia | ELP | 0.61\% | $\mathrm{n} / \mathrm{a}$ | 3.382 | -- | -- | -- | -- |
| 298 | Compania Cervecerias Unidas, S.A. | CCU | 2.35\% | n/a | 3.882 | -- | -- | -- | -- |
| 299 | Compass Diversified Holdings | CODI | 5.26\% | $\mathrm{n} / \mathrm{a}$ | 1.776 | -- | -- | -- | -- |
| 300 | Compass Minerals Int., Inc. | CMP | 4.18\% | n/a | 2.343 | -- | -- | -- | -- |
| 301 | CONAGRA BRANDS | CAG | 3.70\% | 1.84\% | 16.240 | 16.24 | 0.0009 | 0.000033 | 0.000016 |
| 302 | CONMED Corp. | CNMD | 0.64\% | $\mathrm{n} / \mathrm{a}$ | 3.671 | -- | -- | -- | -- |
| 303 | ConocoPhillips | COP | 3.01\% | -1.81\% | 76.582 | -- | -- | -- | -- |
| 304 | Cons. Discr. Select Sector SPDR ETF | XLY | 0.62\% | n/a | 19.747 | -- | -- | -- | -- |
| 305 | Consolidated Edison Inc | ED | 4.02\% | 2.00\% | 27.253 | 27.25 | 0.0015 | 0.000060 | 0.000030 |
| 306 | Constellation Brands Inc | STZ | 1.42\% | 9.14\% | 40.991 | 40.99 | 0.0023 | 0.000032 | 0.000206 |
| 307 | Constellation Brands Inc | STZ.B | 1.27\% | n/a | 41.737 | -- | -- | -- | -- |
| 308 | Continental Resources, Inc. | CLR | 1.61\% | -10.74\% | 13.673 | -- | -- | -- | -- |
| 309 | Core Laboratories N.V. | CLB | 0.14\% | 40.70\% | 1.366 | -- | -- | -- | -- |
| 310 | CorEnergy Infrastructure Trust, Inc. | CORR | 3.88\% | $\mathrm{n} / \mathrm{a}$ | 0.076 | -- | -- | -- | -- |
| 311 | CoreSite Realty Corp. | COR | 3.61\% | $\mathrm{n} / \mathrm{a}$ | 6.225 | -- | -- | -- | -- |
| 312 | Corning Inc. | GLW | 2.34\% | 23.90\% | 34.964 | -- | -- | -- | -- |
| 313 | Corporate Office Properties Trust | OFC | 3.87\% | $\mathrm{n} / \mathrm{a}$ | 3.194 | -- | -- | -- | -- |
| 314 | Corteva, Inc. | CTVA | 1.14\% | 19.56\% | 33.582 | 33.58 | 0.0018 | 0.000021 | 0.000361 |
| 315 | Cosan S.A. Sponsored ADR | CSAN | 6.45\% | $\mathrm{n} / \mathrm{a}$ | 7.102 | -- | -- | -- | -- |
| 316 | Costamare Inc. | CMRE | 3.82\% | $\mathrm{n} / \mathrm{a}$ | 1.471 | -- | -- | -- | -- |
| 317 | Cousins Properties Inc. | CUZ | 3.14\% | $\mathrm{n} / \mathrm{a}$ | 5.876 | -- | -- | -- | -- |
| 318 | Covanta Holding Corp. | CVA | 1.60\% | $\mathrm{n} / \mathrm{a}$ | 2.659 | -- | -- | -- | -- |
| 319 | CPB Inc. | CPF | 3.58\% | n/a | 0.757 | -- | -- | -- | -- |
| 320 | Crane Co. | CR | 1.67\% | $\mathrm{n} / \mathrm{a}$ | 6.040 | -- | -- | -- | -- |
| 321 | Crawford \& Co. | CRD.A | 2.31\% | $\mathrm{n} / \mathrm{a}$ | 0.553 | -- | -- | -- | -- |
| 322 | Crawford \& Co. | CRD.B | 2.39\% | $\mathrm{n} / \mathrm{a}$ | 0.536 | -- | -- | -- | -- |
| 323 | Credit Suisse Group | CS | 0.82\% | 4.20\% | 27.780 | 27.78 | 0.0015 | 0.000013 | 0.000064 |
| 324 | Crescent Point Energy Corp. | CPG | 0.11\% | $\mathrm{n} / \mathrm{a}$ | 2.112 | -- | -- | -- | -- |
| 325 | Crestwood Equity Partners LP | CEQP | 9.18\% | $\mathrm{n} / \mathrm{a}$ | 1.712 | -- | -- | -- | -- |


| NYSE / IBES |  |  | (b) | (b) | (b) |  | Weight |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Ticker | Dividend Yield | IBES <br> Refinitiv Growth | Market Cap (\$billions) | Mkt. Cap. |  | Weighted |  |
|  | Company |  |  |  |  |  |  | Dividend Yield | Growth Rate |
| 326 | CRH PLC | CRH | 3.52\% | n/a | 41.643 | -- | -- | -- | -- |
| 327 | Cross Timbers Royalty Trust | CRT | 12.35\% | $\mathrm{n} / \mathrm{a}$ | 0.072 | -- | -- | -- | -- |
| 328 | CrossAmerica Partners LP | CAPL | 11.43\% | $\mathrm{n} / \mathrm{a}$ | 0.696 | -- | -- | -- | -- |
| 329 | Crown Castle Int. Corp. | CCI | 2.77\% | 21.00\% | 82.960 | -- | -- | -- | -- |
| 330 | Crown Holdings, Inc. | CCK | 0.74\% | 10.12\% | 14.502 | 14.50 | 0.0008 | 0.000006 | 0.000081 |
| 331 | CTO Realty Growth, Inc. | CTO | 7.31\% | $\mathrm{n} / \mathrm{a}$ | 0.326 | -- | -- | -- | -- |
| 332 | CTS Corp. | CTS | 0.44\% | $\mathrm{n} / \mathrm{a}$ | 1.177 | -- | -- | -- | -- |
| 333 | CubeSmart | CUBE | 2.71\% | $\mathrm{n} / \mathrm{a}$ | 10.111 | -- | -- | -- | -- |
| 334 | CullenFrost Bankers, Inc. | CFR | 2.44\% | $\mathrm{n} / \mathrm{a}$ | 7.486 | -- | -- | -- | -- |
| 335 | Culp, Inc. | CULP | 3.10\% | n/a | 0.175 | -- | -- | -- | -- |
| 336 | Cummins Inc. | CMI | 2.23\% | 17.94\% | 34.724 | 34.72 | 0.0019 | 0.000043 | 0.000342 |
| 337 | CURO Group Holdings Corp. | CURO | 2.64\% | 3.57\% | 0.690 | 0.69 | 0.0000 | 0.000001 | 0.000001 |
| 338 | CurtissWright Corp. | CW | 0.59\% | $\mathrm{n} / \mathrm{a}$ | 4.979 | -- | -- | -- | -- |
| 339 | CVS Health Corp. | CVS | 2.35\% | 4.01\% | 112.098 | 112.10 | 0.0062 | 0.000145 | 0.000247 |
| 340 | D.R. Horton, Inc. | DHI | 0.81\% | $\mathrm{n} / \mathrm{a}$ | 35.263 | -- | -- | -- | -- |
| 341 | Dana Inc. | DAN | 1.63\% | 107.95\% | 3.571 | -- | -- | -- | -- |
| 342 | Danaher Corp. | DHR | 0.27\% | 16.35\% | 221.716 | 221.72 | 0.0122 | 0.000033 | 0.001993 |
| 343 | Danaos Corp. | DAC | 2.74\% | n/a | 1.501 | -- | -- | -- | -- |
| 344 | Darden Restaurants, Inc. | DRI | 3.12\% | 29.57\% | 18.387 | -- | -- | -- | -- |
| 345 | DCP Midstream Partners, LP | DCP | 5.76\% | n /a | 5.645 | -- | -- | -- | -- |
| 346 | Deere \& Co. | DE | 0.93\% | 37.57\% | 120.435 | -- | -- | -- | -- |
| 347 | DELAWARE GRP DI | DDF | 6.56\% | $\mathrm{n} / \mathrm{a}$ | 0.085 | -- | -- | -- | -- |
| 348 | Delek Logistics Partners, L.P. | DKL | 9.33\% | 4.61\% | 1.751 | 1.75 | 0.0001 | 0.000009 | 0.000004 |
| 349 | Deluxe Corp. | DLX | 2.83\% | $\mathrm{n} / \mathrm{a}$ | 1.801 | -- | -- | -- | -- |
| 350 | Devon Energy Corp. | DVN | 1.57\% | $\mathrm{n} / \mathrm{a}$ | 18.956 | -- | -- | -- | -- |
| 351 | DHT Holdings, Inc. | DHT | 2.77\% | n/a | 0.986 | -- | -- | -- | -- |
| 352 | Diageo plc | DEO | 1.53\% | 10.10\% | 116.402 | 116.40 | 0.0064 | 0.000098 | 0.000646 |
| 353 | DICKS Sporting Goods, Inc. | DKS | 1.34\% | 14.84\% | 9.691 | 9.69 | 0.0005 | 0.000007 | 0.000079 |
| 354 | Digital Realty Trust, Inc. | DLR | 2.97\% | 30.30\% | 44.215 | -- | -- | -- | -- |
| 355 | Dillards, Inc. | DDS | 0.33\% | $\mathrm{n} / \mathrm{a}$ | 3.851 | -- | -- | -- | -- |
| 356 | Direxion Daily Financial Bull 3X Shares | FAS | 0.31\% | n/a | 3.538 | -- | -- | -- | -- |
| 357 | Discover Financial Services | DFS | 1.32\% | 54.70\% | 40.015 | -- | -- | -- | -- |
| 358 | DNP Select Income Fund Inc. | DNP | 7.28\% | $\mathrm{n} / \mathrm{a}$ | 3.655 | -- | -- | -- | -- |
| 359 | Dolby Laboratories | DLB | 0.91\% | n/a | 9.818 | -- | -- | -- | -- |
| 360 | Dollar General Corp. | DG | 0.71\% | 5.72\% | 56.217 | 56.22 | 0.0031 | 0.000022 | 0.000177 |
| 361 | Dominion Energy Inc. | D | 3.28\% | 6.60\% | 62.197 | 62.20 | 0.0034 | 0.000112 | 0.000226 |
| 362 | Dominos Pizza Inc | DPZ | 0.73\% | 11.21\% | 18.992 | 18.99 | 0.0010 | 0.000008 | 0.000117 |
| 363 | Donaldson Co., Inc. | DCI | 1.29\% | 10.00\% | 8.570 | 8.57 | 0.0005 | 0.000006 | 0.000047 |
| 364 | Dorian LPG Ltd. | LPG | 8.05\% | $\mathrm{n} / \mathrm{a}$ | 0.501 | -- | -- | -- | -- |
| 365 | Douglas Dynamics, Inc. | PLOW | 2.82\% | $\mathrm{n} / \mathrm{a}$ | 0.928 | -- | -- | -- | -- |
| 366 | Douglas Emmett, Inc. | DEI | 3.48\% | n/a | 5.641 | -- | -- | -- | -- |
| 367 | Dover Corp. | DOV | 1.15\% | 10.26\% | 24.832 | 24.83 | 0.0014 | 0.000016 | 0.000140 |
| 368 | Dover Motorsports, Inc. | DVD | 2.92\% | n /a | 0.100 | -- | -- | -- | -- |
| 369 | Dow Inc. | DOW | 4.36\% | $\mathrm{n} / \mathrm{a}$ | 47.908 | -- | -- | -- | -- |
| 370 | Dr. Reddys Laboratories Ltd | RDY | 0.44\% | -1.60\% | 10.548 | -- | -- | -- | -- |
| 371 | DRDGOLD Limited | DRD | 3.68\% | $\mathrm{n} / \mathrm{a}$ | 0.834 | -- | -- | -- | -- |
| 372 | DTE Energy Co. | DTE | 3.61\% | 6.00\% | 23.285 | 23.29 | 0.0013 | 0.000046 | 0.000077 |
| 373 | DTF TaxFree Income, Inc. | DTF | 3.21\% | $\mathrm{n} / \mathrm{a}$ | 0.128 | -- | -- | -- | -- |
| 374 | Duke Energy Corp. | DUK | 3.60\% | 5.00\% | 82.427 | 82.43 | 0.0045 | 0.000163 | 0.000227 |
| 375 | Duke Realty Corp. | DRE | 2.02\% | $\mathrm{n} / \mathrm{a}$ | 19.065 | -- | -- | -- | -- |
| 376 | DuPont de Nemours, Inc. | DD | 1.53\% | n/a | 40.955 | -- | -- | -- | -- |
| 377 | DWS Muni. Income Trust | KTF | 4.25\% | $\mathrm{n} / \mathrm{a}$ | 0.491 | -- | -- | -- | -- |
| 378 | DWS Strategic Muni. Income Trust | KSM | 4.42\% | $\mathrm{n} / \mathrm{a}$ | 0.142 | -- | -- | -- | -- |
| 379 | Dynex Capital, Inc. | DX | 8.87\% | -3.87\% | 0.608 | -- | -- | -- | -- |
| 380 | Eagle Materials Inc | EXP | 0.64\% | $\mathrm{n} / \mathrm{a}$ | 6.495 | -- | -- | -- | -- |
| 381 | Eagle Point Credit Co. Inc. | ECC | 6.57\% | $\mathrm{n} / \mathrm{a}$ | 0.453 | -- | -- | -- | -- |
| 382 | Easterly Government Properties, Inc. | DEA | 4.75\% | $\mathrm{n} / \mathrm{a}$ | 1.873 | -- | -- | -- | -- |
| 383 | EastGroup Properties, Inc. | EGP | 1.84\% | $\mathrm{n} / \mathrm{a}$ | 6.949 | -- | -- | -- | -- |
| 384 | Eastman Chemical Co. | EMN | 2.36\% | 18.01\% | 15.853 | 15.85 | 0.0009 | 0.000021 | 0.000157 |
| 385 | Eaton Corp., PLC | ETN | 1.82\% | 16.53\% | 66.530 | 66.53 | 0.0037 | 0.000067 | 0.000604 |
| 386 | Eaton Vance Muni. Income Trust | EVN | 4.34\% | $\mathrm{n} / \mathrm{a}$ | 0.566 | -- | -- | -- | -- |
| 387 | Ecolab Inc. | ECL | 0.87\% | 16.24\% | 63.119 | 63.12 | 0.0035 | 0.000030 | 0.000563 |
| 388 | Edgewell Personal Care Co. | EPC | 1.33\% | 4.01\% | 2.444 | 2.44 | 0.0001 | 0.000002 | 0.000005 |
| 389 | Edison Int. | EIX | 4.64\% | 3.40\% | 21.696 | 21.70 | 0.0012 | 0.000055 | 0.000041 |
| 390 | Element Solutions Inc. | ESI | 1.01\% | $\mathrm{n} / \mathrm{a}$ | 5.865 | -- | -- | -- | -- |


| NYSE / IBES |  |  | (b) | (b) |  |  |  | Weighted |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | IBES | Market |  |  |  |  |
|  | Company | Ticker | Dividend Yield | Refinitiv Growth | Cap (\$billions) | Mkt. Cap. | Weight | Dividend Yield | Growth Rate |
| 391 | Eletrobras | EBR.B | 5.79\% | n/a | 12.018 | -- | -- | -- | -- |
| 392 | Eli Lilly and Co. | LLY | 1.29\% | 14.81\% | 253.279 | 253.28 | 0.0139 | 0.000180 | 0.002062 |
| 393 | Ellington Financial Inc. | EFC | 9.86\% | n/a | 0.915 | -- | -- | -- | -- |
| 394 | Ellington Residential Mortgage REIT | EARN | 10.66\% | -5.89\% | 0.139 | -- | -- | -- | -- |
| 395 | Embotelladora Andina S.A. | AKO.A | 4.61\% | $\mathrm{n} / \mathrm{a}$ | 1.855 | -- | -- | -- | -- |
| 396 | Embotelladora Andina S.A. | AKO.B | 4.43\% | $\mathrm{n} / \mathrm{a}$ | 2.122 | -- | -- | -- | -- |
| 397 | EMCOR Group, Inc. | EME | 0.43\% | n/a | 6.559 | -- | -- | -- | -- |
| 398 | Emerson Electric Co. | EMR | 1.94\% | 10.84\% | 62.339 | 62.34 | 0.0034 | 0.000066 | 0.000372 |
| 399 | Empire State Realty Trust, Inc. | ESRT | 1.29\% | $\mathrm{n} / \mathrm{a}$ | 1.871 | -- | -- | -- | -- |
| 400 | Employers Holdings Inc | EIG | 2.39\% | $\mathrm{n} / \mathrm{a}$ | 1.184 | -- | -- | -- | -- |
| 401 | Enable Midstream Partners, LP | ENBL | 8.20\% | $\mathrm{n} / \mathrm{a}$ | 3.513 | -- | -- | -- | -- |
| 402 | Enbridge Inc | ENB | 4.66\% | 8.51\% | 81.596 | 81.60 | 0.0045 | 0.000209 | 0.000382 |
| 403 | Encompass Health Corp. | EHC | 1.43\% | 17.30\% | 7.790 | 7.79 | 0.0004 | 0.000006 | 0.000074 |
| 404 | Enel Americas S.A. | ENIA | 4.00\% | $\mathrm{n} / \mathrm{a}$ | 10.241 | -- | -- | -- | -- |
| 405 | Energizer Holdings, Inc. | ENR | 2.95\% | 20.50\% | 2.779 | -- | -- | -- | -- |
| 406 | Energy Transfer LP | ET | 6.39\% | $\mathrm{n} / \mathrm{a}$ | 25.804 | -- | -- | -- | -- |
| 407 | Enerpac Tool Group Corp. | EPAC | 0.16\% | $\mathrm{n} / \mathrm{a}$ | 1.530 | -- | -- | -- | -- |
| 408 | Enerplus Corp. | ERF | 0.64\% | $\mathrm{n} / \mathrm{a}$ | 1.515 | -- | -- | -- | -- |
| 409 | Enersis Chile S.A. | ENIC | 6.52\% | $\mathrm{n} / \mathrm{a}$ | 3.362 | -- | -- | -- | -- |
| 410 | Enersys | ENS | 0.70\% | $\mathrm{n} / \mathrm{a}$ | 4.253 | -- | -- | -- | -- |
| 411 | Eneti Inc. | NETI | 1.10\% | $\mathrm{n} / \mathrm{a}$ | 0.205 | -- | -- | -- | -- |
| 412 | Eni SpA | E | 3.27\% | $\mathrm{n} / \mathrm{a}$ | 44.313 | -- | -- | -- | -- |
| 413 | EnLink Midstream, LLC | ENLC | 6.83\% | $\mathrm{n} / \mathrm{a}$ | 2.690 | -- | -- | -- | -- |
| 414 | Ennis, Inc. | EBF | 4.90\% | $\mathrm{n} / \mathrm{a}$ | 0.533 | -- | -- | -- | -- |
| 415 | EnPro Industries | NPO | 1.22\% | 5.10\% | 1.829 | 1.83 | 0.0001 | 0.000001 | 0.000005 |
| 416 | Entergy Corp. | ETR | 3.49\% | 5.80\% | 21.906 | 21.91 | 0.0012 | 0.000042 | 0.000070 |
| 417 | Enterprise Products Partners L.P. | EPD | 7.94\% | 8.40\% | 49.521 | 49.52 | 0.0027 | 0.000216 | 0.000229 |
| 418 | Entravision Communications Corp. | EVC | 1.32\% | $\mathrm{n} / \mathrm{a}$ | 0.644 | -- | -- | -- | -- |
| 419 | Enviva Partners, LP | EVA | 5.67\% | $\mathrm{n} / \mathrm{a}$ | 2.494 | -- | -- | -- | -- |
| 420 | EOG Resources, Inc. | EOG | 2.38\% | 56.52\% | 40.555 | -- | -- | -- | -- |
| 421 | EPR Properties | EPR | 5.92\% | $\mathrm{n} / \mathrm{a}$ | 3.790 | -- | -- | -- | -- |
| 422 | Equifax, Inc. | EFX | 0.60\% | 8.50\% | 31.839 | 31.84 | 0.0018 | 0.000011 | 0.000149 |
| 423 | Equinor ASA | EQNR | 2.07\% | n/a | 67.554 | -- | -- | -- | -- |
| 424 | Equitable Holdings, Inc. | EQH | 2.18\% | 10.70\% | 13.590 | 13.59 | 0.0007 | 0.000016 | 0.000080 |
| 425 | Equitrans Midstream Corp. | ETRN | 7.07\% | $\mathrm{n} / \mathrm{a}$ | 3.672 | -- | -- | -- | -- |
| 426 | Equity Lifestyle Properties, Inc. | ELS | 1.77\% | $\mathrm{n} / \mathrm{a}$ | 14.906 | -- | -- | -- | -- |
| 427 | Equity Residential | EQR | 2.94\% | $\mathrm{n} / \mathrm{a}$ | 30.683 | -- | -- | -- | -- |
| 428 | ESCO Technologies Inc. | ESE | 0.34\% | n/a | 2.448 | -- | -- | -- | -- |
| 429 | Essent Group Ltd. | ESNT | 1.42\% | 15.06\% | 5.359 | 5.36 | 0.0003 | 0.000004 | 0.000044 |
| 430 | Essential Properties Realty Trust, Inc. | EPRT | 3.32\% | $\mathrm{n} / \mathrm{a}$ | 3.564 | -- | -- | -- | -- |
| 431 | Essential Utilities Inc. | WTRG | 2.04\% | 6.40\% | 12.072 | 12.07 | 0.0007 | 0.000014 | 0.000042 |
| 432 | Essex Property Trust, Inc. | ESS | 2.65\% | $\mathrm{n} / \mathrm{a}$ | 20.496 | -- | -- | -- | -- |
| 433 | Ethan Allen Interiors Inc. | ETH | 3.78\% | $\mathrm{n} / \mathrm{a}$ | 0.667 | -- | -- | -- | -- |
| 434 | Euronav NV | EURN | 1.02\% | $\mathrm{n} / \mathrm{a}$ | 1.658 | -- | -- | -- | -- |
| 435 | Evercore Inc | EVR | 1.98\% | $\mathrm{n} / \mathrm{a}$ | 5.622 | -- | -- | -- | -- |
| 436 | Everest Re Group, Ltd. | RE | 2.31\% | 70.08\% | 10.718 | -- | -- | -- | -- |
| 437 | Evergy Inc. | EVRG | 3.17\% | 5.80\% | 15.489 | 15.49 | 0.0009 | 0.000027 | 0.000049 |
| 438 | Eversource Energy | ES | 2.68\% | 6.81\% | 30.900 | 30.90 | 0.0017 | 0.000046 | 0.000116 |
| 439 | Evertec, Inc. | EVTC | 0.43\% | 9.68\% | 3.337 | 3.34 | 0.0002 | 0.000001 | 0.000018 |
| 440 | Extra Space Storage Inc | EXR | 2.31\% | n/a | 23.205 | -- | -- | -- | -- |
| 441 | Exxon Mobil Corp. | XOM | 5.96\% | 10.14\% | 247.028 | 247.03 | 0.0136 | 0.000809 | 0.001377 |
| 442 | F.N.B. Corp. | FNB | 4.01\% | n /a | 3.821 | -- | -- | -- | -- |
| 443 | FactSet Research Systems Inc. | FDS | 0.90\% | 5.73\% | 13.765 | 13.76 | 0.0008 | 0.000007 | 0.000043 |
| 444 | Farmland Partners Inc. | FPI | 1.69\% | $\mathrm{n} / \mathrm{a}$ | 0.389 | -- | -- | -- | -- |
| 445 | FB Financial Corp. | FBK | 1.07\% | $\mathrm{n} / \mathrm{a}$ | 1.952 | -- | -- | -- | -- |
| 446 | Federal Agricultural Mortgage Corp. | AGM | 3.53\% | $\mathrm{n} / \mathrm{a}$ | 1.023 | -- | -- | -- | -- |
| 447 | Federal Realty Investment Trust | FRT | 3.51\% | $\mathrm{n} / \mathrm{a}$ | 9.391 | -- | -- | -- | -- |
| 448 | Federal Signal Corp. | FSS | 0.90\% | $\mathrm{n} / \mathrm{a}$ | 2.449 | -- | -- | -- | -- |
| 449 | Federated Hermes, Inc. | FHI | 3.18\% | 0.66\% | 3.348 | 3.35 | 0.0002 | 0.000006 | 0.000001 |
| 450 | FedEx Corp. | FDX | 1.09\% | 11.65\% | 73.860 | 73.86 | 0.0041 | 0.000044 | 0.000473 |
| 451 | Fidelity National Financial, Inc. | FNF | 2.95\% | $\mathrm{n} / \mathrm{a}$ | 13.938 | -- | -- | -- | -- |
| 452 | Fidelity National Information Services, Inc. | FIS | 1.17\% | 17.11\% | 82.690 | 82.69 | 0.0045 | 0.000053 | 0.000778 |
| 453 | Financial Select Sector SPDR ETF | XLF | 1.49\% | $\mathrm{n} / \mathrm{a}$ | 41.524 | -- | -- | -- | -- |
| 454 | First American Financial Corp. | FAF | 2.68\% | -3.10\% | 7.557 | -- | -- | -- | -- |
| 455 | First BanCorp. | FBP | 2.15\% | $\mathrm{n} / \mathrm{a}$ | 2.711 | -- | -- | -- | -- |


| NYSE | / IBES |  | (b) | (b) | (b) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | Weig | hted |
|  |  | Tis | Dividend Yield | Refinitiv | Cap |  |  | Dividend <br> Yield | Growth Rate |
| 456 | First Commonwealth Financial Corp. | FCF | 3.34\% | n/a | 1.321 | -- | -- | -- | -- |
| 457 | First Horizon Corp. | FHN | 3.66\% | $\mathrm{n} / \mathrm{a}$ | 9.015 | -- | -- | -- | -- |
| 458 | First Industrial Realty Trust, Inc. | FR | 1.98\% | n/a | 7.034 | -- | -- | -- | -- |
| 459 | First Republic Bank | FRC | 0.43\% | 18.90\% | 34.975 | 34.97 | 0.0019 | 0.000008 | 0.000363 |
| 460 | FirstEnergy Corp. | FE | 4.09\% | -1.84\% | 20.766 | -- | -- | -- | -- |
| 461 | Flagstar Bancorp, Inc. | FBC | 0.49\% | $\mathrm{n} / \mathrm{a}$ | 2.603 | -- | -- | -- | -- |
| 462 | Flaherty \& Crumrine Pref. and Inc. Fund Inc. | PFO | 6.16\% | $\mathrm{n} / \mathrm{a}$ | 0.168 | -- | -- | -- | -- |
| 463 | Flex LNG Ltd. | FLNG | 11.34\% | $\mathrm{n} / \mathrm{a}$ | 0.751 | -- | -- | -- | -- |
| 464 | Flowers Foods, Inc. | FLO | 3.65\% | -3.36\% | 4.874 | -- | -- | -- | -- |
| 465 | Flowserve Corp. | FLS | 1.98\% | 13.89\% | 5.270 | 5.27 | 0.0003 | 0.000006 | 0.000040 |
| 466 | FMC Corp. | FMC | 2.00\% | 9.10\% | 12.380 | 12.38 | 0.0007 | 0.000014 | 0.000062 |
| 467 | Fomento Economico Mexicano | FMX | 0.64\% | 6.10\% | 31.349 | 31.35 | 0.0017 | 0.000011 | 0.000105 |
| 468 | Foot Locker, Inc. | FL | 1.39\% | 34.06\% | 5.979 | -- | -- | -- | -- |
| 469 | Fortis Inc. | FTS | 2.46\% | $\mathrm{n} / \mathrm{a}$ | 21.779 | -- | -- | -- | -- |
| 470 | Fortive Corp. | FTV | 0.37\% | 9.77\% | 26.872 | 26.87 | 0.0015 | 0.000005 | 0.000144 |
| 471 | Fortress Transp. and Infrast. Investors LLC | FTAI | 4.58\% | $\mathrm{n} / \mathrm{a}$ | 2.468 | -- | -- | -- | -- |
| 472 | Fortune Brands Home \& Security, Inc. | FBHS | 1.02\% | $\mathrm{n} / \mathrm{a}$ | 14.123 | -- | -- | -- | -- |
| 473 | Four Corners Property Trust, Inc. | FCPT | 4.61\% | $\mathrm{n} / \mathrm{a}$ | 2.099 | -- | -- | -- | -- |
| 474 | FrancoNevada Corp. | FNV | 0.34\% | 10.79\% | 29.642 | 29.64 | 0.0016 | 0.000006 | 0.000176 |
| 475 | Franklin Resources, Inc. | BEN | 3.35\% | 10.22\% | 16.805 | 16.81 | 0.0009 | 0.000031 | 0.000094 |
| 476 | Franklin Universal Trust | FT | 4.91\% | $\mathrm{n} / \mathrm{a}$ | 0.213 | -- | -- | -- | -- |
| 477 | FreeportMcMoRan Inc. | FCX | 0.77\% | 25.90\% | 56.760 | -- | -- | -- | -- |
| 478 | Fresenius Medical Care AG \& Co. | FMS | 1.43\% | 2.60\% | 23.484 | 23.48 | 0.0013 | 0.000018 | 0.000034 |
| 479 | Fresh Del Monte Produce, Inc. | FDP | 1.24\% | n/a | 1.531 | -- | -- | -- | -- |
| 480 | Frontline Ltd. | FRO | 6.54\% | -15.23\% | 1.512 | -- | -- | -- | -- |
| 481 | FS KKR Capital Corp. | FSK | 10.56\% | $\mathrm{n} / \mathrm{a}$ | 2.812 | -- | -- | -- | -- |
| 482 | FutureFuel Corp. | FF | 2.78\% | $\mathrm{n} / \mathrm{a}$ | 0.378 | -- | -- | -- | -- |
| 483 | Gabelli Conv. \& Income Securities Fund Inc. | GCV | 7.37\% | $\mathrm{n} / \mathrm{a}$ | 0.123 | -- | -- | -- | -- |
| 484 | Gabelli Equity Trust Inc. | GAB | 8.80\% | $\mathrm{n} / \mathrm{a}$ | 1.785 | -- | -- | -- | -- |
| 485 | Gabelli Multimedia Trust Inc. | GGT | 9.16\% | n/a | 0.243 | -- | -- | -- | -- |
| 486 | Gamco Investors, Inc. | GBL | 0.29\% | $\mathrm{n} / \mathrm{a}$ | 0.743 | -- | -- | -- | -- |
| 487 | GasLog Partners LP | GLOP | 0.99\% | -11.10\% | 0.201 | -- | -- | -- | -- |
| 488 | GATX Corp. | GATX | 2.11\% | $\mathrm{n} / \mathrm{a}$ | 3.366 | -- | -- | -- | -- |
| 489 | Genco Shipping \& Trading Limited | GNK | 1.05\% | $\mathrm{n} / \mathrm{a}$ | 0.801 | -- | -- | -- | -- |
| 490 | General American Investors, Inc. | GAM | 6.20\% | $\mathrm{n} / \mathrm{a}$ | 1.091 | -- | -- | -- | -- |
| 491 | General Dynamics Corp. | GD | 2.37\% | 6.38\% | 56.101 | 56.10 | 0.0031 | 0.000073 | 0.000197 |
| 492 | General Electric Co. | GE | 0.30\% | 330.10\% | 116.396 | -- | -- | -- | -- |
| 493 | General Mills, Inc. | GIS | 3.45\% | 4.61\% | 35.856 | 35.86 | 0.0020 | 0.000068 | 0.000091 |
| 494 | Genesis Energy, L.P. | GEL | 7.03\% | n/a | 1.046 | -- | -- | -- | -- |
| 495 | Genpact Limited | G | 0.84\% | 12.50\% | 9.623 | 9.62 | 0.0005 | 0.000004 | 0.000066 |
| 496 | Genuine Parts Co. | GPC | 2.59\% | $\mathrm{n} / \mathrm{a}$ | 18.008 | -- | -- | -- | -- |
| 497 | Geopark Ltd | GPRK | 0.71\% | n/a | 0.704 | -- | -- | -- | -- |
| 498 | Gerdau S.A. | GGB | 2.25\% | $\mathrm{n} / \mathrm{a}$ | 10.524 | -- | -- | -- | -- |
| 499 | Getty Realty Corp. | GTY | 4.92\% | n/a | 1.418 | -- | -- | -- | -- |
| 500 | GFL Environmental Inc. | GFL | 0.06\% | $\mathrm{n} / \mathrm{a}$ | 11.498 | -- | -- | -- | -- |
| 501 | Glatfelter Corp. | GLT | 3.52\% | $\mathrm{n} / \mathrm{a}$ | 0.708 | -- | -- | -- | -- |
| 502 | GlaxoSmithKline plc | GSK | 5.05\% | 4.40\% | 110.693 | 110.69 | 0.0061 | 0.000307 | 0.000268 |
| 503 | Global Industrial Co. | GIC | 1.60\% | $\mathrm{n} / \mathrm{a}$ | 1.509 | -- | -- | -- | -- |
| 504 | Global Medical REIT Inc. | GMRE | 5.50\% | $\mathrm{n} / \mathrm{a}$ | 0.957 | -- | -- | -- | -- |
| 505 | Global Net Lease, Inc. | GNL | 9.02\% | n/a | 1.779 | -- | -- | -- | -- |
| 506 | Global Partners LP | GLP | 10.98\% | -18.40\% | 0.712 | -- | -- | -- | -- |
| 507 | Global Payments Inc. | GPN | 0.46\% | 19.30\% | 49.808 | 49.81 | 0.0027 | 0.000013 | 0.000529 |
| 508 | Global Ship Lease, Inc. | GSL | 5.20\% | $\mathrm{n} / \mathrm{a}$ | 0.698 | -- | -- | -- | -- |
| 509 | Globe Life Inc. | GL | 0.81\% | $\mathrm{n} / \mathrm{a}$ | 9.917 | -- | -- | -- | -- |
| 510 | Gold Fields Limited | GFI | 3.86\% | $\mathrm{n} / \mathrm{a}$ | 7.847 | -- | -- | -- | -- |
| 511 | Goldman Sachs BDC, Inc. | GSBD | 9.28\% | $\mathrm{n} / \mathrm{a}$ | 1.974 | -- | -- | -- | -- |
| 512 | GormanRupp Co. The | GRC | 1.75\% | $\mathrm{n} / \mathrm{a}$ | 0.925 | -- | -- | -- | -- |
| 513 | Graco Inc. | GGG | 0.96\% | n/a | 13.211 | -- | -- | -- | -- |
| 514 | GrafTech Int. Ltd. | EAF | 0.35\% | -5.87\% | 3.054 | -- | -- | -- | -- |
| 515 | Graham Corp. | GHM | 3.39\% | n /a | 0.139 | -- | -- | -- | -- |
| 516 | Graham Holdings Co. | GHC | 0.96\% | $\mathrm{n} / \mathrm{a}$ | 3.153 | -- | -- | -- | -- |
| 517 | Granite Construction Inc. | GVA | 1.25\% | n/a | 1.900 | -- | -- | -- | -- |
| 518 | Granite Point Mortgage Trust Inc. | GPMT | 7.73\% | 2.13\% | 0.709 | 0.71 | 0.0000 | 0.000003 | 0.000001 |
| 519 | Granite Real Estate Inc. | GRP.U | 1.24\% | n/a | 4.650 | -- | -- | -- | -- |
| 520 | Graphic Packaging Holding Co. | GPK | 1.54\% | 19.69\% | 5.997 | 6.00 | 0.0003 | 0.000005 | 0.000065 |


| YSE | IBES (a) |  | (b) | (b) | (b) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | IBES | Market |  |  | Weig | ted |
|  | Company | Ticker | Dividend Yield | Refinitiv Growth | Cap (\$billions) | Mkt. Cap. | Weight | Dividend Yield | Growth Rate |
| 521 | Gray Television, Inc. | GTN | 1.43\% | n/a | 2.139 | -- | -- | -- | -- |
| 522 | Gray Television, Inc. | GTN.A | 1.61\% | $\mathrm{n} / \mathrm{a}$ | 1.895 | -- | -- | -- | -- |
| 523 | Great Ajax Corp. | AJX | 5.46\% | $\mathrm{n} / \mathrm{a}$ | 0.320 | -- | -- | -- | -- |
| 524 | Great Western Bancorp, Inc. | GWB | 0.12\% | $\mathrm{n} / \mathrm{a}$ | 1.818 | -- | -- | -- | -- |
| 525 | Greenbrier Companies, Inc. The | GBX | 2.33\% | $\mathrm{n} / \mathrm{a}$ | 1.500 | -- | -- | -- | -- |
| 526 | Greenhill \& Co., Inc. | GHL | 1.28\% | $\mathrm{n} / \mathrm{a}$ | 0.300 | -- | -- | -- | -- |
| 527 | Greif Bros. Corp. | GEF.B | 4.23\% | $\mathrm{n} / \mathrm{a}$ | 3.030 | -- | -- | -- | -- |
| 528 | Greif, Inc. | GEF | 2.78\% | $\mathrm{n} / \mathrm{a}$ | 3.071 | -- | -- | -- | -- |
| 529 | Griffon Corp. | GFF | 1.38\% | n/a | 1.315 | -- | -- | -- | -- |
| 530 | Group 1 Automotive, Inc. | GPI | 0.77\% | n/a | 3.108 | -- | -- | -- | -- |
| 531 | Grupo Aval Acciones y Valores S.A. | AVAL | 4.78\% | n/a | 5.750 | -- | -- | -- | -- |
| 532 | Grupo Financiero Santander Mx. | BSMX | 1.67\% | n/a | 7.968 | -- | -- | -- | -- |
| 533 | Grupo Supervielle S.A. | SUPV | 0.63\% | -19.00\% | 0.195 | -- | -- | -- | -- |
| 534 | Grupo Televisa S.A. | TV | 0.60\% | $\mathrm{n} / \mathrm{a}$ | 7.259 | -- | -- | -- | -- |
| 535 | Guess, Inc. | GES | 1.95\% | $\mathrm{n} / \mathrm{a}$ | 1.501 | -- | -- | -- | -- |
| 536 | H\&R Block, Inc. | HRB | 4.21\% | 12.50\% | 4.666 | 4.67 | 0.0003 | 0.000011 | 0.000032 |
| 537 | H. B. Fuller Co. | FUL | 1.00\% | 20.00\% | 3.516 | 3.52 | 0.0002 | 0.000002 | 0.000039 |
| 538 | Halliburton Co. | HAL | 0.87\% | 53.80\% | 18.371 | -- | -- | -- | -- |
| 539 | Hamilton Beach Brands Holding Co. | HBB | 2.34\% | $\mathrm{n} / \mathrm{a}$ | 0.237 | -- | -- | -- | -- |
| 540 | Hanesbrands Inc. | HBI | 2.92\% | 10.00\% | 7.182 | 7.18 | 0.0004 | 0.000012 | 0.000039 |
| 541 | Hannon Armstrong Sust. Infrast. Capital, Inc. | HASI | 2.41\% | 8.00\% | 4.566 | 4.57 | 0.0003 | 0.000006 | 0.000020 |
| 542 | HarleyDavidson, Inc. | HOG | 1.43\% | $\mathrm{n} / \mathrm{a}$ | 6.440 | -- | -- | -- | -- |
| 543 | Harmony Gold Mining Co. Limited | HMY | 3.40\% | n/a | 2.230 | -- | -- | -- | -- |
| 544 | Haverty Furniture Companies, Inc. | HVT | 2.61\% | $\mathrm{n} / \mathrm{a}$ | 0.698 | -- | -- | -- | -- |
| 545 | Haverty Furniture Companies, Inc. | HVT.A | 2.42\% | $\mathrm{n} / \mathrm{a}$ | 0.693 | -- | -- | -- | -- |
| 546 | Hawaiian Electric Industries, Inc. | HE | 3.06\% | 1.30\% | 4.861 | 4.86 | 0.0003 | 0.000008 | 0.000003 |
| 547 | HCA Healthcare, Inc. | HCA | 0.80\% | 13.09\% | 77.205 | 77.21 | 0.0042 | 0.000034 | 0.000556 |
| 548 | HCI Group, Inc. | HCI | 1.38\% | $\mathrm{n} / \mathrm{a}$ | 0.983 | -- | -- | -- | -- |
| 549 | HDFC Bank Limited | HDB | 0.29\% | $\mathrm{n} / \mathrm{a}$ | 137.856 | -- | -- | -- | -- |
| 550 | Healthcare Realty Trust Inc. | HR | 3.97\% | $\mathrm{n} / \mathrm{a}$ | 4.433 | -- | -- | -- | -- |
| 551 | Healthcare Trust of America, Inc. | HTA | 4.42\% | $\mathrm{n} / \mathrm{a}$ | 6.339 | -- | -- | -- | -- |
| 552 | Healthpeak Properties, Inc. | PEAK | 3.41\% | 1.70\% | 18.988 | 18.99 | 0.0010 | 0.000036 | 0.000018 |
| 553 | Hecla Mining Co. | HL | 0.72\% | $\mathrm{n} / \mathrm{a}$ | 3.367 | -- | -- | -- | -- |
| 554 | Heico Corp. | HEI | 0.13\% | 9.59\% | 18.071 | 18.07 | 0.0010 | 0.000001 | 0.000095 |
| 555 | Heico Corp. | HEI.A | 0.15\% | n /a | 16.592 | -- | -- | -- | -- |
| 556 | Helmerich \& Payne, Inc. | HP | 3.49\% | $\mathrm{n} / \mathrm{a}$ | 3.096 | -- | -- | -- | -- |
| 557 | Hercules Capital, Inc. | HTGC | 7.49\% | $\mathrm{n} / \mathrm{a}$ | 1.980 | -- | -- | -- | -- |
| 558 | Heritage Insurance Holdings, Inc. | HRTG | 3.20\% | n/a | 0.210 | -- | -- | -- | -- |
| 559 | Hershey Co. The | HSY | 1.80\% | 8.65\% | 36.813 | 36.81 | 0.0020 | 0.000036 | 0.000175 |
| 560 | Hess Corp. | HES | 1.37\% | $\mathrm{n} / \mathrm{a}$ | 22.538 | -- | -- | -- | -- |
| 561 | Hess Midstream Partners LP | HESM | 8.00\% | 14.46\% | 0.631 | 0.63 | 0.0000 | 0.000003 | 0.000005 |
| 562 | Hewlett Packard Enterprise Co. | HPE | 3.16\% | 11.60\% | 19.837 | 19.84 | 0.0011 | 0.000034 | 0.000126 |
| 563 | High Income Securities Fund | PCF | 9.68\% | n /a | 0.094 | -- | -- | -- | -- |
| 564 | Highwoods Properties, Inc. | HIW | 4.14\% | $\mathrm{n} / \mathrm{a}$ | 4.826 | -- | -- | -- | -- |
| 565 | Hillenbrand Inc | HI | 1.88\% | $\mathrm{n} / \mathrm{a}$ | 3.345 | -- | -- | -- | -- |
| 566 | HillRom Holdings, Inc. | HRC | 0.74\% | 7.70\% | 8.523 | 8.52 | 0.0005 | 0.000003 | 0.000036 |
| 567 | Hilltop Holdings Inc. | HTH | 1.43\% | n /a | 2.729 | -- | -- | -- | -- |
| 568 | HNI Corp. | HNI | 3.12\% | $\mathrm{n} / \mathrm{a}$ | 1.742 | -- | -- | -- | -- |
| 569 | Hoegh LNG Partners LP | HMLP | 0.79\% | $\mathrm{n} / \mathrm{a}$ | 0.169 | -- | -- | -- | -- |
| 570 | Holly Energy Partners, L.P. | HEP | 7.67\% | 16.90\% | 1.924 | 1.92 | 0.0001 | 0.000008 | 0.000018 |
| 571 | Honda Motor Co., Ltd. | HMC | 4.74\% | n /a | 57.185 | -- | -- | -- | -- |
| 572 | Horace Mann Educators Corp. | HMN | 3.09\% | $\mathrm{n} / \mathrm{a}$ | 1.667 | -- | -- | -- | -- |
| 573 | Hormel Foods Corp. | HRL | 2.14\% | 7.00\% | 24.784 | 24.78 | 0.0014 | 0.000029 | 0.000095 |
| 574 | Houlihan Lokey, Inc. | HLI | 1.94\% | $\mathrm{n} / \mathrm{a}$ | 6.056 | -- | -- | -- | -- |
| 575 | Howmet Aerospace Inc. | HWM | 0.24\% | n/a | 14.158 | -- | -- | -- | -- |
| 576 | HP Inc. | HPQ | 2.58\% | 17.03\% | 36.158 | 36.16 | 0.0020 | 0.000051 | 0.000338 |
| 577 | HSBC Holdings plc | HSBC | 2.60\% | $\mathrm{n} / \mathrm{a}$ | 116.959 | -- | -- | -- | -- |
| 578 | Huaneng Power Int., Inc. | HNP | 6.58\% | 13.10\% | 5.926 | 5.93 | 0.0003 | 0.000021 | 0.000043 |
| 579 | Hubbell Inc | HUBB | 1.92\% | 10.00\% | 11.078 | 11.08 | 0.0006 | 0.000012 | 0.000061 |
| 580 | Hudson Pacific Properties, Inc. | HPP | 3.72\% | $\mathrm{n} / \mathrm{a}$ | 4.099 | -- | -- | -- | -- |
| 581 | Humana Inc. | HUM | 0.68\% | 13.47\% | 52.533 | 52.53 | 0.0029 | 0.000020 | 0.000389 |
| 582 | Huntington Ingalls Industries, Inc. | HII | 2.18\% | 0.83\% | 8.387 | 8.39 | 0.0005 | 0.000010 | 0.000004 |
| 583 | Huntsman Corp. | HUN | 2.86\% | $\mathrm{n} / \mathrm{a}$ | 5.810 | -- | -- | -- | -- |
| 584 | HysterYale Materials Handling, Inc. | HY | 2.11\% | $\mathrm{n} / \mathrm{a}$ | 1.026 | -- | -- | -- | -- |
| 585 | ICICI Bank Limited | IBN | 0.25\% | n/a | 65.166 | -- | -- | -- | -- |


| NYSE / IBES |  |  | (b) | (b) (b) |  |  |  | Weighted |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | IBES | Market |  |  |  |  |
|  | Company | Ticker | Dividend Yield | Refinitiv Growth | Cap (\$billions) | Mkt. Cap. | Weight | Dividend Yield | Growth Rate |
| 586 | ICL Group Ltd | ICL | 2.24\% | $\mathrm{n} / \mathrm{a}$ | 9.421 | -- | -- | -- | -- |
| 587 | IDACORP, Inc. | IDA | 2.67\% | 3.20\% | 5.372 | 5.37 | 0.0003 | 0.000008 | 0.000009 |
| 588 | IDEX Corp. | IEX | 0.95\% | 12.50\% | 17.326 | 17.33 | 0.0010 | 0.000009 | 0.000119 |
| 589 | IHS Markit Ltd. | INFO | 0.68\% | 11.05\% | 46.984 | 46.98 | 0.0026 | 0.000018 | 0.000285 |
| 590 | Illinois Tool Works Inc. | ITW | 1.95\% | 14.47\% | 73.649 | 73.65 | 0.0040 | 0.000079 | 0.000586 |
| 591 | Independence Holding Co. | IHC | 1.01\% | $\mathrm{n} / \mathrm{a}$ | 0.637 | -- | -- | -- | -- |
| 592 | Independence Realty Trust, Inc. | IRT | 2.43\% | $\mathrm{n} / \mathrm{a}$ | 2.078 | -- | -- | -- | -- |
| 593 | Industrias Bachoco, S.A. de C.V. | IBA | 1.89\% | $\mathrm{n} / \mathrm{a}$ | 2.212 | -- | -- | -- | -- |
| 594 | Infosys Limited | INFY | 1.48\% | $\mathrm{n} / \mathrm{a}$ | 97.518 | -- | -- | -- | -- |
| 595 | InfraCap MLP ETF | AMZA | 10.31\% | $\mathrm{n} / \mathrm{a}$ | 0.284 | -- | -- | -- | -- |
| 596 | ING Group, N.V. | ING | 0.90\% | $\mathrm{n} / \mathrm{a}$ | 53.556 | -- | -- | -- | -- |
| 597 | Ingredion Inc. | INGR | 2.92\% | $\mathrm{n} / \mathrm{a}$ | 5.876 | -- | -- | -- | -- |
| 598 | Innovative Industrial Properties, Inc. | IIPR | 2.44\% | $\mathrm{n} / \mathrm{a}$ | 5.493 | -- | -- | -- | -- |
| 599 | Insight Select Income Fund | INSI | 5.66\% | $\mathrm{n} / \mathrm{a}$ | 0.244 | -- | -- | -- | -- |
| 600 | Insperity, Inc. | NSP | 1.73\% | 15.00\% | 4.013 | 4.01 | 0.0002 | 0.000004 | 0.000033 |
| 601 | Installed Building Products, Inc. | IBP | 0.94\% | $\mathrm{n} / \mathrm{a}$ | 3.785 | -- | -- | -- | -- |
| 602 | Insteel Industries, Inc. | IIIN | 0.28\% | $\mathrm{n} / \mathrm{a}$ | 0.826 | -- | -- | -- | -- |
| 603 | Int. Business Machines Corp. | IBM | 4.62\% | 16.32\% | 127.394 | 127.39 | 0.0070 | 0.000324 | 0.001143 |
| 604 | Int. Flavors \& Fragrances Inc. | IFF | 1.96\% | 7.72\% | 39.048 | 39.05 | 0.0021 | 0.000042 | 0.000166 |
| 605 | Int. Paper Co. | IP | 3.41\% | $\mathrm{n} / \mathrm{a}$ | 23.474 | -- | -- | -- | -- |
| 606 | Int. Seaways Inc. | INSW | 1.44\% | $\mathrm{n} / \mathrm{a}$ | 0.469 | -- | -- | -- | -- |
| 607 | Intercontinental Exchange Inc. | ICE | 1.11\% | 9.34\% | 66.858 | 66.86 | 0.0037 | 0.000041 | 0.000343 |
| 608 | Intercorp Financial Services Inc. | IFS | 3.90\% | n/a | 2.163 | -- | -- | -- | -- |
| 609 | Interpublic Grp of Companies, Inc. | IPG | 2.88\% | 14.10\% | 14.761 | 14.76 | 0.0008 | 0.000023 | 0.000114 |
| 610 | INV VK CA VALU | VCV | 3.97\% | $\mathrm{n} / \mathrm{a}$ | 0.688 | -- | -- | -- | -- |
| 611 | INV VK HI INC2 | VLT | 7.63\% | $\mathrm{n} / \mathrm{a}$ | 0.099 | -- | -- | -- | -- |
| 612 | INV VK INVT NY | VTN | 4.01\% | $\mathrm{n} / \mathrm{a}$ | 0.270 | -- | -- | -- | -- |
| 613 | INV VK MUN OPP | VMO | 4.61\% | $\mathrm{n} / \mathrm{a}$ | 0.932 | -- | -- | -- | -- |
| 614 | INV VK MUN TR | VKQ | 4.52\% | $\mathrm{n} / \mathrm{a}$ | 0.765 | -- | -- | -- | -- |
| 615 | INV VK PA VALU | VPV | 4.36\% | $\mathrm{n} / \mathrm{a}$ | 0.328 | -- | -- | -- | -- |
| 616 | INV VK TR INV | VGM | 4.60\% | $\mathrm{n} / \mathrm{a}$ | 0.766 | -- | -- | -- | -- |
| 617 | Invesco Bond Fund | VBF | 6.81\% | $\mathrm{n} / \mathrm{a}$ | 0.241 | -- | -- | -- | -- |
| 618 | Invesco Emerging Mrk. Sovereign Debt ETF | PCY | 4.43\% | $\mathrm{n} / \mathrm{a}$ | 2.793 | -- | -- | -- | -- |
| 619 | Invesco Global Listed Private Equity ETF | PSP | 5.65\% | $\mathrm{n} / \mathrm{a}$ | 0.264 | -- | -- | -- | -- |
| 620 | Invesco India ETF | PIN | 0.43\% | $\mathrm{n} / \mathrm{a}$ | 0.110 | -- | -- | -- | -- |
| 621 | Invesco Ltd. | IVZ | 2.65\% | 23.23\% | 11.844 | -- | -- | -- | -- |
| 622 | INVESCO MORTGAGE CAPITAL INC | IVR | 11.43\% | $\mathrm{n} / \mathrm{a}$ | 0.912 | -- | -- | -- | -- |
| 623 | Invesco Preferred ETF | PGX | 4.90\% | $\mathrm{n} / \mathrm{a}$ | 7.402 | -- | -- | -- | -- |
| 624 | Invesco S\&P 500 Equal Weight ETF | RSP | 1.29\% | $\mathrm{n} / \mathrm{a}$ | 28.980 | -- | -- | -- | -- |
| 625 | Invitation Home Inc. | INVH | 1.74\% | $\mathrm{n} / \mathrm{a}$ | 22.552 | -- | -- | -- | -- |
| 626 | INVMUN INCOM | OIA | 4.61\% | $\mathrm{n} / \mathrm{a}$ | 0.391 | -- | -- | -- | -- |
| 627 | INVQUALITY MU | IQI | 4.51\% | $\mathrm{n} / \mathrm{a}$ | 0.729 | -- | -- | -- | -- |
| 628 | INVVLU MU INCM | IIM | 4.45\% | $\mathrm{n} / \mathrm{a}$ | 0.798 | -- | -- | -- | -- |
| 629 | Iron Mountain Inc. | IRM | 5.30\% | $\mathrm{n} / \mathrm{a}$ | 13.524 | -- | -- | -- | -- |
| 630 | iShares Agency Bond ETF | AGZ | 1.75\% | $\mathrm{n} / \mathrm{a}$ | 0.731 | -- | -- | -- | -- |
| 631 | iShares China LargeCap ETF | FXI | 1.99\% | $\mathrm{n} / \mathrm{a}$ | 5.005 | -- | -- | -- | -- |
| 632 | iShares Core S\&P 500 ETF | IVV | 1.27\% | $\mathrm{n} / \mathrm{a}$ | 298.695 | -- | -- | -- | -- |
| 633 | iShares Core S\&P MidCap ETF | IJH | 1.06\% | $\mathrm{n} / \mathrm{a}$ | 64.262 | -- | -- | -- | -- |
| 634 | iShares Core S\&P SmallCap ETF | IJR | 0.94\% | $\mathrm{n} / \mathrm{a}$ | 69.739 | -- | -- | -- | -- |
| 635 | iShares Core U.S. Aggregate Bond ETF | AGG | 1.85\% | $\mathrm{n} / \mathrm{a}$ | 88.585 | -- | -- | -- | -- |
| 636 | iShares iBoxx High Yld Corp. Bond ETF | HYG | 4.40\% | $\mathrm{n} / \mathrm{a}$ | 19.193 | -- | -- | -- | -- |
| 637 | iShares iBoxx Invest. Grade Corp. Bond ETF | LQD | 2.41\% | $\mathrm{n} / \mathrm{a}$ | 41.282 | -- | -- | -- | -- |
| 638 | iShares Latin America 40 ETF | ILF | 2.19\% | $\mathrm{n} / \mathrm{a}$ | 1.586 | -- | -- | -- | -- |
| 639 | iShares MSCI Australia ETF | EWA | 2.18\% | $\mathrm{n} / \mathrm{a}$ | 1.575 | -- | -- | -- | -- |
| 640 | iShares MSCI Brazil ETF | EWZ | 2.40\% | $\mathrm{n} / \mathrm{a}$ | 5.673 | -- | -- | -- | -- |
| 641 | iShares MSCI EAFE ETF | EFA | 2.22\% | $\mathrm{n} / \mathrm{a}$ | 58.417 | -- | -- | -- | -- |
| 642 | iShares MSCI Emerging Markets ETF | EEM | 1.45\% | $\mathrm{n} / \mathrm{a}$ | 30.843 | -- | -- | -- | -- |
| 643 | iShares MSCI France ETF | EWQ | 1.52\% | $\mathrm{n} / \mathrm{a}$ | 0.769 | -- | -- | -- | -- |
| 644 | iShares MSCI Germany ETF | EWG | 2.12\% | $\mathrm{n} / \mathrm{a}$ | 2.909 | -- | -- | -- | -- |
| 645 | iShares MSCI Hong Kong ETF | EWH | 2.31\% | $\mathrm{n} / \mathrm{a}$ | 1.060 | -- | -- | -- | -- |
| 646 | iShares MSCI Italy ETF | EWI | 1.92\% | $\mathrm{n} / \mathrm{a}$ | 0.550 | -- | -- | -- | -- |
| 647 | iShares MSCI Japan ETF | EWJ | 1.11\% | $\mathrm{n} / \mathrm{a}$ | 11.864 | -- | -- | -- | -- |
| 648 | iShares MSCI Malaysia ETF | EWM | 3.40\% | $\mathrm{n} / \mathrm{a}$ | 0.235 | -- | -- | -- | -- |
| 649 | iShares MSCI Pacific ex Japan ETF | EPP | 2.24\% | $\mathrm{n} / \mathrm{a}$ | 2.483 | -- | -- | -- | -- |
| 650 | iShares MSCI Singapore ETF | EWS | 2.69\% | $\mathrm{n} / \mathrm{a}$ | 0.668 | -- | -- | -- | -- |


| NYSE / IBES |  |  | (b) | (b) | (b) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Ticker | Dividend Yield | IBES <br> Refinitiv Growth | Market Cap (\$billions) | Mkt. Cap. | Weight | Weighted |  |
|  |  |  |  |  |  |  |  | Dividend Yield | Growth Rate |
| 651 | iShares MSCI South Africa ETF | EZA | 4.65\% | $\mathrm{n} / \mathrm{a}$ | 0.224 | , | -- | -- | -- |
| 652 | iShares MSCI South Korea ETF | EWY | 0.71\% | $\mathrm{n} / \mathrm{a}$ | 6.209 | -- | -- | -- | -- |
| 653 | iShares MSCI Spain ETF | EWP | 3.19\% | $\mathrm{n} / \mathrm{a}$ | 0.619 | -- | -- | -- | -- |
| 654 | iShares MSCI Sweden ETF | EWD | 2.92\% | $\mathrm{n} / \mathrm{a}$ | 0.660 | -- | -- | -- | -- |
| 655 | iShares MSCI Switzerland ETF | EWL | 1.86\% | $\mathrm{n} / \mathrm{a}$ | 1.675 | -- | -- | -- | -- |
| 656 | iShares MSCI Thailand ETF | THD | 2.37\% | $\mathrm{n} / \mathrm{a}$ | 0.372 | -- | -- | -- | -- |
| 657 | iShares MSCI United Kingdom ETF | EWU | 2.67\% | $\mathrm{n} / \mathrm{a}$ | 3.551 | -- | -- | -- | -- |
| 658 | iShares National Muni Bond ETF | MUB | 1.91\% | $\mathrm{n} / \mathrm{a}$ | 23.313 | -- | -- | -- | -- |
| 659 | iShares Russell 1000 Growth ETF | IWF | 0.52\% | $\mathrm{n} / \mathrm{a}$ | 73.094 | -- | -- | -- | -- |
| 660 | iShares Russell 1000 Value ETF | IWD | 1.54\% | $\mathrm{n} / \mathrm{a}$ | 55.110 | -- | -- | -- | -- |
| 661 | iShares Russell 2000 ETF | IWM | 0.85\% | $\mathrm{n} / \mathrm{a}$ | 66.481 | -- | -- | -- | -- |
| 662 | iShares Russell 2000 Growth ETF | IWO | 0.33\% | $\mathrm{n} / \mathrm{a}$ | 11.957 | -- | -- | -- | -- |
| 663 | iShares Russell 2000 Value ETF | IWN | 1.23\% | $\mathrm{n} / \mathrm{a}$ | 15.642 | -- | -- | -- | -- |
| 664 | iShares Russell MidCap ETF | IWR | 0.98\% | $\mathrm{n} / \mathrm{a}$ | 30.300 | -- | -- | -- | -- |
| 665 | iShares Russell MidCap Growth ETF | IWP | 0.25\% | $\mathrm{n} / \mathrm{a}$ | 16.013 | -- | -- | -- | -- |
| 666 | iShares Russell MidCap Value ETF | IWS | 1.31\% | $\mathrm{n} / \mathrm{a}$ | 14.513 | -- | -- | -- | -- |
| 667 | iShares S\&P MidCap 400 Growth ETF | IJK | 0.56\% | $\mathrm{n} / \mathrm{a}$ | 8.220 | -- | -- | -- | -- |
| 668 | iShares S\&P MidCap 400 Value ETF | IJJ | 1.35\% | $\mathrm{n} / \mathrm{a}$ | 8.809 | -- | -- | -- | -- |
| 669 | iShares S\&P SmallCap 600 Value ETF | IJS | 0.84\% | $\mathrm{n} / \mathrm{a}$ | 8.893 | -- | -- | -- | -- |
| 670 | iShares TIPS Bond ETF | TIP | 3.10\% | $\mathrm{n} / \mathrm{a}$ | 32.255 | -- | -- | -- | -- |
| 671 | iShares U.S. Energy ETF | IYE | 2.93\% | $\mathrm{n} / \mathrm{a}$ | 2.202 | -- | -- | -- | -- |
| 672 | iShares U.S. Real Estate ETF | IYR | 1.93\% | $\mathrm{n} / \mathrm{a}$ | 5.450 | -- | -- | -- | -- |
| 673 | iShares U.S. Technology ETF | IYW | 0.34\% | $\mathrm{n} / \mathrm{a}$ | 8.394 | -- | -- | -- | -- |
| 674 | iStar Financial Inc. | STAR | 1.94\% | $\mathrm{n} / \mathrm{a}$ | 1.846 | -- | -- | -- | -- |
| 675 | Itau Unibanco Holding S.A. | ITUB | 0.58\% | $\mathrm{n} / \mathrm{a}$ | 58.212 | -- | -- | -- | -- |
| 676 | ITT Inc. | ITT | 0.88\% | 17.80\% | 8.565 | 8.57 | 0.0005 | 0.000004 | 0.000084 |
| 677 | Jabil, Inc. | JBL | 0.53\% | 19.50\% | 8.801 | 8.80 | 0.0005 | 0.000003 | 0.000094 |
| 678 | Jacobs Engineering Group Inc. | J | 0.62\% | 13.22\% | 17.742 | 17.74 | 0.0010 | 0.000006 | 0.000129 |
| 679 | Janus Henderson Group plc | JHG | 3.52\% | 9.71\% | 7.439 | 7.44 | 0.0004 | 0.000014 | 0.000040 |
| 680 | Japan Smaller Capitalization Fund, Inc. | JOF | 3.81\% | $\mathrm{n} / \mathrm{a}$ | 0.256 | -- | -- | -- | -- |
| 681 | JBG SMITH Properties | JBGS | 2.95\% | 6.60\% | 4.024 | 4.02 | 0.0002 | 0.000007 | 0.000015 |
| 682 | Jefferies Financial Group Inc. | JEF | 2.24\% | $\mathrm{n} / \mathrm{a}$ | 8.834 | -- | -- | -- | -- |
| 683 | John Bean Technologies Corp. | JBT | 0.27\% | 14.20\% | 4.641 | 4.64 | 0.0003 | 0.000001 | 0.000036 |
| 684 | John Hancock Fin Opportunities Fund | BTO | 5.12\% | $\mathrm{n} / \mathrm{a}$ | 0.808 | -- | -- | -- | -- |
| 685 | John Hancock Income Securities Trust | JHS | 5.53\% | $\mathrm{n} / \mathrm{a}$ | 0.185 | -- | -- | -- | -- |
| 686 | John Hancock Investors Trust | JHI | 7.42\% | $\mathrm{n} / \mathrm{a}$ | 0.165 | -- | -- | -- | -- |
| 687 | John Hancock Premium Dividend Fund | PDT | 7.39\% | $\mathrm{n} / \mathrm{a}$ | 0.836 | -- | -- | -- | -- |
| 688 | John Wiley \& Sons, Inc. | JW.A | 2.38\% | $\mathrm{n} / \mathrm{a}$ | 3.240 | -- | -- | -- | -- |
| 689 | John Wiley \& Sons, Inc. | JW.B | 2.39\% | $\mathrm{n} / \mathrm{a}$ | 3.230 | -- | -- | -- | - |
| 690 | Johnson \& Johnson | JNJ | 2.44\% | 7.45\% | 457.525 | 457.53 | 0.0252 | 0.000614 | 0.001873 |
| 691 | Johnson Controls Int. plc | JCI | 1.48\% | 17.46\% | 51.985 | 51.99 | 0.0029 | 0.000042 | 0.000499 |
| 692 | JPMorgan Chase \& Co. | JPM | 2.23\% | 3.00\% | 481.571 | 481.57 | 0.0265 | 0.000590 | 0.000794 |
| 693 | Juniper Networks, Inc. | JNPR | 2.82\% | 7.79\% | 9.234 | 9.23 | 0.0005 | 0.000014 | 0.000040 |
| 694 | Kadant Inc | KAI | 0.49\% | 8.00\% | 2.373 | 2.37 | 0.0001 | 0.000001 | 0.000010 |
| 695 | Kaman Corp. | KAMN | 1.82\% | n/a | 1.221 | -- | -- | -- | , |
| 696 | Kansas City Southern | KSU | 0.74\% | 17.50\% | 26.665 | 26.67 | 0.0015 | 0.000011 | 0.000256 |
| 697 | KB Financial Group Inc | KB | 2.30\% | $\mathrm{n} / \mathrm{a}$ | 19.260 | -- | -- | -- | -- |
| 698 | KB Home | KBH | 1.37\% | $\mathrm{n} / \mathrm{a}$ | 4.036 | -- | -- | -- | - |
| 699 | KBR, Inc. | KBR | 1.13\% | 16.49\% | 5.489 | 5.49 | 0.0003 | 0.000003 | 0.000050 |
| 700 | Kellogg Co. | K | 3.60\% | 3.22\% | 21.973 | 21.97 | 0.0012 | 0.000043 | 0.000039 |
| 701 | Kemper Corp. | KMPR | 1.85\% | $\mathrm{n} / \mathrm{a}$ | 4.256 | -- | -- | -- | -- |
| 702 | Kennametal Inc. | KMT | 2.14\% | 35.50\% | 3.120 | -- | -- | -- | -- |
| 703 | KennedyWilson Holdings Inc. | KW | 4.14\% | $\mathrm{n} / \mathrm{a}$ | 2.990 | -- | -- | -- | -- |
| 704 | Kenon Holdings Ltd. | KEN | 5.08\% | $\mathrm{n} / \mathrm{a}$ | 1.971 | -- | -- | -- | -- |
| 705 | KeyCorp | KEY | 3.54\% | $\mathrm{n} / \mathrm{a}$ | 19.969 | -- | -- | -- | -- |
| 706 | Kilroy Realty Corp. | KRC | 2.98\% | $\mathrm{n} / \mathrm{a}$ | 7.820 | -- | -- | -- | -- |
| 707 | KIMBELL ROYALTY | KRP | 11.16\% | n/a | 0.672 | -- | -- | -- | -- |
| 708 | KimberlyClark Corp. | KMB | 3.40\% | 2.57\% | 45.190 | 45.19 | 0.0025 | 0.000084 | 0.000064 |
| 709 | Kimco Realty Corp. | KIM | 3.05\% | n/a | 9.667 | -- | -- | -- | -- |
| 710 | Kinder Morgan, Inc. | KMI | 6.26\% | 4.03\% | 39.075 | 39.07 | 0.0021 | 0.000134 | 0.000087 |
| 711 | Kinross Gold Corp. | KGC | 1.00\% | -7.90\% | 7.597 | -- | -- | -- | -- |
| 712 | Kirkland Lake Gold Ltd. | KL | 0.79\% | 12.18\% | 10.510 | 10.51 | 0.0006 | 0.000005 | 0.000070 |
| 713 | Kite Realty Group Trust | KRG | 3.60\% | n/a | 1.691 | -- | -- | -- | -- |
| 714 | KKR \& Co. Inc. | KKR | 0.88\% | 25.55\% | 38.369 | -- | -- | -- | -- |
| 715 | KKR Real Estate Finance Trust Inc. | KREF | 8.25\% | $\mathrm{n} / \mathrm{a}$ | 1.160 | -- | -- | -- | -- |


| NYSE | Company | Ticker | (b) | (b) | (b) | Mkt. Cap. | Weight |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Dividend Yield | IBES <br> Refinitiv Growth | Market Cap (\$billions) |  |  | Weighted |  |
|  |  |  |  |  |  |  |  | Dividend Yield | Growth Rate |
| 716 | KnightSwift Transportation Holdings Inc. | KNX | 0.80\% | 13.51\% | 8.246 | 8.25 | 0.0005 | 0.000004 | 0.000061 |
| 717 | Kohls Corp. | KSS | 1.77\% | $\mathrm{n} / \mathrm{a}$ | 8.824 | -- | -- | -- | -- |
| 718 | Koninklijke Philips N.V. | PHG | 1.97\% | $\mathrm{n} / \mathrm{a}$ | 40.294 | -- | -- | -- | -- |
| 719 | Kontoor Brands, Inc. | KTB | 2.77\% | 23.60\% | 3.325 | -- | -- | -- | -- |
| 720 | Korea Electric Power Corp. | KEP | 4.75\% | $\mathrm{n} / \mathrm{a}$ | 13.943 | -- | -- | -- | -- |
| 721 | KornFerry Int. | KFY | 0.70\% | $\mathrm{n} / \mathrm{a}$ | 3.707 | -- | -- | -- | -- |
| 722 | Kronos Worldwide Inc | KRO | 5.48\% | 28.12\% | 1.517 | -- | -- | -- | -- |
| 723 | KT Corp. | KT | 3.37\% | $\mathrm{n} / \mathrm{a}$ | 7.421 | -- | -- | -- | -- |
| 724 | L3Harris Technologies Inc | LHX | 1.75\% | 10.40\% | 46.798 | 46.80 | 0.0026 | 0.000045 | 0.000267 |
| 725 | Ladder Capital Corp | LADR | 7.06\% | $\mathrm{n} / \mathrm{a}$ | 1.430 | -- | -- | -- | -- |
| 726 | Lamb Weston Holdings Inc. | LW | 1.42\% | 10.65\% | 9.592 | 9.59 | 0.0005 | 0.000007 | 0.000056 |
| 727 | Lazard Ltd | LAZ | 3.89\% | 7.30\% | 5.073 | 5.07 | 0.0003 | 0.000011 | 0.000020 |
| 728 | LaZBoy Inc. | LZB | 1.67\% | $\mathrm{n} / \mathrm{a}$ | 1.628 | -- | -- | -- | -- |
| 729 | LCI Industries | LCII | 2.38\% | $\mathrm{n} / \mathrm{a}$ | 3.816 | -- | -- | -- | -- |
| 730 | Lear Corp. | LEA | 0.59\% | 58.44\% | 10.129 | -- | -- | -- | -- |
| 731 | Leggett \& Platt, Inc. | LEG | 3.38\% | $\mathrm{n} / \mathrm{a}$ | 6.626 | -- | -- | -- | -- |
| 732 | Leidos Holdings, Inc. | LDOS | 1.41\% | 9.57\% | 13.643 | 13.64 | 0.0007 | 0.000011 | 0.000072 |
| 733 | Lennar Corp. | LEN | 0.92\% | $\mathrm{n} / \mathrm{a}$ | 34.108 | -- | -- | -- | -- |
| 734 | Lennar Corp. | LEN.B | 1.12\% | $\mathrm{n} / \mathrm{a}$ | 27.969 | -- | -- | -- | -- |
| 735 | Lennox Int., Inc. | LII | 1.07\% | 12.34\% | 12.801 | 12.80 | 0.0007 | 0.000008 | 0.000087 |
| 736 | Levi Strauss \& Co. | LEVI | 1.12\% | $\mathrm{n} / \mathrm{a}$ | 11.483 | -- | -- | -- | -- |
| 737 | Lexington Realty Trust | LXP | 3.24\% | $\mathrm{n} / \mathrm{a}$ | 3.685 | -- | -- | -- | -- |
| 738 | Liberty AllStar Equity Fund | USA | 8.96\% | $\mathrm{n} / \mathrm{a}$ | 1.805 | -- | -- | -- | -- |
| 739 | Liberty AllStar Growth Fund | ASG | 8.83\% | $\mathrm{n} / \mathrm{a}$ | 0.367 | -- | -- | -- | -- |
| 740 | Life Storage, Inc. | LSI | 2.48\% | $\mathrm{n} / \mathrm{a}$ | 9.332 | -- | -- | -- | -- |
| 741 | Lincoln National Corp. | LNC | 2.39\% | 38.55\% | 13.194 | -- | -- | -- | -- |
| 742 | Linde plc | LIN | 1.38\% | 8.11\% | 158.177 | 158.18 | 0.0087 | 0.000120 | 0.000705 |
| 743 | Lindsay Corp. | LNN | 0.75\% | $\mathrm{n} / \mathrm{a}$ | 1.931 | -- | -- | -- | -- |
| 744 | Lithia Motors, Inc. | LAD | 0.37\% | 20.40\% | 11.342 | -- | -- | -- | -- |
| 745 | Lloyds Banking Group PLC | LYG | 2.93\% | $\mathrm{n} / \mathrm{a}$ | 45.426 | -- | -- | -- | -- |
| 746 | loanDepot, Inc. | LDI | 0.78\% | n/a | 3.143 | -- | -- | -- | -- |
| 747 | Lockheed Martin Corp. | LMT | 2.86\% | 5.11\% | 100.604 | 100.60 | 0.0055 | 0.000158 | 0.000283 |
| 748 | Loews Corp. | L | 0.44\% | $\mathrm{n} / \mathrm{a}$ | 14.454 | -- | -- | -- | -- |
| 749 | Loma Negra Compania Industrial Argentina | LOMA | 3.16\% | $\mathrm{n} / \mathrm{a}$ | 0.960 | -- | -- | -- | -- |
| 750 | LouisianaPacific Corp. | LPX | 1.22\% | $\mathrm{n} / \mathrm{a}$ | 5.614 | -- | -- | -- | -- |
| 751 | Lowes Companies, Inc. | LOW | 1.65\% | 19.14\% | 137.504 | 137.50 | 0.0076 | 0.000125 | 0.001447 |
| 752 | LTC Properties, Inc. | LTC | 6.46\% | $\mathrm{n} / \mathrm{a}$ | 1.389 | -- | -- | -- | -- |
| 753 | Lumen Technologies, Inc. | LUMN | 8.06\% | -4.10\% | 13.705 | -- | -- | -- | -- |
| 754 | Lument Finance Trust, Inc. | LFT | 8.91\% | $\mathrm{n} / \mathrm{a}$ | 0.101 | -- | -- | -- | -- |
| 755 | Luxfer Holdings PLC | LXFR | 2.40\% | $\mathrm{n} / \mathrm{a}$ | 0.596 | -- | -- | -- | -- |
| 756 | LyondellBasell Industries N.V. | LYB | 4.27\% | 50.81\% | 35.439 | -- | -- | -- | -- |
| 757 | M\&T Bank Corp. | MTB | 3.08\% | 15.20\% | 18.356 | 18.36 | 0.0010 | 0.000031 | 0.000153 |
| 758 | M.D.C. Holdings, Inc. | MDC | 3.03\% | $\mathrm{n} / \mathrm{a}$ | 3.727 | -- | -- | -- | -- |
| 759 | Macerich Co. The | MAC | 3.50\% | $\mathrm{n} / \mathrm{a}$ | 3.653 | -- | -- | -- | -- |
| 760 | Magellan Midstream Partners, L.P. | MMP | 8.65\% | 7.46\% | 10.522 | 10.52 | 0.0006 | 0.000050 | 0.000043 |
| 761 | Magna Int. Inc. | MGA | 0.92\% | 40.80\% | 26.079 | -- | -- | -- | -- |
| 762 | Magnolia Oil \& Gas Corp | MGY | 1.08\% | $\mathrm{n} / \mathrm{a}$ | 3.586 | -- | -- | -- | -- |
| 763 | Main Street Capital Corp. | MAIN | 5.79\% | $\mathrm{n} / \mathrm{a}$ | 2.917 | -- | -- | -- | -- |
| 764 | Manchester United Ltd. | MANU | 1.09\% | $\mathrm{n} / \mathrm{a}$ | 0.714 | -- | -- | -- | -- |
| 765 | Manning \& Napier, Inc. | MN | 2.00\% | n/a | 0.170 | -- | -- | -- | -- |
| 766 | ManpowerGroup Inc. | MAN | 2.07\% | 43.20\% | 6.601 | -- | -- | -- | -- |
| 767 | Manulife Financial Corp | MFC | 2.05\% | $\mathrm{n} / \mathrm{a}$ | 39.619 | -- | -- | -- | -- |
| 768 | Marathon Oil Corp. | MRO | 1.29\% | -27.95\% | 9.776 | -- | -- | -- | -- |
| 769 | Marathon Petroleum Corp. | MPC | 3.92\% | $\mathrm{n} / \mathrm{a}$ | 37.743 | -- | -- | -- | -- |
| 770 | Marine Products Corp. | MPX | 3.11\% | $\mathrm{n} / \mathrm{a}$ | 0.525 | -- | -- | -- | -- |
| 771 | Marsh \& McLennan Companies, Inc. | MMC | 1.41\% | 11.29\% | 76.799 | 76.80 | 0.0042 | 0.000060 | 0.000477 |
| 772 | Martin Marietta Materials, Inc. | MLM | 0.58\% | 14.17\% | 24.353 | 24.35 | 0.0013 | 0.000008 | 0.000190 |
| 773 | Masco Corp. | MAS | 1.52\% | $\mathrm{n} / \mathrm{a}$ | 15.312 | -- | -- | -- | -- |
| 774 | Mastercard Inc. | MA | 0.48\% | 26.52\% | 359.423 | -- | -- | -- | -- |
| 775 | Matador Resources Co. | MTDR | 0.35\% | $\mathrm{n} / \mathrm{a}$ | 3.376 | -- | -- | -- | -- |
| 776 | Materials Select Sector SPDR ETF | XLB | 1.55\% | $\mathrm{n} / \mathrm{a}$ | 8.640 | -- | -- | -- | -- |
| 777 | Materion Corp. | MTRN | 0.64\% | $\mathrm{n} / \mathrm{a}$ | 1.523 | -- | -- | -- | -- |
| 778 | Matson, Inc. | MATX | 1.61\% | $\mathrm{n} / \mathrm{a}$ | 3.231 | -- | -- | -- | -- |
| 779 | Maxar Technologies Inc. | MAXR | 0.12\% | $\mathrm{n} / \mathrm{a}$ | 2.335 | -- | -- | -- | -- |
| 780 | Maximus, Inc. | MMS | 1.37\% | $\mathrm{n} / \mathrm{a}$ | 5.014 | -- | -- | -- | -- |


| NYSE | Company | Ticker | (b) | (b) | (b) | Mkt. Cap. | Weight | Weighted |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Dividend Yield | IBES <br> Refinitiv Growth | Market Cap (\$billions) |  |  |  |  |
|  |  |  |  |  |  |  |  | Dividend Yield | Growth Rate |
| 781 | McCormick \& Co., Inc. | MKC | 1.59\% | 6.50\% | 22.846 | 22.85 | 0.0013 | 0.000020 | 0.000082 |
| 782 | McDonalds Corp. | MCD | 2.19\% | 20.43\% | 175.908 | -- | -- | -- | -- |
| 783 | McKesson Corp. | MCK | 0.85\% | 10.06\% | 30.519 | 30.52 | 0.0017 | 0.000014 | 0.000169 |
| 784 | MDU Resources Group, Inc. | MDU | 2.56\% | 7.20\% | 6.721 | 6.72 | 0.0004 | 0.000009 | 0.000027 |
| 785 | Medical Properties Trust, Inc. | MPW | 5.58\% | $\mathrm{n} / \mathrm{a}$ | 11.962 | -- | -- | -- | -- |
| 786 | MEDIFAST INC | MED | 2.38\% | $\mathrm{n} / \mathrm{a}$ | 2.804 | -- | -- | -- | -- |
| 787 | Medtronic PLC | MDT | 2.00\% | 10.94\% | 169.386 | 169.39 | 0.0093 | 0.000186 | 0.001019 |
| 788 | Merck \& Co., Inc. | MRK | 3.46\% | 10.83\% | 190.385 | 190.38 | 0.0105 | 0.000362 | 0.001133 |
| 789 | Mercury General Corp. | MCY | 4.20\% | $\mathrm{n} / \mathrm{a}$ | 3.339 | -- | -- | -- | -- |
| 790 | Mesa Royalty Trust | MTR | 0.85\% | $\mathrm{n} / \mathrm{a}$ | 0.010 | -- | -- | -- | -- |
| 791 | Mesabi Trust | MSB | 1.05\% | $\mathrm{n} / \mathrm{a}$ | 0.451 | -- | -- | -- | -- |
| 792 | Methode Electronics, Inc. | MEI | 1.14\% | $\mathrm{n} / \mathrm{a}$ | 1.881 | -- | -- | -- | -- |
| 793 | MetLife, Inc. | MET | 3.07\% | 4.83\% | 53.642 | 53.64 | 0.0029 | 0.000091 | 0.000143 |
| 794 | Mexico Fund, Inc. The | MXF | 1.15\% | $\mathrm{n} / \mathrm{a}$ | 0.235 | -- | -- | -- | -- |
| 795 | MFA Financial, Inc. | MFA | 8.57\% | $\mathrm{n} / \mathrm{a}$ | 2.059 | -- | -- | -- | -- |
| 796 | MFS GOVT MKTS | MGF | 7.67\% | $\mathrm{n} / \mathrm{a}$ | 0.144 | -- | -- | -- | -- |
| 797 | MFS HI YLD INC | CMU | 4.55\% | $\mathrm{n} / \mathrm{a}$ | 0.135 | -- | -- | -- | -- |
| 798 | MFS High Income Muni. Trust | CXE | 4.67\% | $\mathrm{n} / \mathrm{a}$ | 0.170 | -- | -- | -- | -- |
| 799 | MFS Intermediate High Income Fund | CIF | 7.25\% | $\mathrm{n} / \mathrm{a}$ | 0.062 | -- | -- | -- | -- |
| 800 | MFS Intermediate Income Trust | MIN | 8.91\% | $\mathrm{n} / \mathrm{a}$ | 0.432 | -- | -- | -- | -- |
| 801 | MFS Investment Grade Muni. Trust | CXH | 4.49\% | $\mathrm{n} / \mathrm{a}$ | 0.096 | -- | -- | -- | -- |
| 802 | MFS Multimarket Income Trust | MMT | 7.87\% | $\mathrm{n} / \mathrm{a}$ | 0.393 | -- | -- | -- | -- |
| 803 | MFS MUNI INC TR | MFM | 4.32\% | $\mathrm{n} / \mathrm{a}$ | 0.299 | -- | -- | -- | -- |
| 804 | MFS SPL VALUE T | MFV | 8.00\% | $\mathrm{n} / \mathrm{a}$ | 0.049 | -- | -- | -- | -- |
| 805 | MGIC Investment Corp. | MTG | 2.17\% | 10.79\% | 5.008 | 5.01 | 0.0003 | 0.000006 | 0.000030 |
| 806 | MGM Growth Properties LLC | MGP | 5.09\% | 42.80\% | 6.337 | -- | -- | -- | -- |
| 807 | MGM Resorts Int. | MGM | 0.02\% | -175.00\% | 19.545 | -- | -- | -- | -- |
| 808 | Micro Focus Int. PLC Sponsored ADR | MFGP | 2.35\% | $\mathrm{n} / \mathrm{a}$ | 1.940 | -- | -- | -- | -- |
| 809 | MidAmerica Apartment Communities, Inc. | MAA | 2.20\% | $\mathrm{n} / \mathrm{a}$ | 21.392 | -- | -- | -- | -- |
| 810 | Miller Industries, Inc. | MLR | 1.84\% | $\mathrm{n} / \mathrm{a}$ | 0.445 | -- | -- | -- | -- |
| 811 | Minerals Technologies Inc. | MTX | 0.25\% | $\mathrm{n} / \mathrm{a}$ | 2.731 | -- | -- | -- | -- |
| 812 | Mitsubishi UFJ Financial Group, Inc. | MUFG | 3.28\% | $\mathrm{n} / \mathrm{a}$ | 72.444 | -- | -- | -- | -- |
| 813 | MiX Telematics Limited | MIXT | 1.47\% | $\mathrm{n} / \mathrm{a}$ | 0.347 | -- | -- | -- | -- |
| 814 | Mizuho Financial Group, Inc. | MFG | 3.52\% | $\mathrm{n} / \mathrm{a}$ | 37.533 | -- | -- | -- | -- |
| 815 | Mobile TeleSystems PJSC | MBT | 8.96\% | 6.10\% | 8.613 | 8.61 | 0.0005 | 0.000042 | 0.000029 |
| 816 | Moelis \& Co. | MC | 3.55\% | $\mathrm{n} / \mathrm{a}$ | 4.087 | -- | -- | -- | -- |
| 817 | Monmouth Real Estate Investment Corp. | MNR | 3.77\% | $\mathrm{n} / \mathrm{a}$ | 1.877 | -- | -- | -- | -- |
| 818 | Moodys Corp. | MCO | 0.65\% | 9.80\% | 70.756 | 70.76 | 0.0039 | 0.000025 | 0.000381 |
| 819 | Moog Inc. | MOG.A | 1.29\% | $\mathrm{n} / \mathrm{a}$ | 2.490 | -- | -- | -- | -- |
| 820 | Moog Inc. | MOG.B | 1.27\% | $\mathrm{n} / \mathrm{a}$ | 2.531 | -- | -- | -- | -- |
| 821 | Morgan Stanley | MS | 2.70\% | 6.07\% | 189.535 | 189.54 | 0.0104 | 0.000281 | 0.000632 |
| 822 | Morgan Stanley Emerg. Mkts Debt Fund | MSD | 4.51\% | $\mathrm{n} / \mathrm{a}$ | 0.194 | -- | -- | -- | -- |
| 823 | Morgan Stanley India Investment Fund, Inc. | IIF | 0.01\% | $\mathrm{n} / \mathrm{a}$ | 0.293 | -- | -- | -- | -- |
| 824 | Motorola Solutions, Inc. | MSI | 1.25\% | 12.80\% | 38.462 | 38.46 | 0.0021 | 0.000026 | 0.000271 |
| 825 | Movado Group Inc. | MOV | 2.46\% | $\mathrm{n} / \mathrm{a}$ | 0.760 | -- | -- | -- | -- |
| 826 | MPLX LP | MPLX | 9.68\% | $\mathrm{n} / \mathrm{a}$ | 29.249 | -- | -- | -- | -- |
| 827 | MSA Safety Incorporporated | MSA | 1.09\% | n/a | 6.322 | -- | -- | -- | -- |
| 828 | MSC Industrial Direct Co., Inc. | MSM | 3.46\% | 9.12\% | 4.818 | 4.82 | 0.0003 | 0.000009 | 0.000024 |
| 829 | MSCI Inc | MSCI | 0.50\% | 15.31\% | 51.521 | 51.52 | 0.0028 | 0.000014 | 0.000434 |
| 830 | Mueller Industries, Inc. | MLI | 1.18\% | $\mathrm{n} / \mathrm{a}$ | 2.510 | -- | -- | -- | -- |
| 831 | MUELLER WATER PRODUCTS | MWA | 1.42\% | $\mathrm{n} / \mathrm{a}$ | 2.462 | -- | -- | -- | -- |
| 832 | Murphy Oil Corp. | MUR | 2.21\% | 13.98\% | 3.492 | 3.49 | 0.0002 | 0.000004 | 0.000027 |
| 833 | Murphy USA Inc. | MUSA | 0.66\% | $\mathrm{n} / \mathrm{a}$ | 3.896 | -- | -- | -- | -- |
| 834 | MV Oil Trust | MVO | 18.48\% | $\mathrm{n} / \mathrm{a}$ | 0.075 | -- | -- | -- | -- |
| 835 | Myers Industries, Inc. | MYE | 2.47\% | $\mathrm{n} / \mathrm{a}$ | 0.789 | -- | -- | -- | -- |
| 836 | NACCO Industries, Inc. | NC | 2.82\% | $\mathrm{n} / \mathrm{a}$ | 0.200 | -- | -- | -- | -- |
| 837 | National Bank Holdings Corp. | NBHC | 2.35\% | $\mathrm{n} / \mathrm{a}$ | 1.151 | -- | -- | -- | -- |
| 838 | National Fuel Gas Co. | NFG | 3.40\% | $\mathrm{n} / \mathrm{a}$ | 4.878 | -- | -- | -- | -- |
| 839 | National Grid Transco, PLC | NGG | 6.88\% | $\mathrm{n} / \mathrm{a}$ | 46.686 | -- | -- | -- | -- |
| 840 | National Health Investors, Inc. | NHI | 5.83\% | $\mathrm{n} / \mathrm{a}$ | 2.833 | -- | -- | -- | -- |
| 841 | National Presto Industries, Inc. | NPK | 1.09\% | $\mathrm{n} / \mathrm{a}$ | 0.649 | -- | -- | -- | -- |
| 842 | National Retail Properties | NNN | 4.46\% | $\mathrm{n} / \mathrm{a}$ | 8.339 | -- | -- | -- | -- |
| 843 | National Steel Co. | SID | 5.44\% | $\mathrm{n} / \mathrm{a}$ | 11.675 | -- | -- | -- | -- |
| 844 | National Storage Affiliates Trust | NSA | 2.77\% | $\mathrm{n} / \mathrm{a}$ | 4.860 | -- | -- | -- | -- |
| 845 | Natural Grocers by Vitamin Cottage, Inc. | NGVC | 2.35\% | $\mathrm{n} / \mathrm{a}$ | 0.269 | -- | -- | -- | -- |


| NYSE / IBES |  |  | (b) | (b) (b) |  |  |  | Weighted |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | IBES | Market |  |  |  |  |
|  | Company | Ticker | Dividend Yield | Refinitiv Growth | Cap <br> (\$billions) | Mkt. Cap. | Weight | Dividend Yield | Growth Rate |
| 846 | Natural Resource Partners LP | NRP | 8.13\% | $\mathrm{n} / \mathrm{a}$ | 0.272 | -- | -- | -- | -- |
| 847 | NatWest Group plc | NWG | 1.32\% | $\mathrm{n} / \mathrm{a}$ | 36.155 | -- | -- | -- | -- |
| 848 | Navios Maritime Acquisition Corp. | NNA | 15.56\% | n/a | 0.037 | -- | -- | -- | -- |
| 849 | Navios Maritime Partners LP | NMM | 0.83\% | $\mathrm{n} / \mathrm{a}$ | 0.479 | -- | -- | -- | -- |
| 850 | Neenah, Inc. | NP | 3.78\% | $\mathrm{n} / \mathrm{a}$ | 0.839 | -- | -- | -- | -- |
| 851 | Nelnet, Inc. | NNI | 1.13\% | $\mathrm{n} / \mathrm{a}$ | 3.003 | -- | -- | -- | -- |
| 852 | NETSTREIT Corp. | NTST | 3.13\% | $\mathrm{n} / \mathrm{a}$ | 1.010 | -- | -- | -- | -- |
| 853 | New America High Income Fund, Inc. | HYB | 5.92\% | $\mathrm{n} / \mathrm{a}$ | 0.217 | -- | -- | -- | -- |
| 854 | NEW IRELAND FD | IRL | 2.39\% | n/a | 0.062 | -- | -- | -- | -- |
| 855 | New Residential Investment Corp. | NRZ | 8.01\% | -5.46\% | 4.661 | -- | -- | -- | -- |
| 856 | New Senior Investment Group Inc. | SNR | 2.95\% | $\mathrm{n} / \mathrm{a}$ | 0.741 | -- | -- | -- | -- |
| 857 | New York City REIT, Inc. | NYC | 3.76\% | $\mathrm{n} / \mathrm{a}$ | 0.136 | -- | -- | -- | -- |
| 858 | New York Community Bancorp, Inc. | NYCB | 5.41\% | $\mathrm{n} / \mathrm{a}$ | 5.845 | -- | -- | -- | -- |
| 859 | NewJersey Resources Corp. | NJR | 3.43\% | 6.00\% | 3.745 | 3.74 | 0.0002 | 0.000007 | 0.000012 |
| 860 | NewMarket Corp. | NEU | 2.23\% | $\mathrm{n} / \mathrm{a}$ | 3.719 | -- | -- | -- | -- |
| 861 | Newmont Corp. | NEM | 3.71\% | 3.72\% | 47.356 | 47.36 | 0.0026 | 0.000097 | 0.000097 |
| 862 | Nexa Resources S.A. | NEXA | 3.29\% | $\mathrm{n} / \mathrm{a}$ | 1.063 | -- | -- | -- | -- |
| 863 | NexPoint Real Estate Finance, Inc. | NREF | 8.29\% | $\mathrm{n} / \mathrm{a}$ | 0.126 | -- | -- | -- | -- |
| 864 | NexPoint Residential Trust, Inc. | NXRT | 2.28\% | $\mathrm{n} / \mathrm{a}$ | 1.504 | -- | -- | -- | -- |
| 865 | NextEra Energy Partners, LP | NEP | 3.34\% | 27.90\% | 6.071 | -- | -- | -- | -- |
| 866 | NextEra Energy, Inc. | NEE | 1.87\% | 8.01\% | 161.564 | 161.56 | 0.0089 | 0.000166 | 0.000711 |
| 867 | Nielsen Holdings Plc | NLSN | 1.02\% | $\mathrm{n} / \mathrm{a}$ | 8.407 | -- | -- | -- | -- |
| 868 | NIKE, Inc. | NKE | 0.64\% | 17.00\% | 270.915 | 270.92 | 0.0149 | 0.000095 | 0.002532 |
| 869 | NiSource, Inc | NI | 3.47\% | 3.52\% | 9.952 | 9.95 | 0.0005 | 0.000019 | 0.000019 |
| 870 | NL Industries, Inc. | NL | 3.85\% | $\mathrm{n} / \mathrm{a}$ | 0.305 | -- | -- | -- | -- |
| 871 | Nomura Holdings Inc ADR | NMR | 4.72\% | $\mathrm{n} / \mathrm{a}$ | 15.044 | -- | -- | -- | -- |
| 872 | Nordic American Tankers Limited | NAT | 3.40\% | $\mathrm{n} / \mathrm{a}$ | 0.356 | -- | -- | -- | -- |
| 873 | Norfolk Southern Corp. | NSC | 1.64\% | 15.41\% | 65.623 | 65.62 | 0.0036 | 0.000059 | 0.000556 |
| 874 | North American Construction Group Ltd. | NOA | 0.42\% | $\mathrm{n} / \mathrm{a}$ | 0.427 | -- | -- | -- | -- |
| 875 | North European Oil Royality Trust | NRT | 7.70\% | $\mathrm{n} / \mathrm{a}$ | 0.067 | -- | -- | -- | -- |
| 876 | Northrop Grumman Corp. | NOC | 1.72\% | 5.77\% | 58.616 | 58.62 | 0.0032 | 0.000055 | 0.000186 |
| 877 | Northwest Natural Gas Co. | NWN | 3.61\% | 3.80\% | 1.634 | 1.63 | 0.0001 | 0.000003 | 0.000003 |
| 878 | Novartis AG | NVS | 2.25\% | 7.89\% | 206.876 | 206.88 | 0.0114 | 0.000256 | 0.000898 |
| 879 | Novo Nordisk AS | NVO | 1.32\% | 8.35\% | 237.199 | 237.20 | 0.0130 | 0.000172 | 0.001089 |
| 880 | NRG Energy, Inc. | NRG | 3.01\% | 42.60\% | 10.569 | -- | -- | -- | -- |
| 881 | Nu Skin Enterprises, Inc. | NUS | 2.84\% | 6.81\% | 2.680 | 2.68 | 0.0001 | 0.000004 | 0.000010 |
| 882 | Nucor Corp. | NUE | 1.32\% | 26.90\% | 36.723 | -- | -- | -- | -- |
| 883 | NuStar Energy L.P. | NS | 10.22\% | $\mathrm{n} / \mathrm{a}$ | 1.714 | -- | -- | -- | -- |
| 884 | Nutrien Ltd. | NTR | 1.41\% | $\mathrm{n} / \mathrm{a}$ | 36.311 | -- | -- | -- | -- |
| 885 | Nuveen Arizona Quality Muni. Income Fund | NAZ | 3.70\% | $\mathrm{n} / \mathrm{a}$ | 0.186 | -- | -- | -- | -- |
| 886 | Nuveen CA Select TaxFree Inc. Portfolio | NXC | 3.06\% | $\mathrm{n} / \mathrm{a}$ | 0.106 | -- | -- | -- | -- |
| 887 | Nuveen California Muni. Va | NCA | 2.91\% | $\mathrm{n} / \mathrm{a}$ | 0.305 | -- | -- | -- | -- |
| 888 | Nuveen MA Quality Muni. Income Fund | NMT | 3.60\% | $\mathrm{n} / \mathrm{a}$ | 0.142 | -- | -- | -- | -- |
| 889 | Nuveen MO Quality Muni Income Fund | NOM | 3.33\% | $\mathrm{n} / \mathrm{a}$ | 0.037 | -- | -- | -- | -- |
| 890 | Nuveen MultiMarket Income Fund | JMM | 4.32\% | $\mathrm{n} / \mathrm{a}$ | 0.071 | -- | -- | -- | -- |
| 891 | Nuveen Muni. Income Fund, Inc. | NMI | 3.28\% | $\mathrm{n} / \mathrm{a}$ | 0.110 | -- | -- | -- | -- |
| 892 | Nuveen Muni. Value Fund, Inc. | NUV | 3.10\% | $\mathrm{n} / \mathrm{a}$ | 2.465 | -- | -- | -- | -- |
| 893 | Nuveen New York Muni. Valu | NNY | 3.01\% | $\mathrm{n} / \mathrm{a}$ | 0.156 | -- | -- | -- | -- |
| 894 | Nuveen NY Select TaxFree Inc. Portfolio | NXN | 3.13\% | n/a | 0.056 | -- | -- | -- | -- |
| 895 | Nuveen OH Quality Muni. Income Fund | NUO | 3.66\% | n/a | 0.304 | -- | -- | -- | -- |
| 896 | Nuveen PA Quality Muni. Income Fund | NQP | 4.71\% | $\mathrm{n} / \mathrm{a}$ | 0.574 | -- | -- | -- | -- |
| 897 | Nuveen Select Maturities Muni. Fund | NIM | 3.26\% | $\mathrm{n} / \mathrm{a}$ | 0.136 | -- | -- | -- | -- |
| 898 | Nuveen Select Tax Free Income Portfolio III | NXR | 3.00\% | $\mathrm{n} / \mathrm{a}$ | 0.232 | -- | -- | -- | -- |
| 899 | NUVEEN SL TFIP | NXP | 3.12\% | $\mathrm{n} / \mathrm{a}$ | 0.290 | -- | -- | -- | -- |
| 900 | NUVEEN SL TFIP2 | NXQ | 3.11\% | $\mathrm{n} / \mathrm{a}$ | 0.287 | -- | -- | -- | -- |
| 901 | Nuveen VA Quality Muni. Income Fund | NPV | 3.41\% | $\mathrm{n} / \mathrm{a}$ | 0.304 | -- | -- | -- | -- |
| 902 | $n$ nent Electric PLC | NVT | 2.07\% | 11.20\% | 5.677 | 5.68 | 0.0003 | 0.000006 | 0.000035 |
| 903 | Occidental Petroleum Corp. | OXY | 0.15\% | -5.15\% | 25.061 | -- | -- | -- | -- |
| 904 | OchZiff Capital Mgmt. Group LLC | SCU | 4.34\% | -5.42\% | 1.597 | -- | -- | -- | -- |
| 905 | OFG Bancorp | OFG | 1.31\% | $\mathrm{n} / \mathrm{a}$ | 1.261 | -- | -- | -- | -- |
| 906 | OGE Energy Corp. | OGE | 4.52\% | 3.80\% | 7.134 | 7.13 | 0.0004 | 0.000018 | 0.000015 |
| 907 | OilDri Corp. Of America | ODC | 2.93\% | $\mathrm{n} / \mathrm{a}$ | 0.263 | -- | -- | -- | -- |
| 908 | Old Republic Int. Corp. | ORI | 3.43\% | $\mathrm{n} / \mathrm{a}$ | 7.839 | -- | -- | -- | -- |
| 909 | Olin Corp. | OLN | 1.66\% | $\mathrm{n} / \mathrm{a}$ | 7.729 | -- | -- | -- | -- |
| 910 | Omega Healthcare Investors, Inc. | OHI | 7.63\% | n/a | 8.392 | -- | -- | -- | -- |

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| NYSE | IBES |  | (b) | (b) | (b) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | IBES | Market |  |  | Weig | hted |
|  | Company | Ticker | Dividend Yield | Refinitiv Growth | Cap <br> (\$billions) | Mkt. Cap. | Weight | Dividend <br> Yield | Growth Rate |
| 911 | Omnicom Group Inc. | OMC | 3.67\% | 9.50\% | 16.349 | 16.35 | 0.0009 | 0.000033 | 0.000085 |
| 912 | ONE Gas, Inc. | OGS | 3.13\% | 5.00\% | 3.969 | 3.97 | 0.0002 | 0.000007 | 0.000011 |
| 913 | One Liberty Properties, Inc. | OLP | 5.89\% | n /a | 0.637 | -- | -- | -- | -- |
| 914 | OneMain Holdings, Inc. | OMF | 4.69\% | 4.86\% | 7.988 | 7.99 | 0.0004 | 0.000021 | 0.000021 |
| 915 | ONEOK, Inc. | OKE | 7.08\% | 9.17\% | 23.544 | 23.54 | 0.0013 | 0.000092 | 0.000119 |
| 916 | Oppenheimer Holdings, Inc. | OPY | 1.32\% | $\mathrm{n} / \mathrm{a}$ | 0.579 | -- | -- | -- | -- |
| 917 | Oracle Corp. | ORCL | 1.43\% | 10.60\% | 250.247 | 250.25 | 0.0138 | 0.000197 | 0.001458 |
| 918 | Orange | ORAN | 8.54\% | $\mathrm{n} / \mathrm{a}$ | 30.012 | -- | -- | -- | -- |
| 919 | Orchid Island Capital, Inc. | ORC | 15.51\% | $\mathrm{n} / \mathrm{a}$ | 0.619 | -- | -- | -- | -- |
| 920 | Orix Corp Ads | IX | 3.55\% | $\mathrm{n} / \mathrm{a}$ | 22.939 | -- | -- | -- | -- |
| 921 | Ormat Technologies, Inc. | ORA | 0.70\% | 10.00\% | 3.859 | 3.86 | 0.0002 | 0.000001 | 0.000021 |
| 922 | Oshkosh Corp. | OSK | 1.08\% | 24.09\% | 8.384 | -- | -- | -- | -- |
| 923 | Osisko Gold Royalties Ltd | OR | 0.63\% | n/a | 2.062 | -- | -- | -- | -- |
| 924 | Otis Worldwide Corp. | OTIS | 1.06\% | 11.02\% | 38.594 | 38.59 | 0.0021 | 0.000022 | 0.000234 |
| 925 | Ovintiv Inc. | OVV | 1.47\% | 61.37\% | 6.663 | -- | -- | -- | -- |
| 926 | Owens \& Minor, Inc. | OMI | 0.03\% | 21.02\% | 2.932 | -- | -- | -- | -- |
| 927 | Owens Corning Inc | OC | 1.05\% | $\mathrm{n} / \mathrm{a}$ | 10.214 | -- | -- | -- | -- |
| 928 | Owl Rock Capital Corp. | ORCC | 8.52\% | $\mathrm{n} / \mathrm{a}$ | 5.707 | -- | -- | -- | -- |
| 929 | Oxford Industries, Inc. | OXM | 1.79\% | n/a | 1.588 | -- | -- | -- | -- |
| 930 | Packaging Corp. of America | PKG | 2.75\% | 19.95\% | 13.832 | 13.83 | 0.0008 | 0.000021 | 0.000152 |
| 931 | Paramount Group, Inc. | PGRE | 3.06\% | $\mathrm{n} / \mathrm{a}$ | 2.001 | -- | -- | -- | -- |
| 932 | Park Aerospace Corp. | PKE | 2.63\% | $\mathrm{n} / \mathrm{a}$ | 0.310 | -- | -- | -- | -- |
| 933 | ParkerHannifin Corp. | PH | 1.39\% | 15.22\% | 38.201 | 38.20 | 0.0021 | 0.000029 | 0.000320 |
| 934 | PBF Logistics LP | PBFX | 9.52\% | $\mathrm{n} / \mathrm{a}$ | 0.788 | -- | -- | -- | -- |
| 935 | PCM FUND INC | PCM | 8.74\% | $\mathrm{n} / \mathrm{a}$ | 0.138 | -- | -- | -- | -- |
| 936 | Pearson, PLC | PSO | 3.39\% | $\mathrm{n} / \mathrm{a}$ | 8.387 | -- | -- | -- | -- |
| 937 | Pebblebrook Hotel Trust | PEB | 0.18\% | $\mathrm{n} / \mathrm{a}$ | 2.880 | -- | -- | -- | -- |
| 938 | Pembina Pipeline Corp. | PBA | 2.95\% | $\mathrm{n} / \mathrm{a}$ | 17.854 | -- | -- | -- | -- |
| 939 | PennyMac Financial Services, Inc. | PFSI | 1.19\% | $\mathrm{n} / \mathrm{a}$ | 4.503 | -- | -- | -- | -- |
| 940 | PennyMac Mortgage Investment Trust | PMT | 9.97\% | $\mathrm{n} / \mathrm{a}$ | 1.845 | -- | -- | -- | -- |
| 941 | Penske Automotive Group, Inc. | PAG | 2.00\% | 9.50\% | 7.226 | 7.23 | 0.0004 | 0.000008 | 0.000038 |
| 942 | Pentair plc | PNR | 1.01\% | 14.70\% | 13.146 | 13.15 | 0.0007 | 0.000007 | 0.000106 |
| 943 | PerkinElmer, Inc. | PKI | 0.16\% | 37.90\% | 20.094 | -- | -- | -- | -- |
| 944 | Permian Basin Royalty Trust | PBT | 4.75\% | $\mathrm{n} / \mathrm{a}$ | 0.252 | -- | -- | -- | -- |
| 945 | PermRock Royalty Trust | PRT | 11.17\% | $\mathrm{n} / \mathrm{a}$ | 0.079 | -- | -- | -- | -- |
| 946 | Perrigo Co. plc | PRGO | 2.23\% | $\mathrm{n} / \mathrm{a}$ | 5.741 | -- | -- | -- | -- |
| 947 | PetroChina Co. Limited | PTR | 5.63\% | $\mathrm{n} / \mathrm{a}$ | 78.516 | -- | -- | -- | -- |
| 948 | Petroleo Brasileiro S.A. Petrobras | PBR | 2.52\% | -17.55\% | 73.569 | -- | -- | -- | -- |
| 949 | Petroleo Brasileiro S.A. Petrobras | PBR.A | 2.59\% | $\mathrm{n} / \mathrm{a}$ | 71.547 | -- | -- | -- | -- |
| 950 | Pfizer Inc. | PFE | 3.37\% | 11.53\% | 259.229 | 259.23 | 0.0143 | 0.000480 | 0.001642 |
| 951 | Philip Morris Int. Inc. | PM | 4.81\% | 13.30\% | 155.480 | 155.48 | 0.0085 | 0.000411 | 0.001137 |
| 952 | Phillips 66 | PSX | 4.84\% | -11.16\% | 32.591 | -- | -- | -- | -- |
| 953 | Phillips 66 Partners LP | PSXP | 9.60\% | 17.25\% | 8.323 | 8.32 | 0.0005 | 0.000044 | 0.000079 |
| 954 | PHX Minerals Inc. | PHX | 1.36\% | $\mathrm{n} / \mathrm{a}$ | 0.090 | -- | -- | -- | -- |
| 955 | Physicians Realty Trust | DOC | 5.00\% | $\mathrm{n} / \mathrm{a}$ | 4.000 | -- | -- | -- | -- |
| 956 | Piedmont Office Realty Trust, Inc. | PDM | 4.49\% | $\mathrm{n} / \mathrm{a}$ | 2.321 | -- | -- | -- | -- |
| 957 | PIMCO 15 Year U.S. TIPS Index ETF | LTPZ | 3.11\% | $\mathrm{n} / \mathrm{a}$ | 0.685 | -- | -- | -- | -- |
| 958 | PIMCO 15 Year U.S. TIPS Index ETF | STPZ | 3.61\% | $\mathrm{n} / \mathrm{a}$ | 1.009 | -- | -- | -- | -- |
| 959 | Pimco Corporate \& Income Opp. Fund | PTY | 7.80\% | $\mathrm{n} / \mathrm{a}$ | 2.300 | -- | -- | -- | -- |
| 960 | PIMCO High Income Fund | PHK | 8.95\% | $\mathrm{n} / \mathrm{a}$ | 0.921 | -- | -- | -- | -- |
| 961 | PIMCO Strategic Income Fund, Inc. | RCS | 8.23\% | $\mathrm{n} / \mathrm{a}$ | 0.353 | -- | -- | -- | -- |
| 962 | Pinnacle West Capital Corp. | PNW | 4.13\% | 3.40\% | 9.068 | 9.07 | 0.0005 | 0.000021 | 0.000017 |
| 963 | Pioneer Natural Resources Co. | PXD | 1.45\% | 77.78\% | 37.570 | -- | -- | -- | -- |
| 964 | Piper Sandler Companies | PIPR | 1.26\% | $\mathrm{n} / \mathrm{a}$ | 2.587 | -- | -- | -- | -- |
| 965 | Pitney Bowes Inc. | PBI | 2.40\% | $\mathrm{n} / \mathrm{a}$ | 1.467 | -- | -- | -- | -- |
| 966 | PJT Partners Inc. | PJT | 0.25\% | $\mathrm{n} / \mathrm{a}$ | 1.922 | -- | -- | -- | -- |
| 967 | PLDT Inc. | PHI | 4.57\% | $\mathrm{n} / \mathrm{a}$ | 5.250 | -- | -- | -- | -- |
| 968 | Plymouth Industrial REIT, Inc. | PLYM | 3.78\% | $\mathrm{n} / \mathrm{a}$ | 0.682 | -- | -- | -- | -- |
| 969 | PNM Resources, Inc. | PNM | 2.74\% | 4.90\% | 4.102 | 4.10 | 0.0002 | 0.000006 | 0.000011 |
| 970 | Polaris Inc. | PII | 1.86\% | $\mathrm{n} / \mathrm{a}$ | 8.198 | -- | -- | -- | -- |
| 971 | Portland General Electric Co. | POR | 3.42\% | 7.10\% | 4.500 | 4.50 | 0.0002 | 0.000008 | 0.000018 |
| 972 | POSCO | PKX | 2.95\% | $\mathrm{n} / \mathrm{a}$ | 26.351 | -- | -- | -- | -- |
| 973 | Postal Realty Trust, Inc. | PSTL | 4.35\% | $\mathrm{n} / \mathrm{a}$ | 0.270 | -- | -- | -- | -- |
| 974 | PPDAI Group Inc. Sponsored ADR | FINV | 2.35\% | 16.04\% | 1.793 | 1.79 | 0.0001 | 0.000002 | 0.000016 |
| 975 | PPG Industries, Inc. | PPG | 1.39\% | n/a | 40.396 | -- | -- | -- | -- |


| NYSE / IBES |  |  | (b) | (b) | (b) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Ticker | Dividend Yield | IBES <br> Refinitiv Growth | Market Cap (\$billions) | Mkt. Cap. | Weight | Weighted |  |
|  |  |  |  |  |  |  |  | Dividend Yield | Growth Rate |
| 976 | PPL Corp. | PPL | 5.68\% | $\mathrm{n} / \mathrm{a}$ | 22.480 | , | , | -- | -- |
| 977 | Preferred Apartment Communities, Inc. | APTS | 5.94\% | $\mathrm{n} / \mathrm{a}$ | 0.617 | -- | -- | -- | -- |
| 978 | Primerica, Inc. | PRI | 1.24\% | $\mathrm{n} / \mathrm{a}$ | 6.003 | -- | -- | -- | -- |
| 979 | Primo Water Corp. | PRMW | 0.69\% | $\mathrm{n} / \mathrm{a}$ | 2.805 | -- | -- | -- | -- |
| 980 | ProAssurance Corp. | PRA | 0.81\% | n/a | 1.332 | -- | -- | -- | -- |
| 981 | Procter \& Gamble Co. The | PG | 2.44\% | 8.43\% | 349.167 | 349.17 | 0.0192 | 0.000468 | 0.001618 |
| 982 | Prologis, Inc. | PLD | 1.96\% | $\mathrm{n} / \mathrm{a}$ | 95.289 | -- | -- | -- | -- |
| 983 | Prosperity Bancshares, Inc. | PB | 2.76\% | $\mathrm{n} / \mathrm{a}$ | 6.590 | -- | -- | -- | -- |
| 984 | Provident Financial Services, Inc | PFS | 4.02\% | $\mathrm{n} / \mathrm{a}$ | 1.785 | -- | -- | -- | -- |
| 985 | Prudential Financial, Inc. | PRU | 4.28\% | 10.85\% | 41.510 | 41.51 | 0.0023 | 0.000098 | 0.000248 |
| 986 | Prudential Public Limited Co. | PUK | 1.04\% | 9.00\% | 54.003 | 54.00 | 0.0030 | 0.000031 | 0.000267 |
| 987 | PS Business Parks, Inc. | PSB | 2.78\% | $\mathrm{n} / \mathrm{a}$ | 4.164 | -- | -- | -- | -- |
| 988 | PT Telekomunikasi Indonesia, Tbk | TLK | 2.94\% | $\mathrm{n} / \mathrm{a}$ | 20.597 | -- | -- | -- | -- |
| 989 | Public Service Enterprise Group Inc. | PEG | 3.21\% | 2.70\% | 32.119 | 32.12 | 0.0018 | 0.000057 | 0.000048 |
| 990 | Public Storage | PSA | 2.56\% | $\mathrm{n} / \mathrm{a}$ | 54.593 | -- | -- | -- | -- |
| 991 | PulteGroup, Inc. | PHM | 1.01\% | $\mathrm{n} / \mathrm{a}$ | 14.370 | -- | -- | -- | -- |
| 992 | PUTNAM MANAGED | PMM | 4.47\% | $\mathrm{n} / \mathrm{a}$ | 0.420 | -- | -- | -- | -- |
| 993 | PUTNAM MAST INT | PIM | 7.13\% | n/a | 0.212 | -- | -- | -- | -- |
| 994 | PUTNAM MUN OPPO | PMO | 4.39\% | $\mathrm{n} / \mathrm{a}$ | 0.495 | -- | -- | -- | -- |
| 995 | Putnam Premier Income Trust | PPT | 7.49\% | $\mathrm{n} / \mathrm{a}$ | 0.476 | -- | -- | -- | -- |
| 996 | Pzena Investment Management Inc | PZN | 1.09\% | $\mathrm{n} / \mathrm{a}$ | 0.795 | -- | -- | -- | -- |
| 997 | QTS Realty Trust, Inc. | QTS | 2.58\% | n/a | 5.972 | -- | -- | -- | -- |
| 998 | Quaker Chemical Corp. | KWR | 0.62\% | 26.27\% | 4.547 | -- | -- | -- | -- |
| 999 | Quanex Building Products Corp. | NX | 1.28\% | $\mathrm{n} / \mathrm{a}$ | 0.842 | -- | -- | -- | -- |
| 1000 | Quanta Services, Inc. | PWR | 0.25\% | 14.91\% | 13.536 | 13.54 | 0.0007 | 0.000002 | 0.000111 |
| 1001 | Quest Diagnostics Inc. | DGX | 1.67\% | -8.67\% | 18.150 | -- | -- | -- | -- |
| 1002 | Radian Group Inc. | RDN | 2.37\% | 19.80\% | 4.381 | 4.38 | 0.0002 | 0.000006 | 0.000048 |
| 1003 | Ralph Lauren Corp. | RL | 2.24\% | 47.28\% | 8.978 | -- | -- | -- | -- |
| 1004 | Raymond James Financial, Inc. | RJF | 1.13\% | 19.42\% | 18.998 | 19.00 | 0.0010 | 0.000012 | 0.000203 |
| 1005 | Rayonier Inc. | RYN | 2.88\% | $\mathrm{n} / \mathrm{a}$ | 5.295 | -- | -- | -- | -- |
| 1006 | Raytheon Technologies Corp. | RTX | 2.30\% | 23.36\% | 133.628 | -- | -- | -- | -- |
| 1007 | Ready Capital Corp | RC | 11.22\% | $\mathrm{n} / \mathrm{a}$ | 1.066 | -- | -- | -- | -- |
| 1008 | Realty Income Corp. | O | 3.99\% | $\mathrm{n} / \mathrm{a}$ | 27.612 | -- | -- | -- | -- |
| 1009 | Redwood Trust, Inc. | RWT | 5.86\% | $\mathrm{n} / \mathrm{a}$ | 1.388 | -- | -- | -- | -- |
| 1010 | Regal Beloit Corp. | RBC | 0.87\% | $\mathrm{n} / \mathrm{a}$ | 6.166 | -- | -- | -- | -- |
| 1011 | Regional Management Corp. | RM | 1.75\% | $\mathrm{n} / \mathrm{a}$ | 0.588 | -- | -- | -- | -- |
| 1012 | Regions Financial Corp. | RF | 3.01\% | n/a | 19.683 | -- | -- | -- | -- |
| 1013 | Reinsurance Group of America, Inc. | RGA | 2.31\% | 0.70\% | 8.251 | 8.25 | 0.0005 | 0.000010 | 0.000003 |
| 1014 | Reliance Steel \& Aluminum Co. | RS | 1.72\% | 11.37\% | 10.157 | 10.16 | 0.0006 | 0.000010 | 0.000063 |
| 1015 | RELX PLC | RELX | 1.32\% | $\mathrm{n} / \mathrm{a}$ | 58.342 | -- | -- | -- | -- |
| 1016 | REMAX Holdings, Inc. | RMAX | 2.63\% | $\mathrm{n} / \mathrm{a}$ | 0.651 | -- | -- | -- | -- |
| 1017 | RenaissanceRe Holdings Ltd. | RNR | 0.91\% | $\mathrm{n} / \mathrm{a}$ | 7.454 | -- | -- | -- | -- |
| 1018 | Republic Services, Inc. | RSG | 1.42\% | 8.30\% | 38.099 | 38.10 | 0.0021 | 0.000030 | 0.000174 |
| 1019 | ResMed Inc. | RMD | 0.57\% | 20.80\% | 39.655 | -- | -- | -- | -- |
| 1020 | Restaurant Brands Int. Inc. | QSR | 3.27\% | 19.74\% | 20.018 | 20.02 | 0.0011 | 0.000036 | 0.000217 |
| 1021 | Retail Properties of America, Inc. | RPAI | 2.37\% | $\mathrm{n} / \mathrm{a}$ | 2.719 | -- | -- | -- | -- |
| 1022 | Retail Value Inc. | RVI | 4.71\% | n/a | 0.520 | -- | -- | -- | -- |
| 1023 | REV Group, Inc. | REVG | 1.22\% | 114.00\% | 1.066 | -- | -- | -- | -- |
| 1024 | Rexford Industrial Realty, Inc. | REXR | 1.58\% | $\mathrm{n} / \mathrm{a}$ | 8.380 | -- | -- | -- | -- |
| 1025 | Rexnord Corp. | RXN | 0.60\% | 12.96\% | 7.257 | 7.26 | 0.0004 | 0.000002 | 0.000052 |
| 1026 | Rio Tinto PLC | RIO | 7.18\% | 4.30\% | 107.434 | 107.43 | 0.0059 | 0.000424 | 0.000254 |
| 1027 | Ritchie Bros. Auctioneers Inc. | RBA | 0.73\% | 7.00\% | 6.668 | 6.67 | 0.0004 | 0.000003 | 0.000026 |
| 1028 | RLI Corp. | RLI | 0.92\% | $\mathrm{n} / \mathrm{a}$ | 4.915 | -- | -- | -- | -- |
| 1029 | RLJ Lodging Trust | RLJ | 0.27\% | n/a | 2.405 | -- | -- | -- | -- |
| 1030 | Robert Half Int. Inc. | RHI | 1.50\% | 27.30\% | 11.365 | -- | -- | -- | -- |
| 1031 | Rockwell Automation, Inc. | ROK | 1.35\% | 11.62\% | 36.713 | 36.71 | 0.0020 | 0.000027 | 0.000235 |
| 1032 | Rogers Communication, Inc. | RCI | 1.50\% | 11.00\% | 25.817 | 25.82 | 0.0014 | 0.000021 | 0.000156 |
| 1033 | Rollins, Inc. | ROL | 0.86\% | n/a | 18.399 | -- | -- | -- | -- |
| 1034 | Roper Technologies, Inc. | ROP | 0.47\% | 11.10\% | 50.654 | 50.65 | 0.0028 | 0.000013 | 0.000309 |
| 1035 | Royal Bank Of Canada | RY | 1.58\% | 13.10\% | 149.280 | 149.28 | 0.0082 | 0.000130 | 0.001075 |
| 1036 | Royal Dutch Shell PLC | RDS.A | 3.32\% | $\mathrm{n} / \mathrm{a}$ | 163.409 | -- | -- | -- | -- |
| 1037 | Royal Dutch Shell PLC | RDS.B | 3.37\% | $\mathrm{n} / \mathrm{a}$ | 160.950 | -- | -- | -- | -- |
| 1038 | ROYCE OTC MICRO | RMT | 5.38\% | $\mathrm{n} / \mathrm{a}$ | 0.521 | -- | -- | -- | -- |
| 1039 | Royce Value Trust, Inc. | RVT | 5.61\% | n/a | 1.899 | -- | -- | -- | -- |
| 1040 | RPM Int. Inc. | RPM | 1.75\% | 15.85\% | 11.275 | 11.27 | 0.0006 | 0.000011 | 0.000098 |


| NYSE / IBES |  |  | (b) | (b) (b) |  |  |  | Weighted |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | IBES | Market |  |  |  |  |
|  | Company | Ticker | Dividend Yield | Refinitiv Growth | Cap <br> (\$billions) | Mkt. Cap. | Weight | Dividend Yield | Growth Rate |
| 1041 | RPT Realty | RPT | 2.30\% | $\mathrm{n} / \mathrm{a}$ | 1.059 | -- | -- | -- | -- |
| 1042 | Ryder System, Inc. | R | 2.82\% | $\mathrm{n} / \mathrm{a}$ | 4.267 | -- | -- | -- | -- |
| 1043 | S\&P Global Inc. | SPGI | 0.71\% | 10.50\% | 104.498 | 104.50 | 0.0057 | 0.000041 | 0.000603 |
| 1044 | Sabine Royalty Trust | SBR | 8.32\% | $\mathrm{n} / \mathrm{a}$ | 0.585 | -- | -- | -- | -- |
| 1045 | Safehold Inc. | SAFE | 0.75\% | $\mathrm{n} / \mathrm{a}$ | 4.832 | -- | -- | -- | -- |
| 1046 | San Juan Basin Royalty Trust | SJT | 19.86\% | $\mathrm{n} / \mathrm{a}$ | 0.239 | -- | -- | -- | -- |
| 1047 | Santander Consumer USA Holdings Inc. | SC | 2.09\% | 13.52\% | 12.874 | 12.87 | 0.0007 | 0.000015 | 0.000096 |
| 1048 | SAP SE | SAP | 1.12\% | 6.85\% | 178.428 | 178.43 | 0.0098 | 0.000110 | 0.000672 |
| 1049 | Saratoga Investment Corp | SAR | 6.62\% | $\mathrm{n} / \mathrm{a}$ | 0.297 | -- | -- | -- | -- |
| 1050 | Saul Centers, Inc. | BFS | 4.72\% | $\mathrm{n} / \mathrm{a}$ | 1.101 | -- | -- | -- | -- |
| 1051 | Schlumberger Limited | SLB | 1.73\% | 50.40\% | 40.527 | -- | -- | -- | -- |
| 1052 | Schneider National, Inc. | SNDR | 1.27\% | 15.43\% | 3.903 | 3.90 | 0.0002 | 0.000003 | 0.000033 |
| 1053 | SchweitzerMauduit Int., Inc. | SWM | 4.54\% | $\mathrm{n} / \mathrm{a}$ | 1.220 | -- | -- | -- | -- |
| 1054 | Science Applications Int. Corp. | SAIC | 1.78\% | $\mathrm{n} / \mathrm{a}$ | 4.820 | -- | -- | -- | -- |
| 1055 | Scorpio Tankers Inc. | STNG | 2.56\% | $\mathrm{n} / \mathrm{a}$ | 0.907 | -- | -- | -- | -- |
| 1056 | Sealed Air Corp. | SEE | 1.32\% | 8.90\% | 9.091 | 9.09 | 0.0005 | 0.000007 | 0.000044 |
| 1057 | Select Medical Holdings Corp. | SEM | 1.40\% | 19.26\% | 4.823 | 4.82 | 0.0003 | 0.000004 | 0.000051 |
| 1058 | Sempra Energy | SRE | 3.33\% | 4.30\% | 42.151 | 42.15 | 0.0023 | 0.000077 | 0.000100 |
| 1059 | Sendas Distribuidora S.A. | ASAI | 0.36\% | $\mathrm{n} / \mathrm{a}$ | 4.629 | -- | -- | -- | -- |
| 1060 | Sensient Technologies Corp. | SXT | 1.77\% | $\mathrm{n} / \mathrm{a}$ | 3.724 | -- | -- | -- | -- |
| 1061 | Service Corp. Int. | SCI | 1.30\% | 4.11\% | 10.832 | 10.83 | 0.0006 | 0.000008 | 0.000024 |
| 1062 | ServisFirst Bancshares, Inc. | SFBS | 1.08\% | $\mathrm{n} / \mathrm{a}$ | 4.023 | -- | -- | -- | -- |
| 1063 | SFL Corp. Ltd. | SFL | 8.25\% | $\mathrm{n} / \mathrm{a}$ | 0.931 | -- | -- | -- | -- |
| 1064 | Shaw Communications Inc. | SJR | 1.55\% | $\mathrm{n} / \mathrm{a}$ | 13.879 | -- | -- | -- | -- |
| 1065 | Shell Midstream Partners, L.P. | SHLX | 9.64\% | 11.75\% | 4.896 | 4.90 | 0.0003 | 0.000026 | 0.000032 |
| 1066 | Shinhan Financial Group Co Ltd | SHG | 2.98\% | $\mathrm{n} / \mathrm{a}$ | 17.632 | -- | -- | -- | -- |
| 1067 | Shutterstock, Inc. | SSTK | 0.82\% | 13.00\% | 3.753 | 3.75 | 0.0002 | 0.000002 | 0.000027 |
| 1068 | Sibanye Gold Limited | SBSW | 8.21\% | $\mathrm{n} / \mathrm{a}$ | 12.313 | -- | -- | -- | -- |
| 1069 | Signet Jewelers Limited | SIG | 1.05\% | $\mathrm{n} / \mathrm{a}$ | 3.616 | -- | -- | -- | -- |
| 1070 | Simon Property Group, Inc. | SPG | 4.19\% | $\mathrm{n} / \mathrm{a}$ | 43.863 | -- | -- | -- | -- |
| 1071 | Simpson Manufacturing Co., Inc. | SSD | 0.87\% | $\mathrm{n} / \mathrm{a}$ | 4.972 | -- | -- | -- | -- |
| 1072 | SINOPEC Shangai Petrochemical Co., Ltd. | SHI | 6.26\% | $\mathrm{n} / \mathrm{a}$ | 2.337 | -- | -- | -- | -- |
| 1073 | SITE CENTERS CORP. | SITC | 3.00\% | $\mathrm{n} / \mathrm{a}$ | 3.377 | -- | -- | -- | -- |
| 1074 | Sixth Street Specialty Lending, Inc. | TSLX | 6.98\% | $\mathrm{n} / \mathrm{a}$ | 1.711 | -- | -- | -- | -- |
| 1075 | SJW Group | SJW | 2.00\% | $\mathrm{n} / \mathrm{a}$ | 2.029 | -- | -- | -- | -- |
| 1076 | SK Telecom Co., Ltd. | SKM | 5.09\% | $\mathrm{n} / \mathrm{a}$ | 20.968 | -- | -- | -- | -- |
| 1077 | SL Green Realty Corp. | SLG | 4.96\% | $\mathrm{n} / \mathrm{a}$ | 5.086 | -- | -- | -- | -- |
| 1078 | SM Energy Co. | SM | 0.11\% | $\mathrm{n} / \mathrm{a}$ | 2.303 | -- | -- | -- | -- |
| 1079 | Smith \& Nephew SNATS, Inc. | SNN | 2.36\% | 4.60\% | 16.809 | 16.81 | 0.0009 | 0.000022 | 0.000043 |
| 1080 | SnapOn Inc. | SNA | 2.14\% | 9.70\% | 12.405 | 12.40 | 0.0007 | 0.000015 | 0.000066 |
| 1081 | Sociedad Quimica y Minera S.A. | SQM | 1.18\% | $\mathrm{n} / \mathrm{a}$ | 13.957 | -- | -- | -- | -- |
| 1082 | Solaris Oilfield Infrastructure, Inc. | SOI | 5.10\% | $\mathrm{n} / \mathrm{a}$ | 0.376 | -- | -- | -- | -- |
| 1083 | Sonic Automotive, Inc. | SAH | 0.91\% | $\mathrm{n} / \mathrm{a}$ | 2.197 | -- | -- | -- | -- |
| 1084 | Sonoco Products Co. | SON | 2.81\% | 4.81\% | 6.302 | 6.30 | 0.0003 | 0.000010 | 0.000017 |
| 1085 | Sony Corp. | SONY | 0.41\% | 11.60\% | 124.163 | 124.16 | 0.0068 | 0.000028 | 0.000792 |
| 1086 | Source Capital, Inc. | SOR | 3.45\% | $\mathrm{n} / \mathrm{a}$ | 0.387 | -- | -- | -- | -- |
| 1087 | South Jersey Industries, Inc. | SJI | 4.73\% | 4.80\% | 2.874 | 2.87 | 0.0002 | 0.000007 | 0.000008 |
| 1088 S | Southern Co. The | SO | 4.02\% | 6.50\% | 69.491 | 69.49 | 0.0038 | 0.000154 | 0.000248 |
| 1089 | Southern Copper Corp. | SCCO | 5.41\% | 12.06\% | 51.441 | 51.44 | 0.0028 | 0.000153 | 0.000341 |
| 1090 S | Southwest Gas Corp. | SWX | 3.31\% | 4.00\% | 4.245 | 4.24 | 0.0002 | 0.000008 | 0.000009 |
| 1091 | SPDR Bloomberg Barclays Int. T-Bond ETF | BWX | 0.90\% | $\mathrm{n} / \mathrm{a}$ | 1.008 | -- | -- | -- | -- |
| 1092 S | SPDR Bloomberg Brclys High Yld Bond | JNK | 4.51\% | $\mathrm{n} / \mathrm{a}$ | 8.975 | -- | -- | -- | -- |
| 1093 S | SPDR Dow Jones Industrial Avg ETF | DIA | 1.56\% | $\mathrm{n} / \mathrm{a}$ | 31.018 | -- | -- | -- | -- |
| 1094 | SPDR Dow Jones Int. Real Estate ETF | RWX | 2.47\% | $\mathrm{n} / \mathrm{a}$ | 0.905 | -- | -- | -- | -- |
| 1095 | SPDR Nuveen Blmberg Brclys Sht Trm Muni. | SHM | 1.00\% | $\mathrm{n} / \mathrm{a}$ | 4.905 | -- | -- | -- | -- |
| 1096 S | SPDR Nuveen Blmbrg Brclys Muni. Bond | TFI | 1.94\% | $\mathrm{n} / \mathrm{a}$ | 3.733 | -- | -- | -- | -- |
| 1097 S | SPDR S\&P 500 ETF | SPY | 1.26\% | $\mathrm{n} / \mathrm{a}$ | 386.080 | -- | -- | -- | -- |
| 1098 S | SPDR S\&P Biotech ETF | XBI | 0.24\% | $\mathrm{n} / \mathrm{a}$ | 7.006 | -- | -- | -- | -- |
| 1099 S | SPDR S\&P Dividend ETF | SDY | 2.59\% | $\mathrm{n} / \mathrm{a}$ | 19.960 | -- | -- | -- | -- |
| 1100 | SPDR S\&P Emerging Asia Pacific ETF | GMF | 1.33\% | $\mathrm{n} / \mathrm{a}$ | 0.686 | -- | -- | -- | -- |
| 1101 S | SPDR S\&P Metals \& Mining ETF | XME | 0.69\% | $\mathrm{n} / \mathrm{a}$ | 2.020 | -- | -- | -- | -- |
| 1102 | Special Opportunities Fund, Inc. | SPE | 7.24\% | $\mathrm{n} / \mathrm{a}$ | 0.134 | -- | -- | -- | -- |
| 1103 S | Spectrum Brands Holdings Inc. | SPB | 2.06\% | $\mathrm{n} / \mathrm{a}$ | 3.476 | -- | -- | -- | -- |
| 1104 | Spire Inc. | SR | 3.60\% | 7.31\% | 3.732 | 3.73 | 0.0002 | 0.000007 | 0.000015 |
| 1105 | Spirit Aerosystems Holdings, Inc. | SPR | 0.09\% | -60.47\% | 4.623 | -- | -- | -- | -- |



| NYSE | IBES (a) |  | (b) | (b) | (b) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | Wei | hted |
|  | Company | Ticker | Dividend Yield | Refinitiv Growth | Cap (\$billions) | Mkt. Cap. | Weight | Dividend Yield | Growth Rate |
| 1171 | Terreno Realty Corp. | TRNO | 1.73\% | n/a | 4.738 | -- | -- | -- | -- |
| 1172 | Texas Pacific Land Corp. | TPL | 0.74\% | n/a | 11.562 | -- | -- | -- | -- |
| 1173 | Textron Inc. | TXT | 0.11\% | 25.69\% | 16.689 | -- | -- | -- | -- |
| 1174 | TFI Int. Inc. | TFII | 0.82\% | 21.31\% | 10.480 | -- | -- | -- | -- |
| 1175 | The Aarons Co., Inc. | AAN | 1.40\% | n/a | 0.937 | -- | -- | -- | -- |
| 1176 | The AES Corp. | AES | 2.42\% | 8.15\% | 16.586 | 16.59 | 0.0009 | 0.000022 | 0.000074 |
| 1177 | The Allstate Corp. | ALL | 2.39\% | 0.69\% | 40.097 | 40.10 | 0.0022 | 0.000053 | 0.000015 |
| 1178 | The Bank of New York Mellon Corp. | BK | 2.48\% | 11.32\% | 47.276 | 47.28 | 0.0026 | 0.000064 | 0.000294 |
| 1179 | The Central and Eastern Europe Fund | CEE | 3.29\% | $\mathrm{n} / \mathrm{a}$ | 0.181 | -- | -- | -- | -- |
| 1180 | The Charles Schwab Corp. | SCHW | 0.96\% | 21.15\% | 135.186 | -- | -- | -- | -- |
| 1181 | The Chemours Co. | CC | 2.87\% | 27.50\% | 5.748 | -- | -- | -- | -- |
| 1182 | The Clorox Co. | CLX | 2.79\% | 3.25\% | 20.451 | 20.45 | 0.0011 | 0.000031 | 0.000036 |
| 1183 | The Cooper Companies, Inc. | COO | 0.01\% | $\mathrm{n} / \mathrm{a}$ | 20.103 | -- | -- | -- | -- |
| 1184 | The Estee Lauder Companies Inc. | EL | 0.65\% | 26.73\% | 118.755 | -- | -- | -- | -- |
| 1185 | The European Equity Fund, Inc. | EEA | 0.87\% | $\mathrm{n} / \mathrm{a}$ | 0.083 | -- | -- | -- | -- |
| 1186 | The Gap, Inc. | GPS | 1.58\% | $\mathrm{n} / \mathrm{a}$ | 11.472 | -- | -- | -- | -- |
| 1187 | The Goldman Sachs Group, Inc. | GS | 1.21\% | 20.60\% | 139.521 | -- | -- | -- | -- |
| 1188 | The Hanover Insurance Group, Inc. | THG | 1.98\% | 4.90\% | 5.053 | 5.05 | 0.0003 | 0.000005 | 0.000014 |
| 1189 | The Hartford Fin. Srves Group, Inc. | HIG | 2.07\% | 6.60\% | 23.445 | 23.45 | 0.0013 | 0.000027 | 0.000085 |
| 1190 | The Home Depot, Inc. | HD | 1.96\% | 10.57\% | 358.318 | 358.32 | 0.0197 | 0.000386 | 0.002082 |
| 1191 | The India Fund, Inc. | IFN | 9.46\% | n/a | 0.603 | -- | - | -- | -- |
| 1192 | The J. M. Smucker Co. | SJM | 2.74\% | 2.50\% | 14.224 | 14.22 | 0.0008 | 0.000021 | 0.000020 |
| 1193 | The Korea Fund, Inc. | KF | 1.17\% | $\mathrm{n} / \mathrm{a}$ | 0.225 | -- | -- | -- | - |
| 1194 | The Kroger Co. | KR | 1.67\% | 9.75\% | 32.131 | 32.13 | 0.0018 | 0.000029 | 0.000172 |
| 1195 | The Mosaic Co. | MOS | 0.88\% | $\mathrm{n} / \mathrm{a}$ | 12.962 | -- | -- | -- | -- |
| 1196 | The New York Times Co. | NYT | 0.59\% | 3.30\% | 7.923 | 7.92 | 0.0004 | 0.000003 | 0.000014 |
| 1197 | The PNC Financial Services Group, Inc | PNC | 2.58\% | $\mathrm{n} / \mathrm{a}$ | 82.380 | -- | -- | -- | -- |
| 1198 | The Progressive Corp. | PGR | 0.41\% | -9.99\% | 56.814 | -- | -- | -- | -- |
| 1199 | The Scotts MiracleGro Co. | SMG | 1.53\% | $\mathrm{n} / \mathrm{a}$ | 9.002 | -- | -- | -- | -- |
| 1200 | The SherwinWilliams Co. | SHW | 0.73\% | 11.50\% | 79.604 | 79.60 | 0.0044 | 0.000032 | 0.000503 |
| 1201 | The TJX Companies, Inc. | TJX | 1.45\% | 126.20\% | 86.517 | -- | -- | -- | -- |
| 1202 | The Travelers Companies, Inc. | TRV | 2.25\% | 7.38\% | 38.973 | 38.97 | 0.0021 | 0.000048 | 0.000158 |
| 1203 | The Western Union Co. | WU | 4.15\% | 9.19\% | 9.204 | 9.20 | 0.0005 | 0.000021 | 0.000047 |
| 1204 | Thermo Fisher Scientific Inc. | TMO | 0.19\% | 5.06\% | 211.368 | 211.37 | 0.0116 | 0.000022 | 0.000588 |
| 1205 | Thomson Reuters Corp | TRI | 0.67\% | 18.60\% | 56.586 | 56.59 | 0.0031 | 0.000021 | 0.000579 |
| 1206 | Thor Industries, Inc. | THO | 1.33\% | $\mathrm{n} / \mathrm{a}$ | 6.813 | -- | -- | -- | -- |
| 1207 | TIM S.A. Sponsored ADR | TIMB | 3.77\% | n/a | 5.316 | -- | -- | -- | -- |
| 1208 | Timken Co. The | TKR | 1.51\% | 13.00\% | 6.041 | 6.04 | 0.0003 | 0.000005 | 0.000043 |
| 1209 | Toll Brothers Inc. | TOL | 1.12\% | $\mathrm{n} / \mathrm{a}$ | 7.469 | -- | -- | -- | -- |
| 1210 | Tootsie Roll Industries, Inc. | TR | 1.04\% | $\mathrm{n} / \mathrm{a}$ | 2.351 | -- | -- | -- | -- |
| 1211 | Toro Co. The | TTC | 0.92\% | $\mathrm{n} / \mathrm{a}$ | 12.259 | -- | -- | -- | - |
| 1212 | Toronto Dominion Bank The | TD | 1.75\% | 16.30\% | 126.053 | 126.05 | 0.0069 | 0.000121 | 0.001130 |
| 1213 | Tortoise Energy Infrastructure Corp. | TYG | 3.48\% | $\mathrm{n} / \mathrm{a}$ | 0.336 | -- | -- | -- | -- |
| 1214 | TotalEnergies SE Sponsored ADR | TTE | 5.03\% | 34.00\% | 118.913 | -- | -- | -- | -- |
| 1215 | Toyota Motor Corp. | TM | 2.40\% | 15.20\% | 253.566 | 253.57 | 0.0139 | 0.000335 | 0.002119 |
| 1216 | TPG RE Finance Trust, Inc. | TRTX | 6.14\% | $\mathrm{n} / \mathrm{a}$ | 1.004 | -- | - | -- | - |
| 1217 | Trane Technologies plc | TT | 1.22\% | 18.56\% | 45.937 | 45.94 | 0.0025 | 0.000031 | 0.000469 |
| 1218 | TransAlta Corp. | TAC | 1.33\% | n/a | 2.713 | -- | -- | -- | -- |
| 1219 | TransUnion | TRU | 0.32\% | 15.21\% | 22.875 | 22.87 | 0.0013 | 0.000004 | 0.000191 |
| 1220 | Travel Leisure Co. | TNL | 2.27\% | 35.04\% | 4.566 | -- | -- | -- | -- |
| 1221 | Tredegar Corp. | TG | 3.67\% | $\mathrm{n} / \mathrm{a}$ | 0.441 | -- | -- | -- | -- |
| 1222 | Tri Continental Corp. | TY | 4.82\% | $\mathrm{n} / \mathrm{a}$ | 1.847 | -- | -- | -- | -- |
| 1223 | Trinity Industries, Inc. | TRN | 2.84\% | $\mathrm{n} / \mathrm{a}$ | 2.937 | -- | -- | -- | -- |
| 1224 | Trinseo S.A. | TSE | 0.60\% | $\mathrm{n} / \mathrm{a}$ | 2.068 | -- | -- | -- | -- |
| 1225 | TriplePoint Venture Growth BDC Corp. | TPVG | 9.18\% | $\mathrm{n} / \mathrm{a}$ | 0.486 | -- | -- | -- | -- |
| 1226 | Triton Int. Limited | TRTN | 4.11\% | $\mathrm{n} / \mathrm{a}$ | 3.734 | -- | -- | -- | -- |
| 1227 | Tronox Holdings PLC | TROX | 2.15\% | $\mathrm{n} / \mathrm{a}$ | 2.855 | -- | -- | -- | -- |
| 1228 | Truist Financial Corp. | TFC | 3.06\% | $\mathrm{n} / \mathrm{a}$ | 79.158 | -- | -- | -- | -- |
| 1229 | Tsakos Energy Navigation Ltd | TNP | 2.90\% | n/a | 0.141 | -- | -- | -- | -- |
| 1230 | Turkcell Iletisim Hizmetleri AS | TKC | 1.77\% | 33.80\% | 3.907 | -- | - | -- | - |
| 1231 | Turning Point Brands, Inc. | TPB | 0.45\% | 15.50\% | 0.925 | 0.93 | 0.0001 | 0.000000 | 0.000008 |
| 1232 | Two Harbors Investments Corp | TWO | 10.44\% | n/a | 2.043 | -- | -- | -- | - |
| 1233 | Tyson Foods, Inc. | TSN | 2.22\% | 3.80\% | 29.248 | 29.25 | 0.0016 | 0.000036 | 0.000061 |
| 1234 | U.S. Bancorp | USB | 2.86\% | 6.00\% | 87.163 | 87.16 | 0.0048 | 0.000137 | 0.000288 |
| 1235 | U.S. Physical Therapy, Inc. | USPH | 1.24\% | $\mathrm{n} / \mathrm{a}$ | 1.454 | -- | -- | -- | -- |


| NYSE / IBES |  |  | (b) | (b) (b) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Ticker | Dividend Yield | IBES <br> Refinitiv Growth | Market Cap (\$billions) | Mkt. Cap. | Weight | Weighted |  |
|  |  |  |  |  |  |  |  | Dividend Yield | Growth Rate |
| 1236 | Ubiquiti Inc. | UI | 0.52\% | 23.90\% | 19.425 | -- | -- | -- | -- |
| 1237 | UBS Group AG | UBS | 0.70\% | 3.40\% | 59.404 | 59.40 | 0.0033 | 0.000023 | 0.000111 |
| 1238 | UGI Corp. | UGI | 2.91\% | 7.65\% | 9.926 | 9.93 | 0.0005 | 0.000016 | 0.000042 |
| 1239 | Ultrapar Participacoes S.A. | UGP | 2.13\% | $\mathrm{n} / \mathrm{a}$ | 4.476 | -- | -- | -- | -- |
| 1240 | UMH Properties, Inc. | UMH | 3.24\% | $\mathrm{n} / \mathrm{a}$ | 1.114 | -- | -- | -- | -- |
| 1241 | UNI. INSURANCE HOLDINGS INC | UVE | 4.39\% | n/a | 0.456 | -- | -- | -- | -- |
| 1242 | Unifirst Corp. | UNF | 0.45\% | $\mathrm{n} / \mathrm{a}$ | 4.171 | -- | -- | -- | -- |
| 1243 | Unilever PLC | UL | 3.47\% | n/a | 150.761 | -- | -- | -- | -- |
| 1244 | Union Pacific Corp. | UNP | 1.89\% | 13.45\% | 147.634 | 147.63 | 0.0081 | 0.000153 | 0.001091 |
| 1245 | United Dominion Realty Trust, Inc. | UDR | 2.72\% | $\mathrm{n} / \mathrm{a}$ | 15.822 | -- | -- | -- | -- |
| 1246 | United Microelectronics Corp. | UMC | 1.99\% | 19.50\% | 26.883 | 26.88 | 0.0015 | 0.000029 | 0.000288 |
| 1247 | United Parcel Service, Inc. | UPS | 2.12\% | 16.13\% | 167.490 | 167.49 | 0.0092 | 0.000195 | 0.001485 |
| 1248 | United States Steel Corp. | X | 0.14\% | n/a | 7.658 | -- | -- | -- | -- |
| 1249 | UnitedHealth Group Inc. | UNH | 1.42\% | 12.93\% | 384.465 | 384.47 | 0.0211 | 0.000300 | 0.002734 |
| 1250 | Unitil Corp. | UTL | 3.02\% | 3.80\% | 0.756 | 0.76 | 0.0000 | 0.000001 | 0.000002 |
| 1251 | Universal Corp. | UVV | 6.16\% | n/a | 1.245 | -- | -- | -- | -- |
| 1252 | Universal Health Realty Income Trust | UHT | 4.76\% | $\mathrm{n} / \mathrm{a}$ | 0.811 | -- | -- | -- | -- |
| 1253 | Universal Health Services, Inc. | UHS | 0.54\% | 7.61\% | 12.645 | 12.64 | 0.0007 | 0.000004 | 0.000053 |
| 1254 | Unum Group | UNM | 4.38\% | 3.95\% | 5.596 | 5.60 | 0.0003 | 0.000013 | 0.000012 |
| 1255 | Urban Edge Properties | UE | 3.14\% | $\mathrm{n} / \mathrm{a}$ | 2.240 | -- | -- | -- | -- |
| 1256 | Urstadt Biddle Properties Inc. | UBA | 4.72\% | $\mathrm{n} / \mathrm{a}$ | 0.785 | -- | -- | -- | -- |
| 1257 | Urstadt Biddle Properties Inc. | UBP | 5.20\% | $\mathrm{n} / \mathrm{a}$ | 0.642 | -- | -- | -- | -- |
| 1258 | USA Compression Partners, LP | USAC | 13.40\% | $\mathrm{n} / \mathrm{a}$ | 1.521 | -- | -- | -- | -- |
| 1259 | USD Partners LP | USDP | 6.70\% | $\mathrm{n} / \mathrm{a}$ | 0.188 | -- | -- | -- | -- |
| 1260 | Utilities Select Sector SPDR ETF | XLU | 2.90\% | n/a | 13.634 | -- | -- | -- | -- |
| 1261 | Utz Brands, Inc. | UTZ | 0.96\% | 26.81\% | 2.851 | -- | -- | -- | -- |
| 1262 | UWM Holdings Corp. | UWMC | 5.28\% | $\mathrm{n} / \mathrm{a}$ | 0.782 | -- | -- | -- | -- |
| 1263 | V.F. Corp. | VFC | 2.41\% | 22.40\% | 31.910 | -- | -- | -- | -- |
| 1264 | VALE S.A. | VALE | 6.16\% | $\mathrm{n} / \mathrm{a}$ | 107.848 | -- | -- | -- | -- |
| 1265 | Valero Energy Corp. | VLO | 5.86\% | $\mathrm{n} / \mathrm{a}$ | 27.326 | -- | -- | -- | -- |
| 1266 | Valhi, Inc. | VHI | 1.38\% | $\mathrm{n} / \mathrm{a}$ | 0.656 | -- | -- | -- | -- |
| 1267 | Valmont Industries, Inc. | VMI | 0.81\% | $\mathrm{n} / \mathrm{a}$ | 5.228 | -- | -- | -- | -- |
| 1268 | Valvoline Inc. | VVV | 1.60\% | $\mathrm{n} / \mathrm{a}$ | 5.640 | -- | -- | -- | -- |
| 1269 | VanEck Vectors Oil Services ETF | OIH | 0.99\% | $\mathrm{n} / \mathrm{a}$ | 2.344 | -- | -- | -- | -- |
| 1270 | Vanguard Financials ETF | VFH | 1.66\% | $\mathrm{n} / \mathrm{a}$ | 11.375 | -- | -- | -- | -- |
| 1271 | Vanguard FTSE Emerging Markets ETF | VWO | 2.07\% | $\mathrm{n} / \mathrm{a}$ | 80.357 | -- | -- | -- | -- |
| 1272 | Vanguard Real Estate ETF | VNQ | 3.00\% | $\mathrm{n} / \mathrm{a}$ | 43.343 | -- | -- | -- | -- |
| 1273 | Vanguard Total Stock Market ETF | VTI | 1.22\% | n/a | 260.012 | -- | -- | -- | - |
| 1274 | Vector Group Ltd. | VGR | 5.43\% | 13.10\% | 2.270 | 2.27 | 0.0001 | 0.000007 | 0.000016 |
| 1275 | Vedanta Limited | VEDL | 2.45\% | $\mathrm{n} / \mathrm{a}$ | 16.411 | -- | -- | -- | -- |
| 1276 | Ventas, Inc. | VTR | 3.16\% | $\mathrm{n} / \mathrm{a}$ | 21.645 | -- | -- | -- | -- |
| 1277 | VEREIT Inc. | VER | 3.74\% | $\mathrm{n} / \mathrm{a}$ | 11.320 | -- | -- | -- | -- |
| 1278 | Verizon Communications Inc. | VZ | 4.52\% | 3.29\% | 230.066 | 230.07 | 0.0126 | 0.000572 | 0.000416 |
| 1279 | Verso Corp. | VRS | 2.02\% | $\mathrm{n} / \mathrm{a}$ | 0.648 | -- | -- | -- | -- |
| 1280 | Vertiv Holdings Co. | VRT | 0.04\% | 19.50\% | 9.523 | 9.52 | 0.0005 | 0.000000 | 0.000102 |
| 1281 | VICI Properties Inc. | VICI | 4.35\% | 7.40\% | 16.294 | 16.29 | 0.0009 | 0.000039 | 0.000066 |
| 1282 | Virtus Total Return Fund Inc. | ZTR | 10.61\% | $\mathrm{n} / \mathrm{a}$ | 0.465 | -- | - | -- | - |
| 1283 | Visa Inc. | V | 0.54\% | 18.84\% | 457.888 | 457.89 | 0.0252 | 0.000136 | 0.004742 |
| 1284 | Vishay Intertechnology, Inc. | VSH | 1.66\% | 21.00\% | 3.313 | -- | -- | -- | -- |
| 1285 | Vistra Corp. | VST | 3.27\% | 19.30\% | 8.854 | 8.85 | 0.0005 | 0.000016 | 0.000094 |
| 1286 | VOC Energy Trust | VOC | 15.09\% | n/a | 0.072 | -- | -- | -- | -- |
| 1287 | Vontier Corp. | VNT | 0.29\% | 5.40\% | 5.818 | 5.82 | 0.0003 | 0.000001 | 0.000017 |
| 1288 | Vornado Realty Trust | VNO | 4.92\% | $\mathrm{n} / \mathrm{a}$ | 8.251 | -- | -- | -- | -- |
| 1289 | Voya Financial, Inc. | VOYA | 0.98\% | 28.14\% | 7.623 | -- | -- | -- | -- |
| 1290 | Vulcan Materials Co. | VMC | 0.77\% | 15.25\% | 25.661 | 25.66 | 0.0014 | 0.000011 | 0.000215 |
| 1291 | W.P. Carey Inc. | WPC | 5.38\% | $\mathrm{n} / \mathrm{a}$ | 14.382 | -- | -- | -- | -- |
| 1292 | W.R. Berkley Corp. | WRB | 0.70\% | 26.10\% | 13.143 | -- | -- | -- | -- |
| 1293 | W.R. Grace \& Co. | GRA | 1.34\% | 21.80\% | 4.604 | -- | -- | -- | -- |
| 1294 | W.W. Grainger, Inc. | GWW | 1.45\% | 15.49\% | 23.193 | 23.19 | 0.0013 | 0.000018 | 0.000197 |
| 1295 | Wabash National Corp. | WNC | 2.06\% | $\mathrm{n} / \mathrm{a}$ | 0.778 | -- | -- | -- | -- |
| 1296 | Walker \& Dunlop, Inc. | WD | 1.95\% | n/a | 3.264 | -- | -- | -- | -- |
| 1297 | Walmart Inc. | WMT | 1.47\% | 7.53\% | 420.350 | 420.35 | 0.0231 | 0.000340 | 0.001739 |
| 1298 | WARRIOR MET COA | HCC | 1.06\% | $\mathrm{n} / \mathrm{a}$ | 0.970 | -- | -- | -- | -- |
| 1299 | Washington Real Estate Investment Trust | WRE | 4.97\% | n/a | 2.043 | -- | -- | -- | - |
| 1300 | Waste Connections, Inc. | WCN | 0.12\% | 12.42\% | 32.896 | 32.90 | 0.0018 | 0.000002 | 0.000225 |


| NYSE/IBES (a) |  |  | (b) | (b) (b) |  |  |  | Weighted |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Company |  | Ticker | Dividend Yield | IBES Refinitiv Growth | Market <br> Cap <br> (\$billions) | Mkt. Cap. | Weight |  |  |
|  |  | Dividend <br> Yield |  |  |  |  |  | Growth Rate |
| 1301 | Waste Management, Inc. |  | WM | 1.54\% | 12.96\% | 62.798 | 62.80 | 0.0035 | 0.000053 | 0.000447 |
| 1302 | Watsco, Inc. | WSO | 2.81\% | $\mathrm{n} / \mathrm{a}$ | 10.727 | -- | -- | -- | -- |
| 1303 | Watsco, Inc. | WSO.B | 2.83\% | n/a | 10.643 | -- | -- | -- | -- |
| 1304 | Watts Water Technologies, Inc. | WTS | 0.63\% | 8.00\% | 5.530 | 5.53 | 0.0003 | 0.000002 | 0.000024 |
| 1305 | Webster Financial Corp. | WBS | 3.08\% | $\mathrm{n} / \mathrm{a}$ | 4.701 | -- | -- | -- | -- |
| 1306 | WEC Energy Group, Inc. | WEC | 2.81\% | 6.00\% | 30.411 | 30.41 | 0.0017 | 0.000047 | 0.000100 |
| 1307 | Weis Markets, Inc. | WMK | 2.20\% | $\mathrm{n} / \mathrm{a}$ | 1.519 | -- | -- | -- | -- |
| 1308 | Wells Fargo \& Co. | WFC | 1.58\% | 117.39\% | 208.031 | -- | -- | -- | -- |
| 1309 | Welltower Inc. | WELL | 2.91\% | n/a | 35.474 | -- | -- | -- | -- |
| 1310 | West Pharmaceutical Services, Inc. | WST | 0.16\% | 25.80\% | 31.279 | -- | -- | -- | -- |
| 1311 | Western Alliance BanCorp. | WAL | 0.98\% | $\mathrm{n} / \mathrm{a}$ | 10.684 | -- | -- | -- | -- |
| 1312 | Western Asset Invest. Grade Inc. Fund Inc. | PAI | 3.59\% | $\mathrm{n} / \mathrm{a}$ | 0.150 | -- | -- | -- | -- |
| 1313 | Western Asset Managed Muni. Fund, Inc. | MMU | 3.89\% | n/a | 0.588 | -- | -- | -- | -- |
| 1314 | Western Asset Mortgage Capital Corp. | WMC | 8.39\% | $\mathrm{n} / \mathrm{a}$ | 0.174 | -- | -- | -- | -- |
| 1315 | Western Asset Muni. High Income Fund Inc. | MHF | 3.28\% | n/a | 0.174 | -- | -- | -- | -- |
| 1316 | Western Asset Muni. Partners Fund Inc. | MNP | 3.43\% | $\mathrm{n} / \mathrm{a}$ | 0.161 | -- | -- | -- | -- |
| 1317 | Western Midstream Partners, LP | WES | 6.56\% | n/a | 8.034 | -- | -- | -- | -- |
| 1318 | Westinghouse Air Brake Tech. Corp. | WAB | 0.54\% | n/a | 16.917 | -- | -- | -- | -- |
| 1319 | Westlake Chemical Corp. | WLK | 1.26\% | 46.75\% | 11.021 | -- | -- | -- | -- |
| 1320 | Westlake Chemical Partners LP | WLKP | 6.99\% | 9.95\% | 0.949 | 0.95 | 0.0001 | 0.000004 | 0.000005 |
| 1321 | Westpac Banking Corp. | WBK | 4.62\% | n/a | 69.850 | -- | -- | -- | -- |
| 1322 | WestRock Co. | WRK | 1.84\% | 28.98\% | 13.922 | -- | -- | -- | -- |
| 1323 | Westwood Holdings Group Inc | WHG | 1.76\% | n/a | 0.189 | -- | -- | -- | -- |
| 1324 | Weyerhaeuser Co. | WY | 1.92\% | n/a | 26.490 | -- | -- | -- | -- |
| 1325 | Wheaton Precious Metals Corp. | WPM | 0.51\% | 18.76\% | 19.533 | 19.53 | 0.0011 | 0.000005 | 0.000201 |
| 1326 | Whirlpool Corp. | WHR | 2.44\% | 7.70\% | 14.393 | 14.39 | 0.0008 | 0.000019 | 0.000061 |
| 1327 | White Mountains Insurance Group, Ltd. | WTM | 0.09\% | n /a | 3.537 | -- | -- | -- | -- |
| 1328 | Whitestone REIT | WSR | 4.68\% | $\mathrm{n} / \mathrm{a}$ | 0.393 | -- | -- | -- | -- |
| 1329 | Williams Companies, Inc. The | WMB | 6.57\% | $\mathrm{n} / \mathrm{a}$ | 30.350 | -- | -- | -- | -- |
| 1330 | WilliamsSonoma, Inc. | WSM | 1.44\% | 10.73\% | 12.289 | 12.29 | 0.0007 | 0.000010 | 0.000072 |
| 1331 | Winnebago Industries, Inc. | WGO | 0.64\% | n/a | 2.521 | -- | -- | -- | -- |
| 1332 | Wipro Limited | WIT | 0.14\% | 9.00\% | 48.562 | 48.56 | 0.0027 | 0.000004 | 0.000240 |
| 1333 | WisdomTree Emerg. Mrkts High Div. ETF | DEM | 4.54\% | $\mathrm{n} / \mathrm{a}$ | 1.985 | -- | -- | -- | -- |
| 1334 | WisdomTree Int. Equity ETF | DWM | 3.06\% | $\mathrm{n} / \mathrm{a}$ | 0.637 | -- | -- | -- | -- |
| 1335 | Wolseley PLC | FERG | 1.04\% | $\mathrm{n} / \mathrm{a}$ | 31.675 | -- | -- | -- | -- |
| 1336 | Wolverine World Wide, Inc. | WWW | 1.08\% | $\mathrm{n} / \mathrm{a}$ | 3.058 | -- | -- | -- | -- |
| 1337 | Woori Bank | WF | 2.67\% | -3.80\% | 7.110 | -- | - | - | -- |
| 1338 | World Fuel Services Corp. | INT | 1.38\% | 5.00\% | 2.201 | 2.20 | 0.0001 | 0.000002 | 0.000006 |
| 1339 | World Wrestling Entertainment, Inc. | WWE | 0.95\% | 15.75\% | 3.864 | 3.86 | 0.0002 | 0.000002 | 0.000033 |
| 1340 | Worthington Industries, Inc. | WOR | 1.77\% | $\mathrm{n} / \mathrm{a}$ | 3.273 | -- | -- | -- | -- |
| 1341 | WPP PLC | WPP | 2.81\% | $\mathrm{n} / \mathrm{a}$ | 16.657 | -- | -- | -- | -- |
| 1342 | Wyndham Hotels \& Resorts Inc. | WH | 0.89\% | $\mathrm{n} / \mathrm{a}$ | 6.759 | -- | -- | -- | -- |
| 1343 | Xerox Holdings Corp. | XRX | 4.11\% | -18.00\% | 4.343 | -- | -- | -- | -- |
| 1344 | Xinyuan Real Estate Co Ltd | XIN | 2.27\% | n/a | 0.107 | -- | -- | -- | -- |
| 1345 | Xylem Inc. | XYL | 0.86\% | 20.49\% | 23.461 | -- | -- | -- | -- |
| 1346 | Yamana Gold Inc. | AUY | 1.62\% | -16.50\% | 4.146 | -- | -- | -- | -- |
| 1347 | Yum Brands, Inc. | YUM | 1.49\% | 14.15\% | 39.631 | 39.63 | 0.0022 | 0.000032 | 0.000308 |
| 1348 | Yum China Holdings Inc. | YUMC | 0.78\% | 14.74\% | 25.792 | 25.79 | 0.0014 | 0.000011 | 0.000209 |
| 1349 | Zimmer Biomet Holdings, Inc. | ZBH | 0.66\% | 11.29\% | 30.428 | 30.43 | 0.0017 | 0.000011 | 0.000189 |
| 1350 | Zoetis Inc. | ZTS | 0.51\% | 12.53\% | 93.561 | 93.56 | 0.0051 | 0.000026 | 0.000644 |
|  |  |  |  |  |  | 18,190.51 | 1.0000 |  |  |
|  | Weighted Average |  |  |  |  |  |  | 2.20\% | 10.39\% |

## n/a Not Available

[^108]
## HISTORICAL BOND YIELDS

## Current Equity Risk Premium

(a) Average Yield Over Study Period

$$
5.49 \%
$$

(b) Baa Utility Bond Yield

Change in Bond Yield
$3.45 \%$
-2.04\%
(c) Risk Premium/Interest Rate Relationship
$\underline{-0.6576}$
Adjustment to Average Risk Premium
1.34\%
(a) Average Risk Premium over Study Period $\underline{4.78 \%}$

Adjusted Risk Premium $\quad \mathbf{6 . 1 3 \%}$

## Implied Cost of Equity

(b) Baa Utility Bond Yield
3.45\%

Adjusted Equity Risk Premium
6.13\%

Risk Premium Cost of Equity
9.58\%
(a) See Exhibit No. EPE-0023, pp. 2-4.
(b) Six-month average yield for Mar. 2021 to Aug. 2021 based on data from Moody's Investors Service, www.moodys.credittrends.com.
(c) See Exhibit No. EPE-0023, p. 5.

## ALLOWED ROE

| Date | Docket No. | Utility | Base ROE | Baa <br> Bond <br> Yield | Implied Risk Premium |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Feb-06 | ER05-515 | Baltimore Gas \& Elec. | 10.80\% | 6.07\% | 4.73\% |
| Feb-06 | ER05-515 | Baltimore Gas \& Elec. | 11.30\% | 6.07\% | 5.23\% |
| Jun-06 | ER05-925 | Westar Energy Inc. | 10.80\% | 6.36\% | 4.44\% |
| Feb-07 | ER07-284 | San Diego Gas \& Elec. | 11.35\% | 6.14\% | 5.21\% |
| May-07 | ER06-787 | Idaho Power Co. | 10.70\% | 6.15\% | 4.55\% |
| May-07 | ER06-1320 | Wisconsin Elec. Pwr. Co. | 11.00\% | 6.15\% | 4.85\% |
| Sep-07 | EL06-109 | Duquesne Light Co. | 10.90\% | 6.41\% | 4.49\% |
| Sep-07 | ER07-583 | Commonwealth Edison Co. | 11.00\% | 6.41\% | 4.59\% |
| Oct-07 | ER08-92 | Virginia Elec. \& Power Co. | 10.90\% | 6.43\% | 4.47\% |
| Nov-07 | ER08-374 | Atlantic Path 15 | 10.65\% | 6.44\% | 4.21\% |
| Nov-07 | ER08-396 | Westar Energy Inc. | 10.80\% | 6.44\% | 4.36\% |
| Nov-07 | ER08-413 | Startrans IO, LLC | 10.65\% | 6.44\% | 4.21\% |
| Nov-07 | ER08-375 | So. Cal Edison | 10.55\% | 6.44\% | 4.11\% |
| Jan-08 | ER08-686 | Pepco Holdings, Inc. | 11.30\% | 6.41\% | 4.89\% |
| Feb-08 | ER07-562 | Trans-Allegheny | 11.20\% | 6.42\% | 4.78\% |
| Apr-08 | ER07-1142 | Arizona Public Service Co. | 10.75\% | 6.54\% | 4.21\% |
| May-08 | ER08-1207 | Virginia Elec. \& Power Co. | 10.90\% | 6.62\% | 4.28\% |
| May-08 | ER08-1233 | Public Service Elec. \& Gas | 11.18\% | 6.62\% | 4.56\% |
| Jun-08 | ER08-1402 | Duquesne Light Co. | 10.90\% | 6.69\% | 4.21\% |
| Jun-08 | ER08-1423 | Pepco Holdings, Inc. | 10.80\% | 6.69\% | 4.11\% |
| Jul-08 | ER09-35/36 | Tallgrass / Prairie Wind | 10.80\% | 6.80\% | 4.00\% |
| Sep-08 | ER09-249 | Public Service Elec. \& Gas | 11.18\% | 6.94\% | 4.24\% |
| Sep-08 | ER09-187 | So. Cal Edison | 10.53\% | 6.94\% | 3.59\% |
| Sep-08 | ER09-548 | ITC Great Plains | 10.66\% | 6.94\% | 3.72\% |
| Sep-08 | ER09-75 | Pioneer Transmission | 10.54\% | 6.94\% | 3.60\% |
| Nov-08 | ER08-1584 | Black Hills Power Co. | 10.80\% | 7.60\% | 3.20\% |
| Dec-08 | ER09-745 | Baltimore Gas \& Elec. | 10.80\% | 7.80\% | 3.00\% |
| Jan-09 | ER07-1069 | AEP - SPP Zone | 10.70\% | 7.95\% | 2.75\% |
| Jan-09 | ER09-681 | Green Power Express | 10.78\% | 7.95\% | 2.83\% |
| Mar-09 | ER08-281 | Oklahoma Gas \& Elec. | 10.60\% | 8.22\% | 2.38\% |
| Apr-09 | ER08-1457 | PPL Elec. Utilities Corp. | 11.10\% | 8.13\% | 2.97\% |
| Apr-09 | ER08-1457 | PPL Elec. Utilities Corp. | 11.14\% | 8.13\% | 3.01\% |
| Apr-09 | ER08-1457 | PPL Elec. Utilities Corp. | 11.18\% | 8.13\% | 3.05\% |
| Apr-09 | ER08-1588 | Kentucky Utilities Co. | 11.00\% | 8.13\% | 2.87\% |
| Jul-09 | ER08-552 | Niagara Mohawk Pwr. Co. | 11.00\% | 7.62\% | 3.38\% |
| Aug-09 | ER08-313 | Southwestern Public Service Co. | 10.77\% | 7.39\% | 3.38\% |
| Aug-09 | ER09-628 | National Grid Generation LLC | 10.75\% | 7.08\% | 3.67\% |
| Sep-09 | ER10-160 | So. Cal Edison | 10.33\% | 7.08\% | 3.25\% |
| Mar-10 | ER08-1329 | AEP - PJM Zone | 10.99\% | 6.20\% | 4.79\% |
| Aug-10 | ER10-230 | Kansas City Power \& Light Co. | 10.60\% | 6.05\% | 4.55\% |
| Aug-10 | ER10-355 | AEP Transcos - PJM | 10.99\% | 6.05\% | 4.94\% |
| Aug-10 | ER10-355 | AEP Transcos - SPP | 10.70\% | 6.05\% | 4.65\% |
| Sep-10 | ER11-1952 | So. Cal Edison | 10.30\% | 5.93\% | 4.37\% |


| Date | Docket No. | Utility | Base ROE | Baa <br> Bond <br> Yield | Implied <br> Risk <br> Premium |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Oct-10 | EL11-13 | Atlantic Grid Operations | 10.09\% | 5.84\% | 4.25\% |
| Oct-10 | ER11-2895 | Duke Energy Carolinas | 10.20\% | 5.84\% | 4.36\% |
| Nov-10 | ER11-2377 | Northern Pass Transmission | 10.40\% | 5.79\% | 4.61\% |
| Mar-11 | ER10-1377 | Northern States Power Co. (MN) | 10.40\% | 5.94\% | 4.46\% |
| Apr-11 | ER10-516 | South Carolina Elec. \& Gas | 10.55\% | 6.00\% | 4.55\% |
| Apr-11 | ER10-992 | Northern States Power Co. | 10.20\% | 6.00\% | 4.20\% |
| May-11 | ER11-4069 | RITELine | 9.93\% | 5.98\% | 3.95\% |
| Aug-11 | ER12-296 | PJM \& PSE\&G | 11.18\% | 5.71\% | 5.47\% |
| Sep-11 | ER08-386 | PATH | 10.40\% | 5.57\% | 4.83\% |
| Dec-11 | ER11-2560 | Entergy Arkansas | 10.20\% | 5.21\% | 4.99\% |
| Mar-12 | ER12-2300 | Public Service Co. of Colorado | 10.25\% | 5.08\% | 5.17\% |
| Mar-12 | ER11-2853 | Public Service Co. of Colorado | 10.10\% | 5.08\% | 5.02\% |
| Mar-12 | ER11-2853 | Public Service Co. of Colorado | 10.40\% | 5.08\% | 5.32\% |
| Nov-12 | ER12-1378 | Cleco Power LLC | 10.50\% | 4.74\% | 5.76\% |
| Jan-13 | ER12-778 | Puget Sound Energy | 9.80\% | 4.65\% | 5.15\% |
| Jan-13 | ER12-778 | Puget Sound Energy - PSANI | 10.30\% | 4.65\% | 5.65\% |
| Jan-13 | ER12-2554 | Transource Missouri | 9.80\% | 4.65\% | 5.15\% |
| Feb-13 | ER11-3643 | PacifiCorp | 9.80\% | 4.62\% | 5.18\% |
| Feb-13 | ER12-1650 | Maine Public Service Co. | 9.75\% | 4.62\% | 5.13\% |
| Jul-13 | ER11-3697 | So. Cal Edison | 9.30\% | 4.82\% | 4.48\% |
| Jan-14 | ER13-941 | San Diego Gas \& Electric | 9.55\% | 5.22\% | 4.33\% |
| Aug-14 | ER12-1589 | Public Service Co. of Colorado | 9.72\% | 4.76\% | 4.96\% |
| Sep-14 | ER12-91 | Duke Energy Ohio | 10.88\% | 4.73\% | 6.15\% |
| Nov-14 | ER13-1508 | Entergy Arkansas | 10.37\% | 4.71\% | 5.66\% |
| Jan-15 | EL12-101 | Niagara Mohawk Power Corp. | 9.80\% | 4.66\% | 5.14\% |
| Feb-15 | ER13-685 | Public Service Company of New Mexico | 10.00\% | 4.62\% | 5.38\% |
| Mar-15 | ER14-1661 | MidAmerican Central Calif. Transco | 9.80\% | 4.58\% | 5.22\% |
| May-15 | EL14-93 | Westar Energy | 9.80\% | 4.58\% | 5.22\% |
| Jun-15 | ER15-303 | American Transmission Systems, Inc. | 9.88\% | 4.65\% | 5.23\% |
| Jun-15 | EL12-39 | Duke Energy Florida | 10.00\% | 4.65\% | 5.35\% |
| Jun-15 | ER15-303 | American Transmission Systems, Inc. | 10.56\% | 4.65\% | 5.91\% |
| Jun-15 | EL14-12 | MISO Complaint I | 10.02\% | 4.65\% | 5.37\% |
| Jul-15 | ER14-192 | Southwestern Public Service Co. | 10.00\% | 4.79\% | 5.21\% |
| Jul-15 | ER13-2428 | Kentucky Utilities Co. | 10.25\% | 4.79\% | 5.46\% |
| Sep-15 | ER14-2751 | Xcel Energy Southwest Trans. Co. (Gen) | 10.20\% | 5.07\% | 5.13\% |
| Sep-15 | ER14-2751 | Xcel Energy Southwest Trans. Co. (Zn 11) | 10.00\% | 5.07\% | 4.93\% |
| Oct-15 | EL15-27 | Baltimore G\&E / Pepco Holdings, Inc. | 10.00\% | 5.23\% | 4.77\% |
| Oct-15 | ER15-572 | New York Transco LLC | 9.50\% | 5.23\% | 4.27\% |
| Dec-15 | ER15-2237 | Kanstar Transmission, LLC | 9.80\% | 5.41\% | 4.39\% |
| Dec-15 | ER15-2114 | Transource West Virginia, LLC | 10.00\% | 5.41\% | 4.59\% |
| Jan-16 | ER15-1809 | ATX Southwest, LLC | 9.90\% | 5.46\% | 4.44\% |
| Mar-16 | ER15-958 | Transource Kansas, LLC | 9.80\% | 5.41\% | 4.39\% |
| Jun-16 | ER19-605 | Republic Transmission, LLC | 9.30\% | 4.95\% | 4.35\% |

## ALLOWED ROE

|  |  |  |  | Baa <br> Bond | Implied <br> Risk |
| :--- | :--- | :--- | :---: | :---: | :---: |
| Date | Docket No. | Utility | Base <br> ROE | Yield |  |
| Premium |  |  |  |  |  |

## REGRESSION RESULTS



SUMMARY OUTPUT

| Regression Statistics |  |
| :--- | ---: |
| Multiple R | 0.918717119 |
| R Square | 0.844041145 |
| Adjusted R Square | 0.842708163 |
| Standard Error | 0.003447754 |
| Observations | 119 |

ANOVA

|  | $d f$ |  | $S S$ | $M S$ | $F$ | Significance $F$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Regression | 1 | 0.007526828 | 0.007526828 | 633.197865 | $4.94485 \mathrm{E}-49$ |  |
| Residual | 117 | 0.00139078 | $1.1887 \mathrm{E}-05$ |  |  |  |
| Total | 118 | 0.008917608 |  |  |  |  |


|  | Coefficients | Standard Error | $t$ Stat |  | P-value | Lower 95\% | Upper 95\% | Lower 95.0\% |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | Upper 95.0\%


| Date | Docket No. | Utility | Base ROE | Explanation |
| :---: | :---: | :---: | :---: | :---: |
| Cases Added to Mystic Case Set |  |  |  |  |
| May-08 | ER08-1233 | Public Service Elec. \& Gas | 11.18\% | Original formula rate order. Commission accepted $11.18 \%$ ROE based on applicant's DCF analysis using May 2008 study period. 124 FERC $\mathbb{1} 61,303$ at P 1 (2008). |
| Apr-09 | ER08-1457 | PPL Elec. Utilities Corp. | 11.18\% | Order authorized ROEs of $11.10 \%, 11.14 \%$, and $11.18 \%$. Opinion No. $569-\mathrm{B}$ included $11.10 \%$ and $11.14 \%$ values. No basis to distinguish $11.18 \%$ or to exclude it because it applies to a future date. |
| Sep-15 | ER14-2751 | Xcel Energy Southwest Trans. Co. (Zn 11) | 10.00\% | Settlement specifies separate ROE for Zone 11 under SPP OATT. 153 FERC © 63,019 (2015). Commission failed to include. |
| Jun-16 | ER19-605 | Republic Transmission, LLC | 9.30\% | Add observation corresponding to 167 FERC $\mathbb{T} 61,215$ (2019), based on cutoff date for original bid of $7 / 6 / 16$. |
| Sep-18 | ER18-1639 | Constellation Mystic Power, LLC | 9.33\% | Add observation corresponding to 176 FERC ¢ 61,019 (2021). |
| Nov-18 | ER18-1225 | Southwestern Electric Power Co. | 10.10\% | Offer of Settlement dated 12/7/18.168 FERC ¢ 61,179 (2019). |
| Feb-19 | ER19-1396 | AEP West Cos. | 10.00\% | Offer of Settlement dated 3/21/19. 167 FERC \| 61,271 (2019). |
| Feb-19 | ER19-1427 | Alabama Power Co. | 10.60\% | Offer of Settlement dated 3/25/19. 167 FERC \| 61,273 (2019). |
| Apr-19 | EL18-58 | Oklahoma G\&E | 10.00\% | Offer of Settlement dated 5/21/19.167 FERC ¢ 63,048 (2019). |
| May-19 | ER18-1953 | Gulf Power Co. | 10.25\% | Offer of Settlement dated 6/20/19.169 FERC \| 61,023 (2019). |
| Jun-19 | ER17-1519 | PECO | 9.85\% | Offer of Settlement dated 7/22/19.168 FERC ¢ 63,038 (2019). |
| Aug-19 | ER18-169-002 | Southern California Edison | 9.70\% | Offer of Settlement dated 9/19/19. 169 FERC ¢ 63,009 (2019). |
| Sep-19 | ER19-221 | San Diego Gas \& Electric Co. | 10.10\% | Offer of Settlement dated 10/18/19. 170 FERC ¢ 63,010 (2020). |
| Feb-20 | ER19-697-001 | Cheyenne Light, Fuel and Power | 9.90\% | Offer of Settlement dated 3/20/20. 171 FERC ¢ 63,012 (2020). |
| Oct-20 | ER19-1756 | NorthWestern Corp. | 9.65\% | Offer of Settlement dated 11/16/20. 174 FERC ¢ 61,074 (2020). |
| Nov-20 | ER20-1150 | Dayton Power and Light Co. | 9.85\% | Offer of Settlement dated 12/10/20. 175 FERC ¢ 61,021 (2020). |
| Dec-20 | ER21-2198 | Avista Corp. | 9.60\% | Approved 9/30/21 based on study period ending Dec. 2020. 176 FERC ¢ 61,222 (2020). |
| Jan-21 | ER20-227 | Jersey Central Power \& Light Co. | 9.70\% | Offer of Settlement dated 02/02/21.175 FERC ¢ 61,023 (2020). | | Cases Removed from Mystic Case Set |  |  |
| :--- | :--- | :--- |
| Dec-15 | ER15-45 | MISO Complaint II |
| Jul-16 | ER15-1976 | East River |
| Aug-16 | ER16-835 | NYPA |
| Sep-16 | ER15-1775 | Basin Electric |
| Jan-17 | ER16-204 | Tri-State |
| Feb-17 | ER16-209 | Central Power |
| Feb-17 | ER16-1774 | Western Farmers |
| Feb-17 | ER16-1546 | Arkansas Electric |
| Aug-17 | ER17-426 | Denison |
| Nov-17 | ER17-1610 | Mountrail-Williams |
| Nov-17 | ER17-428 | Vermillion | Other Corrections to Mystic Case Set Sep-08 ER09-187 So. Cal Edison

## ELECTRIC GROUP

| Company | (a) | (b) | (c) |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Expected Return on Common Equity | Adjustment Factor | Adjusted Return on Common Equity | $\begin{aligned} & \text { Break } \\ & \text { (B Pts) } \\ & \hline \end{aligned}$ |
| 1 Southern Company | 14.00\% | 1.0251 | 14.35\% | 39 |
| 2 CMS Energy Corp. | 13.50\% | 1.0342 | 13.96\% | 71 |
| 3 WEC Energy Group | 13.00\% | 1.0196 | 13.25\% | 1 |
| 4 OGE Energy Corp. | 13.00\% | 1.0181 | 13.24\% | 29 |
| 5 NextEra Energy, Inc. | 12.50\% | 1.0357 | 12.95\% | 51 |
| 6 Dominion Energy | 12.00\% | 1.0366 | 12.44\% | 10 |
| 7 Otter Tail Corp. | 12.00\% | 1.0286 | 12.34\% | 54 |
| 8 Entergy Corp. | 11.50\% | 1.0259 | 11.80\% | 1 |
| 9 Edison International | 11.50\% | 1.0249 | 11.79\% | 30 |
| 10 Sempra Energy | 11.00\% | 1.0446 | 11.49\% | 5 |
| 11 American Elec Pwr | 11.00\% | 1.0403 | 11.44\% | 15 |
| 12 Xcel Energy Inc. | 11.00\% | 1.0264 | 11.29\% | 4 |
| 13 Alliant Energy | 11.00\% | 1.0229 | 11.25\% | 2 |
| 14 Pub Sv Enterprise Grp. | 11.00\% | 1.0209 | 11.23\% | 2 |
| 15 Ameren Corp. | 10.50\% | 1.0410 | 10.93\% | 30 |
| 16 Emera Inc. | 9.50\% | 1.0298 | 9.78\% | 115 |
| 17 Eversource Energy | 9.50\% | 1.0244 | 9.73\% | 5 |
| 18 IDACORP, Inc. | 9.50\% | 1.0179 | 9.67\% | 6 |
| 19 Duke Energy Corp. | 9.50\% | 1.0134 | 9.63\% | 4 |
| 20 Black Hills Corp. | 9.00\% | 1.0327 | 9.29\% | 34 |
| 21 ALLETE | 9.00\% | 1.0190 | 9.17\% | 12 |
| 22 Evergy Inc. | 9.00\% | 1.0182 | 9.16\% | 1 |
| 23 Consolidated Edison | 8.50\% | 1.0239 | 8.70\% | 46 |
| 24 NorthWestern Corp. | 8.50\% | 1.0223 | 8.69\% | 1 |
| 25 Avista Corp. | 8.50\% | 1.0214 | 8.68\% | 1 |
| 26 Fortis Inc. | 7.50\% | 1.0247 | 7.69\% | 99 |
| Lower End (d) |  |  | 7.69\% |  |
| Upper End (d) |  |  | 14.35\% |  |
| Median (d) |  |  | 11.24\% |  |
| Midpoint |  |  | 11.02\% |  |
| Median - All Values |  |  | 11.24\% |  |
| Low-End Test (e) |  |  | 5.54\% |  |
| High-End Test (f) |  |  | 22.48\% |  |

(a) The Value Line Investment Survey (Jul. 23, Aug, 13 and Sep. 10, 2021).
(b) Computed using the formula $2 *(1+5-\mathrm{Yr}$. Change in Equity) $/(2+5 \mathrm{Yr}$. Change in Equity).
(c) (a) $x$ (b).
(d) Excludes highlighted values.
(e) Average Baa utility bond yield for six-months ending Aug. 2021, plus 20\% of CAPM market risk premium.
(f) $200 \%$ of Median - All Values.

## IBES

| Company |  | (a) | (b) | (c) | (d) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 6-mo. Avg <br> Dividend Yield | $\begin{gathered} \text { EPS } \\ \text { Growth } \end{gathered}$ | Adjusted <br> Dividend Yield | $\begin{gathered} \text { DCF } \\ \text { Result } \end{gathered}$ | $\begin{aligned} & \text { Break } \\ & \text { (b Pts) } \end{aligned}$ |
| 1 | Otter Tail Corp. | 3.25\% | 9.00\% | 3.39\% | 12.39\% | 147 |
| 2 | Emera Inc. | 4.51\% | 6.27\% | 4.65\% | 10.92\% | 15 |
| 3 | Southern Company | 4.14\% | 6.50\% | 4.27\% | 10.77\% | 31 |
| 4 | Ameren Corp. | 2.66\% | 7.70\% | 2.76\% | 10.46\% | 23 |
| 5 | NextEra Energy, Inc. | 2.02\% | 8.13\% | 2.10\% | 10.23\% | 10 |
| 6 | Avista Corp. | 3.81\% | 6.20\% | 3.93\% | 10.13\% | 6 |
| 7 | Dominion Energy | 3.31\% | 6.65\% | 3.42\% | 10.07\% | 44 |
| 8 | Eversource Energy | 2.85\% | 6.68\% | 2.95\% | 9.63\% | 5 |
| 9 | American Elec Pwr | 3.45\% | 6.03\% | 3.55\% | 9.58\% | 8 |
| 10 | WEC Energy Group | 2.91\% | 6.50\% | 3.00\% | 9.50\% | 7 |
| 11 | Duke Energy Corp. | 3.87\% | 5.45\% | 3.98\% | 9.43\% | 2 |
| 12 | ALLETE | 3.64\% | 5.67\% | 3.74\% | 9.41\% | 18 |
| 13 | Evergy Inc. | 3.43\% | 5.70\% | 3.53\% | 9.23\% | 13 |
| 14 | CMS Energy Corp. | 2.83\% | 6.18\% | 2.92\% | 9.10\% | 13 |
| 15 | Xcel Energy Inc. | 2.69\% | 6.30\% | 2.78\% | 9.08\% | 2 |
| 16 | Fortis Inc. | 3.66\% | 5.30\% | 3.75\% | 9.05\% | 3 |
| 17 | OGE Energy Corp. | 4.81\% | 3.90\% | 4.90\% | 8.80\% | 25 |
| 18 | NorthWestern Corp. | 3.89\% | 4.50\% | 3.98\% | 8.48\% | 32 |
| 19 | Black Hills Corp. | 3.36\% | 4.67\% | 3.44\% | 8.11\% | 37 |
| 20 | Edison International | 4.60\% | 3.40\% | 4.68\% | 8.08\% | 3 |
| 21 | Alliant Energy | 2.87\% | 5.10\% | 2.94\% | 8.04\% | 4 |
| 22 | Sempra Energy | 3.31\% | 4.30\% | 3.38\% | 7.68\% | 36 |
| 23 | Entergy Corp. | 3.69\% | 3.85\% | 3.76\% | 7.61\% | 7 |
| 24 | Consolidated Edison | 4.13\% | 2.00\% | 4.17\% | 6.17\% | 144 |
| 25 | IDACORP, Inc. | 2.82\% | 3.20\% | 2.87\% | 6.07\% | 10 |
| 26 | Pub Sv Enterprise Grp. | 3.33\% | 2.35\% | 3.37\% | 5.72\% | 35 |
|  | Lower End (e) |  |  |  | 5.72\% |  |
|  | Upper End (e) |  |  |  | 12.39\% |  |
|  | Median (e) |  |  |  | 9.17\% |  |
|  | Midpoint |  |  |  | 9.06\% |  |
|  | Median - All Values |  |  |  | 9.17\% |  |
|  | Low-End Test (f) |  |  |  | 5.54\% |  |
|  | High-End Test (g) |  |  |  | 18.34\% |  |

(a) Six-month average dividend yield for Mar. 2021 to Aug. 2021.
(b) www.finance.yahoo.com (retreived Sep. 8, 2021).
(c) Six-month average dividend yield $x[1+($ EPS Growth Rate / 2) $]$.
(d) $(\mathrm{b})+(\mathrm{c})$
(e) Excludes highlighted values.
(f) Average Baa utility bond yield for six-months ending Aug. 2021, plus 20\% of CAPM market risk premium.
(g) $200 \%$ of Median - All Values.


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## ELECTRIC GROUP


(a) Data from SEC Form 10-K and Annual Reports.
(b) Includes current maturities.
(c) Includes non-controlling interests.
(d) The Value Line Investment Survey (Jul. 23, Aug, 13 and Sep. 10, 2021).

ELECTRIC GROUP OPERATING COS.
At December 31, 2020

|  | At |  |  |
| :--- | :---: | :---: | :---: |
| Operating Company | Long- | Preferred | Common |
|  | Term | Stock | Equity |

1 ALLETE

ALLETE, Inc. (Minnesota Power)
2 ALLIANT ENERGY CORP.
Interstate Power \& Light
Wisconsin Power \& Light
3 AMEREN CORP.
Ameren Illinois Co.
Union Electric Co.
4 AMERICAN ELEC PWR
AEP Texas, Inc.
Appalachian Power Co.
Indiana Michigan Power Co.
Kentucky Power Co.
Kingsport Power Co.
Ohio Power Co.
Public Service Co. of Oklahoma
Southwestern Electric Pwr Co.
Wheeling Power Co.
5 AVISTA CORP.
Avista Corp.
Alaska Electric Light \& Power
6 BLACK HILLS CORP.
Black Hills Power
Cheyenne Light Fuel \& Power
Black Hills/Colorado Electric Utility Co
7 CMS ENERGY
Consumers Energy Co.
8 CONSOLIDATED EDISON
Consolidated Edison of NY
Orange \& Rockland
Rockland Electric
9 DOMINION ENERGY
Virginia Electric \& Power
Dominion Energy South Carolina
41.9\%
0.0\%
58.1\%
$45.8 \% \quad 2.7 \% \quad 51.5 \%$
$46.2 \% \quad 0.0 \% \quad 53.8 \%$
$44.3 \% \quad 0.7 \% \quad 55.0 \%$
$49.5 \% \quad 0.8 \% \quad 49.7 \%$
$60.1 \% \quad 0.0 \% \quad 39.9 \%$
$52.7 \% \quad 0.0 \% \quad 47.3 \%$
$52.4 \% \quad 0.0 \% \quad 47.6 \%$
$54.7 \% \quad 0.0 \% \quad 45.3 \%$
$46.6 \% \quad 0.0 \% \quad 53.4 \%$
$47.4 \% \quad 0.0 \% \quad 52.6 \%$
$47.1 \% \quad 0.0 \% \quad 52.9 \%$
$50.1 \% \quad 0.0 \% \quad 49.9 \%$
$45.9 \% \quad 0.0 \% \quad 54.1 \%$
$49.4 \% \quad 0.0 \% \quad 50.6 \%$
39.8\%
0.0\%
60.2\%

| $41.8 \%$ | $0.0 \%$ | $58.2 \%$ |
| :--- | :--- | :--- |
| $45.6 \%$ | $0.0 \%$ | $54.4 \%$ |
| $26.6 \%$ | $0.0 \%$ | $73.4 \%$ |

$48.9 \% \quad 0.2 \% \quad 50.9 \%$

| $53.1 \%$ | $0.0 \%$ | $46.9 \%$ |
| :---: | :---: | :---: |
| $52.7 \%$ | $0.0 \%$ | $47.3 \%$ |
| $0.0 \%$ | $0.0 \%$ | $100.0 \%$ |
|  |  |  |
| $48.5 \%$ | $0.0 \%$ | $51.5 \%$ |
| $44.6 \%$ | $0.0 \%$ | $55.4 \%$ |

ELECTRIC GROUP OPERATING COS.

| Operating Company | At December 31, 2020 |  |  |
| :---: | :---: | :---: | :---: |
|  | LongTerm | Preferred Stock | Common Equity |
| 10 DUKE ENERGY |  |  |  |
| Duke Energy Carolinas | 48.2\% | 0.0\% | 51.8\% |
| Duke Energy Florida | 51.2\% | 0.0\% | 48.8\% |
| Duke Energy Indiana | 46.1\% | 0.0\% | 53.9\% |
| Duke Energy Ohio | 44.0\% | 0.0\% | 56.0\% |
| Duke Energy Progress | 50.0\% | 0.0\% | 50.0\% |
| Progress Energy Inc. | 54.3\% | 0.0\% | 45.7\% |
| Duke Energy Kentucky | 50.5\% | 0.0\% | 49.5\% |
| 11 EDISON INTERNATIONAL |  |  |  |
| Southern California Edison Co. | 47.3\% | 5.5\% | 47.2\% |
| 2 EMERA INC. |  |  |  |
| Tampa Electric Co. | 41.9\% | 0.0\% | 58.1\% |
| 13 ENTERGY CORP. |  |  |  |
| Entergy Arkansas Inc. | 54.8\% | 0.0\% | 45.2\% |
| Entergy Louisiana LLC | 54.8\% | 0.0\% | 45.2\% |
| Entergy Mississippi Inc. | 51.6\% | 0.0\% | 48.4\% |
| Entergy New Orleans Inc. | 51.4\% | 0.0\% | 48.6\% |
| Entergy Texas Inc. | 53.6\% | 0.8\% | 45.6\% |
| 14 EVERGY, INC. |  |  |  |
| Evergy Metro | 51.4\% | 0.0\% | 48.6\% |
| Evergy Kansas Central | 47.9\% | 0.0\% | 52.1\% |
| 15 EVERSOURCE ENERGY |  |  |  |
| Connecticut Light \& Power | 43.1\% | 1.3\% | 55.6\% |
| NSTAR Electric Co. | 44.4\% | 0.5\% | 55.1\% |
| Public Service Co. of New Hampshire | 46.8\% | 0.0\% | 53.2\% |
| 16 FORTIS, INC. |  |  |  |
| Tucson Electric Power Co. | 47.0\% | 0.0\% | 53.0\% |
| UNS Electric | 46.6\% | 0.0\% | 53.4\% |
| Central Hudson Gas \& Electric | 49.5\% | 0.0\% | 50.5\% |
| International Transmission Co. | 40.0\% | 0.0\% | 60.0\% |
| ITC Great Plains | 40.0\% | 0.0\% | 60.0\% |
| ITC Midwest | 40.0\% | 0.0\% | 60.0\% |
| Michigan Elec. Transmission Co. | 40.0\% | 0.0\% | 60.0\% |
| 17 IDACORP |  |  |  |
| Idaho Power Co. | 45.8\% | 0.0\% | 54.2\% |
| 18 NEXTERA ENERGY |  |  |  |
| Florida Power \& Light | 39.8\% | 0.0\% | 60.2\% |
| Gulf Power Co. | 35.9\% | 0.0\% | 64.1\% |

ELECTRIC GROUP OPERATING COS.

| Operating Company | At December 31, 2020 |  |  |
| :---: | :---: | :---: | :---: |
|  | LongTerm | Preferred Stock | $\begin{gathered} \hline \text { Common } \\ \text { Equity } \\ \hline \end{gathered}$ |
| 19 NORTHWESTERN CORP. |  |  |  |
| NorthWestern Corporation | 52.8\% | 0.0\% | 47.2\% |
| 20 OGE ENERGY CORP. |  |  |  |
| Oklahoma G\&E | 46.8\% | 0.0\% | 53.2\% |
| 21 OTTER TAIL CORP. |  |  |  |
| Otter Tail Power Co. | 45.8\% | 0.0\% | 54.2\% |
| 22 PUB SV ENTERPRISE GRP |  |  |  |
| Pub Service Electric \& Gas Co. | 45.5\% | 0.0\% | 54.5\% |
| 23 SEMPRA ENERGY |  |  |  |
| San Diego Gas \& Electric | 49.2\% | 0.0\% | 50.8\% |
| Oncor Electric Delivery | 42.9\% | 0.0\% | 57.1\% |
| 24 SOUTHERN CO. |  |  |  |
| Alabama Power Co. | 46.8\% | 1.5\% | 51.7\% |
| Georgia Power Co. | 44.0\% | 0.0\% | 56.0\% |
| Mississippi Power Co. | 44.9\% | 0.0\% | 55.1\% |
| 25 WEC ENERGY GROUP |  |  |  |
| Wisconsin Electric Power Co. | 42.8\% | 0.5\% | 56.7\% |
| Wisconsin Public Service Corp. | 43.3\% | 0.0\% | 56.7\% |
| 26 XCEL ENERGY, INC. |  |  |  |
| Northern States Power Co. (MN) | 46.8\% | 0.0\% | 53.2\% |
| Northern States Power Co. (WI) | 46.2\% | 0.0\% | 53.8\% |
| Public Service Co. of Colorado | 43.2\% | 0.0\% | 56.8\% |
| Southwestern Public Service Co. | 45.8\% | 0.0\% | 54.2\% |
| Average (a) | 46.8\% | 0.2\% | 53.0\% |
| High (a) | 60.1\% | 5.5\% | 73.4\% |
| Low (a) | 26.6\% | 0.0\% | 39.9\% |

(a) Excludes Rockland Electric Company.

Source: 2020 FERC Form 1 Reports, SEC Form 10-K Reports.

# UNITED STATES OF AMERICA <br> BEFORE THE <br> FEDERAL ENERGY REGULATORY COMMISSION 

El Paso Electric Company )
Docket No. ER22-
-000

## PREPARED DIRECT TESTIMONY OF

## JOHN J. SPANOS

ON BEHALF OF

## EL PASO ELECTRIC COMPANY

OCTOBER 29, 2021

# UNITED STATES OF AMERICA <br> BEFORE THE <br> FEDERAL ENERGY REGULATORY COMMISSION 

El Paso Electric Company $\quad$ ) Docket No. ER22-_ 0 ( 000

## PREPARED DIRECT TESTIMONY OF JOHN J. SPANOS

## I. INTRODUCTION

Q. PLEASE STATE YOUR NAME, POSITION, AND BUSINESS ADDRESS.
A. My name is John J. Spanos. My business address is 207 Senate Avenue, Camp Hill, Pennsylvania, 17011.
Q. WHO IS YOUR CURRENT EMPLOYER AND WHAT POSITION DO YOU HOLD?
A. My employer is Gannett Fleming Valuation and Rate Consultants, LLC ("Gannett Fleming"). I am the President of Gannett Fleming.
Q. ON WHOSE BEHALF ARE YOU SUBMITTING THIS TESTIMONY?
A. I am testifying on behalf of El Paso Electric Company ("EPE").
Q. PLEASE DESCRIBE YOUR QUALIFICATIONS.
A. I have over 35 years of depreciation experience, which includes giving expert testimony in more than 380 cases before 41 regulatory commissions, including the New Mexico Public Regulation Commission and the Public Utility Commission of Texas. These cases have included depreciation studies in the electric, gas, water, wastewater, and pipeline industries. In addition to cases in which I have submitted
testimony, I have also supervised over 700 other depreciation or valuation assignments. Exhibit EPE-0030 provides my qualifications statement, which includes further information with respect to my work history, case experience, and leadership in the Society of Depreciation Professionals.

## Q. ARE YOU SPONSORING ANY EXHIBITS IN SUPPORT OF YOUR TESTIMONY IN THIS FILING?

A. Yes. These include:

1) Exhibit No. EPE-0030, Curriculum Vitae of John J. Spanos
2) Exhibit No. EPE-0031, EPE 2019 Depreciation Study prepared by Gannett Fleming; and
3) Exhibit No. EPE-0032, Table of EPE Transmission and General Plant Depreciation Accrual Rates.

## II. PURPOSE OF TESTIMONY AND SUMMARY OF EPE'S DEPRECIATION STUDY

## Q. PLEASE EXPLAIN THE PURPOSE OF YOUR TESTIMONY AND HOW IT IS ORGANIZED.

A. The purpose of my testimony is to:

1) Describe the EPE Depreciation Study prepared by Gannett Fleming for the year ending December 31, 2019 (also referred to herein as the "Depreciation Study"); and
2) Describe how the methodologies used to calculate EPE's depreciation accrual rates for transmission plant are consistent with those commonly used in the industry and are consistent with Federal Energy Regulatory Commission ("Commission") requirements and precedent.
Q. DID YOU PREPARE THE DEPRECIATION STUDY PRESENTED IN
EXHIBIT NO. EPE-0031? EXHIBIT NO. EPE-0031?
A. Yes, I did. Exhibit No. EPE-0031 is my report presenting the study, and is formally entitled: "2019 Depreciation Study - Calculated Annual Depreciation Accruals Related to Electric Plant as of December 31, 2019."
Q. WERE THE OTHER EXHIBITS YOU ARE SPONSORING PREPARED BY YOU OR UNDER YOUR DIRECT SUPERVISION?
A. Yes.
Q. IN PREPARING THE DEPRECIATION STUDY, DID YOU FOLLOW GENERALLY ACCEPTED PRACTICES IN THE FIELD OF DEPRECIATION VALUATION?
A. Yes.

## Q. PLEASE DESCRIBE EPE'S PROPOSED DEPRECIATION ACCRUAL RATES.

A. EPE proposes to utilize the calculated annual depreciation accrual rates for transmission plant by account at December 31, 2019, that are recommended in, and supported by, the Depreciation Study, Exhibit No. EPE-0031. The proposed depreciation rates appropriately reflect the rates at which EPE's transmission assets should be depreciated over their useful lives and are based on the most commonly used methods and procedures for determining depreciation rates.

I note that the Depreciation Study includes all of EPE's electric plant, including steam production plant, gas turbine production plant, transmission plant, distribution plant, and general plant. This testimony focuses on annual depreciation accrual rates for EPE's transmission plant and general plant for use in EPE's transmission formula rate.
Q. PLEASE SUMMARIZE THE DEPRECIATION ACCRUAL RATES AND THE RESULTING DEPRECIATION EXPENSE THAT YOUR STUDY SUPPORTS FOR EPE.
A. The Depreciation Study I present in this testimony supports the depreciation accrual rates and expense set forth below, which is identified by function as of December 31, 2019.

| Function | Rates | $\underline{\text { Expense }}$ |
| :--- | ---: | ---: |
| Transmission | 1.70 | $9,023,893$ |
| General | 3.84 | $\underline{6,601,194}$ |
| Total |  | $\$ 15,625,087$ |

## Q. PLEASE EXPLAIN SOME OF THE MAJOR FACTORS UNDERLYING THE DEPRECIATION RATES YOU RECOMMEND.

A. A major factor that drives the depreciation accrual rates presented in my Depreciation Study is the generally longer average service lives used for the various plant accounts. For EPE's transmission plant accounts, I used relatively long average service lives with high moded dispersion patterns. Using this combination of recovery with the remaining life methodology leads to a relatively low annual depreciation expense for such accounts. For EPE's general plant, I used the life span technique for major structures which results in shorter remaining lives in Account 390. Additionally, most other general plant accounts utilize amortization accounting which appropriately recovers plant investment over the useful life of these asset classes. In addition to the service life parameter, EPE's reserve to plant ratio is also a factor that affects the proposed depreciation rates.

## III. DEPRECIATION STUDY

## Q. PLEASE DEFINE THE CONCEPT OF DEPRECIATION.

A. Depreciation refers to the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of utility plant in the course of service from causes which are known to be in current operation and against which EPE is not protected by insurance. Among the causes to be given consideration are wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand, and the requirements of public authorities.

## Q. ARE THE METHODS AND PROCEDURES REFLECTED IN THE DEPRECIATION STUDY CONSISTENT WITH ACCEPTED DEPRECIATION PRINCIPLES AND PRACTICES?

A. Yes. The Depreciation Study's recommended annual depreciation accrual rates are based on the straight line method, using the average service life procedure, and were applied on a remaining life basis. The calculations were based on attained ages and estimated average service life, and net salvage characteristics for each depreciable group of assets. The straight-line method, average service life procedure is a commonly used depreciation calculation procedure that has been widely accepted in regulatory jurisdictions throughout North America.

## Q. DO THE METHODS AND PROCEDURES USED IN THE DEPRECIATION STUDY COMPLY WITH THIS COMMISSION'S REQUIREMENTS SO THAT THEY ARE SUITABLE FOR USE IN THE EPE TRANSMISSION FORMULA RATE?

A. Yes. The Depreciation Study and the annual depreciation accrual rates determined in the Depreciation Study comply with the requirements of the Commission's Uniform System of Accounts for allocating the service value of an asset (original cost less net salvage) over the asset's service life.

## Q. PLEASE DESCRIBE THE CONTENTS OF YOUR REPORT.

A. My report is presented in nine parts.

- Part I, Introduction, presents the scope and basis for the Depreciation Study.
- Part II, Estimation of Survivor Curves, includes descriptions of the methodology of estimating survivor curves.
- Parts III and IV set forth the analysis for determining service life and net salvage estimation, respectively.
- Part V, Calculation of Annual and Accrued Depreciation, applies the concepts of depreciation and amortization using the remaining life.
- Part VI, Results of Study, presents a description of the results and a summary of the depreciation calculations.
- The table on pages VI-4 through VI-8 presents, for each account or subaccount, the estimated survivor curve, the net salvage percent, the original cost at December 31, 2019, the book depreciation reserve, and the calculated annual depreciation accrual and rate.
- Parts VII, VIII, and IX include graphs and tables that relate to the service life and net salvage analyses, and the detailed depreciation calculations.
- The section beginning on page VII-2 presents the results of the retirement rate analyses prepared as the historical bases for the service life estimates.
- The section beginning on page VIII-2 presents the results of the salvage analysis.
- The section beginning on page IX-2 presents the depreciation calculations related to surviving original cost at December 31, 2019.


## Q. PLEASE EXPLAIN HOW YOU PERFORMED YOUR DEPRECIATION STUDY.

A. I used the straight line remaining life method of depreciation, with the average service life procedure. The annual depreciation is based on a method of depreciation accounting that seeks to distribute the unrecovered cost of fixed capital assets over the estimated remaining useful life of each unit, or group of assets, in a systematic and reasonable manner.

For General Plant Accounts 391, 393, 394, 395, 397, and 398 in the Commission's Uniform System of Accounts ${ }^{1}$, I used the straight line remaining life method of amortization. The account numbers identified throughout my testimony represent those in effect as of December 31, 2019. The annual amortization is based

[^110]on amortization accounting that distributes the unrecovered cost of fixed capital assets over the remaining amortization period selected for each account and vintage.

## Q. HOW DID YOU DETERMINE THE RECOMMENDED ANNUAL DEPRECIATION ACCRUAL RATES?

A. I did this in two phases. In the first phase, I estimated the service life and net salvage characteristics for each depreciable group, that is, for each plant account or subaccount identified as having similar characteristics. In the second phase, I calculated the composite remaining lives and annual depreciation accrual rates based on the service life and net salvage estimates determined in the first phase.
Q. PLEASE DESCRIBE THE FIRST PHASE OF THE DEPRECIATION STUDY, IN WHICH YOU ESTIMATED THE SERVICE LIFE AND NET SALVAGE CHARACTERISTICS FOR EACH DEPRECIABLE GROUP.
A. The service life and net salvage study consisted of compiling historical data from records related to EPE's plant; analyzing these data to obtain historical trends of survivor characteristics; obtaining supplementary information from management and operating personnel concerning practices and plans as they relate to plant operations; and interpreting the above data and the estimates used by other electric utilities to form judgments of average service life and net salvage characteristics.

## Q. WHAT HISTORICAL DATA DID YOU ANALYZE FOR THE PURPOSE OF ESTIMATING SERVICE LIFE CHARACTERISTICS?

A. Generally speaking, I analyzed the EPE accounting entries that record plant transactions during the period 1993 through 2019. The transactions included additions, retirements, transfers, sales, and the related balances.

## Q. WHAT METHOD DID YOU USE TO ANALYZE THESE SERVICE LIFE DATA?

A. I used the retirement rate method. This is the most appropriate method when retirement data covering a long period of time is available because this method determines the average rates of retirement actually experienced by EPE during the period of time covered by the Depreciation Study.

## Q. HOW DID YOU USE THE RETIREMENT RATE METHOD TO ANALYZE EPE'S SERVICE LIFE DATA?

A. I applied the retirement rate analysis to each different group of property in the study. For each property group, I used the retirement rate data to form a life table which, when plotted, shows an original survivor curve for that property group. Each original survivor curve represents the average survivor pattern experienced by the several vintage groups during the experience band studied. The survivor patterns do not necessarily describe the life characteristics of the property group; therefore, interpretation of the original survivor curves is required in order to use them as valid considerations in estimating service life. The Iowa type survivor curves were used to perform these interpretations.
Q. WHAT IS AN "IOWA-TYPE SURVIVOR CURVE" AND HOW DID YOU USE SUCH CURVES TO ESTIMATE THE SERVICE LIFE CHARACTERISTICS FOR EACH PROPERTY GROUP?
A. Iowa-type curves are a widely-used group of survivor curves that contain the range of survivor characteristics usually experienced by utilities and other industrial companies. The Iowa-type curves were developed at the Iowa State College Engineering Experiment Station through an extensive process of observing and
classifying the ages at which various types of property used by utilities and other industrial companies had been retired.

Iowa-type curves are used to smooth and extrapolate original survivor curves determined by the retirement rate method. The Iowa curves and truncated Iowa curves were used in the Depreciation Study to describe the forecasted rates of retirement based on the observed rates of retirement and the outlook for future retirements.

The estimated survivor curve designations for each depreciable property group indicate the average service life, the family within the Iowa system to which the property group belongs, and the relative height of the mode. For example, the Iowa 65-R2 indicates an average service life of sixty-five years; a right-moded, or R , type curve (the mode occurs after average life for right-moded curves); and a moderate height, 2 , for the mode (possible modes for R type curves range from 1 to 5).

## Q. WHAT APPROACH DID YOU USE TO ESTIMATE THE LIVES OF SIGNIFICANT FACILITIES SUCH AS OPERATIONS CENTERS?

A. I used the life span technique to estimate the lives of significant facilities for which concurrent retirement of the entire facility is anticipated. In this technique, the survivor characteristics of such facilities are described by the use of interim survivor curves and estimated probable retirement dates.

The interim survivor curves describe the rate of retirement related to the replacement of elements of the facility, such as, for a building, the retirements of plumbing, heating, doors, windows, roofs, etc., that occur during the life of the
facility. The probable retirement date provides the rate of final retirement for each year of installation for the facility by truncating the interim survivor curve for each installation year at its attained age at the date of probable retirement. The use of interim survivor curves truncated at the date of probable retirement provides a consistent method for estimating the lives of the several years of installation for a particular facility inasmuch as a single concurrent retirement for all years of installation will occur when it is retired.

## Q. WHAT ARE THE BASES FOR THE PROBABLE RETIREMENT YEARS THAT YOU HAVE ESTIMATED FOR EACH FACILITY?

A. The probable retirement years are life spans for each facility that are estimated based on informed judgment that incorporates a consideration of the age, use, size, nature of construction, management outlook, and typical life spans experienced and used by other electric utilities for similar facilities. Most of the life spans result in probable retirement years that are many years in the future. As a result, the retirements of these facilities are not yet subject to specific management plans. Such plans would be premature. At the appropriate time, detailed studies of the economics of rehabilitation and continued use or retirement of the structure will be performed and the results incorporated in the estimation of the facility's life span.

## Q. DID YOU PHYSICALLY OBSERVE EPE'S PLANT AND EQUIPMENT AS PART OF YOUR DEPRECIATION STUDY?

A. Yes. My most recent field review of EPE's property as part of the Depreciation Study was made in February 2020 to observe representative portions of plant. Field reviews are conducted to become familiar with company operations and to obtain an understanding of the function of the plant and information with respect to the
reasons for past retirements and the expected future causes of retirements. This knowledge, as well as information from other discussions with management, was incorporated in the interpretation and extrapolation of the statistical analyses.

## Q. WOULD YOU EXPLAIN THE CONCEPT OF "NET SALVAGE"?

A. Net salvage is a component of the service value of capital assets that is reflected in depreciation rates. The service value of an asset is its original cost less its net salvage. Net salvage is the salvage value received for the asset upon retirement less the cost to retire the asset. When the cost to retire exceeds the salvage value, the result is negative net salvage.

Inasmuch as depreciation expense is the loss in service value of an asset during a defined period, e.g., one year, it must include a ratable portion of both the original cost and the net salvage. That is, the net salvage related to an asset should be incorporated in the cost of service during the same period as its original cost so that customers receiving service from the asset pay rates that include a portion of both elements of the asset's service value, the original cost and the net salvage value.

For example, the full recovery of the service value of a $\$ 10,000$ transmission pole includes not only the $\$ 10,000$ of original cost, but also, on average, $\$ 2,100$ to remove the pole at the end of its life and $\$ 100$ in salvage value. In this example, the net salvage component is negative $\$ 2,000(\$ 100-\$ 2,100)$, and the net salvage percent is negative $20 \%((\$ 100-\$ 2,100) / \$ 10,000)$.

## Q. HOW DID YOU ESTIMATE NET SALVAGE PERCENTAGES?

A. I estimated the net salvage percentages by reviewing EPE's account-specific historical salvage and cost of removal data for the period 1993 through 2019 as a percentage of the associated retired plant, as well as considering industry experience in terms of net salvage estimates for other electric companies.
Q. PLEASE DESCRIBE THE SECOND PHASE OF THE PROCESS THAT YOU USED IN THE DEPRECIATION STUDY IN WHICH YOU CALCULATED COMPOSITE REMAINING LIVES AND ANNUAL DEPRECIATION ACCRUAL RATES.
A. After I estimated the service life and net salvage characteristics for each depreciable property group, I calculated the annual depreciation accrual rates for each group, using the straight line remaining life method, and using remaining lives weighted consistent with the average service life procedure.
Q. PLEASE DESCRIBE THE STRAIGHT LINE REMAINING LIFE METHOD OF DEPRECIATION.
A. The straight line remaining life method of depreciation allocates the original cost of the property, less accumulated depreciation, less future net salvage, in equal amounts to each year of remaining service life.

## Q. PLEASE DESCRIBE AMORTIZATION ACCOUNTING.

A. In amortization accounting, units of property are capitalized in the same manner as they are in depreciation accounting. Amortization accounting is used for accounts with a large number of units, but small asset values. Depreciation accounting is difficult for these assets because periodic inventories are required to properly reflect plant in service. Consequently, retirements are recorded when a vintage is fully amortized rather than as the units are removed from service. That is, there is no
dispersion of retirements. All units are retired when the age of the vintage reaches the amortization period. Each plant account or group of assets is assigned a fixed period which represents an anticipated life during which the asset will render full benefit. For example, in amortization accounting, assets that have a 15 -year amortization period will be fully recovered after 15 years of service and taken off EPE's books, but not necessarily removed from service. In contrast, assets that are taken out of service before 15 years remain on the books until the amortization period for that vintage has expired.

## Q. FOR WHICH PLANT ACCOUNTS IS AMORTIZATION ACCOUNTING BEING UTILIZED?

A. Amortization accounting is only appropriate for certain General Plant accounts. These accounts are 391, 393, 394, 395, 397, and 398. These accounts collectively represent less than two percent of EPE's depreciable plant.

## Q. PLEASE USE AN EXAMPLE TO ILLUSTRATE HOW THE ANNUAL DEPRECIATION ACCRUAL RATE FOR A PARTICULAR GROUP OF PROPERTY IS PRESENTED IN YOUR DEPRECIATION STUDY.

A. I will use Account 353, Station Equipment, as an example because it is one of the largest depreciable mass accounts and represents approximately six percent of total depreciable plant or thirty-five percent of transmission plant.

The retirement rate method was used to analyze the survivor characteristics of this property group. Aged plant accounting data was compiled from 1993 through 2019 and analyzed in periods that best represent the overall service life of this property. The life table for the 1993-2019 experience band is presented on pages VII-45 and VII-46 of the Depreciation Study. The life table displays the
retirement and surviving ratios of the aged plant data exposed to retirement by age interval. For example, page VII-45 shows $\$ 289,681$ retired at age 5.5 with $\$ 98,507,346$ exposed to retirement. Consequently, the retirement ratio is 0.0029 and the surviving ratio is 0.9971 . This life table, or original survivor curve, is plotted along with the estimated smooth survivor curve, the 50-R4, on page VII-44.

The net salvage percent is presented on pages VIII-21 and VIII-22. The percentage is based on the result of annual gross salvage minus the cost to remove plant assets as compared to the original cost of plant retired during the period 1993 through 2019. The 27-year period experienced $\$ 272,653$ (\$6-\$272,659) in net salvage for $\$ 5,749,111$ plant retired. The result is negative net salvage of 5 percent ( $\$ 272,653 / \$ 5,749,111$ ) and the most recent five-year result is negative net salvage of 22 percent. Therefore, based on industry ranges, historical indications of these assets and EPE's expectations, I determined that negative 5 percent was the most appropriate estimate for this account.

My calculation of the annual depreciation related to the original cost at December 31, 2019 of electric plant is presented on pages IX-62 and IX-63. The calculation is based on the $50-\mathrm{R} 4$ survivor curve, 5 percent negative net salvage, the attained age, and the allocated book reserve. The tabulation sets forth the installation year, the original cost, calculated accrued depreciation, allocated book reserve, future accruals, remaining life, and annual accrual. These totals are brought forward to the table on page VI-7.

## Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

# UNITED STATES OF AMERICA BEFORE THE <br> FEDERAL ENERGY REGULATORY COMMISSION 

El Paso Electric Company
)
Docket No. ER22--000

## VERIFICATION

Pursuant to 28 U.S.C. § 1746 (2000), I state under penalty of perjury that I am the John J. Spanos referred to in the foregoing "Prepared Direct Testimony of John J. Spanos on Behalf of El Paso Electric Company," that I have read the same and am familiar with the contents thereof, and that the facts set forth therein are true and correct to the best of my knowledge, information, and belief.

Executed this 29th day of October, 2021.


JOHN J. SPANS

## JOHN SPANOS

## DEPRECIATION EXPERIENCE

## Q. Please state your name.

A. My name is John J. Spanos.
Q. What is your educational background?
A. I have Bachelor of Science degrees in Industrial Management and Mathematics from Carnegie-Mellon University and a Master of Business Administration from York College.
Q. Do you belong to any professional societies?
A. Yes. I am a member and past President of the Society of Depreciation Professionals and a member of the American Gas Association/Edison Electric Institute Industry Accounting Committee.
Q. Do you hold any special certification as a depreciation expert?
A. Yes. The Society of Depreciation Professionals has established national standards for depreciation professionals. The Society administers an examination to become certified in this field. I passed the certification exam in September 1997 and was recertified in August 2003, February 2008, January 2013 and February 2018.

## Q. Please outline your experience in the field of depreciation.

A. In June 1986, I was employed by Gannett Fleming Valuation and Rate Consultants, Inc. as a Depreciation Analyst. During the period from June 1986 through December 1995, I helped prepare numerous depreciation and original cost studies for utility companies in various industries. I helped perform depreciation studies for the following telephone companies: United Telephone of Pennsylvania, United Telephone of New Jersey, and Anchorage Telephone Utility. I helped perform depreciation studies for the following
companies in the railroad industry: Union Pacific Railroad, Burlington Northern Railroad, and Wisconsin Central Transportation Corporation.

I helped perform depreciation studies for the following organizations in the electric utility industry: Chugach Electric Association, The Cincinnati Gas and Electric Company (CG\&E), The Union Light, Heat and Power Company (ULH\&P), Northwest Territories Power Corporation, and the City of Calgary - Electric System.

I helped perform depreciation studies for the following pipeline companies: TransCanada Pipelines Limited, Trans Mountain Pipe Line Company Ltd., Interprovincial Pipe Line Inc., Nova Gas Transmission Limited and Lakehead Pipeline Company.

I helped perform depreciation studies for the following gas utility companies: Columbia Gas of Pennsylvania, Columbia Gas of Maryland, The Peoples Natural Gas Company, T. W. Phillips Gas \& Oil Company, CG\&E, ULH\&P, Lawrenceburg Gas Company and Penn Fuel Gas, Inc.

I helped perform depreciation studies for the following water utility companies: Indiana-American Water Company, Consumers Pennsylvania Water Company and The York Water Company; and depreciation and original cost studies for Philadelphia Suburban Water Company and Pennsylvania-American Water Company.

In each of the above studies, I assembled and analyzed historical and simulated data, performed field reviews, developed preliminary estimates of service life and net salvage, calculated annual depreciation, and prepared reports for submission to state public utility commissions or federal regulatory agencies. I performed these studies under the general direction of William M. Stout, P.E.

In January 1996, I was assigned to the position of Supervisor of Depreciation Studies. In July 1999, I was promoted to the position of Manager, Depreciation and

Valuation Studies. In December 2000, I was promoted to the position as Vice-President of Gannett Fleming Valuation and Rate Consultants, Inc., in April 2012, I was promoted to the position as Senior Vice President of the Valuation and Rate Division of Gannett Fleming Inc. (now doing business as Gannett Fleming Valuation and Rate Consultants, LLC) and in January of 2019, I was promoted to my present position of President of Gannett Fleming Valuation and Rate Consultants, LLC. In my current position I am responsible for conducting all depreciation, valuation and original cost studies, including the preparation of final exhibits and responses to data requests for submission to the appropriate regulatory bodies.

Since January 1996, I have conducted depreciation studies similar to those previously listed including assignments for Pennsylvania-American Water Company; Aqua Pennsylvania; Kentucky-American Water Company; Virginia-American Water Company; Indiana-American Water Company; Iowa-American Water Company; New Jersey-American Water Company; Hampton Water Works Company; Omaha Public Power District; Enbridge Pipe Line Company; Inc.; Columbia Gas of Virginia, Inc.; Virginia Natural Gas Company National Fuel Gas Distribution Corporation - New York and Pennsylvania Divisions; The City of Bethlehem - Bureau of Water; The City of Coatesville Authority; The City of Lancaster - Bureau of Water; Peoples Energy Corporation; The York Water Company; Public Service Company of Colorado; Enbridge Pipelines; Enbridge Gas Distribution, Inc.; Reliant Energy-HLP; Massachusetts-American Water Company; St. Louis County Water Company; Missouri-American Water Company; Chugach Electric Association; Alliant Energy; Oklahoma Gas \& Electric Company; Nevada Power Company; Dominion Virginia Power; NUI-Virginia Gas Companies; Pacific Gas \& Electric Company; PSI Energy; NUI - Elizabethtown Gas Company; Cinergy Corporation - CG\&E; Cinergy Corporation - ULH\&P; Columbia Gas of Kentucky; South Carolina Electric \& Gas Company; Idaho Power Company; El Paso

Electric Company; Aqua North Carolina; Aqua Ohio; Aqua Texas, Inc.; Aqua Illinois, Inc.; Ameren Missouri; Central Hudson Gas \& Electric; Centennial Pipeline Company; CenterPoint Energy-Arkansas; CenterPoint Energy - Oklahoma; CenterPoint Energy Entex; CenterPoint Energy - Louisiana; NSTAR - Boston Edison Company; Westar Energy, Inc.; United Water Pennsylvania; PPL Electric Utilities; PPL Gas Utilities; Wisconsin Power \& Light Company; TransAlaska Pipeline; Avista Corporation; Northwest Natural Gas; Allegheny Energy Supply, Inc.; Public Service Company of North Carolina; South Jersey Gas Company; Duquesne Light Company; MidAmerican Energy Company; Laclede Gas; Duke Energy Company; E.ON U.S. Services Inc.; Elkton Gas Services; Anchorage Water and Wastewater Utility; Kansas City Power and Light; Duke Energy North Carolina; Duke Energy South Carolina; Monongahela Power Company; Potomac Edison Company; Duke Energy Ohio Gas; Duke Energy Kentucky; Duke Energy Indiana; Duke Energy Progress; Northern Indiana Public Service Company; TennesseeAmerican Water Company; Columbia Gas of Maryland; Maryland-American Water Company; Bonneville Power Administration; NSTAR Electric and Gas Company; EPCOR Distribution, Inc.; B. C. Gas Utility, Ltd; Entergy Arkansas; Entergy Texas; Entergy Mississippi; Entergy Louisiana; Entergy Gulf States Louisiana; the Borough of Hanover; Louisville Gas and Electric Company; Kentucky Utilities Company; Madison Gas and Electric; Central Maine Power; PEPCO; PacifiCorp; Minnesota Energy Resource Group; Jersey Central Power \& Light Company; Cheyenne Light, Fuel and Power Company; United Water Arkansas; Central Vermont Public Service Corporation; Green Mountain Power; Portland General Electric Company; Atlantic City Electric; Nicor Gas Company; Black Hills Power; Black Hills Colorado Gas; Black Hills Kansas Gas; Black Hills Service Company; Black Hills Utility Holdings; Public Service Company of Oklahoma; City of

Dubois; Peoples Gas Light and Coke Company; North Shore Gas Company; Connecticut Light and Power; New York State Electric and Gas Corporation; Rochester Gas and Electric Corporation; Greater Missouri Operations; Tennessee Valley Authority; Omaha Public Power District; Indianapolis Power \& Light Company; Vermont Gas Systems, Inc.; Metropolitan Edison; Pennsylvania Electric; West Penn Power; Pennsylvania Power; PHI Service Company - Delmarva Power and Light; Atmos Energy Corporation; Citizens Energy Group; PSE\&G Company; Berkshire Gas Company; Alabama Gas Corporation; Mid-Atlantic Interstate Transmission, LLC; SUEZ Water; WEC Energy Group; Rocky Mountain Natural Gas, LLC; Illinois-American Water Company; Northern Illinois Gas Company; Public Service of New Hampshire and Newtown Artesian Water Company.

My additional duties include determining final life and salvage estimates, conducting field reviews, presenting recommended depreciation rates to management for its consideration and supporting such rates before regulatory bodies.

## Q. Have you submitted testimony to any state utility commission on the subject of utility plant depreciation?

A. Yes. I have submitted testimony to the Pennsylvania Public Utility Commission; the Commonwealth of Kentucky Public Service Commission; the Public Utilities Commission of Ohio; the Nevada Public Utility Commission; the Public Utilities Board of New Jersey; the Missouri Public Service Commission; the Massachusetts Department of Telecommunications and Energy; the Alberta Energy \& Utility Board; the Idaho Public Utility Commission; the Louisiana Public Service Commission; the State Corporation Commission of Kansas; the Oklahoma Corporate Commission; the Public Service Commission of South Carolina; Railroad Commission of Texas - Gas Services Division; the New York Public Service Commission; Illinois Commerce Commission; the Indiana

Utility Regulatory Commission; the California Public Utilities Commission; the Federal Energy Regulatory Commission ("FERC"); the Arkansas Public Service Commission; the Public Utility Commission of Texas; Maryland Public Service Commission; Washington Utilities and Transportation Commission; The Tennessee Regulatory Commission; the Regulatory Commission of Alaska; Minnesota Public Utility Commission; Utah Public Service Commission; District of Columbia Public Service Commission; the Mississippi Public Service Commission; Delaware Public Service Commission; Virginia State Corporation Commission; Colorado Public Utility Commission; Oregon Public Utility Commission; South Dakota Public Utilities Commission; Wisconsin Public Service Commission; Wyoming Public Service Commission; the Public Service Commission of West Virginia; Maine Public Utility Commission; Iowa Utility Board; Connecticut Public Utilities Regulatory Authority; New Mexico Public Regulation Commission; Commonwealth of Massachusetts Department of Public Utilities; Rhode Island Public Utilities Commission and the North Carolina Utilities Commission.

## Q. Have you had any additional education relating to utility plant depreciation?

A. Yes. I have completed the following courses conducted by Depreciation Programs, Inc.: "Techniques of Life Analysis," "Techniques of Salvage and Depreciation Analysis," "Forecasting Life and Salvage," "Modeling and Life Analysis Using Simulation," and "Managing a Depreciation Study." I have also completed the "Introduction to Public Utility Accounting" program conducted by the American Gas Association.

## Q. Does this conclude your qualification statement?

A. Yes.

Docket No. ER22- -000

|  | Year | Jurisdiction | Docket No. |
| :---: | :---: | :---: | :---: |
| 01. | 1998 | PA PUC | R-00984375 |
| 02. | 1998 | PA PUC | R-00984567 |
| 03. | 1999 | PA PUC | R-00994605 |
| 04. | 2000 | D.T.\&E. | DTE 00-105 |
| 05. | 2001 | PA PUC | R-00016114 |
| 06. | 2001 | PA PUC | R-00017236 |
| 07. | 2001 | PA PUC | R-00016339 |
| 08. | 2001 | OH PUC | 01-1228-GA-AIR |
| 09. | 2001 | KY PSC | 2001-092 |
| 10. | 2002 | PA PUC | R-00016750 |
| 11. | 2002 | KY PSC | 2002-00145 |
| 12. | 2002 | NJ BPU | GF02040245 |
| 13. | 2002 | ID PUC | IPC-E-03-7 |
| 14. | 2003 | PA PUC | R-0027975 |
| 15. | 2003 | IN URC | R-0027975 |
| 16. | 2003 | PA PUC | R-00038304 |
| 17. | 2003 | MO PSC | WR-2003-0500 |
| 18. | 2003 | FERC | ERO3-1274-000 |
| 19. | 2003 | NJ BPU | BPU 03080683 |
| 20. | 2003 | NV PUC | 03-10001 |
| 21. | 2003 | LA PSC | U-27676 |
| 22. | 2003 | PA PUC | R-00038805 |
| 23. | 2004 | AB En/Util Bd | 1306821 |
| 24. | 2004 | PA PUC | R-00038168 |
| 25. | 2004 | PA PUC | R-00049255 |
| 26. | 2004 | PA PUC | R-00049165 |
| 27. | 2004 | OK Corp Cm | PUC 200400187 |
| 28. | 2004 | OH PUC | 04-680-EI-AIR |
| 29. | 2004 | RR Com of TX | GUD\# |
| 30. | 2004 | NY PUC | 04-G-1047 |
| 31. | 2004 | AR PSC | 04-121-U |
| 32. | 2005 | ILCC | 05-ICC-06 |
| 33. | 2005 | IL CC | 05-ICC-06 |
| 34. | 2005 | KY PSC | 2005-00042 |

Client Utility
City of Bethlehem - Bureau of Water City of Lancaster
The York Water Company
Massachusetts-American Water Company
City of Lancaster
The York Water Company
Pennsylvania-American Water Company
Cinergy Corp - Cincinnati Gas \& Elect Company
Cinergy Corp - Union Light, Heat \& Power Co.
Philadelphia Suburban Water Company
Columbia Gas of Kentucky
NUI Corporation/Elizabethtown Gas Company Idaho Power Company
The York Water Company
Cinergy Corp - PSI Energy, Inc.
Pennsylvania-American Water Company
Missouri-American Water Company
NSTAR-Boston Edison Company
South Jersey Gas Company
Nevada Power Company
CenterPoint Energy - Arkla
Pennsylvania Suburban Water Company
EPCOR Distribution, Inc.
National Fuel Gas Distribution Corp (PA)
PPL Electric Utilities
The York Water Company
CenterPoint Energy - Arkla
Cinergy Corp. - Cincinnati Gas and
Electric Company
CenterPoint Energy - Entex Gas Services Div.
National Fuel Gas Distribution Gas (NY)
CenterPoint Energy - Arkla
North Shore Gas Company
Peoples Gas Light and Coke Company
Union Light Heat \& Power

## Subject

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| 35. | 2005 | IL CC | 05-0308 |
| 36. | 2005 | MO PSC | GF-2005 |
| 37. | 2005 | KS CC | 05-WSEE-981-RTS |
| 38. | 2005 | RR Com of TX | GUD \# |
| 39. | 2005 | US District Court | Cause No. 1:99-CV-1693LJM/VSS |
| 40. | 2005 | OK CC | PUD 200500151 |
| 41. | 2005 | MA Dept Telecom \& Ergy | DTE 05-85 |
| 42. | 2005 | NY PUC | 05-E-934/05-G-0935 |
| 43. | 2005 | AK Reg Com | U-04-102 |
| 44. | 2005 | CA PUC | A05-12-002 |
| 45. | 2006 | PA PUC | R-00051030 |
| 46. | 2006 | PA PUC | R-00051178 |
| 47. | 2006 | NC Util Cm. | G-5, Sub522 |
| 48. | 2006 | PA PUC | R-00051167 |
| 49. | 2006 | PA PUC | R00061346 |
| 50. | 2006 | PA PUC | R-00061322 |
| 51. | 2006 | PA PUC | R-00051298 |
| 52. | 2006 | PUC of TX | 32093 |
| 53. | 2006 | KY PSC | 2006-00172 |
| 54. | 2006 | SC PSC |  |
| 55. | 2006 | AK Reg Com | U-06-6 |
| 56. | 2006 | DE PSC | 06-284 |
| 57. | 2006 | IN URC | IURC43081 |
| 58. | 2006 | AK Reg Com | U-06-134 |
| 59. | 2006 | MO PSC | WR-2007-0216 |
| 60. | 2006 | FERC | IS05-82-002, et al |
| 61. | 2006 | PA PUC | R-00061493 |
| 62. | 2007 | NC Util Com. | E-7 SUB 828 |
| 63. | 2007 | OH PSC | 08-709-EL-AIR |
| 64. | 2007 | PA PUC | R-00072155 |
| 65. | 2007 | KY PSC | 2007-00143 |

Client Utility
MidAmerican Energy Company Laclede Gas Company
Westar Energy
CenterPoint Energy - Entex Gas Services Div.
Cinergy Corporation

Oklahoma Gas and Electric Company NSTAR

Central Hudson Gas \& Electric Company
Chugach Electric Association
Pacific Gas \& Electric
Aqua Pennsylvania, Inc.
T.W. Phillips Gas and Oil Company

Pub. Service Company of North Carolina
City of Lancaster
Duquesne Light Company
The York Water Company
PPL GAS Utilities
CenterPoint Energy - Houston Electric
Duke Energy Kentucky
SCANA
Municipal Light and Power
Delmarva Power and Light
Indiana American Water Company
Chugach Electric Association
Missouri American Water Company
TransAlaska Pipeline
National Fuel Gas Distribution Corp. (PA)
Duke Energy Carolinas, LLC
Duke Energy Ohio Gas
PPL Electric Utilities Corporation
Kentucky American Water Company

## Subject

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|  | Year | Jurisdiction | Docket No. |
| :---: | :---: | :---: | :---: |
| 66. | 2007 | PA PUC | R-00072229 |
| 67. | 2007 | KY PSC | 2007-0008 |
| 68. | 2007 | NY PSC | 07-G-0141 |
| 69. | 2008 | AK PSC | U-08-004 |
| 70. | 2008 | TN Reg Auth | 08-00039 |
| 71. | 2008 | DE PSC | 08-96 |
| 72. | 2008 | PA PUC | R-2008-2023067 |
| 73. | 2008 | KS CC | 08-WSEE1-RTS |
| 74. | 2008 | IN URC | 43526 |
| 75. | 2008 | IN URC | 43501 |
| 76. | 2008 | MD PSC | 9159 |
| 77. | 2008 | KY PSC | 2008-000251 |
| 78. | 2008 | KY PSC | 2008-000252 |
| 79. | 2008 | PA PUC | 2008-20322689 |
| 80. | 2008 | NY PSC | 08-E887/08-00888 |
| 81. | 2008 | WV TC | VE-080416/VG-8080417 |
| 82. | 2008 | ILCC | ICC-09-166 |
| 83. | 2009 | ILCC | ICC-09-167 |
| 84. | 2009 | DC PSC | 1076 |
| 85. | 2009 | KY PSC | 2009-00141 |
| 86. | 2009 | FERC | ER08-1056-002 |
| 87. | 2009 | PA PUC | R-2009-2097323 |
| 88. | 2009 | NC Util Cm | E-7, Sub 090 |
| 89. | 2009 | KY PSC | 2009-00202 |
| 90. | 2009 | VA St. CC | PUE-2009-00059 |
| 91. | 2009 | PA PUC | 2009-2132019 |
| 92. | 2009 | MS PSC | Docket No. 2011-UA-183 |
| 93. | 2009 | AK PSC | 09-08-U |
| 94. | 2009 | TX PUC | 37744 |
| 95. | 2009 | TX PUC | 37690 |
| 96. | 2009 | PA PUC | R-2009-2106908 |
| 97. | 2009 | KS CC | 10-KCPE-415-RTS |
| 98. | 2009 | PA PUC | R-2009- |

## Client Utility

Pennsylvania American Water Company
NiSource - Columbia Gas of Kentucky
National Fuel Gas Distribution Corp (NY)
Anchorage Water \& Wastewater Utility
Tennessee-American Water Company
Artesian Water Company
The York Water Company
Westar Energy
Northern Indiana Public Service Company
Duke Energy Indiana
NiSource - Columbia Gas of Maryland
Kentucky Utilities
Louisville Gas \& Electric
Pennsylvania American Water Co. - Wastewater Central Hudson
Avista Corporation
Peoples Gas, Light and Coke Company
North Shore Gas Company
Potomac Electric Power Company
NiSource - Columbia Gas of Kentucky
Entergy Services
Pennsylvania American Water Company
Duke Energy Carolinas, LLC
Duke Energy Kentucky
Aqua Virginia, Inc.
Aqua Pennsylvania, Inc.
Entergy Mississippi
Entergy Arkansas
Entergy Texas
El Paso Electric Company
The Borough of Hanover
Kansas City Power \& Light
United Water Pennsylvania

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|  | Year | Jurisdiction | Docket No. |
| :---: | :---: | :---: | :---: |
| 99. | 2009 | OH PUC |  |
| 100. | 2009 | WI PSC | 3270-DU-103 |
| 101. | 2009 | MO PSC | WR-2010 |
| 102. | 2009 | AK Reg Cm | U-09-097 |
| 103. | 2010 | IN URC | 43969 |
| 104. | 2010 | WI PSC | 6690-DU-104 |
| 105. | 2010 | PA PUC | R-2010-2161694 |
| 106. | 2010 | KY PSC | 2010-00036 |
| 107. | 2010 | PA PUC | R-2009-2149262 |
| 108. | 2010 | MO PSC | GR-2010-0171 |
| 109. | 2010 | SC PSC | 2009-489-E |
| 110. | 2010 | NJ BD OF PU | ER09080664 |
| 111. | 2010 | VA St. CC | PUE-2010-00001 |
| 112. | 2010 | PA PUC | R-2010-2157140 |
| 113. | 2010 | MO PSC | ER-2010-0356 |
| 114. | 2010 | MO PSC | ER-2010-0355 |
| 115. | 2010 | PA PUC | R-2010-2167797 |
| 116. | 2010 | PSC SC | 2009-489-E |
| 117. | 2010 | PA PUC | R-2010-22010702 |
| 118. | 2010 | AK PSC | 10-067-U |
| 119. | 2010 | IN URC | Cause No. 43894 |
| 120. | 2010 | IN URC | Cause No. 43894 |
| 121. | 2010 | PA PUC | R-2010-2166212 |
| 122. | 2010 | NC Util Cn. | W-218,SUB310 |
| 123. | 2011 | OH PUC | 11-4161-WS-AIR |
| 124. | 2011 | MS PSC | EC-123-0082-00 |
| 125. | 2011 | CO PUC | 11AL-387E |
| 126. | 2011 | PA PUC | R-2010-2215623 |
| 127. | 2011 | PA PUC | R-2010-2179103 |
| 128. | 2011 | IN URC | 43114 IGCC 4S |
| 129. | 2011 | FERC | IS11-146-000 |
| 130. | 2011 | IL CC | 11-0217 |
| 131. | 2011 | OK CC | 201100087 |
| 132. | 2011 | PA PUC | 2011-2232243 |

Client Utility
Aqua Ohio Water Company
Madison Gas \& Electric Company
Missouri American Water Company
Chugach Electric Association
Northern Indiana Public Service Company
Wisconsin Public Service Corp.
PPL Electric Utilities Corp.
Kentucky American Water Company
Columbia Gas of Pennsylvania
Laclede Gas Company
South Carolina Electric \& Gas Company
Atlantic City Electric
Virginia American Water Company
The York Water Company
Greater Missouri Operations Company
Kansas City Power and Light
T.W. Phillips Gas and Oil Company

SCANA - Electric
Peoples Natural Gas, LLC
Oklahoma Gas and Electric Company
Northern Indiana Public Serv. Company - NIFL
Northern Indiana Public Serv. Co. - Kokomo
Pennsylvania American Water Co. - WW
Aqua North Carolina, Inc.
Ohio American Water Company
Entergy Mississippi
Black Hills Colorado
Columbia Gas of Pennsylvania
City of Lancaster - Bureau of Water
Duke Energy Indiana
Enbridge Pipelines (Southern Lights)
MidAmerican Energy Corporation
Oklahoma Gas \& Electric Company
Pennsylvania American Water Company

Subject
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|  | Year | Jurisdiction | Docket No. |
| :---: | :---: | :---: | :---: |
| 133. | 2011 | FERC | RP11--_-000 |
| 134. | 2012 | WA UTC | UE-120436/UG-120437 |
| 135. | 2012 | AK Reg Cm | U-12-009 |
| 136. | 2012 | MA PUC | DPU 12-25 |
| 137. | 2012 | TX PUC | 40094 |
| 138. | 2012 | ID PUC | IPC-E-12 |
| 139. | 2012 | PA PUC | R-2012-2290597 |
| 140. | 2012 | PA PUC | R-2012-2311725 |
| 141. | 2012 | KY PSC | 2012-00222 |
| 142. | 2012 | KY PSC | 2012-00221 |
| 143. | 2012 | PA PUC | R-2012-2285985 |
| 144. | 2012 | DC PSC | Case 1087 |
| 145. | 2012 | OH PSC | 12-1682-EL-AIR |
| 146. | 2012 | OH PSC | 12-1685-GA-AIR |
| 147. | 2012 | PA PUC | R-2012-2310366 |
| 148. | 2012 | PA PUC | R-2012-2321748 |
| 149. | 2012 | FERC | ER-12-2681-000 |
| 150. | 2012 | MO PSC | ER-2012-0174 |
| 151. | 2012 | MO PSC | ER-2012-0175 |
| 152. | 2012 | MO PSC | GO-2012-0363 |
| 153. | 2012 | MN PUC | G007,001/D-12-533 |
| 154. | 2012 | TX PUC | $\begin{aligned} & \text { SOAH 582-14-1051/ } \\ & \text { TECQ 2013-2007-UCR } \end{aligned}$ |
| 155. | 2012 | PA PUC | 2012-2336379 |
| 156. | 2013 | NJ BPU | ER12121071 |
| 157. | 2013 | KY PSC | 2013-00167 |
| 158. | 2013 | VA St CC | 2013-00020 |
| 159. | 2013 | IA Util Bd | 2013-0004 |
| 160. | 2013 | PAPUC | 2013-2355276 |
| 161. | 2013 | NY PSC | $\begin{aligned} & \text { 13-E-0030, 13-G-0031, } \\ & 13-S-0032 \end{aligned}$ |
| 162. | 2013 | PA PUC | 2013-2355886 |
| 163. | 2013 | TN Reg Auth | 12-0504 |
| 164. | 2013 | ME PUC | 2013-168 |
| 165. | 2013 | DC PSC | Case 1103 |

Client Utility
Carolina Gas Transmission
Avista Corporation
Chugach Electric Association
Columbia Gas of Massachusetts
El Paso Electric Company
Idaho Power Company
PPL Electric Utilities
Borough of Hanover - Bureau of Water
Louisville Gas and Electric Company
Kentucky Utilities Company
Peoples Natural Gas Company
Potomac Electric Power Company
Duke Energy Ohio (Electric)
Duke Energy Ohio (Gas)
City of Lancaster - Sewer Fund
Columbia Gas of Pennsylvania
ITC Holdings
Kansas City Power and Light
KCPL Greater Missouri Operations Company Laclede Gas Company
Integrys - MN Energy Resource Group
Aqua Texas

York Water Company
PHI Service Company-Atlantic City Electric
Columbia Gas of Kentucky
Virginia Electric and Power Company
MidAmerican Energy Corporation
Pennsylvania American Water Company
Consolidated Edison of New York
Peoples TWP LLC
Tennessee American Water
Central Maine Power Company
PHI Service Company - PEPCO

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|  | Year | Jurisdiction | Docket No. |
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| 166. | 2013 | WY PSC | 2003-ER-13 |
| 167. | 2013 | FERC | ER13-2428-0000 |
| 168. | 2013 | FERC | ER13- -0000 |
| 169. | 2013 | FERC | ER13-2410-0000 |
| 170. | 2013 | PA PUC | R-2013-2372129 |
| 171. | 2013 | NJ BPU | ER12111052 |
| 172. | 2013 | PA PUC | R-2013-2390244 |
| 173. | 2013 | OK CC | UM 1679 |
| 174. | 2013 | IL CC | 13-0500 |
| 175. | 2013 | WY PSC | 20000-427-EA-13 |
| 176. | 2013 | UT PSC | 13-035-02 |
| 177. | 2013 | OR PUC | UM 1647 |
| 178. | 2013 | PA PUC | 2013-2350509 |
| 179. | 2014 | IL CC | 14-0224 |
| 180. | 2014 | FERC | ER14- -0000 |
| 181. | 2014 | SD PUC | EL14-026 |
| 182. | 2014 | WY PSC | 20002-91-ER-14 |
| 183. | 2014 | PA PUC | 2014-2428304 |
| 184. | 2014 | PA PUC | 2014-2406274 |
| 185. | 2014 | IL CC | 14-0225 |
| 186. | 2014 | MO PSC | ER-2014-0258 |
| 187. | 2014 | KS CC | 14-BHCG-502-RTS |
| 188. | 2014 | KS CC | 14-BHCG-502-RTS |
| 189. | 2014 | KS CC | 14-BHCG-502-RTS |
| 190. | 2014 | PA PUC | 2014-2418872 |
| 191. | 2014 | WV PSC | 14-0701-E-D |
| 192 | 2014 | VA St CC | PUC-2014-00045 |
| 193. | 2014 | VA St CC | PUE-2013 |
| 194. | 2014 | OK CC | PUD201400229 |
| 195. | 2014 | OR PUC | UM1679 |
| 196. | 2014 | IN URC | Cause No. 44576 |
| 197. | 2014 | MA DPU | DPU. 14-150 |
| 198. | 2014 | CT PURA | 14-05-06 |
| 199. | 2014 | MO PSC | ER-2014-0370 |

## Client Utility

Cheyenne Light, Fuel and Power Company Kentucky Utilities
MidAmerican Energy Company
PPL Utilities
Duquesne Light Company
Jersey Central Power and Light Company
Bethlehem, City of - Bureau of Water
Oklahoma, Public Service Company of
Nicor Gas Company
PacifiCorp
PacifiCorp
Pacificorp
Dubois, City of
North Shore Gas Company
Duquesne Light Company
Black Hills Power Company
Black Hills Power Company
Borough of Hanover - Municipal Water Works
Columbia Gas of Pennsylvania
Peoples Gas Light and Coke Company
Ameren Missouri
Black Hills Service Company
Black Hills Utility Holdings
Black Hills Kansas Gas
Lancaster, City of - Bureau of Water
First Energy - MonPower/PotomacEdison
Aqua Virginia
Virginia American Water Company
Oklahoma Gas and Electric Company
Portland General Electric
Indianapolis Power \& Light
NSTAR Gas
Connecticut Light and Power
Kansas City Power \& Light

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| :---: | :---: | :---: | :---: |
| 200. | 2014 | KY PSC | 2014-00371 |
| 201. | 2014 | KY PSC | 2014-00372 |
| 202. | 2015 | PA PUC | R-2015-2462723 |
| 203. | 2015 | PA PUC | R-2015-2468056 |
| 204. | 2015 | NY PSC | 15-E-0283/15-G-0284 |
| 205. | 2015 | NY PSC | 15-E-0285/15-G-0286 |
| 206. | 2015 | MO PSC | WR-2015-0301/SR-2015-0302 |
| 207. | 2015 | OK CC | PUD 201500208 |
| 208. | 2015 | WV PSC | 15-0676-W-42T |
| 209. | 2015 | PA PUC | 2015-2469275 |
| 210. | 2015 | IN URC | Cause No. 44688 |
| 211. | 2015 | OH PSC | 14-1929-EL-RDR |
| 212. | 2015 | NM PRC | 15-00127-UT |
| 213. | 2015 | TX PUC | PUC-44941; SOAH 473-15-5257 |
| 214. | 2015 | WI PSC | 3270-DU-104 |
| 215. | 2015 | OK CC | PUD 201500273 |
| 216. | 2015 | KY PSC | Doc. No. 2015-00418 |
| 217. | 2015 | NC UC | Doc. No. G-5, Sub 565 |
| 218. | 2016 | WA UTC | Docket UE-17 |
| 219. | 2016 | NY PSC | Case No. 16-W-0130 |
| 220. | 2016 | MO PSC | ER-2016-0156 |
| 221. | 2016 | WI PSC |  |
| 222. | 2016 | KY PSC | Case No. 2016-00026 |
| 223. | 2016 | KY PSC | Case No. 2016-00027 |
| 224. | 2016 | OH PUC | Case No. 16-0907-WW-AIR |
| 225. | 2016 | MD PSC | Case 9417 |
| 226. | 2016 | KY PSC | 2016-00162 |
| 227. | 2016 | DE PSC | 16-0649 |
| 228. | 2016 | DE PSC | 16-0650 |
| 229. | 2016 | NY PSC | Case 16-G-0257 |
| 230. | 2016 | PA PUC | R-2016-2537349 |
| 231. | 2016 | PA PUC | R-2016-2537352 |
| 232. | 2016 | PA PUC | R-2016-2537355 |

## Client Utility

Kentucky Utilities Company Louisville Gas and Electric Company United Water Pennsylvania Inc.
NiSource - Columbia Gas of Pennsylvania New York State Electric and Gas Corporation Rochester Gas and Electric Corporation Missouri American Water Company Oklahoma, Public Service Company of West Virginia American Water Company PPL Electric Utilities
Northern Indiana Public Service Company
First Energy-Ohio Edison/Cleveland Electric/
Toledo Edison
El Paso Electric Depreciation
El Paso Electric
Madison Gas and Electric Company
Oklahoma Gas and Electric
Kentucky American Water Company
Public Service Company of North Carolina
Puget Sound Energy
SUEZ Water New York, Inc.
KCPL - Greater Missouri
Wisconsin Public Service Corporation
Kentucky Utilities Company
Louisville Gas and Electric Company
Aqua Ohio
NiSource - Columbia Gas of Maryland
Columbia Gas of Kentucky
Delmarva Power and Light Company - Electric
Delmarva Power and Light Company - Gas
National Fuel Gas Distribution Corp - NY Div
Metropolitan Edison Company
Pennsylvania Electric Company
Pennsylvania Power Company

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| 233. | 2016 | PA PUC | R-2016-2537359 | West Penn Power Company | Depreciation |
| 234. | 2016 | PA PUC | R-2016-2529660 | NiSource - Columbia Gas of PA | Depreciation |
| 235. | 2016 | KY PSC | Case No. 2016-00063 | Kentucky Utilities / Louisville Gas \& Electric Co | Depreciation |
| 236. | 2016 | MO PSC | ER-2016-0285 | KCPL Missouri | Depreciation |
| 237. | 2016 | AR PSC | 16-052-U | Oklahoma Gas \& Electric Co | Depreciation |
| 238. | 2016 | PSCW | 6680-DU-104 | Wisconsin Power and Light | Depreciation |
| 239. | 2016 | ID PUC | IPC-E-16-23 | Idaho Power Company | Depreciation |
| 240. | 2016 | OR PUC | UM1801 | Idaho Power Company | Depreciation |
| 241. | 2016 | ILL CC | 16- | MidAmerican Energy Company | Depreciation |
| 242. | 2016 | KY PSC | Case No. 2016-00370 | Kentucky Utilities Company | Depreciation |
| 243. | 2016 | KY PSC | Case No. 2016-00371 | Louisville Gas and Electric Company | Depreciation |
| 244. | 2016 | IN URC | Cause No. 45029 | Indianapolis Power \& Light | Depreciation |
| 245. | 2016 | AL RC | U-16-081 | Chugach Electric Association | Depreciation |
| 246. | 2017 | MA DPU | D.P.U. 17-05 | NSTAR Electric Company and Western Massachusetts Electric Company | Depreciation |
| 247. | 2017 | TX PUC | PUC-26831, SOAH 973-17-2686 | El Paso Electric Company | Depreciation |
| 248. | 2017 | WA UTC | UE-17033 and UG-170034 | Puget Sound Energy | Depreciation |
| 249. | 2017 | OH PUC | Case No. 17-0032-EL-AIR | Duke Energy Ohio | Depreciation |
| 250. | 2017 | VA SCC | Case No. PUE-2016-00413 | Virginia Natural Gas, Inc. | Depreciation |
| 251. | 2017 | OK CC | Case No. PUD201700151 | Public Service Company of Oklahoma | Depreciation |
| 252. | 2017 | MD PSC | Case No. 9447 | Columbia Gas of Maryland | Depreciation |
| 253. | 2017 | NC UC | Docket No. E-2, Sub 1142 | Duke Energy Progress | Depreciation |
| 254. | 2017 | VA SCC | Case No. PUR-2017-00090 | Dominion Virginia Electric and Power Company | Depreciation |
| 255. | 2017 | FERC | ER17-1162 | MidAmerican Energy Company | Depreciation |
| 256. | 2017 | PA PUC | R-2017-2595853 | Pennsylvania American Water Company | Depreciation |
| 257. | 2017 | OR PUC | UM1809 | Portland General Electric | Depreciation |
| 258. | 2017 | FERC | ER17-217-000 | Jersey Central Power \& Light | Depreciation |
| 259. | 2017 | FERC | ER17-211-000 | Mid-Atlantic Interstate Transmission, LLC | Depreciation |
| 260. | 2017 | MN PUC | Docket No. G007/D-17-442 | Minnesota Energy Resources Corporation | Depreciation |
| 261. | 2017 | IL CC | Docket No. 17-0124 | Northern Illinois Gas Company | Depreciation |
| 262. | 2017 | OR PUC | UM1808 | Northwest Natural Gas Company | Depreciation |
| 263. | 2017 | NY PSC | Case No. 17-W-0528 | SUEZ Water Owego-Nichols | Depreciation |
| 264. | 2017 | MO PSC | GR-2017-0215 | Laclede Gas Company | Depreciation |
| 265. | 2017 | MO PSC | GR-2017-0216 | Missouri Gas Energy | Depreciation |


|  | Year | Jurisdiction | Docket No. | Client Utility | Subject |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 266. | 2017 | ILL CC | Docket No. 17-0337 | Illinois-American Water Company | Depreciation |
| 267. | 2017 | FERC | Docket No. ER18-22-000 | PPL Electric Utilities Corporation | Depreciation |
| 268. | 2017 | IN URC | Cause No. 44988 | Northern Indiana Public Service Company | Depreciation |
| 269. | 2017 | NJ BPU | BPU Docket No. WR17090985 | New Jersey American Water Company, Inc. | Depreciation |
| 270. | 2017 | RIPUC | Docket No. 4800 | SUEZ Water Rhode Island | Depreciation |
| 271. | 2017 | OK CC | Cause No. PUD 201700496 | Oklahoma Gas and Electric Company | Depreciation |
| 272. | 2017 | NJ BPU | ER18010029 \& GR18010030 | Public Service Electric and Gas Company | Depreciation |
| 273. | 2017 | NC Util Com. | Docket No. E-7, SUB 1146 | Duke Energy Carolinas, LLC | Depreciation |
| 274. | 2017 | KY PSC | Case No. 2017-00321 | Duke Energy Kentucky, Inc. | Depreciation |
| 275. | 2017 | MA DPU | D.P.U. 18-40 | Berkshire Gas Company | Depreciation |
| 276. | 2018 | IN IURC | Cause No. 44992 | Indiana-American Water Company, Inc. | Depreciation |
| 277. | 2018 | IN IURC | Cause No. 45029 | Indianapolis Power and Light | Depreciation |
| 278. | 2018 | NC Util Com. | Docket No. W-218, Sub 497 | Aqua North Carolina, Inc. | Depreciation |
| 279. | 2018 | PA PUC | Docket No. R-2018-2647577 | NiSource - Columbia Gas of Pennsylvania, Inc. | Depreciation |
| 280. | 2018 | OR PUC | Docket UM 1933 | Avista Corporation | Depreciation |
| 281. | 2018 | WA UTC | Docket No. UE-108167 | Avista Corporation | Depreciation |
| 282. | 2018 | ID PUC | AVU-E-18-03, AVU-G-18-02 | Avista Corporation | Depreciation |
| 283. | 2018 | IN URC | Cause No. 45039 | Citizens Energy Group | Depreciation |
| 284. | 2018 | FERC | Docket No. ER18- | Duke Energy Progress | Depreciation |
| 285. | 2018 | PA PUC | Docket No. R-2018-3000124 | Duquesne Light Company | Depreciation |
| 286. | 2018 | MD PSC | Case No. 948 | NiSource - Columbia Gas of Maryland | Depreciation |
| 287. | 2018 | MA DPU | D.P.U. 18-45 | NiSource - Columbia Gas of Massachusetts | Depreciation |
| 288. | 2018 | OH PUC | Case No. 18-0299-GA-ALT | Vectren Energy Delivery of Ohio | Depreciation |
| 289. | 2018 | PA PUC | Docket No. R-2018-3000834 | SUEZ Water Pennsylvania Inc. | Depreciation |
| 290. | 2018 | MD PSC | Case No. 9847 | Maryland-American Water Company | Depreciation |
| 291. | 2018 | PA PUC | Docket No. R-2018-3000019 | The York Water Company | Depreciation |
| 292. | 2018 | FERC | ER-18-2231-000 | Duke Energy Carolinas, LLC | Depreciation |
| 293. | 2018 | KY PSC | Case No. 2018-00261 | Duke Energy Kentucky, Inc. | Depreciation |
| 294. | 2018 | NJ BPU | BPU Docket No. WR18050593 | SUEZ Water New Jersey | Depreciation |
| 295. | 2018 | WA UTC | Docket No. UE-180778 | PacifiCorp | Depreciation |
| 296. | 2018 | UT PSC | Docket No. 18-035-36 | PacifiCorp | Depreciation |
| 297. | 2018 | OR PUC | Docket No. UM-1968 | PacifiCorp | Depreciation |
| 298. | 2018 | ID PUC | Case No. PAC-E-18-08 | PacifiCorp | Depreciation |
| 299. | 2018 | WY PSC | 20000-539-EA-18 | PacifiCorp | Depreciation |
| 300. | 2018 | PA PUC | Docket No. R-2018-3003068 | Aqua Pennsylvania, Inc. | Depreciation |


|  | Year | Jurisdiction | Docket No. | Client Utility | Subject |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 301. | 2018 | IL CC | Docket No. 18-1467 | Aqua Illinois, Inc. | Depreciation |
| 302. | 2018 | KY PSC | Case No. 2018-00294 | Louisville Gas \& Electric Company | Depreciation |
| 303. | 2018 | KY PSC | Case No. 2018-00295 | Kentucky Utilities Company | Depreciation |
| 304. | 2018 | IN URC | Cause No. 45159 | Northern Indiana Public Service Company | Depreciation |
| 305. | 2018 | VA SCC | Case No. PUR-2019-00175 | Virginia American Water Company | Depreciation |
| 306. | 2019 | PA PUC | Docket No. R-2018-3006818 | Peoples Natural Gas Company, LLC | Depreciation |
| 307. | 2019 | OK CC | Cause No. PUD201800140 | Oklahoma Gas and Electric Company | Depreciation |
| 308. | 2019 | MD PSC | Case No. 9490 | FirstEnergy - Potomac Edison | Depreciation |
| 309. | 2019 | SC PSC | Docket No. 2018-318-E | Duke Energy Progress | Depreciation |
| 310. | 2019 | SC PSC | Docket No. 2018-319-E | Duke Energy Carolinas | Depreciation |
| 311. | 2019 | DE PSC | DE 19-057 | Public Service of New Hampshire | Depreciation |
| 312. | 2019 | NY PSC | Case No. 19-W-0168 \& 19-W-0269 | SUEZ Water New York | Depreciation |
| 313. | 2019 | PA PUC | Docket No. R-2019-3006904 | Newtown Artesian Water Company | Depreciation |
| 314. | 2019 | MO PSC | ER-2019-0335 | Ameren Missouri | Depreciation |
| 315. | 2019 | MO PSC | EC-2019-0200 | KCP\&L Greater Missouri Operations Company | Depreciation |
| 316. | 2019 | MN DOC | G011/D-19-377 | Minnesota Energy Resource Corp. | Depreciation |
| 317. | 2019 | NY PSC | Case 19-E-0378 \& 19-G-0379 | New York State Electric and Gas Corporation | Depreciation |
| 318. | 2019 | NY PSC | Case 19-E-0380 \& 19-G-0381 | Rochester Gas and Electric Corporation | Depreciation |
| 319. | 2019 | WA UTC | Docket UE-190529 / UG-190530 | Puget Sound Energy | Depreciation |
| 320. | 2019 | PA PUC | Docket No. R-2019-3010955 | City of Lancaster | Depreciation |
| 321. | 2019 | IURC | Cause No. 45253 | Duke Energy Indiana | Depreciation |
| 322. | 2019 | KY PSC | Case No. 2019-00271 | Duke Energy Kentucky, Inc. | Depreciation |
| 323. | 2019 | OH PUC | Case No. 18-1720-GA-AIR | Northeast Ohio Natural Gas Corp | Depreciation |
| 324. | 2019 | NC Util. Com. | Docket No. E-2, Sub 1219 | Duke Energy Carolinas | Depreciation |
| 325. | 2019 | FERC | Docket No. ER20-277-000 | Jersey Central Power \& Light Company | Depreciation |
| 326. | 2019 | MA DPU | D.P.U. 19-120 | NSTAR Gas Company | Depreciation |
| 327. | 2019 | SC PSC | Docket No. 2019-290-WS | Blue Granite Water Company | Depreciation |
| 328. | 2019 | NC Util. Com. | Docket No. E-2, Sub 1219 | Duke Energy Progress | Depreciation |
| 329. | 2019 | MD PSC | Case No. 9609 | NiSource Columbia Gas of Maryland, Inc. | Depreciation |
| 330. | 2020 | NJ BPU | Docket No. ER20020146 | Jersey Central Power \& Light Company | Depreciation |
| 331. | 2020 | PAPUC | Docket No. R-2020-3018835 | NiSource - Columbia Gas of Pennsylvania, Inc. | Depreciation |
| 332. | 2020 | PA PUC | Docket No. R-2020-3019369 | Pennsylvania-American Water Company | Depreciation |
| 333. | 2020 | PA PUC | Docket No. R-2020-3019371 | Pennsylvania-American Water Company | Depreciation |
| 334. | 2020 | MO PSC | GO-2018-0309, GO-2018-0310 | Spire Missouri, Inc. | Depreciation |
| 335. | 2020 | NM PRC | Case No. 20-00104-UT | El Paso Electric Company | Depreciation |
| 336. | 2020 | MD PSC | Case No. 9644 | Columbia Gas of Maryland, Inc. | Depreciation |
| 337. | 2020 | MO PSC | GO-2018-0309, GO-2018-0310 | Spire Missouri, Inc. | Depreciation |
| 338. | 2020 | VA St CC | Case No. PUR-2020-00095 | Virginia Natural Gas Company | Depreciation |


|  | Year | Jurisdiction | Docket No. | Client Utility | Subject |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 339. | 2020 | SC PSC | Docket No. 2020-125-E | Dominion Energy South Carolina, Inc. | Depreciation |
| 340. | 2020 | WV PSC | Case No. 20-0745-G-D | Hope Gas, Inc. d/b/a Dominion Energy West Virginia | Depreciation |
| 341. | 2020 | VA St CC | Case No. PUR-2020-00106 | Aqua Virginia, Inc. | Depreciation |
| 342. | 2020 | PA PUC | Docket No. R-2020-3020256 | City of Bethlehem - Bureau of Water | Depreciation |
| 343. | 2020 | NE PSC | Docket No. NG-109 | Black Hills Nebraska | Depreciation |
| 344. | 2020 | NY PSC | Case No. 20-E-0428 \& 20-G-0429 | Central Hudson Gas \& Electric Corporation | Depreciation |
| 345. | 2020 | FERC | ER20-598 | Duke Energy Indiana | Depreciation |
| 346. | 2020 | FERC | ER20-855 | Northern Indiana Public Service Company | Depreciation |
| 347. | 2020 | OR PSC | UE 374 | Pacificorp | Depreciation |
| 348. | 2020 | MD PSC | Case No. 9490 Phase II | Potomac Edison - Maryland | Depreciation |
| 349. | 2020 | IN URC | Case No. 45447 | Southern Indiana Gas and Electric Company | Depreciation |
| 350. | 2020 | IN URC | IURC Cause No. 45468 | Indiana Gas Company, Inc. d/b/a Vectren Energy | Depreciation |
| 351. | 2020 | KY PSC | Case No. 2020-00349 | Kentucky Utilities Company | Depreciation |
| 352. | 2020 | KY PSC | Case No. 2020-00350 | Louisville Gas and Electric Company | Depreciation |
| 353. | 2020 | FERC | Docket No. ER21-000 | South FirstEnergy Operating Companies | Depreciation |
| 354. | 2020 | OH PUC | Case Nos 20-1651-EL-AIR, 20-1652-EL-AAM \& 20-1653-EL-ATA | Dayton Power and Light Company | Depreciation |
| 355. | 2020 | OR PSC | UG 388 | Northwest Natural Gas Company | Depreciation |
| 356. | 2020 | MO PSC | Case No. GR-2021-0241 | Ameren Missouri Gas | Depreciation |
| 357. | 2021 | KY PSC | Case No. 2021-00103 | East Kentucky Power Cooperative | Depreciation |
| 358. | 2021 | MPUC | Docket No. 2021-00024 | Bangor Natural Gas | Depreciation |
| 359. | 2021 | PA PUC | Docket No. R-2021-3024296 | Columbia Gas of Pennsylvania, Inc. | Depreciation |
| 360. | 2021 | NC Util. Com. | Doc. No. G-5, Sub 632 | Public Service of North Carolina | Depreciation |
| 361. | 2021 | MO PSC | ER-2021-0240 | Ameren Missouri | Depreciation |
| 362. | 2021 | PA PUC | Docket No. R-2021-3024750 | Duquesne Light Company | Depreciation |
| 363. | 2021 | KS PSC | 21-BHCG-418-RTS | Black Hills Kansas Gas | Depreciation |
| 364. | 2021 | KY PSC | Case No. 2021-00190 | Duke Energy Kentucky | Depreciation |
| 365. | 2021 | OR PSC | Docket UM 2152 | Portland General Electric | Depreciation |
| 366. | 2021 | ILL CC | Docket No. 20-0810 | North Shore Gas Company | Depreciation |
| 367. | 2021 | FERC | ER21-1939-000 | Duke Energy Progress | Depreciation |
| 368. | 2021 | FERC | ER21-1940-000 | Duke Energy Carolina | Depreciation |
| 369. | 2021 | KY PSC | Case No. 2021-00183 | NiSource Columbia Gas of Kentucky | Depreciation |
| 370. | 2021 | MD PSC | Case No. 9664 | NiSource Columbia Gas of Maryland | Depreciation |
| 371. | 2021 | OH PUC | Case No. 21-0596-ST-AIR | Aqua Ohio | Depreciation |
| 372. | 2021 | PA PUC | Docket No. R-2021-3026116 | Hanover Borough Municipal Water Works | Depreciation |
| 373. | 2021 | OR PSC | UM-2180 | Idaho Power Company | Depreciation |
| 374. | 2021 | ID PUC | Case No. IPC-E-21-18 | Idaho Power Company | Depreciation |
| 375. | 2021 | WPSC | 6690-DU-104 | Wisconsin Public Service Company | Depreciation |


|  | Year | Jurisdiction | Docket No. |
| :---: | :---: | :---: | :---: |
|  | 2021 | PAPUC | Docket No. R-2021-3026116 |
| $\begin{aligned} & 376 . \\ & 377 . \end{aligned}$ | 2021 | OH PUC | Case No. 21-637-GA-AIR; |
|  |  |  | Case No. 21-638-GA-ALT; |
|  |  |  | Case No. 21-639-GA-UNC; |
|  |  |  | Case No. 21-640-GA-AAM |
| 378. | 2021 | TX PUC | Texas PUC Docket No. 52195; |
|  |  |  | SOHA Docket No. 473-21-2606 |
| 379. | 2021 | MO PSC | Case No. GR.2021-0108 |
| 380. | 2021 | WV PSC | Case No. 21-0215-WS-P |
| 381. | 2021 | FERC | ER21-2736 |
| 382. | 2021 | FERC | ER21-2737 |
| 383. | 2021 | IN URC | Cause \#45621 |
| 384. | 2021 | PA PUC | Docket No. R-2021-3026682 |
| 385. | 2021 | OH PUC | Case No. 21-887-EL-AIR; |
|  |  |  | Case No. 21-888-EL-ATA; |
|  |  |  | Case No. 889-EI-AAM |

Client Utility
Borough of Hanover
NiSource Columbia Gas of Ohio

El Paso Electric Depreciation
Spire Missouri Depreciation
West Virginia American Water Company Depreciation
Duke Energy Carolinas
Duke Energy Progress
Northern Indiana Public Service Company
City of Lancaster
Duke Energy Ohio

Subject
Depreciation
Depreciation

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Depreciation


El Paso Electric

# 2019 DEPRECIATION STUDY 

## CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO ELECTRIC PLANT AS OF DECEMBER 31, 2019

Prepared by:

## Gannett Fleming

# EL PASO ELECTRIC COMPANY EL PASO, TEXAS 

# CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO ELECTRIC PLANT AS OF DECEMBER 31, 2019 

# Gannett Fleming 

Excellence Delivered As Promised

May 13, 2020

## El Paso Electric Company

 100 N. Stanton StreetEl Paso, TX 79901-1463

Attention Mr. Nathan T. Hirschi<br>Senior Vice President and Chief Financial Officer

Ladies and Gentlemen:
Pursuant to your request, we have conducted a depreciation study related to the electric plant of El Paso Electric Company as of December 31, 2019. The attached report presents a description of the methods used in the estimation of depreciation, the summary of annual depreciation accrual rates, the statistical support for the life and net salvage estimates and the detailed tabulations of annual depreciation.

We gratefully acknowledge the assistance of El Paso Electric personnel in the conduct of this study.

Respectfully submitted,

## GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC



JOHN J. SPANOS
President

JJS:mle
066756.000

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## EL PASO ELECTRIC COMPANY

## DEPRECIATION STUDY

## EXECUTIVE SUMMARY

Pursuant to El Paso Electric Company’s ("El Paso" or "Company") request, Gannett Fleming Valuation and Rate Consultants, LLC ("Gannett Fleming") conducted a depreciation study related to the electric plant as of December 31, 2019. The purpose of this study was to determine the annual depreciation accrual rates and amounts for book and ratemaking purposes.

The depreciation rates are based on the straight line method using the average service life ("ASL") procedure and were applied on a remaining life basis. The calculations were based on attained ages and estimated average service life, and net salvage characteristics for each depreciable group of assets.

El Paso's accounting policy has not changed since the last depreciation study was prepared. However, there has been significant change in expected life stages of generating facilities, recording retirements of assets as well as the associated cost of removal and gross salvage. These changes have caused the proposed depreciation rates in the depreciation study to change from those currently-approved from the last depreciation study as of December 31, 2014.

Gannett Fleming recommends the calculated annual depreciation accrual rates set forth herein apply specifically to electric plant in service as of December 31, 2019 as summarized by Table 1 of the study. Supporting analysis and calculations are provided within the study.

The study results set forth an annual depreciation expense of $\$ 86.0$ million when applied to depreciable plant balances as of December 31, 2019. The results are summarized at the functional level as follows:

## SUMMARY OF ORIGINAL COST, ACCRUAL RATES AND AMOUNTS

| FUNCTION | $\begin{gathered} \text { ORIGINAL COST } \\ \text { AS OF } \\ \text { DECEMBER 31, } 2019 \\ \hline \end{gathered}$ | PROPOSED RATE | PROPOSED EXPENSE |
| :---: | :---: | :---: | :---: |
| Steam Production Plant | \$565,455,714.90 | 3.77 | \$21,326,362 |
| Gas Turbine Plant | 518,021,062.99 | 3.71 | 19,226,357 |
| Transmission Plant | 532,343,333.89 | 1.70 | 9,023,893 |
| Distribution Plant | 1,347,787,849.28 | 2.21 | 29,846,554 |
| General Plant | 171,715,518.71 | 3.84 | 6,601,194 |
| Total | \$3,135,323,479.77 | 2.74 | \$86,024,360 |

## PART I. INTRODUCTION

# EL PASO ELECTRIC COMPANY DEPRECIATION STUDY 

## PART I. INTRODUCTION

## SCOPE

This report sets forth the results of the depreciation study for El Paso Electric Company ("El Paso"), to determine the annual depreciation accrual rates and amounts for book purposes applicable to the original cost of electric plant as of December 31, 2019. The rates and amounts are based on the straight line remaining life method of depreciation. This report also describes the concepts, methods and judgments which underlie the recommended annual depreciation accrual rates related to electric plant in service as of December 31, 2019.

The service life and net salvage estimates resulting from the study were based on informed judgment which incorporated analyses of historical plant retirement data as recorded through 2019, a review of Company practice and outlook as they relate to plant operation and retirement, and consideration of current practice in the electric industry, including knowledge of service lives and net salvage estimates used for other electric companies.

## PLAN OF REPORT

Part I, Introduction, contains statements with respect to the plan of the report, and the basis of the study. Part II, Estimation of Survivor Curves, presents descriptions of the considerations and the methods used in the service life and net salvage studies. Part III, Service Life Considerations, presents the factors and judgment utilized in the average service life analysis. Part IV, Net Salvage Considerations, presents the judgment utilized for the net salvage study. Part V, Calculation of Annual and Accrued Depreciation, describes the procedures used in the calculation of group depreciation.

Part VI, Results of Study, presents summaries by depreciable group of annual depreciation accrual rates and amounts, as well as composite remaining lives. Part VII, Service Life Statistics presents the statistical analysis of service life estimates, Part VIII, Net Salvage Statistics sets forth the statistical indications of net salvage percents, and Part IX, Detailed Depreciation Calculations presents the detailed tabulations of annual depreciation.

## BASIS OF THE STUDY

## Depreciation

Depreciation, in public utility regulation, is the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of utility plant in the course of service from causes which are known to be in current operation and against which the utility is not protected by insurance. Among causes to be given consideration are wear and tear, deterioration, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand, and the requirements of public authorities.

Depreciation, as used in accounting, is a method of distributing fixed capital costs, less net salvage, over a period of time by allocating annual amounts to expense. Each annual amount of such depreciation expense is part of that year's total cost of providing electric utility service. Normally, the period of time over which the fixed capital cost is allocated to the cost of service is equal to the period of time over which an item renders service, that is, the item's service life. The most prevalent method of allocation is to distribute an equal amount of cost to each year of service life. This method is known as the straight-line method of depreciation.

For most accounts, the annual depreciation was calculated by the straight line method using the average service life procedure and the remaining life basis. For
certain General Plant accounts, the annual depreciation is based on amortization accounting. Both types of calculations were based on original cost, attained ages, and estimates of service lives and net salvage.

The straight line method, average service life procedure is a commonly used depreciation calculation procedure that has been widely accepted in jurisdictions throughout North America. Gannett Fleming recommends its continued use. Amortization accounting is used for certain General Plant accounts because of the disproportionate plant accounting effort required when compared to the minimal original cost of the large number of items in these accounts. An explanation of the calculation of annual and accrued amortization is presented beginning on page V -4 of the report.

## Service Life and Net Salvage Estimates

The service life and net salvage estimates used in the depreciation and amortization calculations were based on informed judgment which incorporated a review of management's plans, policies and outlook, a general knowledge of the electric utility industry, and comparisons of the service life and net salvage estimates from our studies of other electric utilities. The use of survivor curves to reflect the expected dispersion of retirement provides a consistent method of estimating depreciation for electric plant. lowa type survivor curves were used to depict the estimated survivor curves for the plant accounts not subject to amortization accounting.

The procedure for estimating service lives consisted of compiling historical data for the plant accounts or depreciable groups, analyzing this history through the use of widely accepted techniques, and forecasting the survivor characteristics for each depreciable group on the basis of interpretations of the historical data analyses and the probable future. The combination of the historical experience and the estimated future yielded estimated survivor curves from which the average service lives were derived.

## PART II. ESTIMATION OF SURVIVOR CURVES

## PART II. ESTIMATION OF SURVIVOR CURVES

The calculation of annual depreciation based on the straight line method requires the estimation of survivor curves and the selection of group depreciation procedures. The estimation of survivor curves is discussed below and the development of net salvage is discussed in later sections of this report.

## SURVIVOR CURVES

The use of an average service life for a property group implies that the various units in the group have different lives. Thus, the average life may be obtained by determining the separate lives of each of the units, or by constructing a survivor curve by plotting the number of units which survive at successive ages.

The survivor curve graphically depicts the amount of property existing at each age throughout the life of an original group. From the survivor curve, the average life of the group, the remaining life expectancy, the probable life, and the frequency curve can be calculated. In Figure 1, a typical smooth survivor curve and the derived curves are illustrated. The average life is obtained by calculating the area under the survivor curve, from age zero to the maximum age, and dividing this area by the ordinate at age zero. The remaining life expectancy at any age can be calculated by obtaining the area under the curve, from the observation age to the maximum age, and dividing this area by the percent surviving at the observation age. For example, in Figure 1, the remaining life at age 30 is equal to the crosshatched area under the survivor curve divided by 29.5 percent surviving at age 30 . The probable life at any age is developed by adding the age and remaining life. If the probable life of the property is calculated for each year of age, the probable life curve shown in the chart can be developed. The frequency curve presents the number of units retired in each age interval. It is derived by obtaining the
differences between the amount of property surviving at the beginning and at the end of each interval.

This study has incorporated the use of lowa curves developed from a retirement rate analysis of historical retirement history. A discussion of the concepts of survivor curves and of the development of survivor curves using the retirement rate method is presented below.

## Iowa Type Curves

The range of survivor characteristics usually experienced by utility and industrial properties is encompassed by a system of generalized survivor curves known as the lowa type curves. There are four families in the lowa system, labeled in accordance with the location of the modes of the retirements in relationship to the average life and the relative height of the modes. The left moded curves, presented in Figure 2, are those in which the greatest frequency of retirement occurs to the left of, or prior to, average service life. The symmetrical moded curves, presented in Figure 3, are those in which the greatest frequency of retirement occurs at average service life. The right moded curves, presented in Figure 4, are those in which the greatest frequency occurs to the right of, or after, average service life. The origin moded curves, presented in Figure 5, are those in which the greatest frequency of retirement occurs at the origin, or immediately after age zero. The letter designation of each family of curves (L, S, R or O) represents the location of the mode of the associated frequency curve with respect to the average service life. The numbers represent the relative heights of the modes of the frequency curves within each family.

The lowa curves were developed at the lowa State College Engineering Experiment Station through an extensive process of observation and classification of the ages at which industrial property had been retired. A report of the study which resulted in the classification of property survivor characteristics into 18 type curves,


Figure 1. A Typical Survivor Curve and Derived Curves


Figure 2. Left Modal or "L" Iowa Type Survivor Curves

Figure 3. Symmetrical or "S" Iowa Type Survivor Curves


Figure 4. Right Modal or "R" Iowa Type Survivor Curves


Figure 5. Origin Modal or "O" Iowa Type Survivor Curves
which constitute three of the four families, was published in 1935 in the form of the Experiment Station's Bulletin 125. These curve types have also been presented in subsequent Experiment Station bulletins and in the text, "Engineering Valuation and Depreciation." ${ }^{1}$ In 1957, Frank V. B. Couch, Jr., an Iowa State College graduate student submitted a thesis presenting his development of the fourth family consisting of the four O type survivor curves.

## Retirement Rate Method of Analysis

The retirement rate method is an actuarial method of deriving survivor curves using the average rates at which property of each age group is retired. The method relates to property groups for which aged accounting experience is available and is the method used to develop the original stub survivor curves in this study. The method (also known as the annual rate method) is illustrated through the use of an example in the following text, and is also explained in several publications, including "Statistical Analyses of Industrial Property Retirements," ${ }^{2}$ "Engineering Valuation and Depreciation," ${ }^{3}$ and "Depreciation Systems."4

The average rate of retirement used in the calculation of the percent surviving for the survivor curve (life table) requires two sets of data: first, the property retired during a period of observation, identified by the property's age at retirement; and second, the property exposed to retirement at the beginning of the age intervals during the same period. The period of observation is referred to as the experience band, and the band of years which represent the installation dates of the property exposed to retirement during the experience band is referred to as the placement band. An example of the calculations used in the development of a life table follows. The example includes

[^111]schedules of annual aged property transactions, a schedule of plant exposed to retirement, a life table and illustrations of smoothing the stub survivor curve.

## Schedules of Annual Transactions in Plant Records

The property group used to illustrate the retirement rate method is observed for the experience band 2010-2019 during which there were placements during the years 2005-2019. In order to illustrate the summation of the aged data by age interval, the data were compiled in the manner presented in Schedules 1 and 2 on pages II-11 and II-12. In Schedule 1, the year of installation (year placed) and the year of retirement are shown. The age interval during which a retirement occurred is determined from this information. In the example which follows, \$10,000 of the dollars invested in 2005 were retired in 2010. The $\$ 10,000$ retirement occurred during the age interval between $41 / 2$ and $51 / 2$ years on the basis that approximately one-half of the amount of property was installed prior to and subsequent to July 1 of each year. That is, on the average, property installed during a year is placed in service at the midpoint of the year for the purpose of the analysis. All retirements also are stated as occurring at the midpoint of a one-year age interval of time, except the first age interval which encompasses only onehalf year.

The total retirements occurring in each age interval in a band are determined by summing the amounts for each transaction year-installation year combination for that age interval. For example, the total of $\$ 143,000$ retired for age interval $4 \frac{1}{2}-5 \frac{1}{2}$ is the sum of the retirements entered on Schedule 1 immediately above the stair step line drawn on the table beginning with the 2010 retirements of 2005 installations and ending with the 2019 retirements of the 2014 installations. Thus, the total amount of 143 for age interval $41 / 2-51 / 2$ equals the sum of:

$$
10+12+13+11+13+13+15+17+19+20
$$

SCHEDULE 1. RETIREMENTS FOR EACH YEAR 2010-2019
Placement Band 2005-2019

SCHEDULE 2. OTHER TRANSACTIONS FOR EACH YEAR 2010-2019 SUMMARIZED BY AGE INTERVAL
6เ0乙-G00乙 pueg łuәسəorld

|  | Acquisitions, Transfers and Sales, Thousands of Dollars |  |  |  |  |  |  |  |  |  | Total During Age Interval | Age Interval |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | During Year |  |  |  |  |  |  |  |  |  |  |  |
| Year <br> Placed | $\underline{2010}$ | $\underline{2011}$ | $\underline{2012}$ | $\underline{2013}$ | $\underline{2014}$ | $\underline{2015}$ | $\underline{2016}$ | $\underline{2017}$ | $\underline{2018}$ | $\underline{2019}$ |  |  |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) |
| 2005 | - | - | - | - | - | - | $60^{\text {a }}$ | - | - | - | - | $131 / 2-141 / 2$ |
| 2006 | - | - | - | - | - | - | - | - | - | - | - | $12^{1 / 2}-13^{1 / 2}$ |
| 2007 | - | - | - | - | - | - | - | - | - | - | - | $111 / 2-11^{1} / 2$ |
| 2008 | - | - | - | - | - | - | - | $(5)^{\text {b }}$ | - | - | 60 | $101 / 2-111 / 2$ |
| 2009 | - | - | - | - | - | - | - | $6^{\text {a }}$ | - | - | - | 91/2-101/2 |
| 2010 | - | - | - | - | - | - | - | - | - | - | (5) | $81 / 2-91 / 2$ |
| 2011 |  | - | - | - | - | - | - | - | - | - | 6 | $71 / 2-81 / 2$ |
| 2012 |  |  | - | - | - | - | - | - | - | - | - | $61 / 2-71 / 2$ |
| 2013 |  |  |  | - | - | - | - | $(12)^{\text {b }}$ | - | - | - | 51/2-61/2 |
| 2014 |  |  |  |  | - | - | - | - | $22^{\text {a }}$ | - | - | $41 / 2-51 / 2$ |
| 2015 |  |  |  |  |  | - | - | $(19)^{\text {b }}$ | - | - | 10 | $31 / 2-41 / 2$ |
| 2016 |  |  |  |  |  |  | - | - | - | - | - | 21/2-31/2 |
| 2017 |  |  |  |  |  |  |  | - | - | $(102){ }^{\text {c }}$ | (121) | $11 / 2-21 / 2$ |
| 2018 |  |  |  |  |  |  |  |  | - | - | - | 1/2-11/2 |
| 2019 |  |  |  |  |  |  |  |  |  |  | - | 0-1/2 |
| Total | - | - | - | - | - | - | 60 | (30) | 22 | (102) | (50) |  |

${ }^{\text {a }}$ Transfer Affecting Exposures at Beginning of Year
${ }^{\mathrm{b}}$ Transfer Affecting Exposures at End of Year
${ }^{\text {c }}$ Sale with Continued Use
Parentheses Denote Credit Amount.

In Schedule 2, other transactions which affect the group are recorded in a similar manner. The entries illustrated include transfers and sales. The entries which are credits to the plant account are shown in parentheses. The items recorded on this schedule are not totaled with the retirements, but are used in developing the exposures at the beginning of each age interval.

## Schedule of Plant Exposed to Retirement

The development of the amount of plant exposed to retirement at the beginning of each age interval is illustrated in Schedule 3 on page II-14. The surviving plant at the beginning of each year from 2010 through 2019 is recorded by year in the portion of the table headed "Annual Survivors at the Beginning of the Year." The last amount entered in each column is the amount of new plant added to the group during the year. The amounts entered in Schedule 3 for each successive year following the beginning balance or addition are obtained by adding or subtracting the net entries shown on Schedules 1 and 2. For the purpose of determining the plant exposed to retirement, transfers-in are considered as being exposed to retirement in this group at the beginning of the year in which they occurred, and the sales and transfers-out are considered to be removed from the plant exposed to retirement at the beginning of the following year. Thus, the amounts of plant shown at the beginning of each year are the amounts of plant from each placement year considered to be exposed to retirement at the beginning of each successive transaction year. For example, the exposures for the installation year 2015 are calculated in the following manner:

| Exposures at age $0=$ amount of addition | $=\$ 750,000$ |
| :--- | :--- |
| Exposures at age $1 / 2=\$ 750,000-\$ 8,000$ | $=\$ 742,000$ |
| Exposures at age $11 / 2=\$ 742,000-\$ 18,000$ | $=\$ 724,000$ |
| Exposures at age $21 / 2=\$ 724,000-\$ 20,000-\$ 19,000$ | $=\$ 685,000$ |
| Exposures at age $3112=\$ 685,000-\$ 22,000$ | $=\$ 663,000$ |

SCHEDULE 3. PLANT EXPOSED TO RETIREMENT


| Year Placed | Exposures, Thousands of Dollars |  |  |  |  |  |  |  |  |  | Total at Beginning of Age Interval |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Annual Survivors at the Beginning of the Year |  |  |  |  |  |  |  |  |  |  |
|  | $\underline{2010}$ | $\underline{2011}$ | $\underline{2012}$ | $\underline{2013}$ | $\underline{2014}$ | $\underline{2015}$ | $\underline{2016}$ | $\underline{2017}$ | $\underline{2018}$ | $\underline{2019}$ |  |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) |
| 2005 | 255 | 245 | 234 | 222 | 209 | 195 | 239 | 216 | 192 | 167 | 167 |
| 2006 | 279 | 268 | 256 | 243 | 228 | 212 | 194 | 174 | 153 | 131 | 323 |
| 2007 | 307 | 296 | 284 | 271 | 257 | 241 | 224 | 205 | 184 | 162 | 531 |
| 2008 | 338 | 330 | 321 | 311 | 300 | 289 | 276 | 262 | 242 | 226 | 823 |
| 2009 | 376 | 367 | 357 | 346 | 334 | 321 | 307 | 297 | 280 | 261 | 1,097 |
| 2010 | 420a | 416 | 407 | 397 | 386 | 374 | 361 | 347 | 332 | 316 | 1,503 |
| 2011 |  | $460{ }^{\text {a }}$ | 455 | 444 | 432 | 419 | 405 | 390 | 374 | 356 | 1,952 |
| 2012 |  |  | 510a | 504 | 492 | 479 | 464 | 448 | 431 | 412 | 2,463 |
| 2013 |  |  |  | 580 ${ }^{\text {a }}$ | 574 | 561 | 546 | 530 | 501 | 482 | 3,057 |
| 2014 |  |  |  |  | $660{ }^{\text {a }}$ | 653 | 639 | 623 | 628 | 609 | 3,789 |
| 2015 |  |  |  |  |  | 750a | 742 | 724 | 685 | 663 | 4,332 |
| 2016 |  |  |  |  |  |  | $850{ }^{\text {a }}$ | 841 | 821 | 799 | 4,955 |
| 2017 |  |  |  |  |  |  |  | 960 ${ }^{\text {a }}$ | 949 | 926 | 5,719 |
| 2018 |  |  |  |  |  |  |  |  | 1,080 ${ }^{\text {a }}$ | 1,069 | 6,579 |
| 2019 |  |  |  |  |  |  |  |  |  | 1,220 ${ }^{\text {a }}$ | 7,490 |
| Total | $\underline{\underline{1,975}}$ | $\underline{\underline{2,382}}$ | $\underline{\underline{2,824}}$ | $\underline{\underline{3,318}}$ | $\underline{\underline{3,872}}$ | $\underline{\underline{4,494}}$ | $\underline{\underline{5,247}}$ | $\underline{\underline{6,017}}$ | $\underline{\underline{6,852}}$ | $\underline{\underline{7,799}}$ | 44,780 |

aAdditions during the year

For the entire experience band 2010-2019, the total exposures at the beginning of an age interval are obtained by summing diagonally in a manner similar to the summing of the retirements during an age interval (Schedule 1). For example, the figure of 3,789 , shown as the total exposures at the beginning of age interval $41 / 2-51 / 2$, is obtained by summing:

$$
255+268+284+311+334+374+405+448+501+609 .
$$

## Original Life Table

The original life table, illustrated in Schedule 4 on page II-16, is developed from the totals shown on the schedules of retirements and exposures, Schedules 1 and 3, respectively. The exposures at the beginning of the age interval are obtained from the corresponding age interval of the exposure schedule, and the retirements during the age interval are obtained from the corresponding age interval of the retirement schedule. The retirement ratio is the result of dividing the retirements during the age interval by the exposures at the beginning of the age interval. The percent surviving at the beginning of each age interval is derived from survivor ratios, each of which equals one minus the retirement ratio. The percent surviving is developed by starting with $100 \%$ at age zero and successively multiplying the percent surviving at the beginning of each interval by the survivor ratio, i.e., one minus the retirement ratio for that age interval. The calculations necessary to determine the percent surviving at age $51 / 2$ are as follows:

| Percent surviving at age $41 / 2$ | $=88.15$ |  |
| :--- | :--- | ---: |
| Exposures at age $41 / 2$ | $=3,789,000$ |  |
| Retirements from age $41 / 2$ to $51 / 2$ | $=143,000$ |  |
| Retirement Ratio | $=$ | $143,000 \div 3,789,000=0.0377$ |
| Survivor Ratio | $=$ | $1.000-0.0377=0.9623$ |
| Percent surviving at age $51 / 2$ | $=$ | $(88.15) \times(0.9623)=84.83$ |

The totals of the exposures and retirements (columns 2 and 3) are shown for the purpose of checking with the respective totals in Schedules 1 and 3. The ratio of the total retirements to the total exposures, other than for each age interval, is meaningless.

## SCHEDULE 4. ORIGINAL LIFE TABLE

 CALCULATED BY THE RETIREMENT RATE METHOD(Exposure and Retirement Amounts are in Thousands of Dollars)

| Age at Beginning of Interval | Exposures at Beginning of Age Interval | Retirements During Age Interval | Retirement Ratio | Survivor Ratio | Percent Surviving at Beginning of Age Interval |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (1) | (2) | (3) | (4) | (5) | (6) |
| 0.0 | 7,490 | 80 | 0.0107 | 0.9893 | 100.00 |
| 0.5 | 6,579 | 153 | 0.0233 | 0.9767 | 98.93 |
| 1.5 | 5,719 | 151 | 0.0264 | 0.9736 | 96.62 |
| 2.5 | 4,955 | 150 | 0.0303 | 0.9697 | 94.07 |
| 3.5 | 4,332 | 146 | 0.0337 | 0.9663 | 91.22 |
| 4.5 | 3,789 | 143 | 0.0377 | 0.9623 | 88.15 |
| 5.5 | 3,057 | 131 | 0.0429 | 0.9571 | 84.83 |
| 6.5 | 2,463 | 124 | 0.0503 | 0.9497 | 81.19 |
| 7.5 | 1,952 | 113 | 0.0579 | 0.9421 | 77.11 |
| 8.5 | 1,503 | 105 | 0.0699 | 0.9301 | 72.65 |
| 9.5 | 1,097 | 93 | 0.0848 | 0.9152 | 67.57 |
| 10.5 | 823 | 83 | 0.1009 | 0.8991 | 61.84 |
| 11.5 | 531 | 64 | 0.1205 | 0.8795 | 55.60 |
| 12.5 | 323 | 44 | 0.1362 | 0.8638 | 48.90 |
| 13.5 | 167 | 26 | 0.1557 | 0.8443 | 42.24 |
|  |  |  |  |  | 35.66 |
| Total | 44,780 | 1,606 |  |  |  |

Column 2 from Schedule 3, Column 12, Plant Exposed to Retirement. Column 3 from Schedule 1, Column 12, Retirements for Each Year.
Column 4 = Column 3 Divided by Column 2.
Column $5=1.0000$ Minus Column 4 .
Column $6=$ Column 5 Multiplied by Column 6 as of the Preceding Age Interval.

The original survivor curve is plotted from the original life table (column 6, Schedule 4). When the curve terminates at a percent surviving greater than zero, it is called a stub survivor curve. Survivor curves developed from retirement rate studies generally are stub curves.

## Smoothing the Original Survivor Curve

The smoothing of the original survivor curve eliminates any irregularities and serves as the basis for the preliminary extrapolation to zero percent surviving of the original stub curve. Even if the original survivor curve is complete from $100 \%$ to zero percent, it is desirable to eliminate any irregularities, as there is still an extrapolation for the vintages which have not yet lived to the age at which the curve reaches zero percent. In this study, the smoothing of the original curve with established type curves was used to eliminate irregularities in the original curve.

The lowa type curves are used in this study to smooth those original stub curves which are expressed as percents surviving at ages in years. Each original survivor curve was compared to the lowa curves using visual and mathematical matching in order to determine the better fitting smooth curves. In Figures 6, 7, and 8, the original curve developed in Table 4 is compared with the $L$, $S$, and $R$ lowa type curves which most nearly fit the original survivor curve. In Figure 6, the L1 curve with an average life between 12 and 13 years appears to be the best fit. In Figure 7, the S0 type curve with a 12-year average life appears to be the best fit and appears to be better than the L1 fitting. In Figure 8, the R1 type curve with a 12-year average life appears to be the best fit and appears to be better than either the L1 or the S0.

In Figure 9, the three fittings, 12-L1, 12-S0 and 12-R1 are drawn for comparison purposes. It is probable that the 12-R1 lowa curve would be selected as the most representative of the plotted survivor characteristics of the group.


## PART III. SERVICE LIFE CONSIDERATIONS

## PART III. SERVICE LIFE CONSIDERATIONS

## FIELD TRIPS

In order to be familiar with the operation of the Company and observe representative portions of the plant, a field trip was conducted for the study. A general understanding of the function of the plant and information with respect to the reasons for past retirements and the expected future causes of retirements are obtained during field trips. This knowledge and information were incorporated in the interpretation and extrapolation of the statistical analyses.

The following is a list of the locations visited during the most recent field trips.
February 24, 2020
East Side Distribution Operations Center
Montana Power Substation
Montana Power Generating Facility
Caliente Substation
Pelicano Substation
Newman Generating Station
Rio Grande Generating Station
August 18, 2014
Newman Generating Station
Rio Grande Generating Station
Stanton Tower
August 19, 2014
Wrangler Substation
Wrangler Solar Facility
Diamond Head Substation
East Side Distribution Operations Center
Montana Power Generating Facility
Montana Power Substation
February 9, 2009
Vanderbilt Service Center
Vista Substation
Wrangler Substation
Hawkins Service Center
Copper Training Center
Copper Combustion Station

Roland Lucky Building
Stanton Building
February 10, 2009
Rio Grande Generating Station
Systems Operating Center
Newman Generation Station
February 19, 2003
Newman Generating Station
Systems Operating Center
Rio Grande Generating Station
501 Engineering Building
Centre Building
February 20, 2003
Sante Fe Building
Ascarate Substation
Copper Combustion Station
Copper Substation
Copper Training Facility
Hawkins Warehouse
Montwood Substation
Caliente Substation

## SERVICE LIFE ANALYSIS

The service life estimates were based on informed judgment which considered a number of factors. The primary factors were the statistical analyses of data; current Company policies and outlook as determined during conversations with management; and the survivor curve estimates from previous studies of this company and other electric companies.

For many of the plant accounts for which survivor curves were estimated, the statistical analyses using the retirement rate method resulted in good to excellent indications of the survivor patterns experienced. These accounts represent 63 percent of depreciable plant. Generally, the information external to the statistics led to no significant departure from the indicated survivor curves for the accounts listed below.

The statistical support for the service life estimates is presented in the section beginning on page VII-2.

Account No. Account Description
STEAM PLANT
312 Boiler Plant Equipment
316
Miscellaneous Power Plant Equipment
TRANSMISSION PLANT
352
353
355
Structures and Improvements
Station Equipment
Wood and Steel Poles
DISTRIBUTION PLANT
362 Station Equipment
364 Poles, Towers and Fixtures
365 Overhead Conductors and Devices
366 Underground Conduit
367 Underground Conductors and Devices
368 Line Transformers
370 Meters
371 Installations on Customers' Premises
GENERAL PLANT
$390 \quad$ Structures and Improvements - Minor Structures
396 Power Operated Equipment

Account 312, Boiler Plant Equipment, is used to illustrate the manner in which the study was conducted for the generating plant. Aged plant accounting data have been compiled for the years 1993 through 2019. These data have been coded in the course of the Company's normal record keeping according to account or property group, type of transaction, year in which the transaction took place, and year in which the electric plant was placed in service. The retirements, other plant transactions, and plant additions were analyzed by the retirement rate method.

The survivor curve estimate is based on the statistical indications for the period 1993 through 2019. The lowa 70-R4 is a reasonable fit of the original interim survivor curve. The 70 -year service life for interim retirements is reasonable for assets in this account. The 70 -year life is shorter than the 80 -year life previously used by the Company.

Account 364, Poles, Towers and Fixtures, is used to illustrate the manner in which the study was conducted for the mass accounts. Aged retirement and other plant accounting data were compiled through the year 2019. These data were coded in the course of the Company's normal recordkeeping according to plant account or property group, type of transaction, year in which the transaction took place, and year in which the electric plant was placed in service. The data were analyzed by the retirement rate method of life analysis. The survivor curve chart for the account is presented on page VII-67 and the life table for the experience band plotted on the chart follows it.

The historical service life indication for Account 364, Poles, Towers and Fixtures is the $45-\mathrm{R} 3$ based on the experience band, 1993-2019. The prior survivor curve estimate for Account 364, Poles, Towers and Fixtures was also the 45-R3. Typical service lives for poles of other electric companies range from 40 to 55 years. The lowa $45-R 3$ survivor curve reflects the outlook of management, is within the range of service life estimates used by other electric companies and is a reasonable interpretation of the significant portion of the stub survivor curves through age 62

For Account 365, Overhead Conductors and Devices, the estimate of survivor characteristics is based on the 1993-2019 experience band. Most retirements have
been due to inadequacy or voltage conversions. Typical service lives for overhead conductors range from 40 to 55 years. The lowa 48 -R2. 5 survivor curve is within the range of other estimates, is a reasonable interpretation of the significant portions of the survivor curves through age 70 and reflects the outlook of management.

## Life Span Estimates

The life span technique was used for the Company's Generation accounts. The life span procedure is appropriate for these accounts since all of the assets within the plant will be retired concurrently. Probable retirement dates were estimated for each power plant. Life spans for each Generating Station were estimated based on discussions with management regarding future outlook, age and condition of the plant and life spans typically experienced and estimated for similar plants. The life span and probable retirement dates used for each generating unit are as follows:

|  | Major <br> Year in <br> Depreciable Group | Probable <br> Service | Retirement <br> Year |  |
| :--- | :--- | :--- | :--- | :--- | Life Span

Power plants typically are retired when there are other units that can generate electricity at a lower cost. Typical life spans for base load, steam power plants have been 50 to 65 years in the past. For example, Units 6,7 and 8 at Rio Grande were completed in 1957, 1958 and 1973, respectively. The estimated probable retirement dates for Rio Grande are 2021, 2022 and 2033. Thus, the life spans estimated for the Rio Grande steam units are 64 years for Unit 6, 64 years for Unit 7 and 60 years for Unit 8, which are within the typical range. The estimated retirement dates should not be interpreted as commitments to retire these plants on these dates, but rather, as reasonable estimates subject to modification in the future as circumstances dictate. However, environmental regulations will impact decisions for closures which will lead to shorter life spans for facilities built in recent years.

For all Production accounts, an interim survivor curve was estimated for each account, since interim retirements, i.e., retirements prior to the final retirement, are experienced in such accounts.

Similar studies were performed for the remaining plant accounts. Each of the judgments represented a consideration of statistical analyses of aged plant activity, management's outlook for the future, and the typical range of lives used by other electric companies.

The selected amortization periods for other General Plant accounts are described in the section "Calculated Annual and Accrued Amortization."

## PART IV. NET SALVAGE CONSIDERATIONS

## PART IV. NET SALVAGE CONSIDERATIONS

## SALVAGE ANALYSIS

The estimates of net salvage by account were based in part on historical data compiled for the years 1993 through 2019. Cost of removal and salvage were expressed as percents of the original cost of plant retired, both on annual and threeyear moving average bases. The most recent five-year average also was calculated for consideration. The net salvage estimates by account are expressed as a percent of the original cost of plant retired.

## Net Salvage Considerations

The estimates of future net salvage are expressed as percentages of surviving plant in service, i.e., all future retirements. In cases in which removal costs are expected to exceed salvage receipts, a negative net salvage percentage is estimated. The net salvage estimates were based on judgment which incorporated analyses of historical cost of removal and salvage data, expectations with respect to future removal requirements and markets for retired equipment and materials.

The analyses of historical cost of removal and salvage data are presented in the section titled "Net Salvage Statistics" for the plant accounts for which the net salvage estimate relied partially on those analyses.

Statistical analyses of historical data for the period 1993 through 2019 contributed significantly toward the net salvage estimates for 14 plant accounts, representing 49 percent of the depreciable plant, as follows:

STEAM PRODUCTION PLANT
$312.00 \quad$ Boiler Plant Equipment
$314.00 \quad$ Turbogenerator Units
315.00 Accessory Electric Equipment
316.00 Miscellaneous Power Plant Equipment

TRANSMISSION PLANT<br>$353.00 \quad$ Station Equipment<br>$355.00 \quad$ Wood and Steel Poles<br>356.00 Overhead Conductors and Devices<br>DISTRIBUTION PLANT<br>$365.00 \quad$ Overhead Conductors and Devices<br>$367.00 \quad$ Underground Conductors and Devices<br>368.00 Line Transformers<br>370.00 Meters<br>371.00 Installations on Customers' Premises<br>$373.00 \quad$ Street Lighting and Signal Systems<br>GENERAL PLANT<br>$396.00 \quad$ Power Operated Equipment

Account 367, Underground Conductors and Devices, will be used to illustrate the manner in which the study was conducted for most mass plant accounts. Net salvage data were compiled for the years 1993 through 2019. These data include the retirements, cost of removal and gross salvage.

Discussions with management indicated that retired underground conductors are either reused or sold for scrap. The previous estimate of net salvage for underground conductors was negative 15 percent. The range of typical net salvage estimates used by other electric companies for underground conductors is negative 10 percent to negative 25 percent.

The net salvage estimate for this account is negative 20 percent and is based on the current practices in place for recording cost of removal and gross salvage. Cost of removal as a percent of the original cost retired averaged around 35 percent through the 1990s, then went to 0 percent starting in 2002 when practices changed. In 2013, a new practice for recording cost of removal was started and will continue into the future. Gross salvage was generally between 5 and 30 percent during the 1990 s, then also went to 0 percent in 2002. Then new practices were implemented in 2013 which will
continue into the foreseeable future, therefore, the most recent period is the best indicator of the future. The overall net salvage percent is negative 21 percent. The most recent five year average for net salvage indicates negative 39 percent. Given the overall statistical indications, most recent five-year average and the estimates of others, a negative 20 percent net salvage was utilized.

The net salvage estimates for most of the remaining accounts were estimated using the above-described judgment process incorporating historical indications and reviewing the typical range of estimates used by other electric companies. The results of the net salvage analysis for each plant account are presented in account sequence beginning in the section titled "Net Salvage Statistics", page VIII-2.

Generally, the net salvage estimates for the general plant accounts were zero percent, consistent with amortization accounting.

## PART V. CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION

## PART V. CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION

## GROUP DEPRECIATION PROCEDURES

A group procedure for depreciation is appropriate when considering more than a single item of property. Normally the items within a group do not have identical service lives, but have lives that are dispersed over a range of time. There are two primary group procedures, namely, average service life and equal life group. In the average service life procedure, the rate of annual depreciation is based on the average life or average remaining life of the group, and this rate is applied to the surviving balances of the group's cost. A characteristic of this procedure is that the cost of plant retired prior to average life is not fully recouped at the time of retirement, whereas the cost of plant retired subsequent to average life is more than fully recouped. Over the entire life cycle, the portion of cost not recouped prior to average life is balanced by the cost recouped subsequent to average life.

## Single Unit of Property

The calculation of straight line depreciation for a single unit of property is straightforward. For example, if a $\$ 1,000$ unit of property attains an age of four years and has a life expectancy of six years, the annual accrual over the total life is:

$$
\frac{\$ 1,000}{(4+6)}=\$ 100 \text { per year. }
$$

The accrued depreciation is:

$$
\$ 1,000\left(1-\frac{6}{10}\right)=\$ 400
$$

## Remaining Life Annual Accruals

For the purpose of calculating remaining life accruals as of December 31, 2019, the depreciation reserve for each plant account is allocated among vintages in proportion to the calculated accrued depreciation for the account. Explanations of remaining life accruals and calculated accrued depreciation follow. The detailed calculations as of December 31, 2019, are set forth in the Results of Study section of the report.

## Average Service Life Procedure

In the average service life procedure, the remaining life annual accrual for each vintage is determined by dividing future book accruals (original cost less book reserve) by the average remaining life of the vintage. The average remaining life is a directly weighted average derived from the estimated future survivor curve in accordance with the average service life procedure.

The calculated accrued depreciation for each depreciable property group represents that portion of the depreciable cost of the group which would not be allocated to expense through future depreciation accruals if current forecasts of life characteristics are used as the basis for such accruals. The accrued depreciation calculation consists of applying an appropriate ratio to the surviving original cost of each vintage of each account based upon the attained age and service life. The straight line accrued depreciation ratios are calculated as follows for the average service life procedure:

$$
\text { Ratio }=1-\frac{\text { Average Remaining Life }}{\text { Average Service Life }}
$$

## CALCULATION OF ANNUAL AND ACCRUED AMORTIZATION

Amortization is the gradual extinguishment of an amount in an account by distributing such amount over a fixed period, over the life of the asset or liability to which it applies, or over the period during which it is anticipated the benefit will be realized. Normally, the distribution of the amount is in equal amounts to each year of the amortization period.

The calculation of annual and accrued amortization requires the selection of an amortization period. The amortization periods used in this report were based on judgment which incorporated a consideration of the period during which the assets will render most of their service, the amortization period and service lives used by other utilities, and the service life estimates previously used for the asset under depreciation accounting.

Amortization accounting is proposed for a number of accounts that represent numerous units of property, but a very small portion of depreciable electric plant in service. The accounts and their amortization periods are as follows:

ACCT
391, Office Furniture and Equipment
393, Stores Equipment
394, Tools, Shop and Garage Equipment
395, Laboratory Equipment
397, Communication Equipment
398, Miscellaneous Equipment

## AMORTIZATION <br> PERIOD, YEARS

 20 25 25 15 15 15For the purpose of calculating annual amortization amounts as of December 31, 2019, the book depreciation reserve for each plant account or subaccount is assigned or allocated to vintages. The book reserve assigned to vintages with an age greater than the amortization period is equal to the vintage's original cost. The remaining book
reserve is allocated among vintages with an age less than the amortization period in proportion to the calculated accrued amortization. The calculated accrued amortization is equal to the original cost multiplied by the ratio of the vintage's age to its amortization period. The annual amortization amount is determined by dividing the future amortizations (original cost less allocated book reserve) by the remaining period of amortization for the vintage.

## PART VI. RESULTS OF STUDY

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## QUALIFICATION OF RESULTS

The calculated annual and accrued depreciation are the principal results of the study. Continued surveillance and periodic revisions are normally required to maintain continued use of appropriate annual depreciation accrual rates. An assumption that accrual rates can remain unchanged over a long period of time implies a disregard for the inherent variability in service lives and salvage and for the change of the composition of property in service. The annual accrual rates were calculated in accordance with the straight line remaining life method of depreciation, using the average service life procedure based on estimates which reflect considerations of current historical evidence and expected future conditions.

The annual depreciation accrual rates are applicable specifically to the electric plant in service as of December 31, 2019. For most plant accounts, the application of such rates to future balances that reflect additions subsequent to December 31, 2019, is reasonable for a period of three to five years.

## DESCRIPTION OF DETAILED TABULATIONS

Table 1 is a summary of the results of the study as applied to the original cost of electric plant at December 31, 2019 presented on pages $\mathrm{VI}-4$ through $\mathrm{VI}-8$ of this report.

The service life estimates were based on judgment that incorporated statistical analysis of retirement data, discussions with management and consideration of estimates made for other electric utilities. The results of the statistical analysis of service life are presented in the section beginning on page VII-2, within the supporting documents of this report.

For each depreciable group analyzed by the retirement rate method, a chart depicting the original and estimated survivor curves followed by a tabular presentation of the original life table(s) plotted on the chart. The survivor curves estimated for the depreciable groups are shown as dark smooth curves on the charts. Each smooth survivor curve is denoted by a numeral followed by the curve type designation. The numeral used is the average life derived from the entire curve from 100 percent to zero percent surviving. The titles of the chart indicate the group, the symbol used to plot the points of the original life table, and the experience and placement bands of the life tables which where plotted. The experience band indicates the range of years for which retirements were used to develop the stub survivor curve. The placements indicate, for the related experience band, the range of years of installations which appear in the experience.

The analyses of salvage data are presented in the section titled, "Net Salvage Statistics". The tabulations present annual cost of removal and salvage data, three-year moving averages and the most recent five-year average. Data are shown in dollars and as percentages of original costs retired.

The tables of the calculated annual depreciation applicable to depreciable assets as of December 31, 2019 are presented in account sequence starting on page IX-2 of the supporting documents. The tables indicate the estimated survivor curve and net salvage percent for the account and set forth, for each installation year, the original cost, the calculated accrued depreciation, the allocated book reserve, future accruals, the remaining life, and the calculated annual accrual amount.

| DEPRECIABLE GROUP |  | $\begin{array}{c}\text { SURVIVOR } \\ \text { CURVE }\end{array}$ <br> $(2)$ |  | NET <br> SALVAGE <br> PERCENT <br> $(3)$ | $\begin{gathered} \text { ORIGINAL COST } \\ \text { AS OF } \\ \text { DECEMBER } 31,2019 \\ \hline(4) \end{gathered}$ | depreciation RESERVE )$\qquad$ | FUTUREACCRUALS | CALCULATED anNual accrual |  | COMPOSITE REMAINING LIFE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | AMOUNT |  |  |  |  | RATE |  |
|  | (1) |  |  |  |  |  | (6) | (7) | (8) |  |
| STEAM PRODUCTION PLANT |  |  |  |  |  |  |  |  |  |  |
| 311.00 | Structures and improvements |  |  |  |  |  |  |  |  |  |  |
|  | RIO GRANDE UNIT 6 | 100-R3 | * | (5) | 1,290,816.82 | 1,281,328 | 74,030 | 37,023 | 2.87 | 2.0 |
|  | RIO GRANDE UNIT 7 | 100-R3 | * | (5) | 1,269,983.01 | 1,269,984 | 63,498 | 21,167 | 1.67 | 3.0 |
|  | RIO GRANDE UNIT 8 | 100-R3 | * | (5) | 2,311,211.39 | 1,828,321 | 598,451 | 42,993 | 1.86 | 13.9 |
|  | RIO GRANDE COMMON | 100-R3 | * | (5) | 4,433,409.00 | 894,702 | 3,760,378 | 269,101 | 6.07 | 14.0 |
|  | NEWMAN UNIT 1 | 100-R3 | * | (5) | 1,269,946.34 | 1,283,433 | 50,011 | 16,728 | 1.32 | 3.0 |
|  | NEWMAN UNIT 2 | 100-R3 | * | (5) | 1,035,404.62 | 748,238 | 338,937 | 113,156 | 10.93 | 3.0 |
|  | NEWMAN UNIT 3 | 100-R3 | * | (5) | 1,097,186.69 | 834,174 | 317,872 | 45,506 | 4.15 | 7.0 |
|  | NEWMAN UNIT 4 | 100-R3 | * | (5) | 15,848,533.13 | 9,933,049 | 6,707,911 | 967,044 | 6.10 | 6.9 |
|  | NEWMAN UNIT 5 | 100-R3 | * | (5) | 25,932,328.44 | 6,104,581 | 21,124,364 | 819,233 | 3.16 | 25.8 |
|  | NEWMAN COMmon | 100-R3 | * | (5) | 18,900,581.86 | 1,025,528 | 18,820,083 | 727,244 | 3.85 | 25.9 |
|  | TOTAL ACCOUNT 311 |  |  |  | 73,389,401.30 | 25,203,337 | 51,855,535 | 3,059,195 | 4.17 | 17.0 |
| 312.00 | Boiller plant equipment |  |  |  |  |  |  |  |  |  |
|  | RIO GRANDE UNIT 6 | 70-R4 | * | (5) | 2,973,007.52 | 3,121,658 | 0 | 0 | - | - |
|  | RIO GRANDE UNIT 7 | 70-R4 | * | (5) | 4,604,495.06 | 4,604,496 | 230,224 | 76,741 | 1.67 | 3.0 |
|  | RIO GRANDE UNIT 8 | 70-R4 | * | (5) | 15,577,497.58 | 10,665,565 | 5,690,807 | 408,845 | 2.62 | 13.9 |
|  | RIO GRANDE COMMON | 70-R4 | * | (5) | 939,444.89 | 267,650 | 718,767 | 51,374 | 5.47 | 14.0 |
|  | NEWMAN UNIT 1 | 70-R4 | * | (5) | 8,696,637.51 | 7,905,587 | 1,225,882 | 408,627 | 4.70 | 3.0 |
|  | NEWMAN UNIT 2 | 70-R4 | * | (5) | 8,916,413.89 | 5,846,465 | 3,515,769 | 1,176,873 | 13.20 | 3.0 |
|  | NEWMAN UNIT 3 | 70-R4 | * | (5) | 6,743,234.49 | 4,948,440 | 2,131,957 | 306,272 | 4.54 | 7.0 |
|  | NEWMAN UNIT 4 | 70-R4 | * | (5) | 3,303,061.75 | 1,706,224 | 1,761,991 | 251,778 | 7.62 | 7.0 |
|  | NEWMAN UNIT 5 | 70-R4 | * | (5) | 112,841,611.74 | 28,281,943 | 90,201,749 | 3,484,552 | 3.09 | 25.9 |
|  | NEWMAN COMMON | 70-R4 | * | (5) | 6,752,670.40 | 715,753 | 6,374,551 | 245,865 | 3.64 | 25.9 |
|  | TOTAL ACCOUNT 312 |  |  |  | 171,348,074.83 | 68,063,781 | 111,851,697 | 6,410,927 | 3.74 | 17.4 |
| 313.00 | ENGINES AND ENGINE-DRIVEN GENERATORS |  |  |  |  |  |  |  |  |  |
|  | NEWMAN UNIT 1 | 55-R2.5 | * | 0 | 327,497.00 | 327,497 | 0 | 0 |  |  |
|  | NEWMAN UNIT 4 | 55-R2.5 |  | 0 | 24,780,032.42 | 12,500,053 | 12,279,980 | 1,780,675 | 7.19 | 6.9 |
|  | NEWMAN UNIT 5 | 55-R2.5 | * | 0 | 48,432,717.43 | 5,328,814 | 43,103,903 | 1,738,596 | 3.59 | 24.8 |
|  | TOTAL ACCOUNT 313 |  |  |  | 73,540,246.85 | 18,156,364 | 55,383,883 | 3,519,271 | 4.79 | 15.7 |
| 314.00 | TURBOGENERATOR UNITS |  |  |  |  |  |  |  |  |  |
|  | RIO GRANDE UNIT 6 | 75-R2.5 | * | (5) | 3,559,997.86 | 3,734,067 | 3,931 | 1,966 | 0.06 | 2.0 |
|  | RIO GRANDE UNIT 7 | 75-R2.5 |  | (5) | 4,204,367.30 | 4,117,514 | 297,071 | 99,611 | 2.37 | 3.0 |
|  | RIO GRANDE UNIT 8 | 75-R2.5 | * | (5) | 11,776,647.98 | 9,445,338 | 2,920,142 | 212,382 | 1.80 | 13.7 |
|  | NEWMAN UNIT 1 | 75-R2.5 |  | (5) | 13,716,383.39 | 11,516,540 | 2,885,663 | 964,087 | 7.03 | 3.0 |
|  | NEWMAN UNIT 2 | 75-R2.5 | * | (5) | 11,439,309.56 | 9,493,772 | 2,517,503 | 840,772 | 7.35 | 3.0 |
|  | NEWMAN UNIT 3 | 75-R2.5 |  | (5) | 12,089,865.10 | 6,855,613 | 5,838,746 | 839,714 | 6.95 | 7.0 |
|  | NEWMAN UNIT 4 | 75-R2.5 | * | (5) | 33,968,974.68 | 30,609,768 | 5,057,655 | 725,854 | 2.14 | 7.0 |
|  | NEWMAN UNIT 5 | 75-R2.5 | * | (5) | 61,650,972.14 | 9,414,378 | 55,319,143 | 2,175,325 | 3.53 | 25.4 |
|  | NEWMAN COMMON | 75-R2.5 |  | (5) | 58,096.94 | 107,629 | $(46,628)$ | 0 |  | - |
|  | TOTAL ACCOUNT 314 |  |  |  | 152,464,614.95 | 85,294,619 | 74,793,226 | 5,859,711 | 3.84 | 12.8 |

EL PASO ELECTRIC COMPANY
TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, NET SALVAGE PERCENT, ORIGINAL COST, BOOK DEPRECIATION RESERVE
AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO ELECTRIC PLANT AS OF DECEMBER 31, 2019

| DEPRECIABLE GROUP | SURVIVOR CURVE | SALVAGE PERCENT | $\begin{gathered} \text { ORIGINAL COST } \\ \text { AS OF } \\ \text { DECEMBER } 31,2019 \\ \hline \end{gathered}$(4) | dEPRECIATION <br> RESERVE <br> (5) | FUTURE ACCRUALS | calculated ANNUAL ACCRUAL |  | COMPOSITE REMAINING LIFE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | AMOUNT | RATE |  |
| (1) | (2) |  |  |  | (6) | (7) | (8) | (9) |
| 315.00 ACCESSORY ELECTRIC EQUIPMENT |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| RIO GRANDE UNIT 7 | 65-54 | (5) | 856,687.83 | 646,912 | 252,610 | 85,569 | 9.99 | 3.0 |
| RIO GRANDE UNIT 8 | 65-S4 | (5) | 6,535,522.62 | 2,002,447 | 4,859,852 | 348,355 | 5.33 | 14.0 |
| NEWMAN UNIT 1 | 65-S4 | (5) | 1,148,175.19 | 1,147,547 | 58,037 | 20,189 | 1.76 | 2.9 |
| NEWMAN UNIT 2 | 65-S4 | (5) | 1,052,955.47 | 1,052,959 | 52,644 | 18,315 | 1.74 | 2.9 |
| NEWMAN UNIT 3 | 65-S4 | (5) | 1,150,891.96 | 785,370 | 423,067 | 61,774 | 5.37 | 6.8 |
| NEWMAN UNIT 4 | 65-S4 | (5) | 6,332,762.78 | 6,332,739 | 316,662 | 46,879 | 0.74 | 6.8 |
| NEWMAN UNIT 5 | 65-S4 | (5) | 24,098,576.74 | 5,716,844 | 19,586,662 | 753,558 | 3.13 | 26.0 |
| NEWMAN COMMON | 65-84 | (5) | 157,236.60 | 4 | 165,095 | 6,350 | 4.04 | 26.0 |
| TOTAL ACCOUNT 315 |  |  | 42,117,068.54 | 18,423,853 | 25,799,069 | 1,384,472 | 3.29 | 18.6 |
| 316.00 MISCELLANEOUS POWER PLANT EQUIPMENT |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| RIO GRANDE UNIT 7 | 70-S2.5 | (5) | 1,851,432.78 | 1,896,993 | 47,011 | 15,680 | 0.85 | 3.0 |
| RIO GRANDE UNIT 8 | 70-S2.5 | (5) | 5,951,707.44 | 4,746,012 | 1,503,280 | 108,647 | 1.83 | 13.8 |
| RIO GRANDE COMMON | 70-S2.5 | (5) | 1,938,696.21 | 799,702 | 1,235,929 | 88,358 | 4.56 | 14.0 |
| NEWMAN UNIT 1 | 70-S2.5 | (5) | 2,177,691.23 | 2,176,490 | 110,085 | 36,748 | 1.69 | 3.0 |
| NEWMAN UNIT 2 | 70-S2.5 | (5) | 2,829,108.29 | 2,829,106 | 141,458 | 47,268 | 1.67 | 3.0 |
| NEWMAN UNIT 3 | 70-S2.5 | (5) | 5,645,295.84 | 5,395,175 | 532,386 | 76,351 | 1.35 | 7.0 |
| NEWMAN UNIT 4 | 70-S2.5 | (5) | 11,495,251.76 | 11,495,252 | 574,762 | 82,268 | 0.72 | 7.0 |
| NEWMAN UNIT 5 | 70-S2.5 | (5) | 1,771,257.00 | 773,576 | 1,086,244 | 42,204 | 2.38 | 25.7 |
| NEWMAN ZERO LIQUID DISCHARGE | 70-S2.5 | (5) | 14,375,574.00 | 3,273,166 | 11,821,187 | 458,420 | 3.19 | 25.8 |
| NEWMAN COMMON | 70-S2.5 | (5) | 3,070,929.91 | 657,238 | 2,567,238 | 99,597 | 3.24 | 25.8 |
| TOTAL ACCOUNT 316 |  |  | 52,596,308.43 | 35,532,076 | 19,694,047 | 1,092,786 | 2.08 | 18.0 |
| TOTAL STEAM PRODUCTION PLANT |  |  | 565,455,714.90 | 250,674,029 | 339,377,457 | 21,326,362 | 3.77 | 15.9 |
| GAS TURBINE PLANT |  |  |  |  |  |  |  |  |
| 341.00 STRUCTURES AND IMPROVEMENTS |  |  |  |  |  |  |  |  |
| COPPER POWER STATION | 60-R4 | 0 | 791,864.17 | 676,484 | 115,380 | 10,546 | 1.33 | 10.9 |
| RIO GRANDE UNIT 9 | 60-R4 | 0 | 22,158,133.04 | 2,511,851 | 19,646,282 | 760,586 | 3.43 | 25.8 |
| MONTANA POWER STATION UNIT 1 | 60 -R4 | 0 | 315,347.41 | 29,788 | 285,559 | 11,015 | 3.49 | 25.9 |
| MONTANA POWER STATION UNIT 2 | 60-R4 | 0 | 257,181.43 | 24,321 | 232,860 | 8,981 | 3.49 | 25.9 |
| MONTANA POWER STATION UNIT 3 | $60-\mathrm{R} 4$ | 0 | 206,815.08 | 18,930 | 187,885 | 7,246 | 3.50 | 25.9 |
| MONTANA POWER STATION UNIT 4 | 60-R4 | 0 | 237,486.20 | 19,541 | 217,945 | 8,406 | 3.54 | 25.9 |
| MONTANA POWER STATION COMMON | 60-R4 | 0 | 18,007,977.41 | 1,381,319 | 16,626,658 | 642,237 | 3.57 | 25.9 |
| SOLAR FACILITIES | 35-S2 | 0 | 91,868.00 | 28,369 | 63,499 | 4,449 | 4.84 | 14.3 |
| TOTAL ACCOUNT 341 |  |  | 42,066,672.74 | 4,690,603 | 37,376,068 | 1,453,466 | 3.46 | 25.7 |

EL PASO ELECTRIC COMPANY
TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, NET SALVAGE PERCENT, ORIGINAL COST, BOOK DEPRECIATION RESERVE
AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO ELECTRIC PLANT AS OF DECEMBER 31, 2019

| DEPRECIABLE GROUP |  | $\begin{gathered} \text { SURVIVOR } \\ \text { CURVE } \\ \hline \end{gathered}$ | $\begin{aligned} & \text { NET } \\ & \text { SALVAGE } \\ & \text { PERCENT } \end{aligned}$ | ORIGINAL COST AS OF DECEMBER 31, 2019 | $\qquad$ DEPRECIATION RESERVE (5) | FUTURE ACCRUALS | CALCULATED ANNUAL ACCRUAL |  | COMPOSITE REMAINING LIFE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | AMOUNT |  |  |  |  | RATE |  |
|  | (1) |  |  | (2) |  |  |  | (7) | (8) | (9) |
| 342.00 | FUEL Holders |  |  |  |  |  |  |  |  |
|  | COPPER POWER STATION | 50-R4 | 0 | 511,690.65 | 480,918 | 30,773 | 2,910 | 0.57 | 10.6 |
|  | RIO GRANDE UNIT 9 | 50-R4 | 0 | 3,768,778.49 | 541,045 | 3,227,734 | 125,815 | 3.34 | 25.7 |
|  | MONTANA POWER STATION COMMON | $50-\mathrm{R} 4$ | 0 | 20,877,427.66 | 1,344,928 | 19,532,500 | 757,417 | 3.63 | 25.8 |
|  | TOTAL ACCOUNT 342 |  |  | 25,157,896.80 | 2,366,890 | 22,791,007 | 886,142 | 3.52 | 25.7 |
| 343.00 | PRIME MOVERS |  |  |  |  |  |  |  |  |
|  | RIO GRANDE UNIT 9 | 40-S1 | 0 | 59,555,058.08 | 8,957,443 | 50,597,615 | 2,206,208 | 3.70 | 22.9 |
|  | MONTANA POWER STATION UNIT 1 | 40-S1 | 0 | 78,609,840.90 | 8,434,351 | 70,175,490 | 2,957,112 | 3.76 | 23.7 |
|  | MONTANA POWER STATION UNIT 2 | 40-S1 | 0 | 73,503,725.19 | 7,883,880 | 65,619,845 | 2,769,125 | 3.77 | 23.7 |
|  | MONTANA POWER STATION UNIT 3 | 40-S1 | 0 | 63,009,557.15 | 5,360,075 | 57,649,482 | 2,424,712 | 3.85 | 23.8 |
|  | MONTANA POWER STATION UNIT 4 | $40-\mathrm{S} 1$ | 0 | 62,425,439.10 | 4,746,607 | 57,678,832 | 2,425,286 | 3.89 | 23.8 |
|  | MONTANA POWER STATION COMMON | 40-S1 | 0 | 34,687,534.99 | 3,863,968 | 30,823,567 | 1,312,508 | 3.78 | 23.5 |
|  | total AcCount 343 |  |  | 371,791,155.41 | 39,246,324 | 332,544,831 | 14,094,951 | 3.79 | 23.6 |
| 344.00 | Generators |  |  |  |  |  |  |  |  |
|  | COPPER POWER STATION | 45-S3 | 0 | 10,369,392.47 | 6,437,801 | 3,931,591 | 364,223 | 3.51 | 10.8 |
|  | RIO GRANDE UNIT 9 | 45-S3 | 0 | 8,420,577.00 | 977,806 | 7,442,771 | 292,562 | 3.47 | 25.4 |
|  | MONTANA POWER STATION UNIT 1 | 45-S3 | 0 | 6,122,690.89 | 398,681 | 5,724,010 | 223,421 | 3.65 | 25.6 |
|  | MONTANA POWER STATION UNIT 2 | 45-S3 | 0 | 6,122,690.90 | 405,064 | 5,717,627 | 223,200 | 3.65 | 25.6 |
|  | MONTANA POWER STATION UNIT 3 | 45-S3 | 0 | 6,241,096.43 | 459,179 | 5,781,917 | 225,112 | 3.61 | 25.7 |
|  | MONTANA POWER STATION UNIT 4 | 45-S3 | 0 | 6,126,227.89 | 416,026 | 5,710,202 | 222,331 | 3.63 | 25.7 |
|  | MONTANA POWER STATION COMMON | 45-S3 | 0 | 63.16 | 10 | 53 | 2 | 3.17 | 26.5 |
|  | SOLAR FACILITIES | 25-S2.5 | 0 | 1,187,262.00 | 367,724 | 819,538 | 62,103 | 5.23 | 13.2 |
|  | TOTAL ACCOUNT 344 |  |  | 44,590,000.74 | 9,462,291 | 35,127,709 | 1,612,954 | 3.62 | 21.8 |
| 345.00 | ACCESSORY ELECTRIC EQUIPMENT |  |  |  |  |  |  |  |  |
|  | COPPER POWER STATION | 45-S1.5 | 0 | 2,306,860.61 | 649,418 | 1,657,443 | 153,586 | 6.66 | 10.8 |
|  | RIO GRANDE UNIT 9 | 45-S1.5 | 0 | 5,186,610.54 | 834,096 | 4,352,515 | 180,297 | 3.48 | 24.1 |
|  | MONTANA POWER STATION UNIT 1 | 45-S1.5 | 0 | 3,115,518.34 | 271,887 | 2,843,632 | 115,423 | 3.70 | 24.6 |
|  | MONTANA POWER STATION UNIT 2 | 45-S1.5 | 0 | 3,029,962.32 | 269,436 | 2,760,527 | 112,104 | 3.70 | 24.6 |
|  | MONTANA POWER STATION UNIT 3 | 45-S1.5 | 0 | 2,686,649.68 | 192,777 | 2,493,873 | 100,898 | 3.76 | 24.7 |
|  | MONTANA POWER STATION UNIT 4 | 45-S1.5 | 0 | 2,250,774.41 | 138,436 | 2,112,338 | 85,397 | 3.79 | 24.7 |
|  | MONTANA POWER STATION COMMON | 45-S1.5 | 0 | 9,316,080.56 | 1,059,360 | 8,256,721 | 336,482 | 3.61 | 24.5 |
|  | SOLAR FACILITIES | 25-S2.5 | 0 | 167,360.00 | 53,304 | 114,056 | 8,862 | 5.30 | 12.9 |
|  | TOTAL ACCOUNT 345 |  |  | 28,059,816.46 | 3,468,713 | 24,591,105 | 1,093,049 | 3.90 | 22.5 |


| DEPRECIABLE GROUP | SURVIVOR CURVE | SALVAGE PERCENT | $\begin{gathered} \text { ORIGINAL COST } \\ \text { AS OF } \\ \text { DECEMBER } 31,2019 \end{gathered}$ | DEPRECIATION RESERVE$\qquad$ (5) | FUTURE ACCRUALS | calculated ANNUAL ACCRUAL |  | COMPOSITE REMAINING LIFE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | AMOUNT | RATE |  |
| (1) | (2) |  | (4) |  | (6) | (7) | (8) | (9) |
| 346.00 MISCELLANEOUS POWER PLANT EQUIPMENT |  |  |  |  |  |  |  |  |
| COPPER POWER STATION | 50-R4 | 0 | 4,170,624.14 | 4,034,370 | 136,254 | 12,405 | 0.30 | 11.0 |
| RIO GRANDE UNIT 9 | $50-\mathrm{R} 4$ | 0 | 410,060.00 | 62,171 | 347,889 | 13,569 | 3.31 | 25.6 |
| MONTANA POWER STATION UNIT 1 | 50-R4 | 0 | 297,568.80 | 32,999 | 264,570 | 10,257 | 3.45 | 25.8 |
| MONTANA POWER STATION UNIT 2 | 50-R4 | 0 | 275,750.74 | 31,927 | 243,823 | 9,456 | 3.43 | 25.8 |
| MONTANA POWER STATION UNIT 3 | 50-R4 | 0 | 229,358.35 | 21,831 | 207,528 | 8,043 | 3.51 | 25.8 |
| MONTANA POWER STATION UNIT 4 | 50-R4 | 0 | 231,227.68 | 19,538 | 211,690 | 8,204 | 3.55 | 25.8 |
| MONTANA POWER STATION COMMON | 50-R4 | 0 | 740,931.13 | 126,522 | 614,409 | 23,861 | 3.22 | 25.7 |
| total account 346 |  |  | 6,355,520.84 | 4,329,358 | 2,026,163 | 85,795 | 1.35 | 23.6 |
| total gas turbine plant |  |  | 518,021,062.99 | 63,564,180 | 454,456,883 | 19,226,357 | 3.71 | 23.6 |
| TRANSMISSION PLANT |  |  |  |  |  |  |  |  |
| 350.10 LAND RIGHTS | 80-R3 | 0 | 18,917,746.38 | 6,016,208 | 12,901,538 | 192,753 | 1.02 | 66.9 |
| 350.10 LAND RIGHTS - ISLETA | square | 0 | 16,824,155.75 | 1,540,524 | 15,283,632 | 636,818 | 3.79 | 24.0 |
| 352.00 STRUCTURES AND IMPROVEMENTS | 75-R4 | (5) | 12,463,442.58 | 4,224,229 | 8,862,386 | 144,867 | 1.16 | 61.2 |
| 353.00 STATION EQUIPMENT | 50-R4 | (5) | 188,643,565.70 | 88,164,203 | 109,911,541 | 2,948,962 | 1.56 | 37.3 |
| 354.00 STEEL TOWERS AND FIXTURES | 75-R4 | (10) | 30,170,781.59 | 14,800,075 | 18,387,784 | 359,891 | 1.19 | 51.1 |
| 355.00 WOOD AND STEEL POLES | 55-S3 | (20) | 163,484,540.27 | 64,248,195 | 131,933,253 | 3,115,165 | 1.91 | 42.4 |
| 356.00 OVERHEAD CONDUCTORS AND DEVICES | 60-R5 | (15) | 98,265,748.68 | 54,924,539 | 58,081,072 | 1,579,563 | 1.61 | 36.8 |
| 359.00 ROADS AND TRALLS | 70-R3 | - | 3,573,352.94 | 662,951 | 2,910,402 | 45,874 | 1.28 | 63.4 |
| TOTAL TRANSMISSION PLANT |  |  | 532,343,333.89 | 234,580,925 | 358,271,608 | 9,023,893 | 1.70 | 39.7 |
| DIStRIBUTION PLANT |  |  |  |  |  |  |  |  |
| 360.10 LAND RIGHTS | 70-R4 | 0 | 2,578,795.26 | 622,987 | 1,955,808 | 33,963 | 1.32 | 57.6 |
| 361.00 STRUCTURES AND IMPROVEMENTS | 70-R3 | (5) | 21,788,555.43 | 2,820,363 | 20,057,620 | 317,742 | 1.46 | 63.1 |
| 362.00 STATION EQUIPMENT | 65-R2 | (5) | 287,622,779.74 | 70,431,015 | 231,572,904 | 4,102,971 | 1.43 | 56.4 |
| 364.00 POLES, TOWERS AND FIXTURES | 45-R3 | (30) | 183,367,772.05 | 61,904,538 | 176,473,566 | 5,697,660 | 3.11 | 31.0 |
| 365.00 OVERHEAD CONDUCTORS AND DEVICES | 48-R2.5 | (15) | 117,036,295.84 | 35,065,798 | 99,525,943 | 2,747,955 | 2.35 | 36.2 |
| 366.00 UNDERGROUND CONDUIT | 65-R4 | (5) | 141,830,292.37 | 40,502,369 | 108,419,438 | 2,124,461 | 1.50 | 51.0 |
| 367.00 UNDERGROUND CONDUCTORS AND DEVICES | 41-S2 | (20) | 166,797,046.25 | 48,664,055 | 151,492,400 | 5,117,534 | 3.07 | 29.6 |
| 368.00 LINE TRANSFORMERS | 52-R3 | (15) | 283,609,011.85 | 67,802,856 | 258,347,508 | 6,629,377 | 2.34 | 39.0 |
| 369.00 SERVICES | 65-S3 | (15) | 56,297,451.56 | 26,484,850 | 38,257,220 | 779,571 | 1.38 | 49.1 |
| 370.00 METERS | 35-R2.5 | (15) | 61,010,255.32 | 28,815,140 | 41,346,653 | 1,598,992 | 2.62 | 25.9 |
| 371.00 INSTALLATIONS ON CUSTOMERS' PREMISES | 35-R2 | (15) | 14,098,583.74 | 5,638,247 | 10,575,125 | 454,004 | 3.22 | ${ }^{23.3}$ |
| 373.00 STREET LIGHTING AND SIGNAL SYSTEMS | 55-R3 | (20) | 11,751,009.87 | 6,077,418 | 8,023,794 | 242,324 | 2.06 | 33.1 |
| total distribution plant |  |  | 1,347,787,849.28 | 394,829,634 | 1,146,047,979 | 29,846,554 | 2.21 | 38.4 |

* INTERIM SURVIVOR CURVES USED. EACH LOCATION HAS A UNIQUE PROBABLE RETIREMENT DATE.
TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, NET SALVAGE PERCENT, ORIGINAL COST, BOOK DEPRECIATION RESERVE




## PART VII. SERVICE LIFE STATISTICS



## EL PASO ELECTRIC COMPANY

ACCOUNT 311.00 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1957-2019
EXPERIENCE BAND 1993-2019

| AGE AT | EXPOSURES AT <br> BEGIN OF <br> BEGINNING OF | RETIREMENTS <br> DURING AGE <br> INTERVAL <br> AGE INTERVAL | RETMT | SURV | PCT SURV |
| ---: | ---: | ---: | ---: | ---: | ---: |
| INEGIN OF |  |  |  |  |  |

## EL PASO ELECTRIC COMPANY

ACCOUNT 311.00 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1957-2019
AGE AT EXPOSURES AT BEGIN OF BEGINNING OF INTERVAL AGE INTERVAL
39.5
40.5
41.5
42.5
43.5
44.5
45.5
46.5
47.5
48.5
49.5
50.5
51.5
52.5
53.5
54.5
55.5
56.5
57.5
58.5
59.5
60.5
61.5
62.5

20,350,236
20, 336, 373
20, 133, 068
20, 042, 620
19,781,936
3,641, 050
3,635,992
2,712, 899
2, 705, 157
2,705,157
2,705,157
2, 704, 031
2, 695,447
2,651,913
2,351, 874
2, 283, 296
2, 281, 202
2,226,508
1,774,583
1,771,595
1,745,518 705, 881 367,404
RETIREMENTS
DURING AGE
INTERVAL

EXPERIENCE BAND 1993-2019

|  |  | PCT SURV |
| :--- | :---: | :---: |
| RETMT | SURV | BEGIN OF |
| RATIO | RATIO | INTERVAL |

98.18
98.18
98.03
97.74
97.74
91.59
91.59
91.59
91.59
91.59
91.59
91.59
91.59
91.59
91.59
91.59
91.59
91.59
91.59
91.59
91.59
91.59
91.59
91.59
EL PASO ELECTRIC COMPANY


## EL PASO ELECTRIC COMPANY

## ACCOUNT 312.00 BOILER PLANT EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1957-2019

| AGE AT | EXPOSURES AT |
| :---: | :--- |
| BEGIN OF | BEGINNING OF |
| INTERVAL | AGE INTERVAL |

0.5
1.5
2.5
$3.5 \quad 144,814,992$
$4.5 \quad 140,791,320$
$5.5 \quad 141,038,562$
$6.5 \quad 140,153,581$
7.5 138,255,854
$8.5 \quad 50,441,332$
$9.5 \quad 49,635,371$
$10.5 \quad 62,434,889$
11.5 63,233,382
12.5 63,231,636
13.
14.
15.
16.
17.
18.5
19.5
20.5
21.5
22.5
23.5
24.5
25.
26.
27.
28.5
29.
30.
31.
32.
33.5
34.5
35.5
36.5
37.5
38.5

60,274, 208
59, 929, 223
59, 997,474
59, 301, 491
69, 711, 216
67,484, 259
71,680,475
66,130,327
66,536, 208
65, 426, 320
68,275,415
65,371,496
62, 097, 115
64,979, 201
63, 722, 822
45, 729, 635
45, 493, 072
34,729,897
33,368,634
36, 699, 467
36,377,167
36,207,186
38,858,610
38,314, 678
37, 899, 136
26,650,676

EXPERIENCE BAND 1993-2019
RETIREMENTS
DURING AGE
INTERVAL

PCT SURV
BEGIN OF
INTERVAL

|  | 0.0000 | 1.0000 | 100.00 |
| :---: | :---: | :---: | :---: |
|  | 0.0000 | 1.0000 | 100.00 |
|  | 0.0000 | 1.0000 | 100.00 |
|  | 0.0000 | 1.0000 | 100.00 |
|  | 0.0000 | 1.0000 | 100.00 |
| 50 | 0.0000 | 1.0000 | 100.00 |
| 471,481 | 0.0033 | 0.9967 | 100.00 |
| 36,998 | 0.0003 | 0.9997 | 99.67 |
|  | 0.0000 | 1.0000 | 99.64 |
|  | 0.0000 | 1.0000 | 99.64 |
|  | 0.0000 | 1.0000 | 99.64 |
|  | 0.0000 | 1.0000 | 99.64 |
| 70,000 | 0.0011 | 0.9989 | 99.64 |
|  | 0.0000 | 1.0000 | 99.53 |
|  | 0.0000 | 1.0000 | 99.53 |
| 56,388 | 0.0009 | 0.9991 | 99.53 |
|  | 0.0000 | 1.0000 | 99.44 |
|  | 0.0000 | 1.0000 | 99.44 |
|  | 0.0000 | 1.0000 | 99.44 |
|  | 0.0000 | 1.0000 | 99.44 |
| 504, 751 | 0.0070 | 0.9930 | 99.44 |
|  | 0.0000 | 1.0000 | 98.74 |
|  | 0.0000 | 1.0000 | 98.74 |
| 1,297 | 0.0000 | 1.0000 | 98.74 |
|  | 0.0000 | 1.0000 | 98.73 |
| 32,937 | 0.0005 | 0.9995 | 98.73 |
|  | 0.0000 | 1.0000 | 98.68 |
| 286,587 | 0.0044 | 0.9956 | 98.68 |
|  | 0.0000 | 1.0000 | 98.25 |
| 130,250 | 0.0028 | 0.9972 | 98.25 |
| 408 | 0.0000 | 1.0000 | 97.97 |
| 27,659 | 0.0008 | 0.9992 | 97.97 |
|  | 0.0000 | 1.0000 | 97.89 |
| 66, 195 | 0.0018 | 0.9982 | 97.89 |
|  | 0.0000 | 1.0000 | 97.71 |
| 365, 232 | 0.0101 | 0.9899 | 97.71 |
| 3,899 | 0.0001 | 0.9999 | 96.73 |
| 7,884 | 0.0002 | 0.9998 | 96.72 |
| 86,182 | 0.0023 | 0.9977 | 96.70 |
| 65, 097 | 0.0024 | 0.9976 | 96.48 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 312.00 BOILER PLANT EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1957-2019
AGE AT EXPOSURES AT BEGIN OF BEGINNING OF INTERVAL AGE INTERVAL
39.5
40.5
41.5
42.5
43.5
44.5
45.5
46.5
47.5
48.5
49.5
50.5
51.5
52.5
53.5
54.5
55.5
56.5
57.5
58.5
59.5
60.5
61.5
62.5

26,442,484
26,178,535
24,443,169
24,295,851
20,568, 722
19, 677,729
19,675,147
14,118, 238
14, 047, 326
14, 047, 326
14, 045, 605
13, 787, 846
13,678, 661
13, 467, 218
10,667, 865
10,584,776
10,583, 212
10,100,316
7,241,082
7,238,566
4,298,134
4, 253, 340
4, 253, 340
RETIREMENTS
DURING AGE
INTERVAL

EXPERIENCE BAND 1993-2019

## RETMT SURV RATIO RATIO

$0.0000 \quad 1.0000$
$0.0001 \quad 0.9999$ 0.00001 .0000
$0.0309 \quad 0.9691$
$0.0085 \quad 0.9915$ $0.0000 \quad 1.0000$
$0.0027 \quad 0.9973$
$0.0000 \quad 1.0000$
0.0000
0.0000
1.0000

241, 511
91, 348
0.0172
0.9828
0.0066
0.0000
0.000
0.0078
0.0000
0.0402

425, 134
109,490
0.0108
0.0000
0.0000
1.0000

6,474
4,831
0.0015
0.998
0.000
0.0011
1.0000 0.9989

PCT SURV
BEGIN OF
INTERVAL
96.24
96.24
96.23
96.23
93.25
92.46
92.46
92.21
92.21
92.21
92.21
90.62
90.02
90.02
90.02
89.32
89.32
85.73
84.81
84.81
84.81
84.68
84.68
84.58
EL PASO ELECTRIC COMPANY
ACCOUNT 313.00 ENGINES AND ENGINE-DRIVEN GENERATORS


## EL PASO ELECTRIC COMPANY

ACCOUNT 313.00 ENGINES AND ENGINE-DRIVEN GENERATORS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1976-2019

| AGE AT | EXPOSURES AT |
| :---: | :--- |
| BEGIN OF | BEGINNING OF |
| INTERVAL | AGE INTERVAL |

0.5
1.5
2.5
3.5
4.5
5.5
6.5
7.5
8.5
9.5
10.5
11.5
12.5
13.5
14.5
15.5
16.5
17.5
18.5
19.5
20.5
21.5
22.5
23.5
24.5
25.5
26.5
27.5
28.5
29.5
30.5
31.5
32.5
33.5
34.5
35.5
36.5
37.5
38.5

72,136,191
64,424, 260
63, 135, 480
62,345,418
49, 886,504
49,179, 821
47,752,963
43, 958, 126
41,506,138
37,999, 552
34,904,512
3, 087, 879
2,160,744
1,965,953
751, 664
482,524
497, 263
497, 263
10, 651, 994
10,651,994
10,651,994
10, 651, 994
10,651,994
10,651,994
10,651,994
10, 651, 994
10, 630, 420
10, 630, 420
10, 619, 412
10, 619, 412
10, 619, 412
10, 619, 412
10, 619, 412
10, 619, 412
10, 619, 412
10, 619, 412
10, 619, 412
10, 199, 210
10, 185, 728
10,169,470

EXPERIENCE BAND 1994-2019

PCT SURV
BEGIN OF
INTERVAL

| RETMT | SURV |
| :---: | :---: |
| RATIO | RATIO |

$$
100.00
$$

$$
100.00
$$

$$
100.00
$$

$$
100.00
$$

100.00
99.88
99.88
99.88
94.39
86.47
86.47
0.000
0.0000
0.000
1.0000
86.47
86.47
86.47
86.47
86.47
86.47
86.47
86.47
86.47
86.47
$\begin{array}{lll}0.0000 & 1.0000 & 86.47 \\ 0.0000 & 1.0000 & 86.47\end{array}$
$0.0000 \quad 1.0000 \quad 86.47$
$0.0000 \quad 1.0000 \quad 86.47$
0.0000
$0.0000 \quad 1.0000 \quad 86.47$
$0.0000 \quad 1.0000 \quad 86.47$
$0.0000 \quad 1.0000 \quad 86.47$
$0.0000 \quad 1.0000 \quad 86.47$

| 0.0000 | 1.0000 | 86.47 |
| :--- | :--- | :--- |
| 0.0000 | 1.0000 | 86.47 |
| 0.0000 | 1.0000 | 86.47 |
| 0.0000 | 1.0000 | 86.47 |
| 0.0000 | 1.0000 | 86.47 |
| 0.0000 | 1.0000 | 86.47 |
| 0.0000 | 1.0000 | 86.47 |
| 0.0000 | 1.0000 | 86.47 |
| 0.0000 | 1.0000 | 86.47 |
| 0.0000 | 1.0000 | 86.47 |

## EL PASO ELECTRIC COMPANY

ACCOUNT 313.00 ENGINES AND ENGINE-DRIVEN GENERATORS

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT | ND 1976-2019 |  | EXPERIENCE BAND 1994-2019 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AGE AT | EXPOSURES AT | RETIREMENTS |  |  | PCT SURV |
| BEGIN OF | BEGINNING OF | DURING AGE | RETMT | SURV | BEGIN OF |
| INTERVAL | AGE INTERVAL | INTERVAL | RATIO | RATIO | INTERVAL |
| 39.5 | 10,169,470 |  | 0.0000 | 1.0000 | 86.47 |
| 40.5 | 10,116,570 |  | 0.0000 | 1.0000 | 86.47 |
| 41.5 | 10,101, 831 | 1,018,167 | 0.1008 | 0.8992 | 86.47 |
| 42.5 | 9, 083,664 |  | 0.0000 | 1.0000 | 77.76 |
| 43.5 |  |  |  |  | 77.76 |



## EL PASO ELECTRIC COMPANY

## ACCOUNT 314.00 TURBOGENERATOR UNITS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1957-2019

| AGE AT | EXPOSURES AT |
| :--- | :--- |
| BEGIN OF | BEGINNING OF |
| INTERVAL | AGE INTERVAL |

0.0 133,168,643
0.5 130,973,136
1.5 123,512,744
2.5 101,082,448
$3.5 \quad 96,979,491$
4.5 96,750,130
$5.5 \quad 89,905,195$
$6.5 \quad 82,755,850$
$7.5 \quad 79,785,244$
8.5 40,224,160
$9.5 \quad 39,978,919$
10.5 37,120,013
$11.5 \quad 36,585,701$
12.5 35,186,500
13.5 33,960,057
$14.5 \quad 32,100,455$
$15.5 \quad 28,775,077$
16.5 28,872,792
$17.5 \quad 38,659,436$
18.5 34,652,209
$19.5 \quad 36,195,426$
$20.5 \quad 36,067,101$
$21.5 \quad 37,214,573$
$22.5 \quad 36,337,032$
23.5 30,771,038
24.5 24,096,468
25.5 23,818,955
$26.5 \quad 26,254,269$
$27.5 \quad 26,254,443$
28.5 26,245,755
$29.5 \quad 26,368,609$
30.5 28,646,203
$31.5 \quad 28,609,544$
$32.5 \quad 32,812,520$
$33.5 \quad 32,699,179$
$34.5 \quad 35,532,656$
$35.5 \quad 38,177,779$
36.5 38,120,945
37.5 38,092,047
$38.5 \quad 38,076,309$

EXPERIENCE BAND 1993-2019

| RETIREMENTS |  |  | PCT SURV |
| :---: | :---: | :---: | :---: |
| DURING AGE | RETMT | SURV | BEGIN OF |
| INTERVAL | RATIO | RATIO | INTERVAL |
|  | 0.0000 | 1.0000 | 100.00 |
|  | 0.0000 | 1.0000 | 100.00 |
|  | 0.0000 | 1.0000 | 100.00 |
|  | 0.0000 | 1.0000 | 100.00 |
|  | 0.0000 | 1.0000 | 100.00 |
| 68,590 | 0.0007 | 0.9993 | 100.00 |
| 7,132,488 | 0.0793 | 0.9207 | 99.93 |
| 46,724 | 0.0006 | 0.9994 | 92.00 |
|  | 0.0000 | 1.0000 | 91.95 |
|  | 0.0000 | 1.0000 | 91.95 |
|  | 0.0000 | 1.0000 | 91.95 |
|  | 0.0000 | 1.0000 | 91.95 |
|  | 0.0000 | 1.0000 | 91.95 |
|  | 0.0000 | 1.0000 | 91.95 |
|  | 0.0000 | 1.0000 | 91.95 |
|  | 0.0000 | 1.0000 | 91.95 |
|  | 0.0000 | 1.0000 | 91.95 |
|  | 0.0000 | 1.0000 | 91.95 |
|  | 0.0000 | 1.0000 | 91.95 |
|  | 0.0000 | 1.0000 | 91.95 |
|  | 0.0000 | 1.0000 | 91.95 |
|  | 0.0000 | 1.0000 | 91.95 |
|  | 0.0000 | 1.0000 | 91.95 |
|  | 0.0000 | 1.0000 | 91.95 |
|  | 0.0000 | 1.0000 | 91.95 |
| 2,768 | 0.0001 | 0.9999 | 91.95 |
|  | 0.0000 | 1.0000 | 91.94 |
|  | 0.0000 | 1.0000 | 91.94 |
|  | 0.0000 | 1.0000 | 91.94 |
|  | 0.0000 | 1.0000 | 91.94 |
| 7,000 | 0.0003 | 0.9997 | 91.94 |
|  | 0.0000 | 1.0000 | 91.91 |
| 29,820 | 0.0010 | 0.9990 | 91.91 |
| 197, 050 | 0.0060 | 0.9940 | 91.82 |
|  | 0.0000 | 1.0000 | 91.27 |
|  | 0.0000 | 1.0000 | 91.27 |
|  | 0.0000 | 1.0000 | 91.27 |
|  | 0.0000 | 1.0000 | 91.27 |
|  | 0.0000 | 1.0000 | 91.27 |
| 74,900 | 0.0020 | 0.9980 | 91.27 |

EL PASO ELECTRIC COMPANY

ACCOUNT 314.00 TURBOGENERATOR UNITS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1957-2019
AGE AT EXPOSURES AT BEGIN OF BEGINNING OF INTERVAL AGE INTERVAL
$39.5 \quad 37,979,118$
40.5
41.5
42.5
43.5
44.5
45.5
46.5
47.5
48.5
49.5
50.5
51.5
52.5
53.5
54.5
55.5
56.5
57.5
58.5
59.5
60.5
61.5
62.5

37,979,118
37,792,939
35, 003, 962
34, 860, 365
33,179,335
25, 009,690
24, 895, 340
17,700,159
17,531,418
17,531,418
17,528, 264
17,331, 534
17,316,105
17, 093, 680
13,341, 814
12,751,104
12,751, 104
11,967,954
9, 184, 393
9, 181, 233
5,586,624
5,498, 853
2,648,949
RETIREMENTS
DURING AGE
INTERVAL

EXPERIENCE BAND 1993-2019

|  | 0.0000 | 1.0000 | 91.09 |
| :---: | :---: | :---: | :---: |
| 735,772 | 0.0195 | 0.9805 | 91.09 |
| 125,883 | 0.0036 | 0.9964 | 89.31 |
|  | 0.0000 | 1.0000 | 88.99 |
|  | 0.0000 | 1.0000 | 88.99 |
|  | 0.0000 | 1.0000 | 88.99 |
|  | 0.0093 | 0.9907 | 88.99 |
|  | 0.0000 | 1.0000 | 88.17 |
|  | 0.0000 | 1.0000 | 88.17 |
|  | 0.0000 | 1.0000 | 88.17 |
|  | 0.0000 | 1.0000 | 88.17 |
|  | 0.0000 | 1.0000 | 88.17 |
|  | 0.0000 | 1.0000 | 88.17 |
|  | 0.0000 | 1.0000 | 88.17 |
|  | 0.0000 | 1.0000 | 88.17 |
|  | 0.0000 | 1.0000 | 88.17 |
|  | 0.0000 | 1.0000 | 88.17 |
|  | 0.0032 | 0.9968 | 88.17 |
|  | 0.0000 | 1.0000 | 87.89 |
|  | 0.0000 | 1.0000 | 87.89 |
|  | 0.0000 | 1.0000 | 87.89 |
|  | 0.0000 | 1.0000 | 87.89 |
|  | 0.0000 | 1.0000 | 87.89 |
|  |  |  | 87.89 |



## EL PASO ELECTRIC COMPANY

ACCOUNT 315.00 ACCESSORY ELECTRIC EQUIPMENT
ORIGINAL LIFE TABLE

PLACEMENT BAND 1957-2019

0.0
0.5
2.5
$3.5 \quad 23,878,238$
$4.5 \quad 22,568,410$
$5.5 \quad 22,466,734$
$6.5 \quad 22,577,425$
$7.5 \quad 22,615,962$
$8.5 \quad 10,307,334$
9.
10.
11.
12.
13.
14.
15.
16.5
17.5
18.5
19.5
20.5
21.5
22.5
23.5
24.5
25.
26.
27.
28.
29.
30.
31.
32.
33.
34.
35.
36.
37.
38.5 12,003,466

9,732,880
2,205,347
2,197,441
2,141,142
2,141,155
2, 080,043
928, 071
934, 681
7, 057,464
6,992,160
8,562,220
8,516,899
8,822, 008
8,761,469
9,142,661
9,102,819
8,931,583
9,602,400
9,580,425
9,580,382
9,614,400
10, 475,555
10,383, 421
11,217, 303
11,120,654
11,524, 250
12, 047, 012
12, 009, 338
12, 008, 408

EXPERIENCE BAND 1993-2019
100.00
100.00
100.00
100.00
99.98

20
99.98
99.98
99.98
99.98
99.98
99.98
99.98
99.98
99.98
99.98
99.98
99.98
99.98
99.98
99.98
99.98
99.98
99.98
99.98
99.98
99.98
99.98
99.98
99.98
99.98
99.98
99.98
99.98
99.98
99.98
99.98
99.98
99.98
99.98
99.98

## RETIREMENTS DRING AGE INTERVAL

PCT SURV
BEGIN OF
INTERVAL

|  |  | PCT SURV |
| :--- | :---: | :---: |
| RETMT | SURV | BEGIN OF |
| RATIO | RATIO | INTERVAL |

## EL PASO ELECTRIC COMPANY

ACCOUNT 315.00 ACCESSORY ELECTRIC EQUIPMENT
ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1957-2019
AGE AT EXPOSURES AT BEGIN OF BEGINNING OF INTERVAL AGE INTERVAL
39.5
40.5
41.5
42.5
43.5
44.5
45.5
46.5
47.5
48.5
49.5
50.5
51.5
52.5
53.5
54.5
55.5
56.5
57.5
58.5
59.5
60.5
61.5
62.5

11,995,552
11,995,539
11,691,615
11,677,806
11,151, 729
5, 029, 876
5, 028,936
3, 604, 696
3,603,774
3,602,589
3,602,589
3,601,515
3,600,697
3,557, 041
2, 853,944
2, 853, 944
2,853,944
2,756,825
1,895,670
1, 895,486
1, 024,740
1, 016,477
532,902

## RETIREMENTS DURING AGE INTERVAL

| 7,875 | 0.0000 | 1.0000 | 99.91 |
| ---: | :---: | :---: | :---: |
|  | 0.0007 | 0.9993 | 99.91 |
|  | 0.0000 | 1.0000 | 99.84 |
|  | 0.0129 | 0.9871 | 99.84 |
|  | 0.0000 | 1.0000 | 98.56 |
|  | 0.0000 | 1.0000 | 98.56 |
|  | 0.1496 | 0.8504 | 98.56 |
|  | 0.0000 | 1.0000 | 83.81 |
|  | 0.0000 | 1.0000 | 83.81 |
|  | 0.0000 | 1.0000 | 83.81 |
|  | 0.0000 | 1.0000 | 83.81 |
|  | 0.0000 | 1.0000 | 83.81 |
|  | 0.0000 | 1.0000 | 83.81 |
|  | 0.0000 | 1.0000 | 83.81 |
|  | 0.0000 | 1.0000 | 83.81 |
|  | 0.0000 | 1.0000 | 83.81 |
|  | 0.0000 | 1.0000 | 83.81 |
|  | 0.0000 | 1.0000 | 83.81 |
|  | 0.0000 | 1.0000 | 83.81 |
|  | 0.0000 | 1.0000 | 83.81 |
|  | 0.0000 | 1.0000 | 83.81 |
|  | 0.0000 | 1.0000 | 83.81 |
|  |  |  | 83.81 |

PCT SURV
BEGIN OF INTERVAL
99.91
99.91
99.84
98.56
98.56
98.56
83.81
83.81
83.81
83.81
83.81
83.81
83.81
83.81
83.81
83.81
83.81
83.81


## EL PASO ELECTRIC COMPANY

ACCOUNT 316.00 MISCELLANEOUS POWER PLANT EQUIPMENT
ORIGINAL LIFE TABLE

PLACEMENT BAND 1957-2019

| AGE AT | EXPOSURES AT |
| :---: | :--- |
| BEGIN OF | BEGINNING OF |
| INTERVAL | AGE INTERVAL |

0.5
1.5
2.5
3.5
4.5
5.5
6.5
7.5
8.5
9.5
10.5
11.5
12.5
13.5
14.5
15.
16.5
17.5
18.5
19.5
20.5
21.5
22.5
23.5
24.
25.
26.
27.
28.5
29.
30.
31.
32.
33.
34.
35.
36.5
37.5
38.5

55,711,639
57, 089, 054
56, 668, 932
55, 480, 489
55, 210, 335
54, 841, 217
53,484,749
51, 978, 058
51, 822, 013
37,190,792
36,990,545
35, 080, 468
34, 894, 422
33, 338, 899
33, 286, 277
33, 253, 871
29, 686,533
28, 854, 622
28,781,694
24,202, 036
18, 664, 955
16, 147, 053
15,592,732
12,698, 876
5, 373, 144
3,442, 044
2,323,646
2,311, 645
2,272,830
2, 268, 680
2,193, 092
2,233,271
2, 119, 249
2, 074, 497
2, 232, 618
2, 095, 884
2,134,855
2,105,775
1,970,366
1, 877, 028

## RETIREMENTS DURING AGE INTERVAL

PCT SURV
BEGIN OF
INTERVAL

| 6,794 | 0.0001 | 0.9999 | 100.00 |
| :---: | :---: | :---: | :---: |
|  | 0.0000 | 1.0000 | 99.99 |
| 58,887 | 0.0010 | 0.9990 | 99.99 |
|  | 0.0000 | 1.0000 | 99.88 |
| 84,172 | 0.0015 | 0.9985 | 99.88 |
|  | 0.0000 | 1.0000 | 99.73 |
| 171,800 | 0.0032 | 0.9968 | 99.73 |
|  | 0.0000 | 1.0000 | 99.41 |
|  | 0.0000 | 1.0000 | 99.41 |
| 2,170 | 0.0001 | 0.9999 | 99.41 |
| 23,243 | 0.0006 | 0.9994 | 99.41 |
| 16,755 | 0.0005 | 0.9995 | 99.34 |
| 27,784 | 0.0008 | 0.9992 | 99.30 |
|  | 0.0000 | 1.0000 | 99.22 |
|  | 0.0000 | 1.0000 | 99.22 |
|  | 0.0000 | 1.0000 | 99.22 |
|  | 0.0000 | 1.0000 | 99.22 |
| 1,268 | 0.0000 | 1.0000 | 99.22 |
|  | 0.0000 | 1.0000 | 99.21 |
|  | 0.0000 | 1.0000 | 99.21 |
|  | 0.0000 | 1.0000 | 99.21 |
|  | 0.0000 | 1.0000 | 99.21 |
| 44,324 | 0.0028 | 0.9972 | 99.21 |
|  | 0.0000 | 1.0000 | 98.93 |
|  | 0.0000 | 1.0000 | 98.93 |
|  | 0.0000 | 1.0000 | 98.93 |
|  | 0.0000 | 1.0000 | 98.93 |
| 3,657 | 0.0016 | 0.9984 | 98.93 |
|  | 0.0000 | 1.0000 | 98.77 |
| 7,157 | 0.0032 | 0.9968 | 98.77 |
| 755 | 0.0003 | 0.9997 | 98.46 |
|  | 0.0000 | 1.0000 | 98.43 |
| 20,984 | 0.0099 | 0.9901 | 98.43 |
| 49,396 | 0.0238 | 0.9762 | 97.45 |
|  | 0.0000 | 1.0000 | 95.13 |
| 3,198 | 0.0015 | 0.9985 | 95.13 |
|  | 0.0000 | 1.0000 | 94.99 |
|  | 0.0000 | 1.0000 | 94.99 |
|  | 0.0000 | 1.0000 | 94.99 |
| 21,176 | 0.0113 | 0.9887 | 94.99 |

EL PASO ELECTRIC COMPANY
ACCOUNT 316.00 MISCELLANEOUS POWER PLANT EQUIPMENT
ORIGINAL LIFE TABLE, CONT.
PLACEMENT BAND 1957-2019
EXPERIENCE BAND 1993-2019

AGE AT EXPOSURES AT BEGIN OF BEGINNING OF INTERVAL AGE INTERVAL
39.5
40.5
41.5
42.5
43.5
44.5
45.5
46.5
47.5
48.5
49.5
50.5
51.5
52.5
53.5
54.5
55.5
56.5
57.5
58.5
59.5
60.5
61.5
62.5

1,731,966
1,535,750
1,465,168
1, 436, 014
1,339,002
828,631
817,748
499, 956
492, 196
492, 196
491, 260
487, 309
419, 221
408, 339
348, 076
344, 862
342, 566
337,746
286,612
269, 098
268,745
71,428
52, 277

PCT SURV
BEGIN OF
INTERVAL
93.92
93.92
92.62
92.62
92.62
92.62
92.62
92.62
92.62
92.62
92.62
92.62
92.62
92.62
92.62
92.62
92.62
92.62
89.82
89.82
89.82
89.82
89.82
89.82


## EL PASO ELECTRIC COMPANY

ACCOUNT 341.00 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1980-2019
EXPERIENCE BAND 1994-2019

0.0 41,394,353
$0.5 \quad 35,466,879$
$1.5 \quad 35,240,857$
2.5 35,167,139
$3.5 \quad 34,612,866$
$4.5 \quad 22,147,811$
$5.5 \quad 22,069,246$
$6.5 \quad 104,529$
7.5 90,214
8.5 90,214
$9.5 \quad 90,214$
$10.5 \quad 90,214$
11.5 101,314
$12.5 \quad 101,314$
13.5 636,095
14.5 636,095
15.5 636,095
16.5 636,095
$17.5 \quad 636,095$
18.5 636,095
19.5 636,095
$20.5 \quad 631,998$
$21.5 \quad 631,998$
$22.5 \quad 631,998$
$23.5 \quad 631,998$
24.5 631,998
25.5 614,553
$26.5 \quad 614,553$
$27.5 \quad 614,553$
$28.5 \quad 614,553$
29.
30.
31.
32.
33.5
34.5
35.5
36.5
37.5
38.5
39.5

## RETIREMENTS DURING AGE INTERVAL

PCT SURV
BEGIN OF
INTERVAL

| 0.0000 | 1.0000 | 100.00 |
| ---: | ---: | ---: |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0555 | 0.9445 | 100.00 |
| 0.0000 | 1.0000 | 94.45 |
| 0.0000 | 1.0000 | 94.45 |
| 0.0000 | 1.0000 | 94.45 |
|  |  | 94.45 |
| 02 |  |  |
|  |  |  |
| 0 |  |  |

EL PASO ELECTRIC COMPANY


## EL PASO ELECTRIC COMPANY

ACCOUNT 341.00 STRUCTURES AND IMPROVEMENTS - SOLAR

ORIGINAL LIFE TABLE

| PLACEMENT BAND 2009-2013 |  | EXPERIENCE BAND 2009-2019 |  |  |  |
| ---: | :---: | :---: | :---: | :---: | :---: |
| AGE AT | EXPOSURES AT | RETIREMENTS |  |  | PCT SURV |
| BEGIN OF | BEGINNING OF | DURING AGE | RETMT | SURV | BEGIN OF |
| INTERVAL | AGE INTERVAL | INTERVAL | RATIO | RATIO | INTERVAL |
| 0.0 |  |  |  | 0.0000 | 1.0000 |
| 0.5 | 91,868 |  | 0.0000 | 1.0000 | 100.00 |
| 1.5 | 91,868 |  | 0.0000 | 1.0000 | 100.00 |
| 2.5 | 91,868 |  | 0.0000 | 1.0000 | 100.00 |
| 3.5 | 91,868 |  | 0.0000 | 1.0000 | 100.00 |
| 4.5 | 91,868 |  | 0.0000 | 1.0000 | 100.00 |
| 5.5 | 91,868 |  | 0.0000 | 1.0000 | 100.00 |
| 6.5 | 91,868 |  | 0.0000 | 1.0000 | 100.00 |
| 7.5 | 39,814 |  | 0.0000 | 1.0000 | 100.00 |
| 8.5 | 39,814 |  | 0.0000 | 1.0000 | 100.00 |
| 9.5 | 39,814 |  | 0.0000 | 1.0000 | 100.00 |
| 10.5 | 39,814 |  |  |  | 100.00 |



## EL PASO ELECTRIC COMPANY

## ACCOUNT 342.00 FUEL HOLDERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1980-2019


EXPERIENCE BAND 1994-2019
RETIREMENTS
DURING AGE
INTERVAL

|  |  | PCT SURV |
| :--- | :---: | :---: |
| RETMT | SURV | BEGIN OF |
| RATIO | RATIO | INTERVAL |

0.0 24,677,004
0.5 18,807,875
1.5 18,676,577
2.5 18,605,616
$3.5 \quad 8,889,095$
$4.5 \quad 3,118,540$
$5.5 \quad 3,118,540$
6.5
7.5
$8.5 \quad 5,333$
$9.5 \quad 5,333$
$10.5 \quad 5,333$
$11.5 \quad 5,333$
12.5 213,173
13.5 480,893
$14.5 \quad 480,893$
$15.5 \quad 480,893$
16.5 480,893
17.5 480,893
18.5 480,893
19.5 480,893
20.5 480,893
21.5 480,893
22.5 480,893
23.5 480,893
24.5 480,893
25.5 480,893
26.5 480,893
$27.5 \quad 480,893$
$28.5480,893$
29.5 480,893
30.5 480,893
31.5 480,893
$32.5 \quad 480,893$
$33.5 \quad 480,893$
$34.5 \quad 475,560$
$35.5 \quad 475,560$
$36.5 \quad 475,560$
$37.5 \quad 475,560$
$38.5 \quad 267,720$
39.5

$$
\begin{aligned}
& 0.0000 \\
& 0.0000 \\
& 0.0000 \\
& 0.0000 \\
& 0.0000 \\
& 0.0000 \\
& 0.0000
\end{aligned}
$$

| 0.0000 | 1.0000 | 100.00 |
| :--- | :--- | :--- |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
|  |  | 100.00 |
|  |  |  |

EL PASO ELECTRIC COMPANY


## EL PASO ELECTRIC COMPANY

## ACCOUNT 343.00 PRIME MOVERS

ORIGINAL LIFE TABLE

| PLACEMENT BAND 2013-2019 |  |  | EXPERIENCE BAND 1994-2019 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AGE AT | EXPOSURES AT | RETIREMENTS |  |  | PCT SURV |
| BEGIN OF | BEGINNING OF | DURING AGE | RETMT | SURV | BEGIN OF |
| INTERVAL | AGE INTERVAL | INTERVAL | RATIO | RATIO | INTERVAL |
| 0.0 | 372,476,668 |  | 0.0000 | 1.0000 | 100.00 |
| 0.5 | 300, 844, 291 |  | 0.0000 | 1.0000 | 100.00 |
| 1.5 | 294, 828,681 |  | 0.0000 | 1.0000 | 100.00 |
| 2.5 | 293,160, 261 | 277,389 | 0.0009 | 0.9991 | 100.00 |
| 3.5 | 172,302, 034 | 204, 330 | 0.0012 | 0.9988 | 99.91 |
| 4.5 | 55, 323, 486 |  | 0.0000 | 1.0000 | 99.79 |
| 5.5 | 55,323,486 | 203,794 | 0.0037 | 0.9963 | 99.79 |
| 6.5 |  |  |  |  | 99.42 |

EL PASO ELECTRIC COMPANY
ORIGINAL AND SMOOTH SURVIVOR CURVES


## EL PASO ELECTRIC COMPANY

## ACCOUNT 344.00 GENERATORS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1980-2019
EXPERIENCE BAND 1994-2019

| AGE AT | EXPOSURES AT | RETIREMENTS |  |  | PCT SURV |
| :---: | :---: | :---: | :---: | :---: | :---: |
| BEGIN OF | BEGINNING OF | DURING AGE | RETMT | SURV | BEGIN OF |
| INTERVAL | AGE INTERVAL | INTERVAL | RATIO | RATIO | INTERVAL |
| 0.0 | 42, 747, 072 |  | 0.0000 | 1.0000 | 100.00 |
| 0.5 | 36,158,807 |  | 0.0000 | 1.0000 | 100.00 |
| 1.5 | 36, 047, 358 |  | 0.0000 | 1.0000 | 100.00 |
| 2.5 | 35,200,903 |  | 0.0000 | 1.0000 | 100.00 |
| 3.5 | 25,856, 239 |  | 0.0000 | 1.0000 | 100.00 |
| 4.5 | 16,883,839 |  | 0.0000 | 1.0000 | 100.00 |
| 5.5 | 8,463, 262 |  | 0.0000 | 1.0000 | 100.00 |
| 6.5 | 8,463, 262 |  | 0.0000 | 1.0000 | 100.00 |
| 7.5 | 8,426,470 |  | 0.0000 | 1.0000 | 100.00 |
| 8.5 | 8,426,470 |  | 0.0000 | 1.0000 | 100.00 |
| 9.5 | 8,241,743 |  | 0.0000 | 1.0000 | 100.00 |
| 10.5 | 8,215, 074 |  | 0.0000 | 1.0000 | 100.00 |
| 11.5 | 8,031,516 |  | 0.0000 | 1.0000 | 100.00 |
| 12.5 | 8,196,749 |  | 0.0000 | 1.0000 | 100.00 |
| 13.5 | 9, 024, 901 |  | 0.0000 | 1.0000 | 100.00 |
| 14.5 | 9, 024, 901 |  | 0.0000 | 1.0000 | 100.00 |
| 15.5 | 9, 024, 901 |  | 0.0000 | 1.0000 | 100.00 |
| 16.5 | 993, 385 |  | 0.0000 | 1.0000 | 100.00 |
| 17.5 | 993, 385 |  | 0.0000 | 1.0000 | 100.00 |
| 18.5 | 993, 385 |  | 0.0000 | 1.0000 | 100.00 |
| 19.5 | 993,385 |  | 0.0000 | 1.0000 | 100.00 |
| 20.5 | 993,385 |  | 0.0000 | 1.0000 | 100.00 |
| 21.5 | 993,385 |  | 0.0000 | 1.0000 | 100.00 |
| 22.5 | 993,385 |  | 0.0000 | 1.0000 | 100.00 |
| 23.5 | 993,385 |  | 0.0000 | 1.0000 | 100.00 |
| 24.5 | 993,385 |  | 0.0000 | 1.0000 | 100.00 |
| 25.5 | 993,385 |  | 0.0000 | 1.0000 | 100.00 |
| 26.5 | 993,385 |  | 0.0000 | 1.0000 | 100.00 |
| 27.5 | 993,385 |  | 0.0000 | 1.0000 | 100.00 |
| 28.5 | 993,385 |  | 0.0000 | 1.0000 | 100.00 |
| 29.5 | 993,385 |  | 0.0000 | 1.0000 | 100.00 |
| 30.5 | 993,385 |  | 0.0000 | 1.0000 | 100.00 |
| 31.5 | 993,385 |  | 0.0000 | 1.0000 | 100.00 |
| 32.5 | 993, 385 |  | 0.0000 | 1.0000 | 100.00 |
| 33.5 | 993,385 |  | 0.0000 | 1.0000 | 100.00 |
| 34.5 | 993,385 |  | 0.0000 | 1.0000 | 100.00 |
| 35.5 | 993,385 | 79,828 | 0.0804 | 0.9196 | 100.00 |
| 36.5 | 913,557 | 39, 284 | 0.0430 | 0.9570 | 91.96 |
| 37.5 | 874,273 | 109,243 | 0.1250 | 0.8750 | 88.01 |
| 38.5 | 599,797 | 109, 363 | 0.1823 | 0.8177 | 77.01 |
| 39.5 |  |  |  |  | 62.97 |

EL PASO ELECTRIC COMPANY


EL PASO ELECTRIC COMPANY


EL PASO ELECTRIC COMPANY

ACCOUNT 345.00 ACCESSORY ELECTRIC EQUIPMENT
ORIGINAL LIFE TABLE
PLACEMENT BAND 1980-2019

| AGE AT | EXPOSURES AT |
| :--- | :--- |
| BEGIN OF | BEGINNING OF |
| INTERVAL | AGE INTERVAL |

0.0 27,489,985
0.5 23,431,573
1.5 23,385,719
2.5 22,837,263
$3.5 \quad 17,720,443$
$4.5 \quad$ 5,253,019
5.5 5,202,416
$6.5 \quad 536,392$
7.5
8.5
9.5
10.5
11.5
12.5
13.5
14.5
15.5
16.5
17.5
18.5
19.5
20.5
21.5
22.5
23.5
24.5
25.5
26.5
27.5
28.5
29.5
30.5
31.5
32.5
33.5
34.5
35.5
36.5
37.5
38.5

$$
451,417
$$

## DURING AGE INTERVAL

RETIREMENTS
EXPERIENCE BAND 1994-2019

| NG AGE | RETMT | SURV | BEGIN OF |
| :--- | ---: | :---: | ---: |
| RATIO | RATIO | INTERVAL |  |
|  | 0.0000 | 1.0000 | 100.00 |
| 48,946 | 0.0000 | 1.0000 | 100.00 |
|  | 0.0021 | 0.9979 | 100.00 |
|  | 0.0000 | 1.0000 | 99.79 |
|  | 0.0000 | 1.0000 | 99.79 |
|  | 0.0000 | 1.0000 | 99.79 |
|  | 0.0000 | 1.0000 | 99.79 |
|  |  |  | 99.79 |
|  |  |  | 99.79 |

0.0000

451, 417
451, 417
451, 417
451, 417
451, 417
0.0000
0.0000
0.0000
0.0000
0.0000

451, 417
0.0000

451, 417
451, 417
451, 417
451, 417
451, 417
451, 417
451, 417
451, 417
0.0000
0.0000
0.0000
0.0000
0.0000
0.0000
0.0000
0.0000

451, 417
451, 417
0.0000
0.0000

451, 417
451, 417
451, 417
451, 417
451, 417
451, 417
451, 417
451, 417
0.0000
0.0000
0.0000
0.0000
0.0000
0.0000
0.0000
0.0000
0.0000
39.5
EL PASO ELECTRIC COMPANY


## EL PASO ELECTRIC COMPANY

ACCOUNT 345.00 ACCESSORY ELECTRIC EQUIPMENT - SOLAR

ORIGINAL LIFE TABLE

| PLACEMENT | AND 2009-2012 |  | EXPERIENCE BAND 2009-2019 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AGE AT | EXPOSURES AT | RETIREMENTS |  |  | PCT SURV |
| BEGIN OF | BEGINNING OF | DURING AGE | RETMT | SURV | BEGIN OF |
| INTERVAL | AGE INTERVAL | INTERVAL | RATIO | RATIO | INTERVAL |
| 0.0 | 167,360 |  | 0.0000 | 1.0000 | 100.00 |
| 0.5 | 167,360 |  | 0.0000 | 1.0000 | 100.00 |
| 1.5 | 167,360 |  | 0.0000 | 1.0000 | 100.00 |
| 2.5 | 167,360 |  | 0.0000 | 1.0000 | 100.00 |
| 3.5 | 167,360 |  | 0.0000 | 1.0000 | 100.00 |
| 4.5 | 167,360 |  | 0.0000 | 1.0000 | 100.00 |
| 5.5 | 167,360 |  | 0.0000 | 1.0000 | 100.00 |
| 6.5 | 167,360 |  | 0.0000 | 1.0000 | 100.00 |
| 7.5 | 105,887 |  | 0.0000 | 1.0000 | 100.00 |
| 8.5 | 48,070 |  | 0.0000 | 1.0000 | 100.00 |
| 9.5 | 48,070 |  | 0.0000 | 1.0000 | 100.00 |
| 10.5 |  |  |  |  | 100.00 |



## EL PASO ELECTRIC COMPANY

## ACCOUNT 346.00 MISCELLANEOUS POWER PLANT EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1980-2019

| AGE AT | EXPOSURES AT |
| :--- | :--- |
| BEGIN OF | BEGINNING OF |
| INTERVAL | AGE INTERVAL |

0.0
0.5
1.5
2.5
$3.5 \quad 4,844,938$
$4.5 \quad 3,844,318$
$5.5 \quad 3,844,318$
$6.5 \quad 3,497,302$
7.5 3,350,086
8.5 3,350,086
$9.5 \quad 3,350,086$
$10.5 \quad 3,351,421$
11.5 3,423,033
12.5 3,462,101
$13.5 \quad 3,843,313$
$14.5 \quad 3,843,313$
$15.5 \quad 3,834,947$
$16.5 \quad 3,734,264$
17.5 3,524,130
18.5 2,870,290
19.5 2,738,049
$20.5 \quad 2,718,185$
$21.5 \quad 2,673,701$
$22.5 \quad 2,623,168$
23.5 1,050,652
24.5 602,136
$25.5 \quad 535,781$
$26.5 \quad 535,781$
$27.5 \quad 535,781$
$28.5 \quad 535,781$
$29.5 \quad 535,781$
30.5 535,781
$31.5 \quad 535,781$
$32.5 \quad 535,781$
$33.5 \quad 535,781$
$34.5 \quad 535,781$
$35.5 \quad 535,781$
$36.5 \quad 515,627$
$37.5 \quad 444,015$
$38.5 \quad 362,393$
39.5

EXPERIENCE BAND 1994-2019

PCT SURV
BEGIN OF
INTERVAL

| 0.0000 | 1.0000 | 100.00 |
| ---: | ---: | ---: |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0351 | 0.9649 | 100.00 |
| 0.0000 | 1.0000 | 96.49 |
| 0.0000 | 1.0000 | 96.49 |
| 0.0000 | 1.0000 | 96.49 |
|  |  | 96.49 |
| 0 |  |  |
| 0 |  |  |



## EL PASO ELECTRIC COMPANY

## ACCOUNT 350.10 LAND RIGHTS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1951-2019

0.0 10,811,232
0.5 4,936,289
1.5 4,936,137
2.5 4,388,825
$3.5 \quad 4,087,119$
$4.5 \quad 4,321,163$
$5.5 \quad 4,774,190$
6.5 4,960,134
7.5 4,966,451
8.5 5,185,899
$9.5 \quad 5,188,185$
$10.5 \quad 5,203,456$
$11.5 \quad 7,290,692$
12.5 7,300,445
13.5 6,802,867
$14.5 \quad 6,831,641$
$15.5 \quad 6,764,945$
$16.5 \quad 5,886,497$
17.5 7,105,074
$18.5 \quad 7,105,569$
$19.5 \quad 7,135,463$
20.5 7,220,467
$21.5 \quad 7,270,419$
$22.5 \quad 7,292,798$
$23.5 \quad 7,273,670$
24.5 7,318,263
$25.5 \quad 7,371,662$
26.5 7,682,149
$27.5 \quad 7,723,119$
$28.5 \quad 7,500,526$
$29.5 \quad 7,039,407$
30.5 4,435,984
31.5 4,445,468
$32.5 \quad 4,301,701$
$33.5 \quad 4,310,223$
34.5 4,300,778
$35.5 \quad 2,280,976$
36.5 2,290,222
$37.5 \quad 2,290,917$
$38.5 \quad 2,350,715$

EXPERIENCE BAND 1996-2019

PCT SURV
BEGIN OF
INTERVAL

| RETMT | SURV |
| :---: | :---: |
| RATIO | RATIO |

1.0000
100.00
100.00
99.99
99.99
99.99

29,475
300
152
-
RETIREMENTS
DURING AGE
INTERVAL

RATIO
1.0000
1.0000
1.0000
1.0000
$0.9932 \quad 99.99$
99.31
99.31
99.31
99.31
99.31
99.31
99.31
99.31
99.31
99.30
99.30
99.30
99.27
99.15
99.15
99.15
99.15
99.15
98.79
98.79
98.79
98.79
98.79
98.79
98.79
98.79
98.79
98.79
98.79
98.79
98.79
98.79
98.79
98.79

## EL PASO ELECTRIC COMPANY

## ACCOUNT 350.10 LAND RIGHTS <br> ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1951-2019
EXPERIENCE BAND 1996-2019

AGE AT EXPOSURES AT BEGIN OF BEGINNING OF INTERVAL AGE INTERVAL
39.5
40.5
41.5
42.5
43.5
44.5
45.5
46.5
47.5
48.5
49.5
50.5
51.5
52.5
53.5
54.5
55.5
56.5
57.5
58.5
59.5
60.5
61.5
62.5
63.5
64.5
65.5
66.5
67.5
68.5

2, 295, 659
2,270,610
1, 050,513
1, 042, 093
1, 012, 240
942, 131
892,179
869, 801
862,771
818,178
764,779
454, 292
413, 322
401, 872
380, 488
360, 632
344, 832
269, 150
259,416
253,589
212,313
194,140
164, 603
74, 957
36, 255
15, 867
15, 867
15, 317
15, 275
RETIREMENTS
DURING AGE
INTERVAL

PCT SURV
BEGIN OF
INTERVAL
98.79
98.79
98.79
98.79
98.79
98.79
98.79
98.79
98.79
98.79
98.79
98.79
98.79
98.79
98.79
98.79
98.79
98.79
98.79
98.79
98.79
98.79
98.79
98.79
98.79
98.79
98.79
98.79
98.79
98.79
EL PASO ELECTRIC COMPANY ORIGINAL AND SMOOTH SURVIVOR CURVES


## EL PASO ELECTRIC COMPANY

ACCOUNT 352.00 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1954-2019

0.5
1.5
2.5
$3.5 \quad 5,175,482$
$4.5 \quad 4,619,086$
$5.5 \quad 4,501,161$
$6.5 \quad 4,177,971$
$7.5 \quad 4,169,916$
$8.5 \quad 6,681,780$
9.5 6,678,069
$10.5 \quad 5,612,121$
$11.5 \quad$ 5,619,006
$12.5 \quad$ 5,523,264
$13.5 \quad$ 5,070,978
$14.5 \quad 5,020,977$
$15.5 \quad 5,020,837$
16.5 4,947,002
$17.5 \quad 4,607,715$
18.5 4,602,098
19.5 4,415,294
$20.5 \quad 4,409,719$
$21.5 \quad 4,404,868$
$22.5 \quad 4,352,647$
23.5 4,351,809
24.5 4,145,235
25.5 4,179,339
26.5 4,185,041
27.5 4,035,791
28.5 4,026,763
29.5 4,042,418
30.5 3,765,548
31.5 3,748,456
$32.5 \quad 3,786,099$
$33.5 \quad 3,431,773$
34.5 3,398,802
$35.5 \quad 199,368$
36.5 233,219
$37.5 \quad 231,780$
$38.5 \quad 227,205$

EXPERIENCE BAND 1993-2019

PCT SURV
BEGIN OF
INTERVAL

| 0 | 0.0000 | 1.0000 | 100.00 |
| :---: | :---: | :---: | :---: |
| 5,221 | 0.0007 | 0.9993 | 100.00 |
| 168 | 0.0000 | 1.0000 | 99.93 |
|  | 0.0000 | 1.0000 | 99.93 |
|  | 0.0000 | 1.0000 | 99.93 |
| 1,395 | 0.0003 | 0.9997 | 99.93 |
|  | 0.0000 | 1.0000 | 99.90 |
|  | 0.0000 | 1.0000 | 99.90 |
|  | 0.0000 | 1.0000 | 99.90 |
| 490 | 0.0001 | 0.9999 | 99.90 |
| 25 | 0.0000 | 1.0000 | 99.89 |
| 0 | 0.0000 | 1.0000 | 99.89 |
| 10,542 | 0.0019 | 0.9981 | 99.89 |
| 420 | 0.0001 | 0.9999 | 99.70 |
| 3,158 | 0.0006 | 0.9994 | 99.70 |
|  | 0.0000 | 1.0000 | 99.63 |
| 5,349 | 0.0011 | 0.9989 | 99.63 |
|  | 0.0000 | 1.0000 | 99.53 |
|  | 0.0000 | 1.0000 | 99.53 |
|  | 0.0000 | 1.0000 | 99.53 |
|  | 0.0000 | 1.0000 | 99.53 |
| 5,790 | 0.0013 | 0.9987 | 99.53 |
| 687 | 0.0002 | 0.9998 | 99.40 |
| 838 | 0.0002 | 0.9998 | 99.38 |
| 2, 088 | 0.0005 | 0.9995 | 99.36 |
| 1,764 | 0.0004 | 0.9996 | 99.31 |
| 1,554 | 0.0004 | 0.9996 | 99.27 |
| 37,398 | 0.0089 | 0.9911 | 99.24 |
| 4,965 | 0.0012 | 0.9988 | 98.35 |
| 435 | 0.0001 | 0.9999 | 98.23 |
|  | 0.0000 | 1.0000 | 98.22 |
| 150 | 0.0000 | 1.0000 | 98.22 |
| 477 | 0.0001 | 0.9999 | 98.21 |
|  | 0.0000 | 1.0000 | 98.20 |
|  | 0.0000 | 1.0000 | 98.20 |
|  | 0.0000 | 1.0000 | 98.20 |
|  | 0.0000 | 1.0000 | 98.20 |
|  | 0.0000 | 1.0000 | 98.20 |
|  | 0.0000 | 1.0000 | 98.20 |
|  | 0.0000 | 1.0000 | 98.20 |

EL PASO ELECTRIC COMPANY

ACCOUNT 352.00 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.
PLACEMENT BAND 1954-2019
EXPERIENCE BAND 1993-2019
$\begin{array}{ll}\text { AGE AT } & \text { EXPOSURES AT } \\ \text { BEGIN OF } & \text { BEGINNING OF } \\ \text { INTERVAL } & \text { AGE INTERVAL }\end{array}$
39.5
40.5
41.5
42.5
43.5
44.5
45.5
46.5
47.5
48.5
49.5
50.5
51.5
52.5
53.5
54.5
55.5
56.5
57.5
58.5
59.5
60.5
61.5
62.5
63.5

227, 205
227, 205
226,911
226, 863
226, 863
226, 114
226,114
222,725
219, 222
218, 766
218,449
216, 173
215, 747
183, 261
171, 687
171, 223
166,793
140,983
133,772
133,772
85,726
81, 267
67,932
29,981

## RETIREMENTS DURING AGE INTERVAL

PCT SURV
BEGIN OF
INTERVAL
98.20
98.20
98.07
98.05
98.05
97.73
97.73
96.26
95.97
95.97
95.83
94.83
94.64
94.64
92.06
91.81
91.07
88.91
86.94
86.94
86.94
86.94
86.94
86.94
86.94
EL PASO ELECTRIC COMPANY


## EL PASO ELECTRIC COMPANY

## ACCOUNT 353.00 STATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1969-2019

| AGE AT | EXPOSURES AT |
| :--- | :--- |
| BEGIN OF | BEGINNING OF |
| INTERVAL | AGE INTERVAL |

$0.5 \quad 123,381,785$
1.5 119,973,354
2.5 114,067,017
3.5 106,098,721
$4.5 \quad 98,012,081$
$5.5 \quad 98,507,346$
$6.5 \quad 93,945,324$
7.5 90,191,602
8.5 111,721,431
9.5 111,030,618
10.5 103,071,046
11.5 90,459,870
12.5 91,565,937
13.5 90,874,522
14.5 94,475,246
15.5 92,769,320
16.5 85,138,709
$17.5 \quad 84,118,567$
$18.5 \quad 84,350,858$
19.
20.
21.
22.
23.
24.
25.
26.
27.
28.5
29.5
30.
31.
32.
33.
34.
35.5
36.5
37.5
38.5

79,802,075
80, 269, 127
80, 808, 087
73,579,963
73,331,768
71,739, 864
70, 900,678
69, 965, 644
69, 628, 184
69, 069, 682
64,567,954
46, 253, 006
46, 137, 531
42,338, 532
41, 712, 188
41,239,758
10,632,523
10,564,176
9, 990, 821
9,522,704

EXPERIENCE BAND 1993-2019

PCT SURV
BEGIN OF
INTERVAL

## RETIREMENTS DNING AGE

| RETIREMENTS <br> DURING AGE <br> INTERVAL | RETMT | RURV | PCT SURV |
| ---: | :---: | :---: | ---: |
|  |  | REGIN OF |  |


| RETIREMENTS |  |  | PCT SURV |
| :---: | :---: | :---: | :---: |
| DURING AGE | RETMT | SURV | BEGIN OF |
| INTERVAL | RATIO | RATIO | INTERVAL |
|  | 0.0000 | 1.0000 | 100.00 |
| 3,520 | 0.0000 | 1.0000 | 100.00 |
| 1,874 | 0.0000 | 1.0000 | 100.00 |
| 10,443 | 0.0001 | 0.9999 | 100.00 |
| 1,247 | 0.0000 | 1.0000 | 99.99 |
| 7,501 | 0.0001 | 0.9999 | 99.99 |
| 289,681 | 0.0029 | 0.9971 | 99.98 |
| 46 | 0.0000 | 1.0000 | 99.68 |
| 1,165 | 0.0000 | 1.0000 | 99.68 |
| 521 | 0.0000 | 1.0000 | 99.68 |
| 181,379 | 0.0016 | 0.9984 | 99.68 |
| 64,442 | 0.0006 | 0.9994 | 99.52 |
| 30,920 | 0.0003 | 0.9997 | 99.46 |
| 69,676 | 0.0008 | 0.9992 | 99.42 |
| 369 | 0.0000 | 1.0000 | 99.35 |
| 254,631 | 0.0027 | 0.9973 | 99.35 |
| 25,833 | 0.0003 | 0.9997 | 99.08 |
| 1,882 | 0.0000 | 1.0000 | 99.05 |
| 10,119 | 0.0001 | 0.9999 | 99.05 |
| 1,565 | 0.0000 | 1.0000 | 99.04 |
| 626,509 | 0.0079 | 0.9921 | 99.04 |
| 506 | 0.0000 | 1.0000 | 98.26 |
| 111,260 | 0.0014 | 0.9986 | 98.26 |
| 163,280 | 0.0022 | 0.9978 | 98.12 |
| 1,250,013 | 0.0170 | 0.9830 | 97.90 |
| 23,121 | 0.0003 | 0.9997 | 96.24 |
| 935, 034 | 0.0132 | 0.9868 | 96.20 |
| 91,742 | 0.0013 | 0.9987 | 94.94 |
| 71,847 | 0.0010 | 0.9990 | 94.81 |
| 1,282 | 0.0000 | 1.0000 | 94.71 |
| 10, 227 | 0.0002 | 0.9998 | 94.71 |
| 75,192 | 0.0016 | 0.9984 | 94.70 |
| 70,396 | 0.0015 | 0.9985 | 94.54 |
| 261, 251 | 0.0062 | 0.9938 | 94.40 |
| 26,157 | 0.0006 | 0.9994 | 93.82 |
| 471, 144 | 0.0114 | 0.9886 | 93.76 |
| 605 | 0.0001 | 0.9999 | 92.69 |
| 99,040 | 0.0094 | 0.9906 | 92.68 |
| 13,126 | 0.0013 | 0.9987 | 91.81 |
| 68,151 | 0.0072 | 0.9928 | 91.69 |

EL PASO ELECTRIC COMPANY ACCOUNT 353.00 STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT | AND 1969-2019 |  | EXPERIENCE BAND 1993-2019 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AGE AT | EXPOSURES AT | RETIREMENTS |  |  | PCT SURV |
| BEGIN OF | BEGINNING OF | DURING AGE | RETMT | SURV | BEGIN OF |
| INTERVAL | AGE INTERVAL | INTERVAL | RATIO | RATIO | INTERVAL |
| 39.5 | 7,704,316 | 123, 831 | 0.0161 | 0.9839 | 91.03 |
| 40.5 | 7,408, 332 | 218,419 | 0.0295 | 0.9705 | 89.57 |
| 41.5 | 4, 031, 385 | 80,148 | 0.0199 | 0.9801 | 86.93 |
| 42.5 | 3,951, 237 | 96 | 0.0000 | 1.0000 | 85.20 |
| 43.5 | 3,291, 692 | 170 | 0.0001 | 0.9999 | 85.20 |
| 44.5 | 3,279, 082 | 62 | 0.0000 | 1.0000 | 85.20 |
| 45.5 | 2,821,871 |  | 0.0000 | 1.0000 | 85.19 |
| 46.5 | 1,991,746 |  | 0.0000 | 1.0000 | 85.19 |
| 47.5 | 526,623 |  | 0.0000 | 1.0000 | 85.19 |
| 48.5 |  |  |  |  | 85.19 |

PASO ELECTRIC COMPANY


## EL PASO ELECTRIC COMPANY

## ACCOUNT 354.00 STEEL TOWERS AND FIXTURES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1937-2017
EXPERIENCE BAND 1993-2019

| AGE AT | EXPOSURES AT | RETIREMENTS |  |  | PCT SURV |
| :---: | :---: | :---: | :---: | :---: | :---: |
| BEGIN OF | BEGINNING OF | DURING AGE | RETMT | SURV | BEGIN OF |
| INTERVAL | AGE INTERVAL | INTERVAL | RATIO | RATIO | INTERVAL |
| 0.0 | 6,639,885 |  | 0.0000 | 1.0000 | 100.00 |
| 0.5 | 6,639,885 |  | 0.0000 | 1.0000 | 100.00 |
| 1.5 | 7,346,448 |  | 0.0000 | 1.0000 | 100.00 |
| 2.5 | 4, 065,497 |  | 0.0000 | 1.0000 | 100.00 |
| 3.5 | 21,529, 011 |  | 0.0000 | 1.0000 | 100.00 |
| 4.5 | 21,529,011 |  | 0.0000 | 1.0000 | 100.00 |
| 5.5 | 21,586,712 |  | 0.0000 | 1.0000 | 100.00 |
| 6.5 | 21,225,178 |  | 0.0000 | 1.0000 | 100.00 |
| 7.5 | 20,116,152 |  | 0.0000 | 1.0000 | 100.00 |
| 8.5 | 24,076,010 | 3 | 0.0000 | 1.0000 | 100.00 |
| 9.5 | 24, 076, 007 |  | 0.0000 | 1.0000 | 100.00 |
| 10.5 | 23,859,860 |  | 0.0000 | 1.0000 | 100.00 |
| 11.5 | 23,859,860 |  | 0.0000 | 1.0000 | 100.00 |
| 12.5 | 23,859,860 |  | 0.0000 | 1.0000 | 100.00 |
| 13.5 | 23,854,780 |  | 0.0000 | 1.0000 | 100.00 |
| 14.5 | 23,854,780 |  | 0.0000 | 1.0000 | 100.00 |
| 15.5 | 23,854,780 | 6,809 | 0.0003 | 0.9997 | 100.00 |
| 16.5 | 23,847,971 |  | 0.0000 | 1.0000 | 99.97 |
| 17.5 | 23,847, 971 |  | 0.0000 | 1.0000 | 99.97 |
| 18.5 | 23,847,971 |  | 0.0000 | 1.0000 | 99.97 |
| 19.5 | 23,589, 552 |  | 0.0000 | 1.0000 | 99.97 |
| 20.5 | 23,589,552 |  | 0.0000 | 1.0000 | 99.97 |
| 21.5 | 23,546,865 |  | 0.0000 | 1.0000 | 99.97 |
| 22.5 | 23,543, 054 |  | 0.0000 | 1.0000 | 99.97 |
| 23.5 | 23,543, 054 |  | 0.0000 | 1.0000 | 99.97 |
| 24.5 | 23,537,706 |  | 0.0000 | 1.0000 | 99.97 |
| 25.5 | 23,537,706 |  | 0.0000 | 1.0000 | 99.97 |
| 26.5 | 23,537,706 |  | 0.0000 | 1.0000 | 99.97 |
| 27.5 | 23,537,706 |  | 0.0000 | 1.0000 | 99.97 |
| 28.5 | 22,831, 143 |  | 0.0000 | 1.0000 | 99.97 |
| 29.5 | 22,831,143 |  | 0.0000 | 1.0000 | 99.97 |
| 30.5 | 4,077,938 |  | 0.0000 | 1.0000 | 99.97 |
| 31.5 | 4,077,938 |  | 0.0000 | 1.0000 | 99.97 |
| 32.5 | 4,020, 237 |  | 0.0000 | 1.0000 | 99.97 |
| 33.5 | 4,016,829 |  | 0.0000 | 1.0000 | 99.97 |
| 34.5 | 4, 016,755 |  | 0.0000 | 1.0000 | 99.97 |
| 35.5 |  |  |  |  | 99.97 |
| 36.5 |  |  |  |  |  |
| 37.5 |  |  |  |  |  |
| 38.5 |  |  |  |  |  |

## EL PASO ELECTRIC COMPANY ACCOUNT 354.00 STEEL TOWERS AND FIXTURES ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1937-2017 |  |  | EXPERIENCE BAND 1993-2019 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AGE AT | EXPOSURES AT | RETIREMENTS |  |  | PCT SURV |
| BEGIN OF | BEGINNING OF | DURING AGE | RETMT | SURV | BEGIN OF |
| INTERVAL | AGE INTERVAL | INTERVAL | RATIO | RATIO | INTERVAL |
| 39.5 |  |  |  |  |  |
| 40.5 |  |  |  |  |  |
| 41.5 |  |  |  |  |  |
| 42.5 |  |  |  |  |  |
| 43.5 |  |  |  |  |  |
| 44.5 |  |  |  |  |  |
| 45.5 |  |  |  |  |  |
| 46.5 |  |  |  |  |  |
| 47.5 |  |  |  |  |  |
| 48.5 |  |  |  |  |  |
| 49.5 |  |  |  |  |  |
| 50.5 |  |  |  |  |  |
| 51.5 |  |  |  |  |  |
| 52.5 |  |  |  |  |  |
| 53.5 |  |  |  |  |  |
| 54.5 |  |  |  |  |  |
| 55.5 | 3,046 |  | 0.0000 |  |  |
| 56.5 | 3,046 |  | 0.0000 |  |  |
| 57.5 | 3, 046 |  | 0.0000 |  |  |
| 58.5 | 3,046 | 3,046 | 1.0000 |  |  |
| 59.5 |  |  |  |  |  |

EL PASO ELECTRIC COMPANY


## EL PASO ELECTRIC COMPANY

## ACCOUNT 355.00 WOOD AND STEEL POLES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1937-2019

0.0
0.5
1.5 96,389,164
$5.5 \quad 88,263,555$
$6.5 \quad 72,980,151$
$7.5 \quad 64,015,975$
9.
10.
11.5
12.5
13.5
14.5
15.
16.5
17.5
18.5
19.5
20.5
21.5
22.5
23.5
24.5
25.5
26.5
27.5
28.5
29.5
30.5
31.5
32.5
33.5
34.5
35.5
36.5
37.5
38.5
2.5 87,925,443
$3.5 \quad 102,671,533$
$4.5 \quad 89,833,174$
$8.5 \quad 68,260,857$
$119,943,603$
$109,990,092$
$96,389,164$
$87,925,443$
$102,671,533$
$89,833,174$
$88,263,555$
$72,980,151$
$64,015,975$
$68,260,857$
66, 831, 254
66,269,446
61,580, 818
61,406,534
61, 482, 060
66, 355, 396
61,752,917
60,714,102
60, 255,579
60,141,477
58, 963, 935
57,794,195
56, 368, 358
54,508,535
51, 935, 380
50, 968, 334
48, 953, 784
46, 132, 210
46,141, 067
45, 103, 322
44,224,590
23,339, 270
23, 028, 499
22,158, 192
21, 885,577
21,595,484
12,657,933
12,477, 234
11,782,492
11,399,709

## RETIREMENTS DURING AGE INTERVAL

EXPERIENCE BAND 1993-2019

| 823 | 0.0000 | 1.0000 | 100.00 |
| ---: | ---: | ---: | ---: |
| 5,784 | 0.0001 | 0.9999 | 100.00 |
| 2,272 | 0.0000 | 1.0000 | 99.99 |
| 3,901 | 0.0000 | 1.0000 | 99.99 |
| 2,254 | 0.0000 | 1.0000 | 99.99 |
| 3,714 | 0.0000 | 1.0000 | 99.99 |
| 5,894 | 0.0001 | 0.9999 | 99.98 |
| 25,585 | 0.0004 | 0.9996 | 99.97 |
| 120,946 | 0.0019 | 0.9981 | 99.94 |
| 3,139 | 0.0000 | 1.0000 | 99.75 |
| 6,792 | 0.0001 | 0.9999 | 99.75 |
| 4,194 | 0.0001 | 0.9999 | 99.74 |
| 2,511 | 0.0000 | 1.0000 | 99.73 |
| 97,187 | 0.0016 | 0.9984 | 99.73 |
| 12,331 | 0.0002 | 0.9998 | 99.57 |
| 8,713 | 0.0001 | 0.9999 | 99.55 |
| 24,864 | 0.0004 | 0.9996 | 99.53 |
| 4,019 | 0.0001 | 0.9999 | 99.49 |
| 4,915 | 0.0001 | 0.9999 | 99.49 |
| 32,067 | 0.0005 | 0.9995 | 99.48 |
| 24,971 | 0.0004 | 0.9996 | 99.43 |
| 133,984 | 0.0023 | 0.9977 | 99.38 |
| 8,111 | 0.0001 | 0.9999 | 99.15 |
| 86,213 | 0.0016 | 0.9984 | 99.14 |
| 59,872 | 0.0012 | 0.9988 | 98.98 |
| 65,576 | 0.0013 | 0.9987 | 98.87 |
| 60,462 | 0.0012 | 0.9988 | 98.74 |
| 68,461 | 0.0015 | 0.9985 | 98.62 |
| 69,643 | 0.0015 | 0.9985 | 98.47 |
| 18,663 | 0.0004 | 0.9996 | 98.32 |
| 176,624 | 0.0040 | 0.9960 | 98.28 |
| 310,832 | 0.0133 | 0.9867 | 97.89 |
| 103,934 | 0.0045 | 0.9955 | 96.59 |
| 327,471 | 0.0148 | 0.9852 | 96.15 |
| 407,789 | 0.0186 | 0.9814 | 94.73 |
| 195,198 | 0.0090 | 0.9910 | 92.97 |
| 326,147 | 0.0258 | 0.9742 | 92.13 |
| 666,435 | 0.0534 | 0.9466 | 89.75 |
| 252,045 | 0.0214 | 0.9786 | 84.96 |
| 241,971 | 0.0212 | 0.9788 | 83.14 |
|  | 0, |  |  |
| 10 |  |  |  |

PCT SURV
BEGIN OF
INTERVAL
100.00
100.00
99.99
99.99
99.98
99.97
99.94
99.75
99.74
99.73
99.57
99.55
99.49
99.49
99.43
99.38
99.14
98.98
98.87
98.74
98.47
98.32
98.28
97.89
96.15
94.73
92.97
89.75
83.14

EL PASO ELECTRIC COMPANY

ACCOUNT 355.00 WOOD AND STEEL POLES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1937-2019

| AGE AT | EXPOSURES AT |
| :--- | :--- |
| BEGIN OF | BEGINNING OF |
| INTERVAL | AGE INTERVAL |

39.5
40.5
41.5
42.5
43.5
44.5
45.5
46.5
47.5
48.5
49.5
50.5
51.5
52.5
53.5
54.5

10,750,901
10, 394, 019
5,199,481
4, 996, 312
4, 821, 398
4,386,495
3,846, 288
3, 631, 124
3,541, 191
3, 305, 589
3, 006, 858
402, 926
239,638
181, 879
54,178
562
55.5
56.5

## RETIREMENTS DURING AGE INTERVAL

158,571 50,572 166, 251 51,987 89, 065 348, 829 123, 074 61, 006 54, 891 87,632

27, 834 14, 038 14,913 4,139 364 302 567

EXPERIENCE BAND 1993-2019

| RETMT | SURV |
| :---: | :---: |
| RATIO | RATIO |

PCT SURV BEGIN OF INTERVAL
81.38
80.18
79.79
77.23
76.43
75.02
69.05
66.84
65.72
64.70
62.99
62.40
60.23
56.48
55.20
54.82
25.36
EL PASO ELECTRIC COMPANY
ACCOUNT 356.00 OVERHEAD CONDUCTORS AND DEVICES


## EL PASO ELECTRIC COMPANY

## ACCOUNT 356.00 OVERHEAD CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1941-2019

| AGE AT | EXPOSURES AT |
| :--- | :--- |
| BEGIN OF | BEGINNING OF |
| INTERVAL | AGE INTERVAL |

0.0
0.5
1.5
2.5
3.5 63,229,141
$4.5 \quad 56,982,661$
$5.5 \quad 57,783,965$
$6.5 \quad 52,500,290$
$7.5 \quad 52,548,878$
$8.5 \quad 62,700,553$
$9.5 \quad 62,310,752$
$10.5 \quad 61,916,385$
$11.5 \quad 57,020,862$
$12.5 \quad 57,295,950$
13.5 57,409,383
14.5 63,722,385
15.5 62,164,974
$16.5 \quad 61,816,251$
17.5 62,027,451
18.5 62,128,749
19.5 62,079,752
$20.5 \quad 61,975,597$
$21.5 \quad 61,350,363$
22.5 60,087,186
$23.5 \quad$ 62,761,294
24.5 62,517,012
25.5 62,463,173
$26.5 \quad 59,404,758$
$27.5 \quad 59,505,121$
28.5 58,023,920
$29.5 \quad 57,515,559$
30.5 25,352,994
31.5 25,371,981
$32.5 \quad 24,071,047$
$33.5 \quad 24,117,396$
34.5 24,129,708
$35.5 \quad 14,373,832$
36.5 14,669,872
37.5 14,746,512
$38.5 \quad 14,654,961$

EXPERIENCE BAND 1993-2019

| RETIREMENTS <br> DURING AGE <br> INTERVAL | RETMT | SURV | PCT SURV |
| ---: | ---: | ---: | ---: |
| REGIN OF |  |  |  |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 356.00 OVERHEAD CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1941-2019
EXPERIENCE BAND 1993-2019

| AGE AT | EXPOSURES AT |
| :--- | :--- |
| BEGIN OF | BEGINNING OF |
| INTERVAL | AGE INTERVAL |

39.5
40.5
41.5
42.5
43.5
44.5
45.5
46.5
47.5
48.5
49.5
50.5
51.5
52.5
53.5
54.5
55.5
56.5
57.5
58.5
59.5
60.5
61.5
62.5
63.5

14,380, 984
14, 261, 057
8, 044, 440
8, 002, 933
7,715,623
7,426, 012
7,173,179
7, 071, 433
7, 060,264
6, 912, 388
6,656,994
2, 260,928
2, 191, 311
2,133, 882
1, 923, 329
1, 818, 010
1, 739, 384
1,317,527
1,257,211
1, 225,741
1, 051, 041 990,508
854, 819
146,908

## RETIREMENTS <br> DURING AGE INTERVAL

| RETMT | SURV |
| :--- | :---: |
| RATIO | RATIO |

908
82,065
2,802
205, 363
76, 080
143,309
15, 656
6,838
9,753
15,343
19,541
3,417
7,201
14,493
7,020
618
2,170
646
1,116
2, 064
1,123
722
3, 067
636
0.003
0.0043
. 004
0.9999
0.0058
0.9942
0.0003
0.0257
0.0099
0.0193
0.0022
0.0010
0.0014
0.0022
0.9997
0.9743
0.9901
0.9807
0.9978

PCT SURV
BEGIN OF
INTERVAL
99.50
99.49
98.92
98.89
96.35
95.40
93.56
93.35
93.26
93.13
92.93
92.65
92.51
92.21
91.58
91.25
91.22
91.11
91.06
90.98
90.83
90.73
90.66
90.34
89.95
EL PASO ELECTRIC COMPANY


## EL PASO ELECTRIC COMPANY

## ACCOUNT 359.00 ROADS AND TRAILS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1954-2019
EXPERIENCE BAND 1993-2019

0.5
$1.5 \quad 2,034,806$
2.5 2,017,741
$3.5 \quad 898,665$
$4.5 \quad 898,131$
$5.5 \quad 898,131$
$6.5 \quad 898,131$
7.5 898,131
8.5 1,099,259
9.5 1,099,259
$10.5 \quad 1,021,745$
11.5 1,021,745
12.5 1,021,745
13.5 1,021,745
14.5 1,021,745
15.5 1,021,745
$16.5 \quad 1,017,986$
17.5 1,017,986
$18.5 \quad 1,017,986$
$19.5 \quad 779,495$
20.5 481,341
$21.5 \quad 481,341$
22.5 318,852
$23.5 \quad 318,852$
24.5 318,852
$25.5 \quad 318,852$
$26.5 \quad 318,852$
$27.5 \quad 204,696$
$28.5 \quad 204,696$
29.5 204,696
$30.5 \quad 204,696$
$31.5 \quad 204,696$
$32.5 \quad 204,696$
$33.5 \quad 204,696$
$34.5 \quad 204,696$
35.5
36.5
37.5
38.5

## RETIREMENTS DURING AGE INTERVAL

## RETMT SURV <br> RATIO RATIO

PCT SURV
BEGIN OF
INTERVAL
100.00
100.00
99.93
99.93
99.93
99.87
99.87
99.87
99.87
99.05
99.05
99.05
99.05
99.05
99.05
99.05
99.05
98.69
98.69
98.69
98.69
98.69
98.69
98.69
98.69
98.69
98.69
98.69
98.69
98.69
98.69
98.69
98.69
98.69
98.69
98.69
98.69
0.0000

EL PASO ELECTRIC COMPANY


## EL PASO ELECTRIC COMPANY

## ACCOUNT 360.10 LAND RIGHTS

ORIGINAL LIFE TABLE
PLACEMENT BAND 1988-2019
EXPERIENCE BAND 1993-2019

| AGE AT | EXPOSURES AT | RETIREMENTS |
| :---: | :---: | :---: |
| BEGIN OF | BEGINNING OF | DURING AGE |
| INTERVAL | AGE INTERVAL | INTERVAL |


| RETMT | SURV | BEGIN OF |
| :---: | :---: | :---: |
| RATIO | RATIO | INTERVAL |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
| 0.0000 | 1.0000 | 100.00 |
|  |  | 100.00 |
|  |  |  |
| 0.0 |  |  |

EL PASO ELECTRIC COMPANY


## EL PASO ELECTRIC COMPANY

ACCOUNT 361.00 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1926-2019

0.5
$1.5 \quad 12,305,174$
2.5 8,743,949
$3.5 \quad 6,744,197$
$4.5 \quad 6,484,356$
$5.5 \quad 6,405,056$
$6.5 \quad$ 5,139,061
$7.5 \quad 4,633,379$
8.5 4,642,689
$9.5 \quad 2,701,133$
$10.5 \quad 2,723,770$
$11.5 \quad 2,688,570$
$12.5 \quad 3,114,629$
13.5 2,940,075
14.5 2,920,316
$15.5 \quad 2,766,850$
$16.5 \quad 2,751,895$
$17.5 \quad 2,797,734$
18.5 2,794,830
19.
20.
21.
22.
23.
24.
25.
26.
27.
28.5
29.
30.
31.
32.
33.
34.
35.5
36.5
37.5
38.5

1,998,990
2, 008, 083
2, 006, 770
2, 005,341
2, 024, 840
2, 033, 752
1,914,947
1, 806,716
1,738,113
1,740,896
1,697,186
1,530,943
1,541, 338
1,388,240
1, 246, 038
1,188,663
1,137,508
1, 042,438
1, 074,007
1, 033,770

EXPERIENCE BAND 1993-2019

| RETIREMENTS <br> DURING AGE <br> INTERVAL | RETMT | SURV | PCT SURV |
| ---: | ---: | ---: | ---: |
|  | RATIO | RATIO | INTERVAL |

## EL PASO ELECTRIC COMPANY

ACCOUNT 361.00 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.
PLACEMENT BAND 1926-2019
EXPERIENCE BAND 1993-2019

| AGE AT | EXPOSURES AT |
| :--- | :--- |
| BEGIN OF | BEGINNING OF |
| INTERVAL | AGE INTERVAL |

39. 

40.5
41.5
42.5
43.5
44.5
45.5
46.5
47.5
48.5
49.5
50.5
51.5
52.5
53.5
54.5
55.5
56.5
57.5
58.5
59.5
60.5
61.5
62.5
63.5
64.5
65.5
66.5
67.5
68.5
69.5
70.5
71.5
72.5
73.5
74.5

608,243
596, 880
587,668
581, 965
562,599
525, 167
466,384
411, 646
394,400
389, 848
362,803
341, 021
303, 013
273,746
271,694
269, 855
261, 387
251, 435
236, 020
217,607
208,716
203, 982
190, 513
184, 365
124,775
61,554
55,998
50, 095
40, 236
21,676
15,416
10,117
989
367
53

## RETIREMENTS DURING AGE INTERVAL

| RETMT | SURV |
| :--- | ---: |
| RATIO | RATIO |


| 1,918 | 0.0032 | 0.9968 | 93.77 |
| ---: | ---: | ---: | ---: |
| 1,975 | 0.0033 | 0.9967 | 93.47 |
| 1,097 | 0.0019 | 0.9981 | 93.16 |
| 393 | 0.0007 | 0.9993 | 92.99 |
| 758 | 0.0013 | 0.9987 | 92.93 |
| 6,516 | 0.0124 | 0.9876 | 92.80 |
| 5,182 | 0.0111 | 0.9889 | 91.65 |
| 1,259 | 0.0031 | 0.9969 | 90.63 |
| 447 | 0.0011 | 0.9989 | 90.36 |
| 151 | 0.0004 | 0.9996 | 90.25 |

0.0004
0.9996
0.0008
0.9992

372
515
2,287
$486 \quad 0.008$
205
352
301
1,619
2,734
2,814 0.0135 9070.0044

2,267
2,843 0.0154
$360 \quad 0.0029$
2180.0035

182
78
17
1
10.0001
. 0000
0.0000

3,700
314
53

PCT SURV
BEGIN OF
INTERVAL
93.77
93.47
93.16
92.99
92.93
92.80
91.65
90.63
90.25
90.22
90.14
90.04
89.89
89.14
88.98
88.91
88.79
88.69
88.08
86.97
85.80
85.42
84.40
83.10
82.86
82.57
82.30
82.17
82.14
82.13
82.13
52.09
52.09
7.52
EL PASO ELECTRIC COMPANY


## EL PASO ELECTRIC COMPANY

## ACCOUNT 362.00 STATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1949-2019

| AGE AT | EXPOSURES AT |
| :---: | :--- |
| BEGIN OF | BEGINNING OF |
| INTERVAL | AGE INTERVAL |


| 0.0 | $248,828,114$ |
| ---: | ---: |
| 0.5 | $201,849,775$ |
| 1.5 | $176,409,889$ |
| 2.5 | $165,161,928$ |
| 3.5 | $161,826,959$ |
| 4.5 | $154,548,514$ |
| 5.5 | $139,248,866$ |
| 6.5 | $126,903,879$ |
| 7.5 | $112,196,449$ |
| 8.5 | $108,902,705$ |
| 9.5 | $104,297,485$ |
| 10.5 | $91,740,879$ |
| 11.5 | $81,733,466$ |
| 12.5 | $82,480,744$ |
| 13.5 | $75,916,167$ |
| 14.5 | $72,817,079$ |
| 15.5 | $63,288,093$ |
| 16.5 | $58,627,728$ |
| 17.5 | $58,421,777$ |
| 18.5 | $57,373,743$ |
| 19.5 | $52,937,449$ |
| 20.5 | $52,603,940$ |
| 21.5 | $49,537,435$ |
| 22.5 | $47,755,815$ |
| 23.5 | $44,599,419$ |
| 24.5 | $42,812,608$ |
| 25.5 | $37,854,351$ |
| 26.5 | $33,965,172$ |
| 27.5 | $33,459,976$ |
| 28.5 | $31,712,819$ |

29. 
30. 
31. 
32. 
33. 

34.5
35.5
36.5
37.5
38.5

29,127,131
31,869,456
32,202,120
30,513,599
30, 495, 791
29,497,777
29, 199, 281
26,795,173
27,537,745
26, 911, 602

EXPERIENCE BAND 1993-2019

## RETIREMENTS DURING AGE INTERVAL

|  |  |
| :---: | :---: |
| RETMT | SURV |
| RATIO | RATIO |

PCT SURV
BEGIN OF
INTERVAL

| 5,778 | 0.0000 | 1.0000 | 100.00 |
| ---: | ---: | ---: | ---: |
| 4,784 | 0.0000 | 1.0000 | 100.00 |
| 18,582 | 0.0001 | 0.9999 | 100.00 |
| 1,958 | 0.0000 | 1.0000 | 99.98 |
| 62,406 | 0.0004 | 0.9996 | 99.98 |
| 62,318 | 0.0004 | 0.9996 | 99.95 |
| 30,881 | 0.0002 | 0.9998 | 99.90 |
| 82,346 | 0.0006 | 0.9994 | 99.88 |
| 140,311 | 0.0013 | 0.9987 | 99.82 |
| 294,340 | 0.0027 | 0.9973 | 99.69 |
| 142,182 | 0.0014 | 0.9986 | 99.42 |
| 130,114 | 0.0014 | 0.9986 | 99.29 |
| 126,518 | 0.0015 | 0.9985 | 99.15 |
| $1,465,394$ | 0.0178 | 0.9822 | 98.99 |
| 190,667 | 0.0025 | 0.9975 | 97.23 |
| 547,480 | 0.0075 | 0.9925 | 96.99 |
| 70,888 | 0.0011 | 0.9989 | 96.26 |
| 249,502 | 0.0043 | 0.9957 | 96.15 |
| 100,452 | 0.0017 | 0.9983 | 95.74 |
| 111,758 | 0.0019 | 0.9981 | 95.58 |
| 123,542 | 0.0023 | 0.9977 | 95.39 |
| 11,976 | 0.0002 | 0.9998 | 95.17 |
| $2,516,789$ | 0.0508 | 0.9492 | 95.15 |
| 407,437 | 0.0085 | 0.9915 | 90.32 |
| 334,541 | 0.0075 | 0.9925 | 89.54 |
| 454,915 | 0.0106 | 0.9894 | 88.87 |
| 215,488 | 0.0057 | 0.9943 | 87.93 |
| 245,080 | 0.0072 | 0.9928 | 87.43 |
| 129,983 | 0.0039 | 0.9961 | 86.80 |
| 185,504 | 0.0058 | 0.9942 | 86.46 |
| 96,301 | 0.0033 | 0.9967 | 85.95 |
| 342,589 | 0.0107 | 0.9893 | 85.67 |
| 156,140 | 0.0048 | 0.9952 | 84.75 |
| 143,418 | 0.0047 | 0.9953 | 84.34 |
| 278,167 | 0.0091 | 0.9909 | 83.94 |
| 97,430 | 0.0033 | 0.9967 | 83.18 |
| 136,642 | 0.0047 | 0.9953 | 82.90 |
| 94,829 | 0.0035 | 0.9965 | 82.51 |
| 221,448 | 0.0080 | 0.9920 | 82.22 |
| 225,936 | 0.0084 | 0.9916 | 81.56 |
|  | 0.9 |  |  |

EL PASO ELECTRIC COMPANY

ACCOUNT 362.00 STATION EQUIPMENT
ORIGINAL LIFE TABLE, CONT.
PLACEMENT BAND 1949-2019
EXPERIENCE BAND 1993-2019

| AGE AT | EXPOSURES AT |
| :--- | :--- |
| BEGIN OF | BEGINNING OF |
| INTERVAL | AGE INTERVAL |

$40.5 \quad 25,010,695$
$41.5 \quad 23,825,171$
42.5
43.5
44.5
45.5
46.5
47.5
48.5
49.5
50.5
51.5
52.5
53.5
54.5
55.5
56.5
57.5
58.5
59.5
60.5
61.5
62.5
63.5
64.5
65.5
66.5
67.5
68.5
69.5
70.5

23, 705, 122
21, 787,906
20, 026, 479
19, 198, 028
18,948, 452
17,890,985
17,128, 820
16, 435, 498
15, 602,745
14,512,462
13, 619, 252
12, 853, 322
12,431,615
11, 939,540
11,796,546
5, 749, 888
4, 769, 299
4,133,619
3,582,340
3,349,527
2,942,965
2, 273, 680
1,120,932
877,104
485, 016
301, 737
287, 268
132,785
RETIREMENTS
DURING AGE
INTERVAL

| RETMT | SURV |
| :---: | :---: |
| RATIO | RATIO |


| 157,313 | 0.0063 | 0.9937 | 80.88 |
| ---: | ---: | ---: | ---: |
| 90,831 | 0.0036 | 0.9964 | 80.37 |
| 94,048 | 0.0039 | 0.9961 | 80.08 |
| 122,967 | 0.0052 | 0.9948 | 79.76 |
| 118,797 | 0.0055 | 0.9945 | 79.35 |
| 112,787 | 0.0056 | 0.9944 | 78.91 |
| 127,441 | 0.0066 | 0.9934 | 78.47 |
| 299,804 | 0.0158 | 0.9842 | 77.95 |
| 94,512 | 0.0053 | 0.9947 | 76.72 |
| 62,561 | 0.0037 | 0.9963 | 76.31 |
| 135,240 | 0.0082 | 0.9918 | 76.03 |
| 36,825 | 0.0024 | 0.9976 | 75.41 |
| 574,110 | 0.0396 | 0.9604 | 75.23 |
| 265,583 | 0.0195 | 0.9805 | 72.25 |
| 128,814 | 0.0100 | 0.9900 | 70.84 |
| 91,519 | 0.0074 | 0.9926 | 70.13 |
| 55,073 | 0.0046 | 0.9954 | 69.62 |
| 61,008 | 0.0052 | 0.9948 | 69.30 |
| 74,318 | 0.0129 | 0.9871 | 68.94 |
| 133,887 | 0.0281 | 0.9719 | 68.05 |
| 59,613 | 0.0144 | 0.9856 | 66.14 |
| 47,699 | 0.0133 | 0.9867 | 65.18 |
| 32,003 | 0.0096 | 0.9904 | 64.31 |
| 10,065 | 0.0034 | 0.9966 | 63.70 |
| 17,268 | 0.0076 | 0.9924 | 63.48 |
| 13,770 | 0.0123 | 0.9877 | 63.00 |
| 4,754 | 0.0054 | 0.9946 | 62.23 |
| 2,860 | 0.0059 | 0.9941 | 61.89 |
| 39 | 0.0001 | 0.9999 | 61.52 |
|  | 0.0000 | 1.0000 | 61.52 |
|  | 0.0000 | 1.0000 | 61.52 |
|  |  |  | 61.52 |

PASO ELECTRIC COMPANY
ACCOUNT 364.00 POLES, TOWERS AND FIXTURES
ORIGINAL AND SMOOTH SURVIVOR CURVES


## EL PASO ELECTRIC COMPANY

ACCOUNT 364.00 POLES, TOWERS AND FIXTURES
ORIGINAL LIFE TABLE

PLACEMENT BAND 1929-2019

0.0
0.5
$1.5 \quad 145,169,448$
2.5 138,213,021
$3.5 \quad 131,797,614$
$4.5 \quad 125,576,909$
$5.5 \quad 120,653,080$
$6.5 \quad 116,230,405$
$7.5 \quad 110,594,999$
8.5 104,370,279
9.5
10.
11.5
12.5
13.5
14.5
15.5
16.5
17.5
18.5
19.5
20.5
21.
22.5
23.5
24.5
25.5
26.5
27.5
28.5
29.5
30.5
31.5
32.5
33.5
34.5
35.5
36.5
37.5
38.5

99, 823, 893
94, 936, 650
89,510,956
84, 029, 680
81, 242, 298
73,044,418
67,222,187
63, 816, 432
60,571, 636
56,586, 813
51,583, 644
47, 266, 897
44,189,978
41, 329, 487
38,660,783
35,344,616
33,496, 308
31, 871, 910
30,324, 992
28,325, 852
26, 821, 682
24,943,755
23,278, 279
21,596,391
19, 880,660
18, 235, 018
16,514, 280
15,189, 285
13, 366, 431
11, 967, 365

EXPERIENCE BAND 1993-2019

## RETIREMENTS DURING AGE INTERVAL

|  |  |  |  |
| ---: | ---: | ---: | ---: |
| 17,009 | 0.0001 | 0.9999 | 100.00 |
| 118,714 | 0.0008 | 0.9992 | 99.99 |
| 142,642 | 0.0010 | 0.9990 | 99.91 |
| 121,574 | 0.0009 | 0.9991 | 99.81 |
| 87,825 | 0.0007 | 0.9993 | 99.72 |
| 123,902 | 0.0010 | 0.9990 | 99.66 |
| 136,718 | 0.0011 | 0.9989 | 99.56 |
| 73,914 | 0.0006 | 0.9994 | 99.45 |
| 101,720 | 0.0009 | 0.9991 | 99.38 |
| 146,783 | 0.0014 | 0.9986 | 99.29 |
| 158,950 | 0.0016 | 0.9984 | 99.15 |
| 110,461 | 0.0012 | 0.9988 | 98.99 |
| 322,481 | 0.0036 | 0.9964 | 98.88 |
| 113,055 | 0.0013 | 0.9987 | 98.52 |
| 161,873 | 0.0020 | 0.9980 | 98.39 |
| 110,954 | 0.0015 | 0.9985 | 98.19 |
| 150,991 | 0.0022 | 0.9978 | 98.05 |
| 130,750 | 0.0020 | 0.9980 | 97.83 |
| 151,347 | 0.0025 | 0.9975 | 97.62 |
| 146,469 | 0.0026 | 0.9974 | 97.38 |
| 179,104 | 0.0035 | 0.9965 | 97.13 |
| 149,860 | 0.0032 | 0.9968 | 96.79 |
| 181,973 | 0.0041 | 0.9959 | 96.48 |
| 194,097 | 0.0047 | 0.9953 | 96.09 |
| 155,194 | 0.0040 | 0.9960 | 95.64 |
| 127,463 | 0.0036 | 0.9964 | 95.25 |
| 151,583 | 0.0045 | 0.9955 | 94.91 |
| 80,067 | 0.0025 | 0.9975 | 94.48 |
| 166,748 | 0.0055 | 0.9945 | 94.24 |
| 117,204 | 0.0041 | 0.9959 | 93.72 |
| 102,790 | 0.0038 | 0.9962 | 93.34 |
| 83,224 | 0.0033 | 0.9967 | 92.98 |
| 60,810 | 0.0026 | 0.9974 | 92.67 |
| 69,924 | 0.0032 | 0.9968 | 92.43 |
| 89,082 | 0.0045 | 0.9955 | 92.13 |
| 299,425 | 0.0164 | 0.9836 | 91.71 |
| 168,885 | 0.0102 | 0.9898 | 90.21 |
| 275,761 | 0.0182 | 0.9818 | 89.29 |
| 267,296 | 0.0200 | 0.9800 | 87.66 |
| 315,706 | 0.0264 | 0.9736 | 85.91 |
|  |  |  |  |
| 10 |  |  |  |

## EL PASO ELECTRIC COMPANY

ACCOUNT 364.00 POLES, TOWERS AND FIXTURES
ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1929-2019
AGE AT EXPOSURES AT BEGIN OF BEGINNING OF INTERVAL
39.5
40.5
41.5
42.5
43.5
44.5
45.5
46.5
47.5
48.5
49.5
50.5
51.5
52.5
53.5
54.5
55.5
56.5
57.5
58.5
59.5
60.5
61.5
62.5
63.5
64.5
65.5
66.5
67.5
68.5
69.5
70.5
71.5
72.5
73.5
74.5
75.5
76.5
77.5
78.5

10,499, 272
8,486,915
6,999,879
6,222,523
5, 250, 320
4, 078, 355
3,189, 283
2, 323, 492
1,549,466
1,112,963
813, 602
639,473
556, 252
449, 534
379, 136
334, 682
309, 799
297,313
294,910
289,774
285,394
227,527
181, 646
147, 953
116,150
77, 269
77, 053
70,966
68,103
55, 281
44,681
41, 081
41, 081
41, 081
40, 419
40, 419
34, 859
30,508
29,120
28,481

EXPERIENCE BAND 1993-2019

## RETIREMENTS DURING AGE INTERVAL

## RETMT SURV <br> RATIO RATIO

PCT SURV
BEGIN OF
INTERVAL
83.65
77.26
73.05
69.58
63.93
54.75
47.60
37.30
27.17
19.84
15.90
13.83
13.04
11.58
10.04
8.96
8.36
8.03
7.92
7.72
7.56
6.63
6.04
5.82
5.61
5.56
5.54
5.11
5.10
5.10
5.10
5.10
5.10
5.10
5.10
5.10
5.10
5.10
5.10
5.10

## EL PASO ELECTRIC COMPANY <br> ACCOUNT 364.00 POLES, TOWERS AND FIXTURES <br> ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1929-2019 |  | EXPERIENCE BAND 1993-2019 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AGE AT | EXPOSURES AT | RETIREMENTS |  |  | PCT SURV |
| BEGIN OF | BEGINNING OF | DURING AGE | RETMT | SURV | BEGIN OF |
| INTERVAL | AGE INTERVAL | INTERVAL | RATIO | RATIO | INTERVAL |
| 79.5 |  |  | 0.0000 | 1.0000 | 5.10 |
| 80.5 | 25,109 |  | 0.0000 | 1.0000 | 5.10 |
| 81.5 | 22,844 |  | 0.0000 | 1.0000 | 5.10 |
| 82.5 | 22,454 |  | 0.0000 | 1.0000 | 5.10 |
| 83.5 | 20,842 |  | 0.0000 | 1.0000 | 5.10 |
| 84.5 | 17,829 |  | 0.0000 | 1.0000 | 5.10 |
| 85.5 | 16,052 |  | 0.0000 | 1.0000 | 5.10 |
| 86.5 | 13,875 |  | 0.0000 | 1.0000 | 5.10 |
| 87.5 | 12,019 |  | 0.0000 | 1.0000 | 5.10 |
| 88.5 | 10,315 |  | 0.0000 | 1.0000 | 5.10 |
| 89.5 | 8,410 |  | 0.0000 | 1.0000 | 5.10 |
| 90.5 | 3,280 |  |  |  | 5.10 |

EL PASO ELECTRIC COMPANY
ACCOUNT 365.00 OVERHEAD CONDUCTORS AND DEVICES


## EL PASO ELECTRIC COMPANY

## ACCOUNT 365.00 OVERHEAD CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1932-2019

| AGE AT | EXPOSURES AT |
| :---: | :--- |
| BEGIN OF | BEGINNING OF |
| INTERVAL | AGE INTERVAL |


| 0.0 | $100,306,062$ |
| ---: | ---: |
| 0.5 | $92,048,327$ |
| 1.5 | $86,231,131$ |
| 2.5 | $82,712,476$ |
| 3.5 | $73,941,599$ |
| 4.5 | $69,655,058$ |
| 5.5 | $65,050,747$ |
| 6.5 | $62,273,666$ |
| 7.5 | $59,251,789$ |
| 8.5 | $55,040,551$ |
| 9.5 | $52,431,534$ |
| 10.5 | $49,992,193$ |
| 11.5 | $46,572,562$ |
| 12.5 | $43,484,113$ |
| 13.5 | $42,285,067$ |
| 14.5 | $38,278,980$ |
| 15.5 | $35,759,482$ |
| 16.5 | $34,444,998$ |
| 17.5 | $33,405,405$ |
| 18.5 | $31,491,511$ |
| 19.5 | $30,378,950$ |
| 20.5 | $28,194,994$ |
| 21.5 | $26,497,577$ |
| 22.5 | $24,959,604$ |
| 23.5 | $23,633,161$ |
| 24.5 | $21,908,697$ |
| 25.5 | $21,263,467$ |
| 26.5 | $20,712,669$ |
| 27.5 | $19,509,336$ |
| 28.5 | $18,383,306$ |

$29.5 \quad 17,514,651$
30.5 16,703,089
31.5 15,966,454
$32.5 \quad 15,307,124$
$33.5 \quad 14,596,159$
$34.5 \quad 13,724,506$
$35.5 \quad 12,884,269$
36.5 12,391,743
$37.5 \quad 11,331,299$
$38.5 \quad 10,374,989$

EXPERIENCE BAND 1993-2019

PCT SURV
BEGIN OF
INTERVAL

## RETIREMENTS

| 20,146 | 0.0002 | 0.9998 | 100.00 |
| ---: | ---: | ---: | ---: |
| 72,144 | 0.0008 | 0.9992 | 99.98 |
| 79,840 | 0.0009 | 0.9991 | 99.90 |
| 115,488 | 0.0014 | 0.9986 | 99.81 |
| 327,961 | 0.0044 | 0.9956 | 99.67 |
| 229,759 | 0.0033 | 0.9967 | 99.23 |
| 230,578 | 0.0035 | 0.9965 | 98.90 |
| 140,208 | 0.0023 | 0.9977 | 98.55 |
| 178,716 | 0.0030 | 0.9970 | 98.33 |
| 192,429 | 0.0035 | 0.9965 | 98.03 |
| 211,528 | 0.0040 | 0.9960 | 97.69 |
| 161,995 | 0.0032 | 0.9968 | 97.29 |
| 101,664 | 0.0022 | 0.9978 | 96.98 |
| 87,975 | 0.0020 | 0.9980 | 96.77 |
| 76,064 | 0.0018 | 0.9982 | 96.57 |
| 89,314 | 0.0023 | 0.9977 | 96.40 |
| 135,980 | 0.0038 | 0.9962 | 96.17 |
| 71,744 | 0.0021 | 0.9979 | 95.81 |
| 97,548 | 0.0029 | 0.9971 | 95.61 |
| 97,443 | 0.0031 | 0.9969 | 95.33 |
| 136,904 | 0.0045 | 0.9955 | 95.03 |
| 146,428 | 0.0052 | 0.9948 | 94.61 |
| 248,564 | 0.0094 | 0.9906 | 94.11 |
| 151,897 | 0.0061 | 0.9939 | 93.23 |
| 179,123 | 0.0076 | 0.9924 | 92.66 |
| 119,268 | 0.0054 | 0.9946 | 91.96 |
| 105,786 | 0.0050 | 0.9950 | 91.46 |
| 89,589 | 0.0043 | 0.9957 | 91.01 |
| 110,204 | 0.0056 | 0.9944 | 90.61 |
| 110,127 | 0.0060 | 0.9940 | 90.10 |
| 60,749 | 0.0035 | 0.9965 | 89.56 |
| 97,518 | 0.0058 | 0.9942 | 89.25 |
| 91,164 | 0.0057 | 0.9943 | 88.73 |
| 46,732 | 0.0031 | 0.9969 | 88.22 |
| 59,688 | 0.0041 | 0.9959 | 87.95 |
| 145,348 | 0.0106 | 0.9894 | 87.59 |
| 61,809 | 0.0048 | 0.9952 | 86.67 |
| 277,348 | 0.0224 | 0.9776 | 86.25 |
| 239,235 | 0.0211 | 0.9789 | 84.32 |
| 379,141 | 0.0365 | 0.9635 | 82.54 |
|  |  |  |  |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 365.00 OVERHEAD CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1932-2019
EXPERIENCE BAND 1993-2019

| AGE AT | EXPOSURES AT |
| :---: | :--- |
| BEGIN OF | BEGINNING OF |
| INTERVAL | AGE INTERVAL |

39.5
40.5
41.5
42.5
43.5
44.5
45.5
46.5
47.5
48.5
49.5
50.5
51.5
52.5
53.5
54.5
55.5
56.5
57.5
58.5
59.5
60.5
61.5
62.5
63.5
64.5
65.5
66.5
67.5
68.5
69.5
70.5
71.5
72.5
73.5
74.5
75.5
76.5
77.5
78.5

9,398,378
8,101,123
7,169,084
6, 767,544
6, 080,743
5, 412, 969
4, 930, 757
4, 384, 300
3,988,905
3,740,756
3,125,612
2,582,607
2, 033,406
1,467,450
1, 065,268
877,604
713,993
587, 997
475,397
382, 963
344, 218
287,676
135, 102
114,546
103,407
97, 731
88, 684
82,583
75,549
62,581
62,581
54,634
32,760
32,760
32,760
32,760
32,760
29, 212
29, 212
27,597

## RETIREMENTS DURING AGE INTERVAL

| 456,882 | 0.0486 | 0.9514 | 79.52 |
| ---: | ---: | ---: | ---: |
| 112,055 | 0.0138 | 0.9862 | 75.66 |
| 168,434 | 0.0235 | 0.9765 | 74.61 |
| 251,523 | 0.0372 | 0.9628 | 72.86 |
| 184,804 | 0.0304 | 0.9696 | 70.15 |
| 93,844 | 0.0173 | 0.9827 | 68.02 |
| 196,580 | 0.0399 | 0.9601 | 66.84 |
| 114,618 | 0.0261 | 0.9739 | 64.17 |
| 230,231 | 0.0577 | 0.9423 | 62.50 |
| 234,205 | 0.0626 | 0.9374 | 58.89 |
| 194,242 | 0.0621 | 0.9379 | 55.20 |
| 265,146 | 0.1027 | 0.8973 | 51.77 |
| 393,010 | 0.1933 | 0.8067 | 46.46 |
| 275,197 | 0.1875 | 0.8125 | 37.48 |
| 104,941 | 0.0985 | 0.9015 | 30.45 |
| 74,388 | 0.0848 | 0.9152 | 27.45 |
| 77,194 | 0.1081 | 0.8919 | 25.12 |
| 33,255 | 0.0566 | 0.9434 | 22.41 |
| 38,055 | 0.0800 | 0.9200 | 21.14 |
| 41,141 | 0.1074 | 0.8926 | 19.45 |
| 59,154 | 0.1719 | 0.8281 | 17.36 |
| 114,800 | 0.3991 | 0.6009 | 14.38 |
| 20,556 | 0.1522 | 0.8478 | 8.64 |
| 11,139 | 0.0972 | 0.9028 | 7.32 |
| 5,676 | 0.0549 | 0.9451 | 6.61 |
| 9,046 | 0.0926 | 0.9074 | 6.25 |
| 3,884 | 0.0438 | 0.9562 | 5.67 |
| 980 | 0.0119 | 0.9881 | 5.42 |
| 2 | 0.0000 | 1.0000 | 5.36 |
|  | 0.0000 | 1.0000 | 5.36 |
|  | 0.0000 | 1.0000 | 5.36 |
|  | 0.0000 | 1.0000 | 5.36 |
|  | 0.0000 | 1.0000 | 5.36 |
|  | 0.0000 | 1.0000 | 5.36 |
|  | 0.0000 | 1.0000 | 5.36 |
|  | 0.0000 | 1.0000 | 5.36 |
|  | 0.0000 | 1.0000 | 5.36 |
| 10000 | 1.0000 | 5.36 |  |
| 10000 | 1.0000 | 5.36 |  |
| 1000 | 1.0000 | 5.36 |  |
| 100 |  |  |  |

EL PASO ELECTRIC COMPANY

ACCOUNT 365.00 OVERHEAD CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1932-2019 |  | EXPERIENCE BAND 1993-2019 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AGE AT | EXPOSURES AT | RETIREMENTS |  |  | PCT SURV |
| BEGIN OF | BEGINNING OF | DURING AGE | RETMT | SURV | BEGIN OF |
| INTERVAL | AGE INTERVAL | INTERVAL | RATIO | RATIO | INTERVAL |
| 79.5 |  |  | 0.0000 | 1.0000 | 5.36 |
| 80.5 | 22,619 |  | 0.0000 | 1.0000 | 5.36 |
| 81.5 | 20,025 |  | 0.0000 | 1.0000 | 5.36 |
| 82.5 | 17,160 |  | 0.0000 | 1.0000 | 5.36 |
| 83.5 | 11,403 |  | 0.0000 | 1.0000 | 5.36 |
| 84.5 | 8,271 |  | 0.0000 | 1.0000 | 5.36 |
| 85.5 | 5,423 |  | 0.0000 | 1.0000 | 5.36 |
| 86.5 | 3,870 |  | 0.0000 | 1.0000 | 5.36 |
| 87.5 | 1,770 |  |  |  | 5.36 |

EL PASO ELECTRIC COMPANY
ACCOUNT 366.00 UNDERGROUND CONDUIT
ORIGINAL AND SMOOTH SURVIVOR CURVES


## EL PASO ELECTRIC COMPANY

## ACCOUNT 366.00 UNDERGROUND CONDUIT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1948-2019

| AGE AT | EXPOSURES AT |
| :---: | :--- |
| BEGIN OF | BEGINNING OF |
| INTERVAL | AGE INTERVAL |

$0.0 \quad 123,775,207$
$0.5 \quad 117,342,859$
1.5 112,780,532
2.5 108,800,246
3.5 103,589,990
$4.5 \quad 100,981,880$
$5.5 \quad 96,504,446$
$6.5 \quad 92,937,492$
7.5 89,570,213
$8.5 \quad 88,157,941$
9.
10.
11.
12.
13.
14.
15.
16.
17.
18.5
19.5
20.5
21.5
22.5
23.5
24.5
25.
26.
27.
28.5
29.
30.
31.
32.
33.
34.5
35.5
36.5
37.5
38.5

86,590,707
82,364, 298
77,698,441
71,522,842
67,174, 028
61,129,159
53,571, 898
48, 879, 296
44, 198, 503
40, 960, 411
37,436,926
33, 253, 414
28, 806, 342
26,647,700
24,046,716
21,586,692
20, 067, 013
18, 986, 208
17,975,477
16, 938, 469
15, 803, 917
14, 635,597
13,385, 775
11, 981, 315
10, 766, 242
9, 452,771
7, 911, 386
7, 020, 899
6, 327, 334
5,502,588

EXPERIENCE BAND 1993-2019

PCT SURV
BEGIN OF
INTERVAL

| 19,148 | 0.0002 | 0.9998 | 100.00 |
| ---: | ---: | ---: | ---: |
| 80,380 | 0.0007 | 0.9993 | 99.98 |
| 57,901 | 0.0005 | 0.9995 | 99.92 |
| 79,075 | 0.0007 | 0.9993 | 99.86 |
| 58,458 | 0.0006 | 0.9994 | 99.79 |
| 72,839 | 0.0007 | 0.9993 | 99.74 |
| 68,399 | 0.0007 | 0.9993 | 99.66 |
| 58,177 | 0.0006 | 0.9994 | 99.59 |
| 47,615 | 0.0005 | 0.9995 | 99.53 |
| 51,301 | 0.0006 | 0.9994 | 99.48 |
| 59,638 | 0.0007 | 0.9993 | 99.42 |
| 54,602 | 0.0007 | 0.9993 | 99.35 |
| 58,637 | 0.0008 | 0.9992 | 99.29 |
| 33,614 | 0.0005 | 0.9995 | 99.21 |
| 24,979 | 0.0004 | 0.9996 | 99.16 |
| 38,555 | 0.0006 | 0.9994 | 99.13 |
| 48,244 | 0.0009 | 0.9991 | 99.06 |
| 55,889 | 0.0011 | 0.9989 | 98.98 |
| 27,633 | 0.0006 | 0.9994 | 98.86 |
| 29,632 | 0.0007 | 0.9993 | 98.80 |
| 19,316 | 0.0005 | 0.9995 | 98.73 |
| 47,398 | 0.0014 | 0.9986 | 98.68 |
| 29,485 | 0.0010 | 0.9990 | 98.54 |
| 40,706 | 0.0015 | 0.9985 | 98.44 |
| 35,370 | 0.0015 | 0.9985 | 98.29 |
| 28,768 | 0.0013 | 0.9987 | 98.14 |
| 29,120 | 0.0015 | 0.9985 | 98.01 |
| 46,445 | 0.0024 | 0.9976 | 97.87 |
| 41,221 | 0.0023 | 0.9977 | 97.63 |
| 34,983 | 0.0021 | 0.9979 | 97.41 |
| 18,308 | 0.0012 | 0.9988 | 97.20 |
| 19,878 | 0.0014 | 0.9986 | 97.09 |
| 4,992 | 0.0004 | 0.9996 | 96.96 |
| 8,984 | 0.0007 | 0.9993 | 96.92 |
| 6,116 | 0.0006 | 0.9994 | 96.85 |
| 2,491 | 0.0003 | 0.9997 | 96.80 |
| 5,138 | 0.0006 | 0.9994 | 96.77 |
| 3,944 | 0.0006 | 0.9994 | 96.71 |
| 8,935 | 0.0014 | 0.9986 | 96.65 |
| 16,590 | 0.0030 | 0.9970 | 96.52 |
|  |  |  |  |
| 10 |  |  |  |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 366.00 UNDERGROUND CONDUIT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1948-2019
AGE AT EXPOSURES AT BEGIN OF BEGINNING OF INTERVAL
39.5
40.5
41.5
42.5
43.5
44.5
45.5
46.5
47.5
48.5
49.5
50.5
51.5
52.5
53.5
54.5
55.5
56.5
57.5
58.5
59.5
60.5
61.5
62.5
63.5
64.5
65.5
66.5
67.5

4,597,122
3, 869, 267
3,140, 855
2, 784, 009
2, 094,506
1, 766, 345
986,344
682, 270
661, 912
631, 803
508,909
336, 089
300, 922
282,699
252, 967
172, 372
159,640
138, 762
62,391
57,499
48,225
45, 322
21,596
3,438
3,317
3,313
3, 309
72

## RETIREMENTS DURING AGE INTERVAL

EXPERIENCE BAND 1993-2019

| 8,884 | 0.0019 | 0.9981 | 96.23 |
| ---: | ---: | ---: | ---: |
| 3,598 | 0.0009 | 0.9991 | 96.04 |
| 11,566 | 0.0037 | 0.9963 | 95.95 |
| 12,598 | 0.0045 | 0.9955 | 95.60 |
| 15,805 | 0.0075 | 0.9925 | 95.16 |
| 9,461 | 0.0054 | 0.9946 | 94.45 |
| 4,712 | 0.0048 | 0.9952 | 93.94 |
| 16,550 | 0.0243 | 0.9757 | 93.49 |
| 8,820 | 0.0133 | 0.9867 | 91.22 |
| 7,594 | 0.0120 | 0.9880 | 90.01 |
| 2,007 | 0.0039 | 0.9961 | 88.93 |
| 5,172 | 0.0154 | 0.9846 | 88.58 |
| 6,164 | 0.0205 | 0.9795 | 87.21 |
| 3,359 | 0.0119 | 0.9881 | 85.43 |
| 623 | 0.0025 | 0.9975 | 84.41 |
| 4,906 | 0.0285 | 0.9715 | 84.20 |
| 7,488 | 0.0469 | 0.9531 | 81.81 |
| 5,766 | 0.0416 | 0.9584 | 77.97 |
| 136 | 0.0022 | 0.9978 | 74.73 |
| 306 | 0.0053 | 0.9947 | 74.57 |
| 1,879 | 0.0390 | 0.9610 | 74.17 |
| 241 | 0.0053 | 0.9947 | 71.28 |
| 402 | 0.0186 | 0.9814 | 70.90 |
| 121 | 0.0352 | 0.9648 | 69.58 |
| 5 | 0.0014 | 0.9986 | 67.13 |
| 4 | 0.0011 | 0.9989 | 67.04 |
| 3 | 0.0010 | 0.9990 | 66.97 |
| 2 | 0.0293 | 0.9707 | 66.90 |
|  |  |  | 64.94 |

EL PASO ELECTRIC COMPANY
ACCOUNT 367.00 UNDERGROUND CONDUCTORS AND DEVICES


## EL PASO ELECTRIC COMPANY

ACCOUNT 367.00 UNDERGROUND CONDUCTORS AND DEVICES
ORIGINAL LIFE TABLE

PLACEMENT BAND 1953-2019

| AGE AT | EXPOSURES AT |
| :--- | :--- |
| BEGIN OF | BEGINNING OF |
| INTERVAL | AGE INTERVAL |


| 0.0 | $159,625,916$ |
| ---: | ---: |
| 0.5 | $151,240,617$ |
| 1.5 | $141,455,474$ |
| 2.5 | $130,847,361$ |
| 3.5 | $131,938,187$ |
| 4.5 | $122,576,070$ |
| 5.5 | $111,565,565$ |
| 6.5 | $103,471,551$ |
| 7.5 | $98,309,449$ |
| 8.5 | $94,190,811$ |
| 9.5 | $92,115,229$ |
| 10.5 | $85,345,960$ |
| 11.5 | $78,560,184$ |
| 12.5 | $71,257,273$ |
| 13.5 | $63,954,434$ |
| 14.5 | $55,562,184$ |
| 15.5 | $47,363,015$ |
| 16.5 | $43,925,720$ |
| 17.5 | $39,854,045$ |
| 18.5 | $36,357,678$ |
| 19.5 | $33,038,373$ |
| 20.5 | $29,382,492$ |
| 21.5 | $25,222,338$ |
| 22.5 | $22,074,778$ |
| 23.5 | $19,959,154$ |
| 24.5 | $17,266,864$ |
| 25.5 | $14,978,573$ |
| 26.5 | $13,669,294$ |
| 27.5 | $12,436,098$ |
| 28.5 | $11,149,236$ |

29.5 9,978,488
$30.5 \quad$ 8,729,389
31.5 7,420,899
$32.5 \quad 6,496,560$
$33.5 \quad 5,697,214$
34.5 4,705,955
$35.5 \quad 3,940,634$
36.5 3,280,255
$37.5 \quad 2,913,935$
$38.5 \quad 2,200,681$

EXPERIENCE BAND 1993-2019

PCT SURV
BEGIN OF
INTERVAL
RETIREMENTS
DURING AGE
INTERVAL

| RETMT | SURV |
| :---: | :---: |
| RATIO | RATIO |

100.00
99.97
99.69
99.58
99.51
99.42
99.29
99.21
99.11
98.94
98.50
98.42
98.29
98.12
97.91
97.78
97.57
97.30
96.87
96.66
96.36
96.07
94.79
93.77
92.97
91.76
90.01
88.40
86.66
84.94
81.81
78.54
74.57
71.08
67.70
64.57
62.32
59.53
58.20
55.43

EL PASO ELECTRIC COMPANY

ACCOUNT 367.00 UNDERGROUND CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1953-2019

| AGE AT | EXPOSURES AT |
| :--- | :--- |
| BEGIN OF | BEGINNING OF |
| INTERVAL | AGE INTERVAL |

39.5
40.5
41.5
42.5
43.5
44.5
45.5
46.5
47.5
48.5
49.5
50.5
51.5
52.5
53.5
54.5
55.5

1,630, 014
1,272,365 985, 171 858, 437 699,672 503, 359 405, 117 360, 004 295, 868 254, 339

172, 760
135, 727
107,711
41, 880
16,926
2,327

## RETIREMENTS DURING AGE INTERVAL

EXPERIENCE BAND 1993-2019


RATIO
49,764
64,721
42,156
42, 907
43, 430
27,479
45, 113
64,136
41,529
12,484
10,210
8, 914
7,313
1, 060
233
57

PCT SURV
BEGIN OF INTERVAL
53.05
51.43
48.82
46.73
44.39
41.64
39.36
34.98
28.75
24.71
23.50
22.11
20.66
19.26
18.77
18.51
18.05
EL PASO ELECTRIC COMPANY


## EL PASO ELECTRIC COMPANY

## ACCOUNT 368.00 LINE TRANSFORMERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1922-2019

| AGE AT | EXPOSURES AT |
| :---: | :--- |
| BEGIN OF | BEGINNING OF |
| INTERVAL | AGE INTERVAL |

0.0 250,255,874
0.5 239,642,495
1.5 229,660,691
2.5 216,467,338
$3.5 \quad 197,366,871$
$4.5 \quad 188,385,946$
$5.5 \quad 178,560,713$
$6.5 \quad 170,462,326$
7.5 155,380,240
8.5 142,145,496
$9.5 \quad 134,314,248$
10.5 121,189,068
11.5 108,750,761
$12.5 \quad 93,451,890$
$13.5 \quad$ 88,095,527
14.5 74,220,022
$15.5 \quad 74,531,419$
$16.5 \quad 72,299,555$
17.5 69,080,962
18.5 65,829,140
19.
20.
21.
22.5
23.5
24.5
25.5
26.5
27.5
28.5
29.5
30.5
31.5
32.
33.5
34.5
35.5
36.5
37.5
38.5

64,240,841
61,237,441
57,109,979
50, 377, 430
50, 050, 028
45, 833, 523
41, 326, 526
41, 271, 116
39,478, 002
37,526,723
35, 381, 232
33, 844, 310
31, 680, 219
29,736,622
27, 291, 788
25,483, 857
23,700,596
22, 030,588
20, 384, 167
19, 055, 427

EXPERIENCE BAND 1993-2019
RETIREMENTS
DURING AGE
INTERVAL

RETMT
RATIO

PCT SURV
BEGIN OF
INTERVAL

|  |  |  |  |
| ---: | ---: | ---: | ---: |
| 25,461 | 0.0001 | 0.9999 | 100.00 |
| 87,071 | 0.0004 | 0.9996 | 99.99 |
| 86,859 | 0.0004 | 0.9996 | 99.95 |
| 174,984 | 0.0008 | 0.9992 | 99.92 |
| 168,412 | 0.0009 | 0.9991 | 99.83 |
| 112,768 | 0.0006 | 0.9994 | 99.75 |
| 265,637 | 0.0015 | 0.9985 | 99.69 |
| 201,310 | 0.0012 | 0.9988 | 99.54 |
| 261,451 | 0.0017 | 0.9983 | 99.42 |
| 247,221 | 0.0017 | 0.9983 | 99.26 |
| 404,255 | 0.0030 | 0.9970 | 99.08 |
| 305,910 | 0.0025 | 0.9975 | 98.79 |
| 321,868 | 0.0030 | 0.9970 | 98.54 |
| 208,167 | 0.0022 | 0.9978 | 98.25 |
| 169,746 | 0.0019 | 0.9981 | 98.03 |
| 140,346 | 0.0019 | 0.9981 | 97.84 |
| 134,567 | 0.0018 | 0.9982 | 97.65 |
| 108,520 | 0.0015 | 0.9985 | 97.48 |
| 201,248 | 0.0029 | 0.9971 | 97.33 |
| 172,771 | 0.0026 | 0.9974 | 97.05 |
| 174,559 | 0.0027 | 0.9973 | 96.79 |
| 275,817 | 0.0045 | 0.9955 | 96.53 |
| 304,060 | 0.0053 | 0.9947 | 96.09 |
| 309,496 | 0.0061 | 0.9939 | 95.58 |
| 262,131 | 0.0052 | 0.9948 | 94.99 |
| 223,921 | 0.0049 | 0.9951 | 94.50 |
| 239,719 | 0.0058 | 0.9942 | 94.04 |
| 247,300 | 0.0060 | 0.9940 | 93.49 |
| 278,582 | 0.0071 | 0.9929 | 92.93 |
| 273,066 | 0.0073 | 0.9927 | 92.27 |
| 152,367 | 0.0043 | 0.9957 | 91.60 |
| 191,426 | 0.0057 | 0.9943 | 91.21 |
| 136,844 | 0.0043 | 0.9957 | 90.69 |
| 152,322 | 0.0051 | 0.9949 | 90.30 |
| 136,781 | 0.0050 | 0.9950 | 89.84 |
| 169,781 | 0.0067 | 0.9933 | 89.39 |
| 140,430 | 0.0059 | 0.9941 | 88.79 |
| 238,479 | 0.0108 | 0.9892 | 88.27 |
| 221,552 | 0.0109 | 0.9891 | 87.31 |
| 156,278 | 0.0082 | 0.9918 | 86.36 |
|  |  |  |  |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 368.00 LINE TRANSFORMERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1922-2019

| AGE AT | EXPOSURES AT |
| :--- | :--- |
| BEGIN OF | BEGINNING OF |
| INTERVAL | AGE INTERVAL |

39.5
40.5
41.5
42.5
43.5
44.5
45.5
46.5
47.5
48.5
49.5
50.5
51.5
52.5
53.5
54.5
55.5
56.5
57.5
58.5
59.5
60.5
61.5
62.5
63.5
64.5
65.5
66.5
67.5
68.5
69.5
70.5
71.5
72.5
73.5
74.5
75.5
76.5
77.5
78.5

17,620,860
16, 036, 886
14,174,861
12, 785, 236
11, 213, 441
10, 098, 378
8,592,439
7,379,104
6,653,846
6, 026, 084
5, 436, 113
4,909, 472
4, 447, 746
3, 943, 194
3,465,539
2, 938, 554
2, 452, 153
2,111,324
1,811, 400
1,592,128
1,457,508
1,260,010
1, 059, 141
927, 845
819,746
723, 857
617, 292
494, 079
420, 792
372,336
337,154
299,557
263, 924
221, 365
185,943
158, 247
146, 838
130,972
117,934
102,134

EXPERIENCE BAND 1993-2019

PCT SURV
BEGIN OF
INTERVAL

| 277,254 | 0.0157 | 0.9843 | 85.65 |
| ---: | ---: | ---: | ---: |
| 379,233 | 0.0236 | 0.9764 | 84.31 |
| 295,654 | 0.0209 | 0.9791 | 82.31 |
| 732,825 | 0.0573 | 0.9427 | 80.60 |
| 529,701 | 0.0472 | 0.9528 | 75.98 |
| 481,882 | 0.0477 | 0.9523 | 72.39 |
| 427,818 | 0.0498 | 0.9502 | 68.93 |
| 327,806 | 0.0444 | 0.9556 | 65.50 |
| 329,501 | 0.0495 | 0.9505 | 62.59 |
| 314,762 | 0.0522 | 0.9478 | 59.49 |
| 261,034 | 0.0480 | 0.9520 | 56.38 |
| 258,752 | 0.0527 | 0.9473 | 53.68 |
| 285,736 | 0.0642 | 0.9358 | 50.85 |
| 314,206 | 0.0797 | 0.9203 | 47.58 |
| 329,222 | 0.0950 | 0.9050 | 43.79 |
| 350,087 | 0.1191 | 0.8809 | 39.63 |
| 266,974 | 0.1089 | 0.8911 | 34.91 |
| 129,770 | 0.0615 | 0.9385 | 31.11 |
| 69,005 | 0.0381 | 0.9619 | 29.20 |
| 26,989 | 0.0170 | 0.9830 | 28.08 |
| 65,204 | 0.0447 | 0.9553 | 27.61 |
| 109,975 | 0.0873 | 0.9127 | 26.37 |
| 105,123 | 0.0993 | 0.9007 | 24.07 |
| 94,088 | 0.1014 | 0.8986 | 21.68 |
| 96,966 | 0.1183 | 0.8817 | 19.48 |
| 92,803 | 0.1282 | 0.8718 | 17.18 |
| 71,533 | 0.1159 | 0.8841 | 14.98 |
| 30,621 | 0.0620 | 0.9380 | 13.24 |
| 11,825 | 0.0281 | 0.9719 | 12.42 |
| 6,315 | 0.0170 | 0.9830 | 12.07 |
| 9,993 | 0.0296 | 0.9704 | 11.87 |
| 4,399 | 0.0147 | 0.9853 | 11.51 |
| 16,470 | 0.0624 | 0.9376 | 11.35 |
| 11,666 | 0.0527 | 0.9473 | 10.64 |
| 11,058 | 0.0595 | 0.9405 | 10.08 |
| 10,739 | 0.0679 | 0.9321 | 9.48 |
| 14,933 | 0.1017 | 0.8983 | 8.83 |
| 11,467 | 0.0876 | 0.9124 | 7.94 |
| 8,028 | 0.0681 | 0.9319 | 7.24 |
| 7,016 | 0.0687 | 0.9313 | 6.75 |
| 20 |  |  |  |

## EL PASO ELECTRIC COMPANY ACCOUNT 368.00 LINE TRANSFORMERS <br> ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1922-2019 |  |  | EXPERIENCE BAND 1993-2019 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AGE AT | EXPOSURES AT | RETIREMENTS |  |  | PCT SURV |
| BEGIN OF | BEGINNING OF | DURING AGE | RETMT | SURV | BEGIN OF |
| INTERVAL | AGE INTERVAL | INTERVAL | RATIO | RATIO | INTERVAL |
| 79.5 | 90,702 | 4,897 | 0.0540 | 0.9460 | 6.28 |
| 80.5 | 81,210 | 2,298 | 0.0283 | 0.9717 | 5.95 |
| 81.5 | 74,628 | 4,188 | 0.0561 | 0.9439 | 5.78 |
| 82.5 | 64,054 | 6,367 | 0.0994 | 0.9006 | 5.45 |
| 83.5 | 53,173 | 6,892 | 0.1296 | 0.8704 | 4.91 |
| 84.5 | 43,513 | 4,359 | 0.1002 | 0.8998 | 4.27 |
| 85.5 | 37,315 | 5,965 | 0.1599 | 0.8401 | 3.85 |
| 86.5 | 30,506 | 7,542 | 0.2472 | 0.7528 | 3.23 |
| 87.5 | 22,419 | 4,945 | 0.2206 | 0.7794 | 2.43 |
| 88.5 | 15,722 | 1,211 | 0.0770 | 0.9230 | 1.90 |
| 89.5 | 11,715 | 725 | 0.0619 | 0.9381 | 1.75 |
| 90.5 | 8,081 | 416 | 0.0515 | 0.9485 | 1.64 |
| 91.5 | 6,183 | 162 | 0.0262 | 0.9738 | 1.56 |
| 92.5 | 3,970 | 55 | 0.0138 | 0.9862 | 1.52 |
| 93.5 | 944 | 11 | 0.0118 | 0.9882 | 1.50 |
| 94.5 |  |  |  |  | 1.48 |

EL PASO ELECTRIC COMPANY


## EL PASO ELECTRIC COMPANY

## ACCOUNT 369.00 SERVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1939-2019

| AGE AT | EXPOSURES AT |
| :--- | :--- |
| BEGIN OF | BEGINNING OF |
| INTERVAL | AGE INTERVAL |

0.0
$0.5 \quad 34,097,281$
1.5 32,057,282
2.5 29,894,422
$3.5 \quad 29,937,724$
$4.5 \quad 25,845,175$
$5.5 \quad 26,645,730$
$6.5 \quad 26,660,695$
$7.5 \quad 26,523,419$
$8.5 \quad 26,825,885$
$9.5 \quad 26,907,791$
10.5 27,712,033
$11.5 \quad 28,418,407$
12.5 26,520,597
13.5 27,323,187
14.5 23,897,443
15.5 23,555,785
$16.5 \quad 23,084,509$
17.5 22,599,720
18.5 22,283,692
19.
20.
21.
22.
23.
24.
25.
26.
27.
28.5
29.5
30.5
31.
32.
33.
34.
35.5
36.5
37.5
38.5

21,677,625
21, 458, 768
20,690,503
19, 211, 573
19,502, 088
18,449, 211
17,176, 052
17,369,719
16,712,975
16,159,625
15, 483, 832
14, 816, 165
14,255,505
13,563, 270
12,816,390
11,972,980
10, 957, 727
10, 019, 778
9,541, 463
8,943,563

EXPERIENCE BAND 1993-2019

PCT SURV
BEGIN OF
INTERVAL

|  | 0.0000 | 1.0000 | 100.00 |
| ---: | ---: | ---: | ---: |
| 62 | 0.0000 | 1.0000 | 100.00 |
| 1,887 | 0.0001 | 0.9999 | 100.00 |
| 5,466 | 0.0001 | 0.9999 | 99.99 |
| 5,199 | 0.0002 | 0.9998 | 99.98 |
| 1,852 | 0.0002 | 0.9998 | 99.97 |
|  | 0.0001 | 0.9999 | 99.95 |
| 721 | 0.0000 | 1.0000 | 99.94 |
| 2,894 | 0.0001 | 0.9999 | 99.94 |
| 1,834 | 0.0001 | 0.9999 | 99.94 |
| 2,000 | 0.0001 | 0.9999 | 99.92 |
| 1,088 | 0.0000 | 1.0000 | 99.91 |
| 878 | 0.0000 | 1.0000 | 99.91 |
| 1,972 | 0.0001 | 0.9999 | 99.90 |
| 2,431 | 0.0001 | 0.9999 | 99.90 |
| 537 | 0.0000 | 1.0000 | 99.89 |
| 945 | 0.0000 | 1.0000 | 99.88 |
| 1,878 | 0.0001 | 0.9999 | 99.88 |
| 613 | 0.0000 | 1.0000 | 99.87 |
| 1,078 | 0.0000 | 1.0000 | 99.87 |
| 176 | 0.0000 | 1.0000 | 99.86 |
| 1,961 | 0.0001 | 0.9999 | 99.86 |
| 3,298 | 0.0002 | 0.9998 | 99.85 |
| 2,752 | 0.0001 | 0.9999 | 99.84 |
| 2,580 | 0.0001 | 0.9999 | 99.82 |
| 2,274 | 0.0001 | 0.9999 | 99.81 |
| 2,472 | 0.0001 | 0.9999 | 99.80 |
| 3,222 | 0.0002 | 0.9998 | 99.78 |
| 3,633 | 0.0002 | 0.9998 | 99.76 |
| 3,539 | 0.0002 | 0.9998 | 99.74 |
| 3,235 | 0.0002 | 0.9998 | 99.72 |
| 2,469 | 0.0002 | 0.9998 | 99.69 |
| 2,192 | 0.0002 | 0.9998 | 99.68 |
| 2,698 | 0.0002 | 0.9998 | 99.66 |
| 2,468 | 0.0002 | 0.9998 | 99.64 |
| 2,464 | 0.0002 | 0.9998 | 99.62 |
| 2,352 | 0.0002 | 0.9998 | 99.60 |
| 1,437 | 0.0002 | 0.9998 | 99.57 |
| 1,080 | 0.0001 | 0.9999 | 99.56 |
|  |  |  |  |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 369.00 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1939-2019

| AGE AT | EXPOSURES AT |
| :---: | :--- |
| BEGIN OF | BEGINNING OF |
| INTERVAL | AGE INTERVAL |

39.5
40.5
41.5
42.5
43.5
44.5
45.5
46.5
47.5
48.5
49.5
50.5
51.5
52.5
53.5
54.5
55.5
56.5
57.5
58.5
59.5
60.5
61.5
62.5
63.5
64.5
65.5
66.5
67.5
68.5
69.5
70.5
71.5
72.5
73.5
74.5
75.5
76.5
77.5
78.5
79.5
80.5

8,175,545
7,453,724
6,728,989
6, 040, 841
5,616,537
5, 304, 091
4,775,785
4, 380, 142
4, 058, 641
3, 824, 654
3,505,412
3,218,959
2, 998, 414
2, 773, 128
2,582,944
2, 386, 262
2,195,790
2, 042, 859
1, 869, 883
1, 689, 323
1,576, 031
1, 417, 280
1, 213, 864
1, 088, 483
974, 287
649, 654
534, 893
426,470
345, 871
269,679
193,708
150, 970
111, 974
83,511
64, 357
54,110
47,966
45, 377
38,356
23, 664
11, 853

## RETIREMENTS DURING AGE INTERVAL

EXPERIENCE BAND 1993-2019


| RETMT | SURV |
| :---: | :---: |
| RATIO | RATIO |

PCT SURV
BEGIN OF
INTERVAL
99.55
99.53
99.51
99.49
99.48
99.46
99.45
99.43
99.41
99.40
99.38
99.37
99.35
99.34
99.32
99.30
99.28
99.25
99.23
99.22
99.16
99.13
99.11
99.09
99.07
99.05
99.03
99.00
98.96
98.93
98.90
98.88
98.86
98.83
98.76
98.69
98.62
98.62
98.61
98.58
98.55
98.49
EL PASO ELECTRIC COMPANY


## EL PASO ELECTRIC COMPANY

## ACCOUNT 370.00 METERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1949-2019

| AGE AT | EXPOSURES AT |
| :---: | :--- |
| BEGIN OF | BEGINNING OF |
| INTERVAL | AGE INTERVAL |


| 0.0 | $54,377,344$ |
| ---: | ---: |
| 0.5 | $51,564,513$ |
| 1.5 | $50,510,840$ |
| 2.5 | $48,567,229$ |
| 3.5 | $46,134,651$ |
| 4.5 | $44,179,768$ |
| 5.5 | $43,913,582$ |
| 6.5 | $35,804,849$ |
| 7.5 | $36,630,322$ |
| 8.5 | $37,099,508$ |
| 9.5 | $37,515,727$ |
| 10.5 | $29,726,839$ |
| 11.5 | $29,843,104$ |
| 12.5 | $30,079,336$ |
| 13.5 | $27,845,828$ |
| 14.5 | $23,754,419$ |
| 15.5 | $24,005,848$ |
| 16.5 | $22,890,951$ |
| 17.5 | $21,337,882$ |
| 18.5 | $18,729,628$ |

19.5 16,950,637
20.5 15,347,992
$21.5 \quad 14,361,806$
$22.5 \quad 12,713,918$
23.5 12,545,088
24.5 11,976,252
$25.5 \quad 10,546,353$
$26.5 \quad 10,196,775$
$27.5 \quad 9,430,138$
$28.5 \quad 8,399,356$
$29.5 \quad 7,442,959$
$30.5 \quad 6,587,688$
$31.5 \quad 5,300,307$
$32.5 \quad 4,656,723$
33.5 4,064,197
$34.5 \quad 3,259,447$
$35.5 \quad 2,755,944$
36.5 2,412,174
$37.5 \quad 1,909,977$
38.5 1,760,960

## RETIREMENTS DURING AGE INTERVAL

EXPERIENCE BAND 1993-2019

| 4,984 | 0.0001 | 0.9999 | 100.00 |
| ---: | ---: | ---: | ---: |
| 23,721 | 0.0005 | 0.9995 | 99.99 |
| 181,511 | 0.0036 | 0.9964 | 99.94 |
| 36,054 | 0.0007 | 0.9993 | 99.59 |
| 48,681 | 0.0011 | 0.9989 | 99.51 |
| 68,623 | 0.0016 | 0.9984 | 99.41 |
| 84,552 | 0.0019 | 0.9981 | 99.25 |
| 91,764 | 0.0026 | 0.9974 | 99.06 |
| 133,198 | 0.0036 | 0.9964 | 98.81 |
| 166,883 | 0.0045 | 0.9955 | 98.45 |
| 162,741 | 0.0043 | 0.9957 | 98.01 |
| 177,322 | 0.0060 | 0.9940 | 97.58 |
| 288,951 | 0.0097 | 0.9903 | 97.00 |
| 230,787 | 0.0077 | 0.9923 | 96.06 |
| 229,765 | 0.0083 | 0.9917 | 95.32 |
| 268,155 | 0.0113 | 0.9887 | 94.54 |
| 345,776 | 0.0144 | 0.9856 | 93.47 |
| 277,916 | 0.0121 | 0.9879 | 92.12 |
| 281,344 | 0.0132 | 0.9868 | 91.00 |
| 311,058 | 0.0166 | 0.9834 | 89.80 |
| 274,425 | 0.0162 | 0.9838 | 88.31 |
| 293,119 | 0.0191 | 0.9809 | 86.88 |
| 278,855 | 0.0194 | 0.9806 | 85.22 |
| 267,881 | 0.0211 | 0.9789 | 83.57 |
| 284,909 | 0.0227 | 0.9773 | 81.81 |
| 352,517 | 0.0294 | 0.9706 | 79.95 |
| 294,762 | 0.0279 | 0.9721 | 77.60 |
| 265,898 | 0.0261 | 0.9739 | 75.43 |
| 277,769 | 0.0295 | 0.9705 | 73.46 |
| 249,144 | 0.0297 | 0.9703 | 71.30 |
| 300,878 | 0.0404 | 0.9596 | 69.18 |
| 532,567 | 0.0808 | 0.9192 | 66.39 |
| 148,056 | 0.0279 | 0.9721 | 61.02 |
| 138,159 | 0.0297 | 0.9703 | 59.31 |
| 326,932 | 0.0804 | 0.9196 | 57.55 |
| 174,894 | 0.0537 | 0.9463 | 52.92 |
| 67,200 | 0.0244 | 0.9756 | 50.08 |
| 131,688 | 0.0546 | 0.9454 | 48.86 |
| 33,123 | 0.0173 | 0.9827 | 46.20 |
| 62,635 | 0.0356 | 0.9644 | 45.39 |
|  |  |  |  |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 370.00 METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1949-2019

| AGE AT | EXPOSURES AT |
| :--- | :--- |
| BEGIN OF | BEGINNING OF |
| INTERVAL | AGE INTERVAL |

39.5
40.5
41.5
42.5
43.5
44.5
45.5
46.5
47.5
48.5
49.5
50.5
51.5
52.5
53.5

1,494,570
1,199,167
1, 043,531
853, 023
632, 790
503,790
365, 134
237, 262
160,841
49, 910
32,836
21, 393
9,437
1,421

EXPERIENCE BAND 1993-2019

PCT SURV BEGIN OF INTERVAL
43.78
40.67
38.89
36.62
32.02
30.29
26.42
22.91
22.14
16.39
11.60
7.56
3.33
0.50
EL PASO ELECTRIC COMPANY


## EL PASO ELECTRIC COMPANY

ACCOUNT 371.00 INSTALLATIONS ON CUSTOMERS' PREMISES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1962-2019

| AGE AT | EXPOSURES AT |
| :--- | :--- |
| BEGIN OF | BEGINNING OF |
| INTERVAL | AGE INTERVAL |


| 0.0 | $13,839,749$ |
| ---: | ---: |
| 0.5 | $13,744,170$ |
| 1.5 | $13,404,791$ |
| 2.5 | $12,750,091$ |
| 3.5 | $12,220,229$ |
| 4.5 | $11,980,089$ |
| 5.5 | $11,636,021$ |
| 6.5 | $11,270,604$ |
| 7.5 | $10,956,368$ |
| 8.5 | $10,620,049$ |
| 9.5 | $10,261,614$ |
| 10.5 | $9,899,350$ |
| 11.5 | $9,561,007$ |
| 12.5 | $8,608,812$ |
| 13.5 | $8,529,107$ |
| 14.5 | $6,699,218$ |
| 15.5 | $6,356,361$ |
| 16.5 | $5,376,419$ |
| 17.5 | $4,784,166$ |
| 18.5 | $4,251,440$ |
| 19.5 | $3,924,144$ |
| 20.5 | $3,555,748$ |
| 21.5 | $3,210,909$ |
| 22.5 | $2,648,100$ |
| 23.5 | $2,616,313$ |
| 24.5 | $2,220,187$ |
| 25.5 | $1,822,058$ |
| 26.5 | $1,824,933$ |
| 27.5 | $1,555,211$ |
| 28.5 | $1,424,355$ |

29.5 1,358,263
30.5 1,190,814
31.5 1,073,119
32.5
33.5
34.5
35.5
36.5
37.5
38.5
952, 065
857, 815
760,794
654,386
532,965
430, 169
362,544

EXPERIENCE BAND 1993-2019

PCT SURV
BEGIN OF
INTERVAL

| 7,170 | 0.0005 | 0.9995 | 100.00 |
| ---: | ---: | ---: | ---: |
| 53,461 | 0.0039 | 0.9961 | 99.95 |
| 69,799 | 0.0052 | 0.9948 | 99.56 |
| 82,735 | 0.0065 | 0.9935 | 99.04 |
| 57,848 | 0.0047 | 0.9953 | 98.40 |
| 75,805 | 0.0063 | 0.9937 | 97.93 |
| 79,605 | 0.0068 | 0.9932 | 97.31 |
| 42,282 | 0.0038 | 0.9962 | 96.65 |
| 52,203 | 0.0048 | 0.9952 | 96.28 |
| 48,150 | 0.0045 | 0.9955 | 95.83 |
| 57,669 | 0.0056 | 0.9944 | 95.39 |
| 56,432 | 0.0057 | 0.9943 | 94.86 |
| 56,045 | 0.0059 | 0.9941 | 94.31 |
| 63,507 | 0.0074 | 0.9926 | 93.76 |
| 81,866 | 0.0096 | 0.9904 | 93.07 |
| 64,878 | 0.0097 | 0.9903 | 92.18 |
| 100,149 | 0.0158 | 0.9842 | 91.28 |
| 122,643 | 0.0228 | 0.9772 | 89.85 |
| 88,927 | 0.0186 | 0.9814 | 87.80 |
| 57,128 | 0.0134 | 0.9866 | 86.16 |
| 31,608 | 0.0081 | 0.9919 | 85.01 |
| 50,393 | 0.0142 | 0.9858 | 84.32 |
| 54,882 | 0.0171 | 0.9829 | 83.13 |
| 66,889 | 0.0253 | 0.9747 | 81.71 |
| 57,695 | 0.0221 | 0.9779 | 79.64 |
| 69,100 | 0.0311 | 0.9689 | 77.89 |
| 17,876 | 0.0098 | 0.9902 | 75.46 |
| 47,189 | 0.0259 | 0.9741 | 74.72 |
| 22,605 | 0.0145 | 0.9855 | 72.79 |
| 12,610 | 0.0089 | 0.9911 | 71.73 |
| 48,537 | 0.0357 | 0.9643 | 71.10 |
| 20,950 | 0.0176 | 0.9824 | 68.56 |
| 29,605 | 0.0276 | 0.9724 | 67.35 |
| 27,910 | 0.0293 | 0.9707 | 65.49 |
| 36,069 | 0.0420 | 0.9580 | 63.57 |
| 36,094 | 0.0474 | 0.9526 | 60.90 |
| 19,926 | 0.0304 | 0.9696 | 58.01 |
| 17,197 | 0.0323 | 0.9677 | 56.24 |
| 16,735 | 0.0389 | 0.9611 | 54.43 |
| 32,399 | 0.0894 | 0.9106 | 52.31 |
|  |  |  |  |

## EL PASO ELECTRIC COMPANY

ACCOUNT 371.00 INSTALLATIONS ON CUSTOMERS' PREMISES

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1962-2019 |  |  | EXPERIENCE BAND 1993-2019 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AGE AT | EXPOSURES AT | RETIREMENTS |  |  | PCT SURV |
| BEGIN OF | BEGINNING OF | DURING AGE | RETMT | SURV | BEGIN OF |
| INTERVAL | AGE INTERVAL | INTERVAL | RATIO | RATIO | INTERVAL |
| 39.5 | 306,477 | 19,687 | 0.0642 | 0.9358 | 47.64 |
| 40.5 | 262,581 | 17,888 | 0.0681 | 0.9319 | 44.58 |
| 41.5 | 218,498 | 12,868 | 0.0589 | 0.9411 | 41.54 |
| 42.5 | 183, 104 | 13,505 | 0.0738 | 0.9262 | 39.09 |
| 43.5 | 150,787 | 16,419 | 0.1089 | 0.8911 | 36.21 |
| 44.5 | 111,938 | 7,269 | 0.0649 | 0.9351 | 32.27 |
| 45.5 | 86,198 | 8,629 | 0.1001 | 0.8999 | 30.17 |
| 46.5 | 55,345 | 17,634 | 0.3186 | 0.6814 | 27.15 |
| 47.5 | 23,327 | 5,130 | 0.2199 | 0.7801 | 18.50 |
| 48.5 | 9,159 | 6,459 | 0.7052 | 0.2948 | 14.43 |
| 49.5 | 888 | 344 | 0.3869 | 0.6131 | 4.25 |
| 50.5 |  |  |  |  | 2.61 |

EL PASO ELECTRIC COMPANY
ACCOUNT 373.00 STREET LIGHTING AND SI


## EL PASO ELECTRIC COMPANY

ACCOUNT 373.00 STREET LIGHTING AND SIGNAL SYSTEMS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1919-2019

| AGE AT | EXPOSURES AT |
| :---: | :--- |
| BEGIN OF | BEGINNING OF |
| INTERVAL | AGE INTERVAL |


| 0.0 | $7,400,340$ |
| ---: | ---: |
| 0.5 | $7,980,994$ |
| 1.5 | $8,062,912$ |
| 2.5 | $8,155,163$ |
| 3.5 | $7,592,624$ |
| 4.5 | $7,443,283$ |
| 5.5 | $7,339,054$ |
| 6.5 | $7,215,203$ |
| 7.5 | $7,303,382$ |
| 8.5 | $7,337,852$ |
| 9.5 | $7,371,057$ |
| 10.5 | $7,358,143$ |
| 11.5 | $7,370,504$ |
| 12.5 | $7,301,206$ |
| 13.5 | $6,922,285$ |
| 14.5 | $6,548,136$ |
| 15.5 | $6,641,351$ |
| 16.5 | $6,635,686$ |
| 17.5 | $6,619,531$ |
| 18.5 | $6,776,972$ |
| 19.5 | $6,667,074$ |
| 20.5 | $6,501,697$ |
| 21.5 | $6,062,413$ |
| 22.5 | $5,153,133$ |
| 23.5 | $5,234,017$ |
| 24.5 | $4,815,541$ |
| 25.5 | $3,702,977$ |
| 26.5 | $3,731,185$ |
| 27.5 | $3,122,354$ |
| 28.5 | $2,746,308$ |

$29.5 \quad 2,352,868$
$30.5 \quad 2,472,629$
31.5 2,519,171
$32.5 \quad 2,663,236$
$33.5 \quad 2,680,841$
34.5 2,648,152
35.5 2,623,123
$36.5 \quad 2,595,025$
37.5 2,520,117
$38.5 \quad 2,445,204$

EXPERIENCE BAND 1993-2019

| RETIREMENTS |  |  | PCT SURV |
| :---: | :---: | :---: | :---: |
| DURING AGE | RETMT | SURV | BEGIN OF |
| INTERVAL | RATIO | RATIO | INTERVAL |
| 1,628 | 0.0002 | 0.9998 | 100.00 |
| 918 | 0.0001 | 0.9999 | 99.98 |
| 5,674 | 0.0007 | 0.9993 | 99.97 |
| 8,485 | 0.0010 | 0.9990 | 99.90 |
| 4,289 | 0.0006 | 0.9994 | 99.79 |
| 7,690 | 0.0010 | 0.9990 | 99.74 |
| 10,322 | 0.0014 | 0.9986 | 99.63 |
| 8,152 | 0.0011 | 0.9989 | 99.49 |
| 8,156 | 0.0011 | 0.9989 | 99.38 |
| 6,852 | 0.0009 | 0.9991 | 99.27 |
| 16,883 | 0.0023 | 0.9977 | 99.18 |
| 8,898 | 0.0012 | 0.9988 | 98.95 |
| 10, 255 | 0.0014 | 0.9986 | 98.83 |
| 26,681 | 0.0037 | 0.9963 | 98.69 |
| 17,287 | 0.0025 | 0.9975 | 98.33 |
| 8,481 | 0.0013 | 0.9987 | 98.09 |
| 12,746 | 0.0019 | 0.9981 | 97.96 |
| 17,108 | 0.0026 | 0.9974 | 97.77 |
| 15, 097 | 0.0023 | 0.9977 | 97.52 |
| 11,403 | 0.0017 | 0.9983 | 97.30 |
| 29,788 | 0.0045 | 0.9955 | 97.13 |
| 14,237 | 0.0022 | 0.9978 | 96.70 |
| 12,743 | 0.0021 | 0.9979 | 96.49 |
| 13,370 | 0.0026 | 0.9974 | 96.28 |
| 30,390 | 0.0058 | 0.9942 | 96.03 |
| 13,792 | 0.0029 | 0.9971 | 95.48 |
| 14,774 | 0.0040 | 0.9960 | 95.20 |
| 7,720 | 0.0021 | 0.9979 | 94.82 |
| 15,832 | 0.0051 | 0.9949 | 94.63 |
| 12, 057 | 0.0044 | 0.9956 | 94.15 |
| 8,907 | 0.0038 | 0.9962 | 93.73 |
| 14, 019 | 0.0057 | 0.9943 | 93.38 |
| 11,530 | 0.0046 | 0.9954 | 92.85 |
| 7,922 | 0.0030 | 0.9970 | 92.43 |
| 5,063 | 0.0019 | 0.9981 | 92.15 |
| 3,515 | 0.0013 | 0.9987 | 91.98 |
| 8,100 | 0.0031 | 0.9969 | 91.85 |
| 15,343 | 0.0059 | 0.9941 | 91.57 |
| 37, 203 | 0.0148 | 0.9852 | 91.03 |
| 4,860 | 0.0020 | 0.9980 | 89.69 |

## EL PASO ELECTRIC COMPANY

ACCOUNT 373.00 STREET LIGHTING AND SIGNAL SYSTEMS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1919-2019

| AGE AT | EXPOSURES AT |
| :--- | :--- |
| BEGIN OF | BEGINNING OF |
| INTERVAL | AGE INTERVAL |

39.5
40.5
41.5
42.5
43.5
44.5
45.5
46.5
47.5
48.5
49.5
50.5
51.5
52.5
53.5
54.5
55.5
56.5
57.5
58.5
59.5
60.5
61.5
62.5
63.5
64.5
65.5
66.5
67.5
68.5
69.5
70.5
71.5
72.5
73.5
74.5
75.5
76.5
77.5
78.5
$79.5 \quad 1,978$

## RETIREMENTS DURING AGE INTERVAL

2, 376, 297
2,340, 030
2, 197, 792
2,131, 021
2, 061, 217
1,988,441
1, 806,671
1, 693, 343
1, 452, 079
1,386,606
1,320, 156
1,205,144
1, 090, 140
971, 085
930,533
831, 659
771,766
700, 871
564, 657
496, 113
304, 352
228, 233
175, 849
164,330
161,515
157, 768
151, 243
109,466
75,731
60, 809
46, 086
27,491
13, 300
8,991
7,128
6,346
5,396
4,980
4, 210
3,488

EXPERIENCE BAND 1993-2019

|  |  | PCT SURV |
| :--- | :---: | :---: |
| RETMT | SURV | BEGIN OF |
| RATIO | RATIO | INTERVAL |

89.51
89.46
88.37
87.83
87.69
87.07
86.62
86.15
83.46
83.19
83.03
82.83
82.61
82.46
82.20
81.82
81.02
80.74
80.23
79.29
78.52
77.66
77.30
76.79
75.36
74.43
71.32
66.26
61.13
58.59
56.85
54.65
52.72
49.52
42.08
37.46
35.88
35.60
35.14
34.91
34.81
32.88


## EL PASO ELECTRIC COMPANY

## ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS - MAJOR STRUCTURES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1990-2019

| AGE AT | EXPOSURES AT |
| :--- | :--- |
| BEGIN OF | BEGINNING OF |
| INTERVAL | AGE INTERVAL |

0.0 95,091,700
0.5 92,433,190
1.5 93,424,430
2.5 94,810,825
3.5 85,568,866
$4.5 \quad 41,892,383$
$5.5 \quad 37,123,375$
$6.5 \quad 35,313,387$
$7.5 \quad 34,969,376$
8.5 30,538,286
9.5 26,862,254
10.5 26,479,358
11.5 9,427,716
12.5 9,403,446
13.5 8,653,592
14.5 8,397,457
$15.5 \quad$ 8,392,088
$16.5 \quad 8,329,310$
$17.5 \quad 3,550,768$
18.5 3,550,768
19.5 3,512,538
$20.5 \quad 3,416,716$
$21.5 \quad 3,401,501$
$22.5 \quad 3,397,483$
$23.5 \quad 3,396,382$
24.5 3,248,534
25.5 3,248,534
26.5 3,248,534
27.5 3,248,534
28.5

EXPERIENCE BAND 1993-2019

## RETIREMENTS DURING AGE INTERVAL <br> DURING AGE

RETMT SURV
RATIO RATIO

PCT SURV
BEGIN OF
INTERVAL
100.00
100.00
100.00
100.00
100.00
100.00
99.92
99.88
99.88
99.88
99.88
99.88
99.83
99.78
99.78
97.35
97.35
97.35
97.35
97.35
97.35
97.35
97.35
97.35
97.35
97.35
97.35
97.35
97.35
97.35
EL PASO ELECTRIC COMPANY


## EL PASO ELECTRIC COMPANY

ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS - MINOR STRUCTURES
ORIGINAL LIFE TABLE

PLACEMENT BAND 1964-2019

| AGE AT | EXPOSURES AT |
| :---: | :--- |
| BEGIN OF | BEGINNING OF |
| INTERVAL | AGE INTERVAL |

$0.5 \quad 23,431,810$
1.5 23,358,845
2.5 21,368,906
$3.5 \quad 20,589,275$
$4.5 \quad 16,433,887$
$5.5 \quad 16,050,309$
$6.5 \quad 15,948,583$
$7.5 \quad 14,703,937$
8.5 8,995,557
$9.5 \quad 7,114,456$
$10.5 \quad 7,034,098$
$11.5 \quad 6,535,439$
12.5 6,753,077
13.5 6,583,448
14.5 6,393,726
$15.5 \quad 6,198,886$
16.5 6,030,719
17.5 6,011,558
$18.5 \quad 6,128,645$
19.5 6,079,184
20.5 6,101,596
21.5 5,432,123
$22.5 \quad 3,893,813$
23.5 3,534,153
24.5 3,209,669
25.5 3, 055,137
26.5 3,126,724
$27.5 \quad 3,263,533$
$28.5 \quad 3,279,393$
29.5 3,062,756
$30.5 \quad 2,779,578$
$31.5 \quad 2,779,578$
$32.5 \quad 2,585,486$
$33.5 \quad 2,434,347$
$34.5 \quad 2,374,040$
$35.5 \quad 2,312,401$
$36.5 \quad 2,208,121$
$37.5 \quad 2,103,914$
$38.5 \quad 1,781,622$

EXPERIENCE BAND 1994-2019

PCT SURV
BEGIN OF
INTERVAL
100.00
100.00
99.99
99.96
99.59
99.44
99.44
99.38
98.80
95.48
90.28
87.97
87.83
87.78
87.76
86.40
84.72
84.72
83.74
83.74
83.74
83.74
77.55
77.55
77.55
77.55
77.55
77.55
77.55
77.55
77.55
77.55
77.55
77.55
77.55
77.53
77.53
77.53
77.53
77.53

EL PASO ELECTRIC COMPANY

ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS - MINOR STRUCTURES
ORIGINAL LIFE TABLE, CONT.

| PLACEMENT | BAND 1964-2019 |  | EXPERIENCE BAND $1994-2019$ |  |  |
| :---: | ---: | :---: | ---: | :---: | ---: |
| AGE AT | EXPOSURES AT | RETIREMENTS |  |  | PCT SURV |
| BEGIN OF | BEGINNING OF | DURING AGE | RETMT | SURV | BEGIN OF |
| INTERVAL | AGE INTERVAL | INTERVAL | RATIO | RATIO | INTERVAL |
| 39.5 |  |  |  | 0.0000 | 1.0000 |
| 40.5 | $1,695,980$ |  | 0.0000 | 1.0000 | 77.53 |
| 41.5 | $1,684,157$ |  | 0.0000 | 1.0000 | 77.53 |
| 42.5 | $1,650,962$ |  | 0.0000 | 1.0000 | 77.53 |
| 43.5 | $1,496,022$ |  | 0.0000 | 1.0000 | 77.53 |
| 44.5 | $1,231,024$ |  | 0.0000 | 1.0000 | 77.53 |
| 45.5 | $1,113,937$ |  | 0.0000 | 1.0000 | 77.53 |
| 46.5 | $1,065,556$ |  | 0.0000 | 1.0000 | 77.53 |
| 47.5 | 898,202 |  | 0.0000 | 1.0000 | 77.53 |
| 48.5 | 882,737 |  | 0.0000 | 1.0000 | 77.53 |
| 49.5 | 874,650 |  | 0.0000 | 1.0000 | 77.53 |
| 50.5 | 841,481 |  | 0.0000 | 1.0000 | 77.53 |
| 51.5 | 787,983 |  | 0.0000 | 1.0000 | 77.53 |
| 52.5 | 488,385 |  | 0.0000 | 1.0000 | 77.53 |
| 53.5 | 285,878 |  | 0.0000 | 1.0000 | 77.53 |
| 54.5 | 42,551 |  |  | 1.0000 | 77.53 |
| 55.5 | 26,691 |  |  |  | 77.53 |

EL PASO ELECTRIC COMPANY
ACCOUNT 396.00 POWER OPERATED EQUIPMENT


## EL PASO ELECTRIC COMPANY

ACCOUNT 396.00 POWER OPERATED EQUIPMENT
ORIGINAL LIFE TABLE

PLACEMENT BAND 1976-2019
EXPERIENCE BAND 1993-2019

| AGE AT | EXPOSURES AT | RETIREMENTS |  |  | PCT SURV |
| :---: | :---: | :---: | :---: | :---: | :---: |
| BEGIN OF | BEGINNING OF | DURING AGE | RETMT | SURV | BEGIN OF |
| INTERVAL | AGE INTERVAL | INTERVAL | RATIO | RATIO | INTERVAL |
| 0.0 | 4,592,692 |  | 0.0000 | 1.0000 | 100.00 |
| 0.5 | 4,503,118 |  | 0.0000 | 1.0000 | 100.00 |
| 1.5 | 4,303,543 |  | 0.0000 | 1.0000 | 100.00 |
| 2.5 | 4,139, 220 | 59,654 | 0.0144 | 0.9856 | 100.00 |
| 3.5 | 2,495,263 | 32,508 | 0.0130 | 0.9870 | 98.56 |
| 4.5 | 1,748,566 | 46, 132 | 0.0264 | 0.9736 | 97.27 |
| 5.5 | 1,718,966 |  | 0.0000 | 1.0000 | 94.71 |
| 6.5 | 1,647,178 | 9,914 | 0.0060 | 0.9940 | 94.71 |
| 7.5 | 1,650,581 | 17,992 | 0.0109 | 0.9891 | 94.14 |
| 8.5 | 1,693,863 |  | 0.0000 | 1.0000 | 93.11 |
| 9.5 | 1,530,112 |  | 0.0000 | 1.0000 | 93.11 |
| 10.5 | 1,517,188 |  | 0.0000 | 1.0000 | 93.11 |
| 11.5 | 1,522, 251 |  | 0.0000 | 1.0000 | 93.11 |
| 12.5 | 599,765 |  | 0.0000 | 1.0000 | 93.11 |
| 13.5 | 599,765 |  | 0.0000 | 1.0000 | 93.11 |
| 14.5 | 591,226 |  | 0.0000 | 1.0000 | 93.11 |
| 15.5 | 589,314 |  | 0.0000 | 1.0000 | 93.11 |
| 16.5 | 597,485 |  | 0.0000 | 1.0000 | 93.11 |
| 17.5 | 597,485 |  | 0.0000 | 1.0000 | 93.11 |
| 18.5 | 564,752 | 34,950 | 0.0619 | 0.9381 | 93.11 |
| 19.5 | 511, 031 | 7,500 | 0.0147 | 0.9853 | 87.35 |
| 20.5 | 450, 234 | 154,860 | 0.3440 | 0.6560 | 86.07 |
| 21.5 | 295, 374 | 10,871 | 0.0368 | 0.9632 | 56.46 |
| 22.5 | 284,503 | 114,561 | 0.4027 | 0.5973 | 54.39 |
| 23.5 | 169,942 |  | 0.0000 | 1.0000 | 32.49 |
| 24.5 | 169,942 | 66,439 | 0.3910 | 0.6090 | 32.49 |
| 25.5 | 103,503 | 14,128 | 0.1365 | 0.8635 | 19.79 |
| 26.5 | 89,375 | 13,317 | 0.1490 | 0.8510 | 17.09 |
| 27.5 | 76, 058 | 61,274 | 0.8056 | 0.1944 | 14.54 |
| 28.5 | 14,784 |  | 0.0000 | 1.0000 | 2.83 |
| 29.5 | 14,784 | 1,550 | 0.1048 | 0.8952 | 2.83 |
| 30.5 | 13,234 | 5,063 | 0.3826 | 0.6174 | 2.53 |
| 31.5 | 8,171 |  | 0.0000 | 1.0000 | 1.56 |
| 32.5 | 8,171 |  | 0.0000 | 1.0000 | 1.56 |
| 33.5 | 8,171 |  | 0.0000 | 1.0000 | 1.56 |
| 34.5 | 8,171 |  | 0.0000 | 1.0000 | 1.56 |
| 35.5 | 8,171 | 8,171 | 1.0000 |  | 1.56 |
| 36.5 |  |  |  |  |  |

## PART VIII. NET SALVAGE STATISTICS


three-year moving averages

| $93-95$ | 119 | 59 | 49 | 28,600 |  | 28,541 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $94-96$ | 2,600 | 359 | 14 | 0 | $359-$ | $14-$ |
| $95-97$ | 2,481 | 300 | 12 | 0 | $300-$ | $12-$ |
| $96-98$ | 2,481 | 300 | 12 | 0 | $300-$ | $12-$ |
| $97-99$ |  |  | 0 | 0 |  | 0 |
| $98-00$ | 88 | 88 | 0 | 0 | 0 | 0 |
| $99-01$ | 88 |  | 0 |  |  |  |
| $00-02$ |  |  |  |  |  |  |
| $01-03$ |  |  |  |  |  |  |
| $02-04$ |  |  |  |  |  |  |
| $03-05$ |  |  |  |  |  |  |


| EL PASO ELECTRIC COMPANY |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ACCOUNT 311.00 STRUCTURES AND IMPROVEMENTS |  |  |  |  |  |  |  |
| SUMMARY OF BOOK SALVAGE |  |  |  |  |  |  |  |
|  | REGULAR | COST OF REMOVAL |  | GROSS SALVAGE |  | NET SALVAGE |  |
| YEAR | RETIREMENTS | AMOUNT | PCT |  | PCT |  | PCT |
| THREE-YEAR MOVING AVERAGES |  |  |  |  |  |  |  |
| 04-06 |  |  |  |  |  |  |  |
| 05-07 |  |  |  |  |  |  |  |
| 06-08 |  |  |  |  |  |  |  |
| 07-09 |  |  |  |  |  |  |  |
| 08-10 | 1,050 |  | 0 |  | 0 |  | 0 |
| 09-11 | 1,050 | 6,007 | 572 |  | 0 | 6,007- | 572- |
| 10-12 | 1,050 | 6,007 | 572 |  | 0 | 6,007- | 572- |
| 11-13 |  | 6,007 |  |  |  | 6,007- |  |
| 12-14 |  |  |  |  |  |  |  |
| 13-15 |  | 1,148 |  | 151 |  | 997- |  |
| 14-16 | 10,568 | 1,148 | 11 | 3,763 | 36 | 2,614 | 25 |
| 15-17 | 37,267 | 11,068 | 30 | 4,311 | 12 | 6,757- | 18- |
| 16-18 | 37,267 | 9,919 | 27 | 4,160 | 11 | 5,759- | 15- |
| 17-19 | 461, 929 | 1,949,478 | 422 | 570 | 0 | 1,948,908- | 422- |

FIVE-YEAR AVERAGE
15-19
283,498
$1,170,376413$
2,599
1
1,167,776-412-

## EL PASO ELECTRIC COMPANY

ACCOUNT 312.00 BOILER PLANT EQUIPMENT
SUMMARY OF BOOK SALVAGE

|  | REGULAR | COST OF REMOVAL |  | $\begin{aligned} & \text { GROSS } \\ & \text { SALVAGE } \end{aligned}$ |  | NET SALVAGE |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | RETIREMENTS | AMOUNT | PCT | AMOUNT | PCT | AMOUNT | PCT |
| 1994 | 2,594 |  | 0 |  | 0 |  | 0 |
| 1995 |  |  |  | 124,500 |  | 124,500 |  |
| 1996 | 133,400 | 5,704 | 4 |  | 0 | 5,704- | 4- |
| 1997 |  |  |  |  |  |  |  |
| 1998 | 385, 197 | 101,960 | 26 | 38,528 | 10 | 63,432- | 16- |
| 1999 |  |  |  |  |  |  |  |
| 2000 |  |  |  |  |  |  |  |
| 2001 |  | 4,459 |  |  |  | 4,459- |  |
| 2002 |  |  |  |  |  |  |  |
| 2003 |  |  |  |  |  |  |  |
| 2004 | 111,427 | 80,412 | 72 |  | 0 | 80,412- | 72- |
| 2005 |  |  |  |  |  |  |  |
| 2006 |  |  |  |  |  |  |  |
| 2007 |  |  |  |  |  |  |  |
| 2008 |  |  |  |  |  |  |  |
| 2009 |  |  |  |  |  |  |  |
| 2010 | 3,500 |  | 0 |  | 0 |  | 0 |
| 2011 |  |  |  |  |  |  |  |
| 2012 |  |  |  |  |  |  |  |
| 2013 |  |  |  |  |  |  |  |
| 2014 |  |  |  |  |  |  |  |
| 2015 |  | 412 |  | 322 |  | 90- |  |
| 2016 | 18,957 |  | 0 | 204,417- |  | 204,417- |  |
| 2017 | 924,310 | 46,428 | 5 | 71,267 | 8 | 24,839 | 3 |
| 2018 | 36,928 |  | 0 | 184 | 0 | 184 | 0 |
| 2019 | 675,563 | 45,990 | 7 | 19- | 0 | 46,009- | 7- |
| TOTAL | 2,291, 877 | 285,365 | 12 | 30,365 | 1 | 255, 000- | 11- |

THREE-YEAR MOVING AVERAGES

| $94-96$ | 45,331 | 1,901 | 4 | 41,500 | 92 | 39,599 | 87 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :--- |
| $95-97$ | 44,467 | 1,901 | 4 | 41,500 | 93 | 39,599 | 89 |
| $96-98$ | 172,866 | 35,888 | 21 | 12,843 | 7 | $23,045-$ | $13-$ |
| $97-99$ | 128,399 | 33,987 | 26 | 12,843 | 10 | $21,144-$ | $16-$ |
| $98-00$ | 128,399 | 33,987 | 26 | 12,843 | 10 | $21,144-$ | $16-$ |
| $99-01$ |  | 1,486 |  |  | $1,486-$ |  |  |
| $00-02$ |  | 1,486 |  |  | $1,486-$ |  |  |
| $01-03$ |  | 1,486 |  | 0 | $1,486-$ |  |  |
| $02-04$ | 37,142 | 26,804 | 72 | 0 | $26,804-$ | $72-$ |  |
| $03-05$ | 37,142 | 26,804 | 72 |  | $26,804-$ | $72-$ |  |
| $04-06$ | 37,142 | 26,804 | 72 |  |  | $26,804-$ | $72-$ |
| $05-07$ |  |  |  |  |  |  |  |



## EL PASO ELECTRIC COMPANY

ACCOUNT 313.00 ENGINES AND ENGINE-DRIVEN GENERATORS

SUMMARY OF BOOK SALVAGE

|  | REGULAR | $\begin{aligned} & \text { COST } \\ & \text { REMO } \end{aligned}$ |  | GROSS SALVAGE |  | NET SALVAGE |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | RETIREMENTS | AMOUNT | PCT | AMOUNT | PCT | AMOUNT | PCT |
| 2010 | 60,000 |  | 0 |  | 0 |  | 0 |
| 2011 |  |  |  |  |  |  |  |
| 2012 |  |  |  |  |  |  |  |
| 2013 |  |  |  |  |  |  |  |
| 2014 |  |  |  |  |  |  |  |
| 2015 |  |  |  |  |  |  |  |
| 2016 | 2,415,423 |  | 0 | 14,781- | 1- | 14,781- | 1 |
| 2017 | 3,482,012 |  | 0 | 198,350 | 6 | 198, 350 | 6 |
| 2018 | 1,018,167 |  | 0 | 8,738 | 1 | 8,738 | 1 |
| 2019 |  |  |  |  |  |  |  |
| TOTAL | 6,975,603 |  | 0 | 192,307 | 3 | 192,307 | 3 |

THREE-YEAR MOVING AVERAGES

| $10-12$ | 20,000 | 0 | 0 | 0 |  |  |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- |
| $11-13$ |  |  |  |  |  |  |
| $12-14$ |  |  |  |  |  |  |
| $13-15$ | 805,141 | 0 | $4,927-$ | $1-$ | $4,927-$ | $1-$ |
| $14-16$ | $1,965,812$ | 0 | 61,190 | 3 | 61,190 | 3 |
| $15-17$ | $2,305,201$ | 0 | 64,102 | 3 | 64,102 | 3 |
| $16-18$ | $1,500,060$ | 0 | 69,029 | 5 | 69,029 | 5 |

FIVE-YEAR AVERAGE
15-19
1,383, 121
0
38,461
3
38,461
3

## EL PASO ELECTRIC COMPANY

ACCOUNT 314.00 TURBOGENERATOR UNITS

|  | SUMMARY OF BOOK SALVAGE |  |  |  |  | NET SALVAGE |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | REGULAR | COST OF REMOVAL |  | GROSS <br> SALVAGE |  |  |  |
| YEAR | RETIREMENTS | AMOUNT | PCT | AMOUNT | PCT | AMOUNT | PCT |
| 1994 | 2,768 | 8,916 | 322 |  | 0 | 8,916- | 322- |
| 1995 |  |  |  |  |  |  |  |
| 1996 |  |  |  |  |  |  |  |
| 1997 |  |  |  |  |  |  |  |
| 1998 |  |  |  |  |  |  |  |
| 1999 |  |  |  |  |  |  |  |
| 2000 |  |  |  |  |  |  |  |
| 2001 | 36,820 |  | 0 |  | 0 |  | $\bigcirc$ |
| 2002 |  |  |  |  |  |  |  |
| 2003 |  |  |  |  |  |  |  |
| 2004 | 197, 050 | 10,628 | 5 |  | 0 | 10,628- | $5-$ |
| 2005 |  |  |  |  |  |  |  |
| 2006 |  |  |  |  |  |  |  |
| 2007 |  |  |  |  |  |  |  |
| 2008 |  |  |  |  |  |  |  |
| 2009 |  |  |  |  |  |  |  |
| 2010 | 149,800 |  | 0 |  | 0 |  | 0 |
| 2011 |  |  |  |  |  |  |  |
| 2012 |  |  |  |  |  |  |  |
| 2013 |  |  |  |  |  |  |  |
| 2014 |  |  |  |  |  |  |  |
| 2015 |  |  |  |  |  |  |  |
| 2016 | 660,872 |  | 0 |  | 0 |  | 0 |
| 2017 | 7,258, 371 |  | 0 |  | 0 |  | 0 |
| 2018 | 46,724 | 71,429 | 153 | 112,619 | 241 | 41,190 | 88 |
| 2019 | 324,140 | 96,683 | 30 |  | 0 | 96,683- | $30-$ |
| TOTAL | 8,676,545 | 187,656 | 2 | 112,619 | 1 | 75,037- | 1- |

THREE-YEAR MOVING AVERAGES

| $94-96$ | 923 | 2,972 | 322 | 0 |
| :--- | :---: | :---: | :---: | :---: |
| $95-97$ |  |  |  |  |
| $96-98$ |  |  |  |  |
| $97-99$ |  |  | 0 | 0 |
| $98-00$ | 12,273 |  | 0 | 0 |
| $99-01$ | 12,273 |  |  | 0 |
| $00-02$ | 12,273 | 3,543 | 5 | 0 |
| $01-03$ | 65,683 | 3,543 | 5 | 0 |
| $02-04$ | 65,683 |  |  | 0 |





## EL PASO ELECTRIC COMPANY

ACCOUNT 316.00 MISCELLANEOUS POWER PLANT EQUIPMENT
SUMMARY OF BOOK SALVAGE

| YEAR | REGULAR RETIREMENTS | COST OF REMOVAL AMOUNT | PCT | $\begin{gathered} \text { GROSS } \\ \text { SALVAGE } \\ \text { AMOUNT } \end{gathered}$ | PCT | NET <br> SALVAGE AMOUNT | PCT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1993 | 33,352 | 3,742 | 11 | 36 | 0 | 3,706- | 11- |
| 1994 | 331, 112 | 3,524 | 1 |  | 0 | 3,524- | 1- |
| 1995 |  |  |  |  |  |  |  |
| 1996 | 356 |  | 0 |  | 0 |  | 0 |
| 1997 |  |  |  |  |  |  |  |
| 1998 | 7,314 | 1,802 | 25 |  | 0 | 1,802- | $25-$ |
| 1999 |  |  |  | 7,224 |  | 7,224 |  |
| 2000 | 3,558 |  | 0 |  | 0 |  | 0 |
| 2001 | 21,739 |  | 0 |  | 0 |  | 0 |
| 2002 |  |  |  |  |  |  |  |
| 2003 | 761 |  | 0 |  | 0 |  | 0 |
| 2004 | 57,362 | 10,500 | 18 | 8,690 | 15 | 1,810- | $3-$ |
| 2005 |  |  |  |  |  |  |  |
| 2006 |  |  |  |  |  |  |  |
| 2007 | 15,990 |  | 0 |  | 0 |  | 0 |
| 2008 |  |  |  |  |  |  |  |
| 2009 |  |  |  |  |  |  |  |
| 2010 | 43,620 |  | 0 |  | 0 |  | 0 |
| 2011 |  |  |  |  |  |  |  |
| 2012 |  |  |  |  |  |  |  |
| 2013 |  |  |  |  |  |  |  |
| 2014 |  |  |  |  |  |  |  |
| 2015 |  |  |  | 6,699 |  | 6,699 |  |
| 2016 | 26,656 | 8,019 | 30 | 5,232 | 20 | 2,787- | 10- |
| 2017 | 33,076 | 74,869 | 226 | 18,180 | 55 | 56,689- | 171- |
| 2018 |  |  |  |  |  |  |  |
| 2019 |  |  |  |  |  |  |  |
| TOTAL | 574,895 | 102,455 | 18 | 46, 061 | 8 | 56,394- | $10-$ |

THREE-YEAR MOVING AVERAGES

| 93-95 | 121,488 | 2,422 | 2 | 12 | $\bigcirc$ | 2,410- | $2-$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 94-96 | 110,489 | 1,175 | 1 |  | 0 | 1,175- | 1- |
| 95-97 | 119 |  | 0 |  | 0 |  | 0 |
| 96-98 | 2,557 | 601 | 23 |  | 0 | 601- | $23-$ |
| 97-99 | 2,438 | 601 | 25 | 2,408 | 99 | 1,807 | 74 |
| 98-00 | 3,624 | 601 | 17 | 2,408 | 66 | 1,807 | 50 |
| 99-01 | 8,432 |  | 0 | 2,408 | 29 | 2,408 | 29 |
| 00-02 | 8,432 |  | 0 |  | 0 |  | 0 |
| 01-03 | 7,500 |  | 0 |  | 0 |  | 0 |
| 02-04 | 19,374 | 3,500 | 18 | 2,897 | 15 | 603- | $3-$ |
| 03-05 | 19,374 | 3,500 | 18 | 2,897 | 15 | 603- | 3 - |

## EL PASO ELECTRIC COMPANY

ACCOUNT 316.00 MISCELLANEOUS POWER PLANT EQUIPMENT

| SUMMARY OF BOOK SALVAGE |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | REGULAR | COST OF REMOVAL |  | GROSS SALVAGE |  | $\begin{gathered} \text { NET } \\ \text { SALVAGE } \end{gathered}$ |  |
| YEAR | RETIREMENTS | AMOUNT | PCT | AMOUNT | PCT | AMOUNT | PCT |
| THREE-YEAR MOVING AVERAGES |  |  |  |  |  |  |  |
| 04-06 | 19,121 | 3,500 | 18 | 2,897 | 15 | 603- | $3-$ |
| 05-07 | 5,330 |  | 0 |  | 0 |  | 0 |
| 06-08 | 5,330 |  | 0 |  | 0 |  | 0 |
| 07-09 | 5,330 |  | 0 |  | 0 |  | 0 |
| 08-10 | 14,540 |  | 0 |  | 0 |  | 0 |
| 09-11 | 14,540 |  | 0 |  | 0 |  | 0 |
| 10-12 | 14,540 |  | 0 |  | 0 |  | 0 |
| 11-13 |  |  |  |  |  |  |  |
| 12-14 |  |  |  |  |  |  |  |
| 13-15 |  |  |  | 2,233 |  | 2,233 |  |
| 14-16 | 8,885 | 2,673 | 30 | 3,977 | 45 | 1,304 | 15 |
| 15-17 | 19,911 | 27,629 | 139 | 10,037 | 50 | 17,592- | 88- |
| 16-18 | 19,911 | 27,629 | 139 | 7,804 | 39 | 19,825- | 100- |
| 17-19 | 11,025 | 24,956 | 226 | 6,060 | 55 | 18,896- | 171- |

FIVE-YEAR AVERAGE
15-19
11,946
16,577139
6,02250
10,555-88-

| EL PASO ELECTRIC COMPANY |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ACCOUNT 341.00 STRUCTURES AND IMPROVEMENTS |  |  |  |  |  |  |  |
| SUMMARY OF BOOK SALVAGE |  |  |  |  |  |  |  |
| REGULAR |  | COST OF REMOVAL AMOUNT |  | GROSS SALVAGE AMOUNT |  | NET <br> SALVAGE |  |
| YEAR | RETIREMENTS | AMOUNT | PCT | AMOUNT | PCT |  | PCT |
| 2015 |  | 4,775 |  |  |  | 4,775- |  |
| 2016 | 34,102 | 22,727 | 67 | 2,858- | 8- | 25,585- | 75- |
| 2017 |  |  |  |  |  |  |  |
| 2018 |  |  |  |  |  |  |  |
| 2019 |  |  |  |  |  |  |  |
| TOTAL | 34,102 | 27,502 | 81 | 2,858- | 8- | 30,360- | 89- |
| THREE-YEAR MOVING AVERAGES |  |  |  |  |  |  |  |
| 15-17 | 11,367 | 9,167 | 81 | 953- | 8 - | 10,120- | 89- |
| 16-18 | 11,367 | 7,576 | 67 | 953- | 8 - | 8,528- | 75- |
| 17-19 |  |  |  |  |  |  |  |
| FIVE-YEAR AVERAGE |  |  |  |  |  |  |  |
| 15-19 | 6,820 | 5,500 | 81 | 572- | 8- | 6,072- | 89- |


| EL PASO ELECTRIC COMPANY |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ACCOUNT 342.00 FUEL HOLDERS |  |  |  |  |  |  |  |
| SUMMARY OF BOOK SALVAGE |  |  |  |  |  |  |  |
| REGULAR |  | $\begin{aligned} & \text { COST } \\ & \text { REMO } \end{aligned}$ | GROSS SALVAGE |  |  | NET SALVAGE |  |
| YEAR | RETIREMENTS | AMOUNT | PCT |  | PCT |  | PCT |
| 2015 |  | 2,11 |  |  |  | 2,11 |  |
| 2016 |  | 19, 1 |  |  |  | 19,1 |  |
| 2017 |  |  |  |  |  |  |  |
| 2018 |  |  |  |  |  |  |  |
| 2019 |  | 9,919 |  |  |  | 9,9 |  |
| TOTAL |  | 30, |  |  |  | 30,3 |  |

THREE-YEAR MOVING AVERAGES

| $15-17$ | 6,819 |  | $6,819-$ |
| :--- | :--- | :--- | :--- |
| $16-18$ | 6,114 | 9 | $6,105-$ |
| $17-19$ | 3,027 | 9 | $3,018-$ |

17-19
3, 027
9
3,018-

FIVE-YEAR AVERAGE
6, 074
5
6,069-

| EL PASO ELECTRIC COMPANY |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ACCOUNT 343.00 PRIME MOVERS |  |  |  |  |  |  |  |
| SUMMARY OF BOOK SALVAGE |  |  |  |  |  |  |  |
|  | REGULAR | COST OF REMOVAL |  | GROS |  | NET <br> SALVAGE |  |
| YEAR | RETIREMENTS | AMOUNT | PCT | AMOUNT | PCT | AMOUNT | PCT |
| 2015 |  | 9,525 |  |  |  | 9,525- |  |
| 2016 | 277, 389 | 34,731 | 13 |  | 0 | 34,731- | 13- |
| 2017 | 204, 330 | 9,643 | 5 |  | 0 | 9,643- | $5-$ |
| 2018 |  |  |  |  |  |  |  |
| 2019 | 203,794 | 12,972- | 6 - |  | 0 | 12,972 | 6 |
| TOTAL | 685,513 | 40,927 | 6 |  | 0 | 40, 927- | 6 - |
| THREE-YEAR MOVING AVERAGES |  |  |  |  |  |  |  |
| 15-17 | 160,573 | 17,966 | 11 |  | 0 | 17,966- | 11- |
| 16-18 | 160,573 | 14,791 | 9 |  | 0 | 14,791- | 9 - |
| 17-19 | 136, 041 | 1,110- | 1- |  | 0 | 1,110 | 1 |

FIVE-YEAR AVERAGE
15-19
137,103
8,185
6
0
8,185- 6-


THREE-YEAR MOVING AVERAGES

15-17
16-18
17-19
39,704
76,118
85,963

FIVE-YEAR AVERAGE

| 1,579 | 4 |
| :---: | :---: |
| 1,164 | 2 |
| $831-$ | $1-$ |

182
182
0

2850
$109 \quad 0$

1,579-4-983- 1-
1,013 1

176- 0


## EL PASO ELECTRIC COMPANY

ACCOUNT 346.00 MISCELLANEOUS POWER PLANT EQUIPMENT

|  | SUMMARY OF BOOK SALVAGE |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | REGULAR RETIREMENTS | COST OF REMOVAL AMOUNT | PCT | $\begin{aligned} & \text { GROSS } \\ & \text { SALVAGE } \\ & \text { AMOUNT } \end{aligned}$ | PCT | NET <br> SALVAGE <br> AMOUNT | PCT |
| 2015 |  | 376 |  |  |  | 376- |  |
| 2016 | 18,819 | 973 | 5 |  | 0 | 973- | $5-$ |
| 2017 |  | 52 |  |  |  | 52- |  |
| 2018 |  |  |  | 218 |  | 218 |  |
| 2019 |  | 232- |  |  |  | 232 |  |
| TOTAL | 18,819 | 1,169 | 6 | 218 | 1 | 951- | $5-$ |

THREE-YEAR MOVING AVERAGES

| $15-17$ | 6,273 | 467 | 7 | 0 | $467-$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $16-18$ | 6,273 | 342 | 5 | 73 | 1 | $269-$ |
| $17-19$ |  | $60-$ |  | 73 |  | $133-$ |

FIVE-YEAR AVERAGE
15-19
3,764
2346
441
190- 5 -

|  | EL PASO ELECTRIC COMPANY |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ACCOUNT 352.00 STRUCTURES AND IMPROVEMENTS |  |  |  |  |  |  |
|  | SUMMARY OF BOOK SALVAGE |  |  |  |  |  |  |
|  | REGULAR | COST OF |  | GROSSSALVAG |  | NET |  |
| YEAR | RETIREMENTS | AMOUNT | PCT | AMOUNT | PCT | AMOUNT | PCT |
| 1993 | 123 |  |  |  |  | 123- |  |
| 1994 |  |  |  |  |  |  |  |
| 1995 |  |  |  |  |  |  |  |
| 1996 |  |  |  |  |  |  |  |
| 1997 |  |  |  |  |  |  |  |
| 1998 |  |  |  |  |  |  |  |
| 1999 |  |  |  |  |  |  |  |
| 2000 | 4,557 |  | 0 |  | 0 |  | 0 |
| 2001 |  |  |  |  |  |  |  |
| 2002 |  |  |  |  |  |  |  |
| 2003 |  |  | 0 |  | $\bigcirc$ |  | 0 |
| 2004 |  |  | 0 |  | 0 |  | 0 |
| 2005 |  |  |  |  |  |  |  |
| 2006 |  |  |  |  |  |  |  |
| 2007 | 1,763 |  | $\bigcirc$ |  | 0 |  | 0 |
| 2008 |  |  |  |  |  |  |  |
| 2009 | 405 |  |  |  |  | 405- |  |
| 2010 |  |  |  |  |  |  |  |
| 2011 |  |  |  |  |  |  |  |
| 2012 |  |  |  |  |  |  |  |
| 2013 | 56,356 |  | 0 |  | 0 |  | 0 |
| 2014 |  |  |  |  |  |  |  |
| 2015 |  |  |  |  |  |  |  |
| 2016 | 5,221 | 8,569 | 164 |  | 0 | 8,56 | 164 |
| 2017 ( |  |  |  |  |  |  |  |
| 2018 |  |  |  |  |  |  |  |
| 2019 |  |  |  |  |  |  |  |
| TOTAL | 67,898 | 9, 097 | 13 |  | $\bigcirc$ | 9, 09 | $13-$ |

THREE-YEAR MOVING AVERAGES

| $93-95$ |  | 41 |  | $41-$ |
| :--- | :--- | :--- | :--- | :--- |
| $94-96$ |  |  |  |  |
| $95-97$ |  |  |  |  |
| $96-98$ |  | 0 | 0 | 0 |
| $97-99$ | 1,519 | 0 | 0 | 0 |
| $98-00$ | 1,519 | 0 | 0 | 0 |
| $99-01$ | 1,519 | 0 | 0 | 0 |
| $00-02$ |  | 0 | 0 | 0 |
| $01-03$ |  | 0 | 0 | 0 |
| $02-04$ |  |  | 0 | 0 |
| $03-05$ |  |  | 0 | 0 |



## EL PASO ELECTRIC COMPANY

## ACCOUNT 353.00 STATION EQUIPMENT

SUMMARY OF BOOK SALVAGE

|  | REGULAR | COST OF REMOVAL |  | $\begin{aligned} & \text { GROSS } \\ & \text { SALVAGE } \end{aligned}$ |  | NET SALVAGE |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | RETIREMENTS | AMOUNT | PCT | AMOUNT | PCT | AMOUNT | PCT |
| 1993 | 1,252 | 761 | 61 |  | 0 | 761- | 61 - |
| 1994 | 7,200 | 4,006 | 56 | 6 | 0 | 4,000- | 56 - |
| 1995 | 900 |  | 0 |  | 0 |  | 0 |
| 1996 | 925 | 1,520 | 164 |  | 0 | 1,520- | 164 - |
| 1997 |  |  |  |  |  |  |  |
| 1998 |  |  |  |  |  |  |  |
| 1999 |  |  |  |  |  |  |  |
| 2000 | 38,166 |  | 0 |  | 0 |  | 0 |
| 2001 |  |  |  |  |  |  |  |
| 2002 |  |  |  |  |  |  |  |
| 2003 |  |  |  |  |  |  |  |
| 2004 |  |  |  |  |  |  |  |
| 2005 |  |  |  |  |  |  |  |
| 2006 |  | 48- |  |  |  | 48 |  |
| 2007 | 94,531 | 735 | 1 |  | 0 | 735- | 1- |
| 2008 |  | 497 |  |  |  | 497 - |  |
| 2009 | 320,767 | 1,572 | 0 |  | 0 | 1,572- | 0 |
| 2010 | 259,448 | 32,034 | 12 |  | 0 | 32,034- | $12-$ |
| 2011 |  | 356 |  |  |  | 356- |  |
| 2012 |  |  |  |  |  |  |  |
| 2013 | 4,119,058 | 6,216 | 0 |  | 0 | 6,216- | 0 |
| 2014 | 5,091 | 29,561 | 581 |  | 0 | 29,561- | 581- |
| 2015 | 446,436 | 103,697 | 23 |  | 0 | 103,697- | $23-$ |
| 2016 | 95,108 | 27,545 | 29 |  | 0 | 27,545- | $29-$ |
| 2017 | 360,229 | 64,208 | 18 |  | 0 | 64,208- | 18 - |
| 2018 |  |  |  |  |  |  |  |
| 2019 |  |  |  |  |  |  |  |
| TOTAL | 5,749,111 | 272,659 | 5 | 6 | 0 | 272,653- | $5-$ |

## THREE-YEAR MOVING AVERAGES

| 93-95 | 3,117 | 1,589 | 51 | 2 | 0 | 1,587- | 51- |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 94-96 | 3,008 | 1,842 | 61 | 2 | 0 | 1,840- | 61 - |
| 95-97 | 608 | 507 | 83 |  | 0 | $507-$ | $83-$ |
| 96-98 | 308 | 507 | 164 |  | 0 | $507-$ | $164-$ |
| 97-99 |  |  |  |  |  |  |  |
| 98-00 | 12,722 |  | 0 |  | 0 |  | 0 |
| 99-01 | 12,722 |  | 0 |  | 0 |  | 0 |
| 00-02 | 12,722 |  | 0 |  | 0 |  | 0 |
| 01-03 |  |  |  |  |  |  |  |
| 02-04 |  |  |  |  |  |  |  |
| 03-05 |  |  |  |  |  |  |  |



FIVE-YEAR AVERAGE
15-19
180, 355
39,090 22
0
39,090- $22-$


THREE-YEAR MOVING AVERAGES

| $93-95$ | 1 | 6 | 600 | 0 | $6-60-$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| $94-96$ | 1,015 | $4-$ | 0 | 0 | 4 |
| $95-97$ | 1,015 | $4-$ | 0 | 0 | 4 |
| $96-98$ | 1,015 | $4-$ | 0 | 0 | 0 |
| $97-99$ |  |  |  |  | 4 |
| $98-00$ |  |  |  |  |  |
| $99-01$ |  |  |  |  |  |
| $00-02$ |  |  |  |  |  |
| $01-03$ |  |  |  |  |  |
| $02-04$ |  |  |  |  |  |
| $03-05$ |  |  |  |  |  |


| EL PASO ELECTRIC COMPANY |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ACCOUNT 354.00 STEEL TOWERS AND FIXTURES |  |  |  |  |  |  |  |  |
| SUMMARY OF BOOK SALVAGE |  |  |  |  |  |  |  |  |
|  | REGULAR | COST OF |  |  | GROSSSALVAGE |  | NET SALVAGE |  |
| YEAR | RETIREMENTS | AMOUNT |  | PCT | AMOUNT | PCT | AMOUNT | PCT |
| THREE-YEAR MOVING AVERAGES |  |  |  |  |  |  |  |  |
| 04-06 |  |  |  |  |  |  |  |  |
| 05-07 |  |  |  |  |  |  |  |  |
| 06-08 |  |  |  |  |  |  |  |  |
| 07-09 |  |  |  |  |  |  |  |  |
| 08-10 |  |  |  |  |  |  |  |  |
| 09-11 |  |  |  |  |  |  |  |  |
| 10-12 |  |  |  |  |  |  |  |  |
| 11-13 |  |  |  |  |  |  |  |  |
| 12-14 |  |  |  |  |  |  |  |  |
| 13-15 |  |  | 51- |  |  |  | 51 |  |
| 14-16 | 2,270 |  | , 012 | 45 |  | 0 | 1,012- | 45- |
| 15-17 | 2,270 |  | , 012 | 45 |  | 0 | 1,012- | 45- |
| 16-18 | 2,270 |  | , 063 | 47 |  | 0 | 1,063- | 47- |
| 17-19 |  |  |  |  |  |  |  |  |
| FIVE-YEAR AVERAGE |  |  |  |  |  |  |  |  |
| 15-19 | 1,362 |  | 607 | 45 |  | 0 | 607- | 45- |

## EL PASO ELECTRIC COMPANY

ACCOUNT 355.00 WOOD AND STEEL POLES

SUMMARY OF BOOK SALVAGE

|  | REGULAR | COST OF REMOVAL |  | $\begin{gathered} \text { GROSS } \\ \text { SALVAG } \end{gathered}$ |  | NET SALVAGE |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | RETIREMENTS | AMOUNT | PCT | AMOUNT | PCT | AMOUNT | PCT |
| 1993 | 121,740 | 38,918 | 32 |  | 0 | 38,918- | $32-$ |
| 1994 | 1,430,115 | 17,549 | 1 | 1,021 | 0 | 16,528- | 1 - |
| 1995 | 62,186 | 20,892 | 34 |  | 0 | 20,892- | $34-$ |
| 1996 | 266,722 | 243,257 | 91 |  | 0 | 243, 257- | 91- |
| 1997 | 55,696 | 180 | 0 | 135 | 0 | 45- | 0 |
| 1998 | 83,726 | 1,449 | 2 |  | 0 | 1,449- | 2 |
| 1999 | 137,762 | 78,083 | 57 |  | 0 | 78,083- | $57-$ |
| 2000 | 178,317 | 5,271 | 3 |  | 0 | 5,271- | 3 - |
| 2001 | 1,522 |  | 0 |  | 0 |  | 0 |
| 2002 | 3,306 | 7,592 | 230 | 4,174 | 126 | 3,418- | 103- |
| 2003 | 11,666 |  | 0 |  | 0 |  | 0 |
| 2004 | 323 |  | 0 |  | 0 |  | 0 |
| 2005 |  | 3,095 |  |  |  | 3,095- |  |
| 2006 |  | 2,383 |  |  |  | 2,383- |  |
| 2007 | 164,132 |  | 0 |  | 0 |  | 0 |
| 2008 |  |  |  |  |  |  |  |
| 2009 |  |  |  |  |  |  |  |
| 2010 |  |  |  |  |  |  |  |
| 2011 |  |  |  |  |  |  |  |
| 2012 |  |  |  | 7,388 |  | 7,388 |  |
| 2013 |  |  |  |  |  |  |  |
| 2014 | 1, 080, 041 | 464,577 | 43 | 8,424 | 1 | 456,153- | 42- |
| 2015 | 646,145 | 7,314 | 1 | 8,229 | 1 | 915 | 0 |
| 2016 | 594,109 | 65,550 | 11 | 17,351 | 3 | 48,199- | 8 - |
| 2017 | 86,212 | 10,931 | 13 | 185 | 0 | 10,746- | 12- |
| 2018 | 171,364 |  | 0 | 86 | 0 | 86 | 0 |
| 2019 | 135,255 |  | 0 | 3,650 | 3 | 3,650 | 3 |
| TOTAL | 5,230,340 | 967, 040 | 18 | 50,642 | 1 | 916,398- | 18 - |

THREE-YEAR MOVING AVERAGES

| $93-95$ | 538,014 | 25,786 | 5 |
| ---: | ---: | ---: | ---: |
| $94-96$ | 586,341 | 93,899 | 16 |
| $95-97$ | 128,201 | 88,110 | 69 |
| $96-98$ | 135,381 | 81,629 | 60 |
| $97-99$ | 92,395 | 26,571 | 29 |
| $98-00$ | 133,268 | 28,268 | 21 |
| $99-01$ | 105,867 | 27,785 | 26 |
| $00-02$ | 61,048 | 4,288 | 7 |
| $01-03$ | 5,498 | 2,531 | 46 |
| $02-04$ | 5,098 | 2,531 | 50 |
| $03-05$ | 3,996 | 1,032 | 26 |


| 340 | 0 | $25,446-$ | $5-$ |
| ---: | ---: | ---: | ---: |
| 340 | 0 | $93,559-$ | $16-$ |
| 45 | 0 | $88,065-$ | $69-$ |
| 45 | 0 | $81,584-$ | $60-$ |
| 45 | 0 | $26,526-$ | $29-$ |
|  | 0 | $28,268-$ | $21-$ |
|  | 0 | $27,785-$ | $26-$ |
| 1,391 | 2 | $2,896-$ | $5-$ |
| 1,391 | 25 | $1,139-$ | $21-$ |
| 1,391 | 27 | $1,139-$ | $22-$ |
|  | 0 | $1,032-$ | $26-$ |

## EL PASO ELECTRIC COMPANY

ACCOUNT 355.00 WOOD AND STEEL POLES

SUMMARY OF BOOK SALVAGE

| SUMMARY OF BOOK SALVAGE |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | REGULAR | COST OF REMOVAL |  | GROSS SALVAG |  | NET SALVAGE |  |
| YEAR | RETIREMENTS | AMOUNT | PCT | AMOUNT | PCT | AMOUNT | PCT |
| THREE-YEAR MOVING AVERAGES |  |  |  |  |  |  |  |
| 04-06 | 108 | 1,826 |  |  | 0 | 1,826- |  |
| 05-07 | 54,711 | 1,826 | 3 |  | 0 | 1,826- | $3-$ |
| 06-08 | 54,711 | 794 | 1 |  | 0 | 794 - | 1- |
| 07-09 | 54,711 |  | 0 |  | 0 |  | 0 |
| 08-10 |  |  |  |  |  |  |  |
| 09-11 |  |  |  |  |  |  |  |
| 10-12 |  |  |  | 2,463 |  | 2,463 |  |
| 11-13 |  |  |  | 2,463 |  | 2,463 |  |
| 12-14 | 360, 014 | 154,859 | 43 | 5,271 | 1 | 149,588- | 42- |
| 13-15 | 575,395 | 157,297 | 27 | 5,551 | 1 | 151,746- | 26 - |
| 14-16 | 773,432 | 179,147 | 23 | 11,335 | 1 | 167,812- | 22 - |
| 15-17 | 442, 155 | 27,932 | 6 | 8,588 | 2 | 19,343- | 4 - |
| 16-18 | 283,895 | 25,494 | 9 | 5,874 | 2 | 19,620- | 7 - |
| 17-19 | 130,944 | 3,644 | 3 | 1,307 | 1 | 2,337- | 2 - |

FIVE-YEAR AVERAGE
15-19 326,617
$16,759 \quad 5$
5,900
2
10,859-3-

## EL PASO ELECTRIC COMPANY

## ACCOUNT 356.00 OVERHEAD CONDUCTORS AND DEVICES

SUMMARY OF BOOK SALVAGE

| YEAR | REGULAR RETIREMENTS | COST OF REMOVAL AMOUNT | PCT | GROSS SALVAGE AMOUNT | PCT | NET SALVAGE AMOUNT | PCT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1993 | 11,099 | 778 | 7 |  | $\bigcirc$ | 778- | 7 - |
| 1994 | 127 | 993 | 782 | 54 | 43 | 939- | 739- |
| 1995 | 36,083 |  | 0 | 3,835 | 11 | 3,835 | 11 |
| 1996 | 224,373 | 4,747 | 2 | 44,405 | 20 | 39,658 | 18 |
| 1997 |  |  |  |  |  |  |  |
| 1998 | 58,809 |  | 0 | 3,287 | 6 | 3,287 | 6 |
| 1999 | 226,400 |  | 0 | 32,365 | 14 | 32,365 | 14 |
| 2000 | 30,646 |  | 0 |  | 0 |  | 0 |
| 2001 |  |  |  |  |  |  |  |
| 2002 |  |  |  |  |  |  |  |
| 2003 |  |  |  |  |  |  |  |
| 2004 |  |  | 0 |  | 0 |  | 0 |
| 2005 |  |  |  |  |  |  |  |
| 2006 |  |  |  |  |  |  |  |
| 2007 | 11 |  | 0 |  | 0 |  | 0 |
| 2008 |  |  |  |  |  |  |  |
| 2009 |  |  |  |  |  |  |  |
| 2010 |  |  |  |  |  |  |  |
| 2011 |  |  |  |  |  |  |  |
| 2012 |  |  |  | 30,258 |  | 30,258 |  |
| 2013 | 8,506 |  | 0 |  | 0 |  | 0 |
| 2014 |  |  |  |  |  |  |  |
| 2015 | 21,283 | 2,987 | 14 |  | 0 | 2,987- | 14- |
| 2016 | 30,220 | 23,192 | 77 |  | 0 | 23,192- | 77- |
| 2017 | 18,901 | 2,585- | 14- | 128 | 1 | 2,713 | 14 |
| 2018 |  |  |  |  |  |  |  |
| 2019 | 89,344 | 1,571- | $2-$ |  | 0 | 1,571 | 2 |
| TOTAL | 755,801 | 28,540 | 4 | 114,331 | 15 | 85,791 | 11 |

THREE-YEAR MOVING AVERAGES

| $93-95$ | 15,770 | 590 | 4 | 1,296 | 8 | 706 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $94-96$ | 86,861 | 1,913 | 2 | 16,098 | 19 | 14,185 |
| $95-97$ | 86,819 | 1,582 | 2 | 16,080 | 19 | 14,498 |
| $96-98$ | 94,394 | 1,582 | 2 | 15,897 | 17 | 14,315 |
| $97-99$ | 95,070 |  | 0 | 11,884 | 13 | 11,884 |
| $98-00$ | 105,285 |  | 0 | 11,884 | 11 | 11,884 |
| $99-01$ | 85,682 |  | 0 | 10,788 | 13 | 11 |
| $00-02$ | 10,215 |  |  |  | 0 | 10,788 |
| $01-03$ |  |  |  | 0 | 13 |  |
| $02-04$ |  |  |  | 0 | 0 |  |
| $03-05$ |  |  |  |  | 0 |  |

## EL PASO ELECTRIC COMPANY

ACCOUNT 356.00 OVERHEAD CONDUCTORS AND DEVICES

| SUMMARY OF BOOK SALVAGE |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | REGULAR | COST OF REMOVAL |  | GROSS SALVAGE |  | NET SALVAGE |  |
| YEAR | RETIREMENTS |  | PCT |  | PCT |  | PCT |
| THREE-YEAR MOVING AVERAGES |  |  |  |  |  |  |  |
| 04-06 |  |  | 0 |  | 0 |  | 0 |
| 05-07 | 4 |  | 0 |  | 0 |  | 0 |
| 06-08 | 4 |  | 0 |  | 0 |  | 0 |
| 07-09 | 4 |  | 0 |  | 0 |  | 0 |
| 08-10 |  |  |  |  |  |  |  |
| 09-11 |  |  |  |  |  |  |  |
| 10-12 |  |  |  | 10,086 |  | 10,086 |  |
| 11-13 | 2,835 |  | $\bigcirc$ | 10,086 | 356 | 10, 086 | 356 |
| 12-14 | 2,835 |  | 0 | 10,086 | 356 | 10, 086 | 356 |
| 13-15 | 9,930 | 996 | 10 |  | 0 | 996- | 10- |
| 14-16 | 17,168 | 8,726 | 51 |  | 0 | 8,726- | 51- |
| 15-17 | 23,468 | 7,864 | 34 | 43 | 0 | 7,822- | 33- |
| 16-18 | 16,374 | 6,869 | 42 | 43 | 0 | 6,826- | 42- |
| 17-19 | 36, 082 | 1,385- | 4- | 43 | 0 | 1,428 | 4 |

FIVE-YEAR AVERAGE
15-19
31,950
$4,404 \quad 14$
$26 \quad 0$
4,379- 14 -


## EL PASO ELECTRIC COMPANY

 ACCOUNT 361.00 STRUCTURES AND IMPROVEMENTSSUMMARY OF BOOK SALVAGE

YEAR 2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019

TOTAL

| COST OF |  |
| :---: | ---: |
| REMOVAL |  |
| AMOUNT | PCT |
| 2,952 | 6 |

GROSS
SALVAGE
AMOUNT PCT
1,576 3
15, 000
1,803

1,421

| 1,896 | 4 |
| ---: | ---: |
| 3,853 | 91 |
| 3,942 |  |
| 10,269 |  |
| 19,521 |  |

43,85424
185,854

$$
\begin{array}{r}
87,053 \\
42,747 \\
4,221
\end{array}
$$

REGULAR
RETIREMENTS
51,833
r

2,952 6

NET SALVAGE AMOUNT PCT

1,376- $3-$
15, 000
1,803

1,421- 2-
5,597 13
6,565 156
13,434
6, 060
4, 815

50,476
27

THREE-YEAR MOVING AVERAGES

| 00-02 | 17,278 | 984 | 6 | 5,525 | 32 | 4,541 | 26 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 01-03 |  |  |  | 5,601 |  | 5,601 |  |
| 02-04 |  |  |  | 5,601 |  | 5,601 |  |
| 03-05 |  |  |  | 601 |  | 601 |  |
| 04-06 |  |  |  |  |  |  |  |
| 05-07 |  |  |  |  |  |  |  |
| 06-08 |  |  |  |  |  |  |  |
| 07-09 |  |  |  |  |  |  |  |
| 08-10 |  |  |  |  |  |  |  |
| 09-11 |  |  |  |  |  |  |  |
| 10-12 |  |  |  |  |  |  |  |
| 11-13 |  |  |  |  |  |  |  |
| 12-14 | 29,018 | 474 | 2 |  | 0 | 474- | $2-$ |
| 13-15 | 43,267 | 1,106 | 3 | 2,498 | 6 | 1,392 | 3 |
| 14-16 | 44,674 | 2,390 | 5 | 5,970 | 13 | 3,580 | 8 |
| 15-17 | 15,656 | 3,230 | 21 | 11,762 | 75 | 8,532 | 54 |



## EL PASO ELECTRIC COMPANY

## ACCOUNT 362.00 STATION EQUIPMENT

SUMMARY OF BOOK SALVAGE

| YEAR | REGULAR RETIREMENTS | COST OF REMOVAL AMOUNT | PCT | GROSS SALVAGE AMOUNT | PCT | NET <br> SALVAGE AMOUNT | PCT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1993 | 92,711 | 21,444 | 23 | 4,997 | 5 | 16,447- | 18- |
| 1994 |  |  |  |  |  |  |  |
| 1995 | 7,991 | 2,269 | 28 | 2,108 | 26 | 161- | $2-$ |
| 1996 | 6,060 | 2,217 | 37 | 1,465 | 24 | 752- | 12- |
| 1997 |  |  |  |  |  |  |  |
| 1998 |  |  |  |  |  |  |  |
| 1999 |  |  |  |  |  |  |  |
| 2000 | 219,845 | 12,507 | 6 | 6,653 | 3 | 5,854- | $3-$ |
| 2001 |  |  |  |  |  |  |  |
| 2002 |  |  |  |  |  |  |  |
| 2003 | 2,263 |  | 0 |  | 0 |  | 0 |
| 2004 | 2,502 |  | $\bigcirc$ | 2,500 | 100 | 2,500 | 100 |
| 2005 |  | 57,445 |  | 156,564 |  | 99,119 |  |
| 2006 |  | 11,469 |  |  |  | 11,469- |  |
| 2007 | 371,707 | 13,874 | 4 | 35,000 | 9 | 21, 126 | 6 |
| 2008 |  | 21,604 |  |  |  | 21,604- |  |
| 2009 | 2,830, 019 | 3,302 | 0 |  | 0 | 3,302- | 0 |
| 2010 | 167,041 | 6,287 | 4 | 28,883 | 17 | 22,596 | 14 |
| 2011 |  | 8,798 |  | 942 |  | 7,856- |  |
| 2012 | 505,371 |  | 0 | 73,294 | 15 | 73,294 | 15 |
| 2013 |  |  |  | 146,137 |  | 146,137 |  |
| 2014 | 4,170,487 | 39,042 | 1 | 15,440 | 0 | 23,602- | 1- |
| 2015 | 1,368,664 | 297,565 | 22 | 148,823 | 11 | 148,742- | 11- |
| 2016 | 248,691 | 32,418 | 13 | 117,442 | 47 | 85, 024 | 34 |
| 2017 | 2,040,737 | 437,869 | 21 | 588,653 | 29 | 150,784 | 7 |
| 2018 |  |  |  |  |  |  |  |
| 2019 |  |  |  |  |  |  |  |
| TOTAL | 12, 034, 088 | 968,110 | 8 | 1,328,901 | 11 | 360,791 | 3 |

THREE-YEAR MOVING AVERAGES

| 93-95 | 33,567 | 7,904 | 24 | 2,368 | 7 | 5,536- | 16- |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 94-96 | 4,684 | 1,495 | 32 | 1,191 | 25 | 304- | 6 - |
| 95-97 | 4,684 | 1,495 | 32 | 1,191 | 25 | 304- | 6 - |
| 96-98 | 2, 020 | 739 | 37 | 488 | 24 | 251- | 12- |
| 97-99 |  |  |  |  |  |  |  |
| 98-00 | 73,282 | 4,169 | 6 | 2,218 | 3 | 1,951- | $3-$ |
| 99-01 | 73,282 | 4,169 | 6 | 2,218 | 3 | 1,951- | 3 |
| 00-02 | 73,282 | 4,169 | 6 | 2,218 | 3 | 1,951- | 3- |
| 01-03 | 754 |  | 0 |  | 0 |  | 0 |
| 02-04 | 1,588 |  | 0 | 833 | 52 | 833 | 52 |
| 03-05 | 1,588 | 19,148 |  | 53, 021 |  | 33,873 |  |



Q Gannett Fleming VIII-33 | El Paso Electric |
| ---: |
| December 31, 2019 |

## EL PASO ELECTRIC COMPANY

ACCOUNT 364.00 POLES, TOWERS AND FIXTURES

## SUMMARY OF BOOK SALVAGE

|  | REGULAR | COST OF REMOVAL |  | GROSS <br> SALVAGE |  | NET SALVAGE |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | RETIREMENTS | AMOUNT | PCT | AMOUNT | PCT | AMOUNT | PCT |
| 1993 | 257, 089 | 61,914 | 24 | 40,640 | 16 | 21,274- | 8 - |
| 1994 | 307, 028 | 78, 261 | 25 | 65,369 | 21 | 12,892- | 4 - |
| 1995 | 330, 763 | 92,561 | 28 | 71,277 | 22 | 21,284- | 6 - |
| 1996 | 266, 238 | 130,382 | 49 | 64,640 | 24 | 65,742- | 25 |
| 1997 | 416, 363 | 143,330 | 34 | 85,250 | 20 | 58, 080- | 14 - |
| 1998 | 315,164 | 87,381 | 28 | 67,804 | 22 | 19,577- | 6 - |
| 1999 | 443, 991 | 81,583 | 18 | 48,794 | 11 | 32,789- | 7 - |
| 2000 | 460, 322 | 34,653 | 8 | 54, 030 | 12 | 19,377 | 4 |
| 2001 | 313,936 | 48,120 | 15 | 60,548 | 19 | 12,428 | 4 |
| 2002 | 350,570 | 75,481 | 22 | 274, 245 | 78 | 198,764 | 57 |
| 2003 | 255, 212 | 87,273 | 34 | 126,571 | 50 | 39,298 | 15 |
| 2004 | 491, 630 | 90,781 | 18 | 161, 736 | 33 | 70,955 | 14 |
| 2005 | 149,876 | 71,794 | 48 | 273,889 | 183 | 202,095 | 135 |
| 2006 | 361, 007 | 28,163 | 8 | 266,823 | 74 | 238, 660 | 66 |
| 2007 | 421, 381 | 20,546 | 5 | 570,930 | 135 | 550, 384 | 131 |
| 2008 | 184,600 | 23, 099 | 13 | 477, 601 | 259 | 454, 502 | 246 |
| 2009 | 277,127 | 3,207 | 1 | 468, 240 | 169 | 465, 033 | 168 |
| 2010 | 167,580 | 139- | 0 | 294, 071 | 175 | 294, 210 | 176 |
| 2011 | 129,104 |  | 0 | 261, 362 | 202 | 261, 362 | 202 |
| 2012 | 133,609 |  | 0 | 298,414 | 223 | 298, 414 | 223 |
| 2013 | 973, 074 | 243,477 | 25 | 260,374 | 27 | 16,897 | 2 |
| 2014 | 752,982 | 449,174 | 60 | 215,695 | 29 | 233,480- | $31-$ |
| 2015 | 796,418 | 705,581 | 89 | 124, 722 | 16 | 580,859- | 73 |
| 2016 | 737,846 | 674,493 | 91 | 88,660 | 12 | 585,833- | 79 - |
| 2017 | 736,428 | 708,359 | 96 | 145,694 | 20 | 562, 665- | 76 |
| 2018 | 654,282 | 535,757 | 82 | 86,817 | 13 | 448,939- | 69 - |
| 2019 | 959,455 | 647,981 | 68 | 66,204 | 7 | 581, 777- | 61- |
| TOTAL | 11,643, 075 | 5,123,212 | 44 | 5, 020, 402 | 43 | 102,811- | $1-$ |

## THREE-YEAR MOVING AVERAGES

| $93-95$ | 298,293 |
| :--- | :--- |
| $94-96$ | 301,343 |
| $95-97$ | 337,788 |
| $96-98$ | 332,588 |
| $97-99$ | 391,839 |
| $98-00$ | 406,492 |
| $99-01$ | 406,083 |
| $00-02$ | 374,943 |
| $01-03$ | 306,573 |
| $02-04$ | 365,804 |
| $03-05$ | 298,906 |


| 77,579 | 26 |
| ---: | ---: |
| 100,401 | 33 |
| 122,091 | 36 |
| 120,364 | 36 |
| 104,098 | 27 |
| 67,872 | 17 |
| 54,785 | 13 |
| 52,751 | 14 |
| 70,291 | 23 |
| 84,512 | 23 |
| 83,283 | 28 |


| 59,095 | 20 |
| ---: | ---: |
| 67,095 | 22 |
| 73,722 | 22 |
| 72,565 | 22 |
| 67,283 | 17 |
| 56,876 | 14 |
| 54,457 | 13 |
| 129,608 | 35 |
| 153,788 | 50 |
| 187,517 | 51 |
| 187,399 | 63 |


| $18,483-$ | $6-$ |
| ---: | ---: |
| $33,306-$ | $11-$ |
| $48,369-$ | $14-$ |
| $47,800-$ | $14-$ |
| $36,815-$ | $9-$ |
| $10,996-$ | $3-$ |
| $328-$ | 0 |
| 76,856 | 20 |
| 83,497 | 27 |
| 103,006 | 28 |
| 104,116 | 35 |


| EL PASO ELECTRIC COMPANY |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ACCOUNT 364.00 POLES, TOWERS AND FIXTURES |  |  |  |  |  |  |  |
| SUMMARY OF BOOK SALVAGE |  |  |  |  |  |  |  |
|  | REGULAR | COST OF REMOVAL |  | GROSS SALVAGE |  | NET SALVAGE |  |
| YEAR | RETIREMENTS | AMOUNT | PCT | AMOUNT | PCT | AMOUNT | PCT |
| THREE-YEAR MOVING AVERAGES |  |  |  |  |  |  |  |
| 04-06 | 334,171 | 63,579 | 19 | 234,149 | 70 | 170,570 | 51 |
| 05-07 | 310,755 | 40,168 | 13 | 370,547 | 119 | 330, 380 | 106 |
| 06-08 | 322,329 | 23,936 | 7 | 438, 451 | 136 | 414,515 | 129 |
| 07-09 | 294,369 | 15,617 | 5 | 505,591 | 172 | 489,973 | 166 |
| 08-10 | 209,769 | 8,722 | 4 | 413, 304 | 197 | 404,582 | 193 |
| 09-11 | 191, 271 | 1,023 | 1 | 341, 224 | 178 | 340, 202 | 178 |
| 10-12 | 143,431 | 46- | 0 | 284,616 | 198 | 284,662 | 198 |
| 11-13 | 411, 929 | 81,159 | 20 | 273,384 | 66 | 192, 225 | 47 |
| 12-14 | 619,889 | 230,884 | 37 | 258,161 | 42 | 27,277 | 4 |
| 13-15 | 840,825 | 466, 077 | 55 | 200, 264 | 24 | 265,814- | 32- |
| 14-16 | 762,416 | 609, 749 | 80 | 143, 026 | 19 | 466,724- | 61- |
| 15-17 | 756, 897 | 696,144 | 92 | 119,692 | 16 | 576,452- | 76- |
| 16-18 | 709,519 | 639,536 | 90 | 107, 057 | 15 | 532,479- | $75-$ |
| 17-19 | 783,388 | 630,699 | 81 | 99,572 | 13 | 531,127- | 68 - |

FIVE-YEAR AVERAGE

| $15-19$ | 776,886 | 654,434 | 84 | 102,420 | 13 | $552,015-71-$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 365.00 OVERHEAD CONDUCTORS AND DEVICES

SUMMARY OF BOOK SALVAGE

|  | REGULAR | COST OF REMOVAL |  | $\begin{aligned} & \text { GROSS } \\ & \text { SALVAGE } \end{aligned}$ |  | NET SALVAGE |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | RETIREMENTS | AMOUNT | PCT | AMOUNT | PCT | AMOUNT | PCT |
| 1993 | 356, 035 | 63,553 | 18 | 42,077 | 12 | 21,476- | 6 - |
| 1994 | 420, 848 | 81,853 | 19 | 41,980 | 10 | 39,873- | 9 - |
| 1995 | 454, 007 | 81, 285 | 18 | 58,984 | 13 | 22,301- | $5-$ |
| 1996 | 252,983 | 129,167 | 51 | 69, 002 | 27 | 60,165- | 24- |
| 1997 | 294, 241 | 99, 072 | 34 | 64,442 | 22 | 34,630- | 12- |
| 1998 | 212,602 | 56,948 | 27 | 37, 078 | 17 | 19,870- | 9 - |
| 1999 | 434,976 | 70,387 | 16 | 44,869 | 10 | 25,518- | 6 - |
| 2000 | 461,448 | 37,533 | 8 | 54,619 | 12 | 17,086 | 4 |
| 2001 | 183,869 | 34,768 | 19 | 59,128 | 32 | 24,360 | 13 |
| 2002 | 228,641 |  | 0 |  | 0 |  | 0 |
| 2003 | 132,296 |  | 0 |  | 0 |  | 0 |
| 2004 | 309, 621 |  | 0 |  | 0 |  | 0 |
| 2005 | 97,691 |  | 0 |  | 0 |  | 0 |
| 2006 | 347,788 |  | 0 |  | 0 |  | 0 |
| 2007 | 252,865 |  | 0 |  | 0 |  | 0 |
| 2008 | 152,980 |  | 0 |  | 0 |  | 0 |
| 2009 | 222,363 | 4 | 0 | 15,714 | 7 | 15,710 | 7 |
| 2010 | 63,154 |  | 0 | 252,418 | 400 | 252,418 | 400 |
| 2011 | 9,204 |  | 0 | 299,519 |  | 299,519 |  |
| 2012 | 21, 069 |  | 0 | 265,500 |  | 265,500 |  |
| 2013 | 693,926 | 173,630 | 25 | 297,627 | 43 | 123, 997 | 18 |
| 2014 | 548,140 | 270, 049 | 49 | 240,656 | 44 | 29,393- | $5-$ |
| 2015 | 600,417 | 484, 380 | 81 | 72,076 | 12 | 412,304- | 69- |
| 2016 | 614,945 | 481, 437 | 78 | 66,108 | 11 | 415,330- | 68- |
| 2017 | 625,348 | 448, 847 | 72 | 68,725 | 11 | 380, 122- | 61- |
| 2018 | 594,160 | 417,883 | 70 | 61,677 | 10 | 356, 206 - | 60- |
| 2019 | 754,506 | 355,777 | 47 | 55,934 | 7 | 299,843- | 40- |
| TOTAL | 9,340,124 | 3,286,573 | 35 | 2,168,132 | 23 | 1,118,441- | $12-$ |

THREE-YEAR MOVING AVERAGES

| $93-95$ | 410,297 |
| :--- | :--- |
| $94-96$ | 375,946 |
| $95-97$ | 333,744 |
| $96-98$ | 253,275 |
| $97-99$ | 313,940 |
| $98-00$ | 369,675 |
| $99-01$ | 360,098 |
| $00-02$ | 291,320 |
| $01-03$ | 181,602 |
| $02-04$ | 223,520 |
| $03-05$ | 179,870 |


| 75,564 | 18 |
| ---: | ---: |
| 97,435 | 26 |
| 103,175 | 31 |
| 95,062 | 38 |
| 75,469 | 24 |
| 54,956 | 15 |
| 47,563 | 13 |
| 24,100 | 8 |
| 11,589 | 6 |
|  | 0 |
|  | 0 |


| 47,680 | 12 | $27,883-$ | $7-$ |
| ---: | ---: | ---: | ---: |
| 56,655 | 15 | $40,780-$ | $11-$ |
| 64,143 | 19 | $39,032-$ | $12-$ |
| 56,841 | 22 | $38,222-$ | $15-$ |
| 48,796 | 16 | $26,673-$ | $8-$ |
| 45,522 | 12 | $9,434-$ | $3-$ |
| 52,872 | 15 | 5,309 | 1 |
| 37,916 | 13 | 13,815 | 5 |
| 19,709 | 11 | 8,120 | 4 |
|  | 0 |  | 0 |
|  | 0 |  | 0 |

## EL PASO ELECTRIC COMPANY

ACCOUNT 365.00 OVERHEAD CONDUCTORS AND DEVICES

| SUMMARY OF BOOK SALVAGE |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | REGULAR | COST OF REMOVAL |  | GROSSSALVAGE |  | $\begin{gathered} \text { NET } \\ \text { SALVAGE } \end{gathered}$ |  |
| YEAR | RETIREMENTS | AMOUNT | PCT | AMOUNT | PCT | AMOUNT | PCT |
| THREE-YEAR MOVING AVERAGES |  |  |  |  |  |  |  |
| 04-06 | 251,700 |  | 0 |  | 0 |  | 0 |
| 05-07 | 232,781 |  | 0 |  | 0 |  | 0 |
| 06-08 | 251, 211 |  | 0 |  | 0 |  | 0 |
| 07-09 | 209,403 | 1 | 0 | 5,238 | 3 | 5,237 | 3 |
| 08-10 | 146,166 | 1 | 0 | 89,377 | 61 | 89,376 | 61 |
| 09-11 | 98,240 | 1 | 0 | 189, 217 | 193 | 189, 216 | 193 |
| 10-12 | 31,142 |  | 0 | 272,479 | 875 | 272,479 | 875 |
| 11-13 | 241, 399 | 57,877 | 24 | 287,549 | 119 | 229,672 | 95 |
| 12-14 | 421, 045 | 147,893 | 35 | 267,928 | 64 | 120, 035 | 29 |
| 13-15 | 614,161 | 309,353 | 50 | 203,453 | 33 | 105,900- | $17-$ |
| 14-16 | 587, 834 | 411, 955 | 70 | 126, 280 | 21 | 285, 675- | 49- |
| 15-17 | 613,570 | 471,555 | 77 | 68,969 | 11 | 402,585- | 66- |
| 16-18 | 611,484 | 449,389 | 73 | 65,503 | 11 | 383,886- | 63- |
| 17-19 | 658, 005 | 407,502 | 62 | 62,112 | 9 | 345,390- | 52- |

FIVE-YEAR AVERAGE
15-19
637, 875
$437,665 \quad 69$
64,904 10
372,761- 58 -

## EL PASO ELECTRIC COMPANY

ACCOUNT 366.00 UNDERGROUND CONDUIT

SUMMARY OF BOOK SALVAGE

|  | REGULAR | COST OF REMOVAL |  | $\begin{aligned} & \text { GROSS } \\ & \text { SALVAGE } \end{aligned}$ |  | NET SALVAGE |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | RETIREMENTS | AMOUNT | PCT | AMOUNT | PCT | AMOUNT | PCT |
| 1993 | 45,752 | 12,697 | 28 | 6,448 | 14 | 6,249- | 14- |
| 1994 | 37,717 | 13,106 | 35 | 8,509 | 23 | 4,597- | 12- |
| 1995 | 59,290 | 21,334 | 36 | 12, 029 | 20 | 9,305- | 16- |
| 1996 | 61,184 | 42,561 | 70 | 35,839 | 59 | 6,722- | 11- |
| 1997 | 69,992 | 10,888 | 16 | 4,664 | 7 | 6,224- | 9 - |
| 1998 | 53,413 | 13,161 | 25 | 16,708 | 31 | 3,547 | 7 |
| 1999 | 74,814 | 14,937 | 20 | 7,191 | 10 | 7,746- | 10- |
| 2000 | 149, 036 | 7,823 | 5 | 14,263 | 10 | 6,440 | 4 |
| 2001 | 103,933 | 13,615 | 13 | 12,695 | 12 | 920- | 1- |
| 2002 | 90, 069 |  | 0 |  | 0 |  | 0 |
| 2003 | 148,796 |  | 0 |  | 0 |  | 0 |
| 2004 | 234,354 |  | 0 |  | 0 |  | 0 |
| 2005 | 27,281 | 809 | 3 |  | 0 | 809- | $3-$ |
| 2006 | 121,380 | 1,411 | 1 |  | 0 | 1,411- | 1- |
| 2007 | 139,747 | 9,319 | 7 |  | 0 | 9,319 - | 7 - |
| 2008 | 25,321 |  | 0 |  | 0 |  | 0 |
| 2009 | 42,668 | 14 | 0 | 1,589 | 4 | 1,574 | 4 |
| 2010 | 27,632 |  | 0 | 26, 032 | 94 | 26,032 | 94 |
| 2011 | 460 |  | 0 | 37,656 |  | 37,656 |  |
| 2012 | 6,763 | 371 | 5 | 40,964 | 606 | 40,593 | 600 |
| 2013 | 142,322 | 35,611 | 25 | 36,049 | 25 | 438 | 0 |
| 2014 | 29,970 | 12,690 | 42 | 74,510 | 249 | 61,820 | 206 |
| 2015 | 2,752 | 24,141 | 877 | 92, 032 |  | 67,891 |  |
| 2016 | 3,143 | 32,594 |  | 71,970 |  | 39,375 |  |
| 2017 |  | 10,878 |  | 85, 053 |  | 74,175 |  |
| 2018 | 9 | 70,991 |  | 68,516 |  | 2,475- |  |
| 2019 | 4 | 98,430 |  | 57,275 |  | 41,155- |  |
| TOTAL | 1,697,802 | 447, 381 | 26 | 709,992 | 42 | 262,611 | 15 |

THREE-YEAR MOVING AVERAGES

| $93-95$ | 47,586 |
| :--- | ---: |
| $94-96$ | 52,730 |
| $95-97$ | 63,489 |
| $96-98$ | 61,530 |
| $97-99$ | 66,073 |
| $98-00$ | 92,421 |
| $99-01$ | 109,261 |
| $00-02$ | 114,346 |
| $01-03$ | 114,266 |
| $02-04$ | 157,740 |
| $03-05$ | 136,810 |


| 15,712 | 33 | 8,995 | 19 |
| ---: | ---: | ---: | ---: |
| 25,667 | 49 | 18,792 | 36 |
| 24,928 | 39 | 17,511 | 28 |
| 22,203 | 36 | 19,070 | 31 |
| 12,995 | 20 | 9,521 | 14 |
| 11,974 | 13 | 12,721 | 14 |
| 12,125 | 11 | 11,383 | 10 |
| 7,146 | 6 | 8,986 | 8 |
| 4,538 | 4 | 4,232 | 4 |
|  | 0 |  | 0 |
| 270 | 0 |  | 0 |


| $6,717-$ | $14-$ |
| :---: | :---: |
| $6,875-$ | $13-$ |
| $7,417-$ | $12-$ |
| $3,133-$ | $5-$ |
| $3,474-$ | $5-$ |
| 747 | 1 |
| $742-$ | $1-$ |
| 1,840 | 2 |
| $307-$ | 0 |
|  | 0 |
| $270-$ | 0 |


|  |  | EL PASO | ELEC | COMPANY |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | COUNT 366.00 | 0 UN | Ound Condu |  |  |  |
|  |  | SUMMARY | OF | SALVAGE |  |  |  |
| YEAR | REGULAR RETIREMENTS | COST OF REMOVAL AMOUNT | PCT | GROSS SALVAGE AMOUNT | PCT | NET <br> SALVAGE AMOUNT | PCT |
| THREE-Y | R MOVING AVER |  |  |  |  |  |  |
| 04-06 | 127,672 | 740 | 1 |  | 0 | 740- | 1- |
| 05-07 | 96,136 | 3,846 | 4 |  | 0 | 3,846- | $4-$ |
| 06-08 | 95,482 | 3,577 | 4 |  | 0 | 3,577- | $4-$ |
| 07-09 | 69,245 | 3,111 | 4 | 530 | 1 | 2,582- | 4- |
| 08-10 | 31,874 | 5 | 0 | 9,207 | 29 | 9,202 | 29 |
| 09-11 | 23,587 | 5 | 0 | 21,759 | 92 | 21,754 | 92 |
| 10-12 | 11,618 | 124 | 1 | 34,884 | 300 | 34,761 | 299 |
| 11-13 | 49,849 | 11,994 | 24 | 38,223 | 77 | 26,229 | 53 |
| 12-14 | 59,685 | 16,224 | 27 | 50,508 | 85 | 34,284 | 57 |
| 13-15 | 58,348 | 24,147 | 41 | 67,530 | 116 | 43,383 | 74 |
| 14-16 | 11,955 | 23,142 | 194 | 79,504 | 665 | 56,362 | 471 |
| 15-17 | 1,965 | 22,538 |  | 83, 018 |  | 60,480 |  |
| 16-18 | 1,051 | 38,155 |  | 75,180 |  | 37, 025 |  |
| 17-19 | 4 | 60,100 |  | 70,281 |  | 10,182 |  |
| FIVE-YEAR AVERAGE |  |  |  |  |  |  |  |
| 15-19 | 1,182 | 47,407 |  | 74,969 |  | 27,562 |  |


| Q Gannett Fleming | VIII-39 El Paso Electric |
| :--- | ---: |
| December 31, 2019 |  |

## EL PASO ELECTRIC COMPANY

ACCOUNT 367.00 UNDERGROUND CONDUCTORS AND DEVICES

|  | SUMMARY OF BOOK SALVAGE |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | REGULAR | COST OF REMOVAL |  | GROSS <br> SALVAGE |  | NET SALVAGE |  |
| YEAR | RETIREMENTS | AMOUNT | PCT | AMOUNT | PCT | AMOUNT | PCT |
| 1993 | 175,776 | 29,584 | 17 | 19,880 | 11 | 9,704- | 6 - |
| 1994 | 202,888 | 68,153 | 34 | 51,816 | 26 | 16,337- | 8 - |
| 1995 | 190, 148 | 65,667 | 35 | 53, 091 | 28 | 12,576- | 7- |
| 1996 | 152,359 | 123,865 | 81 | 90,159 | 59 | 33,706- | 22- |
| 1997 | 85,803 | 25,536 | 30 | 9,656 | 11 | 15,880- | 19- |
| 1998 | 129,319 | 45,580 | 35 | 33,423 | 26 | 12,157- | 9 - |
| 1999 | 233, 034 | 44, 069 | 19 | 27,310 | 12 | 16,759- | 7- |
| 2000 | 430, 883 | 23,744 | 6 | 22,857 | 5 | 887- | 0 |
| 2001 | 228,215 | 34,481 | 15 | 34,658 | 15 | 177 | 0 |
| 2002 | 142, 064 |  | 0 | 1,249 | 1 | 1,249 | 1 |
| 2003 | 500, 884 |  | 0 |  | 0 |  | 0 |
| 2004 | 376,207 |  | 0 |  | 0 |  | 0 |
| 2005 | 164,403 |  | 0 |  | 0 |  | 0 |
| 2006 | 224,689 |  | 0 |  | 0 |  | 0 |
| 2007 | 397, 214 |  | 0 |  | 0 |  | 0 |
| 2008 | 66,088 |  | 0 |  | $\bigcirc$ |  | $\bigcirc$ |
| 2009 | 115,395 |  | 0 | 285 | 0 | 285 | 0 |
| 2010 | 20,899 |  | 0 | 15,949 | 76 | 15,949 | 76 |
| 2011 | 33,251 |  | 0 | 16, 053 | 48 | 16, 053 | 48 |
| 2012 | 10,539 |  | 0 | 20,757 | 197 | 20,757 | 197 |
| 2013 | 551,540 | 138,003 | 25 | 29,982 | 5 | 108, 021- | 20- |
| 2014 | 524,789 | 221, 165 | 42 | 45, 074 | 9 | 176, 091- | 34- |
| 2015 | 560,234 | 245,427 | 44 | 119,468 | 21 | 125,959- | 22 - |
| 2016 | 413,688 | 417, 806 | 101 | 62,500 | 15 | 355, 306 - | 86- |
| 2017 | 760,396 | 434, 714 | 57 | 188,557 | 25 | 246,157- | $32-$ |
| 2018 | 801,580 | 393,553 | 49 | 95,842 | 12 | 297,711- | $37-$ |
| 2019 | 1,094,576 | 458, 463 | 42 | 67,294 | 6 | 391,169- | 36- |
| TOTAL | 8,586,862 | 2,769,811 | 32 | 1,005,860 | 12 | 1,763,951- | 21- |

## THREE-YEAR MOVING AVERAGES

| $93-95$ | 189,604 | 54,468 | 29 | 41,596 | 22 | $12,872-$ | $7-$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $94-96$ | 181,798 | 85,895 | 47 | 65,022 | 36 | $20,873-$ | $11-$ |
| $95-97$ | 142,770 | 71,689 | 50 | 50,969 | 36 | $20,721-$ | $15-$ |
| $96-98$ | 122,494 | 64,994 | 53 | 44,413 | 36 | $20,581-$ | $17-$ |
| $97-99$ | 149,385 | 38,395 | 26 | 23,463 | 16 | $14,932-$ | $10-$ |
| $98-00$ | 264,412 | 37,798 | 14 | 27,863 | 11 | $9,934-$ | $4-$ |
| $99-01$ | 297,377 | 34,098 | 11 | 28,275 | 10 | $5,823-$ | $2-$ |
| $00-02$ | 267,054 | 19,408 | 7 | 19,588 | 7 | 180 | 0 |
| $01-03$ | 290,388 | 11,494 | 4 | 11,969 | 4 | 475 | 0 |
| $02-04$ | 339,718 |  | 0 | 416 | 0 | 416 | 0 |
| $03-05$ | 347,165 |  |  |  | 0 | 0 |  |

## EL PASO ELECTRIC COMPANY

ACCOUNT 367.00 UNDERGROUND CONDUCTORS AND DEVICES

| SUMMARY OF BOOK SALVAGE |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | REGULAR | COST OF REMOVAL |  | $\begin{gathered} \text { GROSS } \\ \text { SALVAGE } \end{gathered}$ |  | NET SALVAGE |  |
| YEAR | RETIREMENTS | AMOUNT | PCT | AMOUNT | PCT | AMOUNT | PCT |
| THREE-YEAR MOVING AVERAGES |  |  |  |  |  |  |  |
| 04-06 | 255,100 |  | 0 |  | 0 |  | 0 |
| 05-07 | 262,102 |  | 0 |  | 0 |  | 0 |
| 06-08 | 229,330 |  | 0 |  | 0 |  | 0 |
| 07-09 | 192,899 |  | 0 | 95 | 0 | 95 | 0 |
| 08-10 | 67,460 |  | 0 | 5,411 | 8 | 5,411 | 8 |
| 09-11 | 56,515 |  | 0 | 10,762 | 19 | 10,762 | 19 |
| 10-12 | 21,563 |  | 0 | 17,586 | 82 | 17,586 | 82 |
| 11-13 | 198,443 | 46,001 | 23 | 22,264 | 11 | 23,737- | 12- |
| 12-14 | 362, 289 | 119,723 | 33 | 31,938 | 9 | 87,785- | $24-$ |
| 13-15 | 545,521 | 201,532 | 37 | 64,841 | 12 | 136,690- | $25-$ |
| 14-16 | 499,571 | 294,799 | 59 | 75,681 | 15 | 219,119- | 44- |
| 15-17 | 578,106 | 365,982 | 63 | 123,508 | 21 | 242,474- | 42- |
| 16-18 | 658,555 | 415, 358 | 63 | 115,633 | 18 | 299,725- | 46 - |
| 17-19 | 885,518 | 428, 910 | 48 | 117, 231 | 13 | 311, 679- | 35- |

FIVE-YEAR AVERAGE
$\begin{array}{lllllll}15-19 & 726,095 & 389,993 & 54 & 106,732 & 15 & 283,261-39-\end{array}$

## EL PASO ELECTRIC COMPANY

ACCOUNT 368.00 LINE TRANSFORMERS

SUMMARY OF BOOK SALVAGE

|  | REGULAR | COST OF REMOVAL |  | $\begin{gathered} \text { GROSS } \\ \text { SALVAGE } \end{gathered}$ |  | NET SALVAGE |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | RETIREMENTS | AMOUNT | PCT | AMOUNT | PCT | AMOUNT | PCT |
| 1993 | 44,830 | 5,920 | 13 | 13,370 | 30 | 7,450 | 17 |
| 1994 | 118,715 | 31,524 | 27 | 25,208 | 21 | 6,316- | 5 |
| 1995 | 343,441 | 51,650 | 15 | 22,480 | 7 | 29,170- | 8 |
| 1996 | 77,422 | 43,835 | 57 | 25,722 | 33 | 18,113- | 23 |
| 1997 | 86,537 | 33,192 | 38 | 20,033 | 23 | 13,159- | 15 |
| 1998 | 165,755 | 40,837 | 25 | 36,137 | 22 | 4,700- | 3 |
| 1999 | 218,642 | 41,961 | 19 | 19,269 | 9 | 22,692- | 10 |
| 2000 | 1,526,482 | 86, 086 | 6 | 83, 075 | 5 | 3, 011- | 0 |
| 2001 | 192,541 | 35,135 | 18 | 22,455 | 12 | 12,680- | $7-$ |
| 2002 | 117,799 | 9,114 | 8 | 6,187 | 5 | 2,927- | 2 |
| 2003 | 259,168 | 34,928 | 13 | 20,576 | 8 | 14,352- | 6 |
| 2004 | 247,590 | 19,045 | 8 | 12,694 | 5 | 6,351- | 3 |
| 2005 | 56,564 | 7,025 | 12 | 8,744 | 15 | 1,719 | 3 |
| 2006 | 221,695 |  | 0 | 66, 057 | 30 | 66, 057 | 30 |
| 2007 | 466,075 |  | 0 | 48,477 | 10 | 48,477 | 10 |
| 2008 | 102,951 |  | 0 | 116, 211 | 113 | 116, 211 | 113 |
| 2009 | 178,897 |  | 0 | 42,531 | 24 | 42,531 | 24 |
| 2010 | 286,496 |  | 0 | 79,725 | 28 | 79,725 | 28 |
| 2011 | 395,518 |  | 0 | 111, 751 | 28 | 111, 751 | 28 |
| 2012 | 306,387 |  | 0 | 86,532 | 28 | 86,532 | 28 |
| 2013 | 1,198,456 | 299,871 | 25 | 99,418 | 8 | 200,453- | $17-$ |
| 2014 | 1,411,184 | 372,080 | 26 | 50,422 | 4 | 321,658- | 23 |
| 2015 | 1,671, 081 | 582,748 | 35 | 231, 799 | 14 | 350, 949- | 21 |
| 2016 | 1,358,488 | 606,512 | 45 | 177, 222 | 13 | 429, 290- | 32 |
| 2017 | 1,572,066 | 671,145 | 43 | 220, 291 | 14 | 450,854- | 29 |
| 2018 | 1,125,802 | 495,702 | 44 | 175,867 | 16 | 319,835- | 28 |
| 2019 | 1,540, 224 | 536,329 | 35 | 197,511 | 13 | 338,818- | 22 |
| TOTAL | 15,290,806 | 4, 004, 638 | 26 | 2,019,764 | 13 | 1,984,874- | 13 |

## THREE-YEAR MOVING AVERAGES



FIVE-YEAR AVERAGE

| $15-19$ | $1,453,532$ | 578,487 | 40 | 200,538 | 14 | $377,949-26-$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |


three-year moving averages

| 93-95 |  |  |  | 387 |  | 387 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 94-96 |  |  |  |  |  |  |  |
| 95-97 |  |  |  |  |  |  |  |
| 96-98 |  |  |  |  |  |  |  |
| 97-99 | 19 | 2 | 11 |  | 2 | $2-$ | 9 - |
| 98-00 | 9,508 | 549 | 6 | 306 | 3 | 243- | 3 - |
| 99-01 | 9,508 | 549 | 6 | 306 | 3 | 243- | 3- |
| 00-02 | 9,492 | 547 | 6 | 590 | 6 | 43 | 0 |
| 01-03 | 2 |  | 0 | 285 |  | 285 |  |
| 02-04 | 3,401 |  | 0 | 285 | 8 | 285 | 8 |
| 03-05 | 3,398 |  | 0 |  | 0 |  | 0 |



## EL PASO ELECTRIC COMPANY

## ACCOUNT 370.00 METERS

SUMMARY OF BOOK SALVAGE

|  | REGULAR | COST OF REMOVAL |  | $\begin{gathered} \text { GROSS } \\ \text { SALVAGE } \end{gathered}$ |  | NET SALVAGE |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | RETIREMENTS | AMOUNT | PCT | AMOUNT | PCT | AMOUNT | PCT |
| 1993 | 211,488 | 77,747 | 37 | 49,128 | 23 | 28,619- | 14- |
| 1994 | 149,416 | 98,560 | 66 | 57,211 | 38 | 41,349- | 28 - |
| 1995 | 181,413 | 84,180 | 46 | 55,073 | 30 | 29,107- | 16- |
| 1996 | 136,314 | 70,965 | 52 | 36,262 | 27 | 34,703- | $25-$ |
| 1997 | 53,100 | 14,671 | 28 | 8,287 | 16 | 6,384- | 12- |
| 1998 | 175,615 | 93,007 | 53 | 16,781 | 10 | 76,226- | 43- |
| 1999 | 599,260 | 181, 145 | 30 | 58,603 | 10 | 122,542- | 20- |
| 2000 | 456,886 | 62,288 | 14 | 9,368 | 2 | 52,920- | 12- |
| 2001 | 721,393 | 192,160 | 27 | 42,546 | 6 | 149,614- | 21- |
| 2002 | 1,183,384 | 362,520 | 31 | 129 | 0 | 362,391- | 31- |
| 2003 | 678,813 | 188,595 | 28 | 321 | 0 | 188,274- | 28 - |
| 2004 | 544,753 | 161, 760 | 30 |  | 0 | 161,760- | 30- |
| 2005 | 175,069 | 45,840 | 26 |  | 0 | 45,840- | 26- |
| 2006 | 1,139,974 | 46,985 | 4 |  | 0 | 46,985- | 4- |
| 2007 | 1, 077,779 |  | 0 |  | 0 |  | 0 |
| 2008 | 600,894 |  | 0 |  | 0 |  | 0 |
| 2009 |  |  |  |  |  |  |  |
| 2010 | 109,089 |  | 0 | 12,366 | 11 | 12,366 | 11 |
| 2011 | 279,746 |  | 0 | 34,918 | 12 | 34,918 | 12 |
| 2012 |  |  |  | 19,506 |  | 19,506 |  |
| 2013 | 265,688 | 66,479 | 25 | 15, 061 | 6 | 51,418- | 19- |
| 2014 |  |  |  |  |  |  |  |
| 2015 |  | 7,813 |  | 6,451 |  | 1,362- |  |
| 2016 |  | 6,830 |  | 679 |  | 6,151- |  |
| 2017 |  | 3,544 |  | 1,003 |  | 2,540- |  |
| 2018 |  | 5,586 |  | 2,635 |  | 2,951- |  |
| 2019 |  | 19,884 |  | 2,403 |  | 17,481- |  |
| TOTAL | 8,740, 074 | 1,790,559 | 20 | 428, 730 | 5 | 1,361,829- | $16-$ |

THREE-YEAR MOVING AVERAGES

| $93-95$ | 180,772 |
| :--- | :--- |
| $94-96$ | 155,714 |
| $95-97$ | 123,609 |
| $96-98$ | 121,676 |
| $97-99$ | 275,992 |
| $98-00$ | 410,587 |
| $99-01$ | 592,513 |
| $00-02$ | 787,221 |
| $01-03$ | 861,197 |
| $02-04$ | 802,317 |
| $03-05$ | 466,212 |


| 86,829 | 48 |
| ---: | ---: |
| 84,568 | 54 |
| 56,605 | 46 |
| 59,548 | 49 |
| 96,274 | 35 |
| 112,147 | 27 |
| 145,198 | 25 |
| 205,656 | 26 |
| 247,758 | 29 |
| 237,625 | 30 |
| 132,065 | 28 |


| 53,804 | 30 |
| ---: | ---: |
| 49,515 | 32 |
| 33,207 | 27 |
| 20,443 | 17 |
| 27,890 | 10 |
| 28,251 | 7 |
| 36,839 | 6 |
| 17,348 | 2 |
| 14,332 | 2 |
| 150 | 0 |
| 107 | 0 |


| $33,025-$ | $18-$ |
| ---: | ---: |
| $35,053-$ | $23-$ |
| $23,398-$ | $19-$ |
| $39,104-$ | $32-$ |
| $68,384-$ | $25-$ |
| $83,896-$ | $20-$ |
| $108,359-$ | $18-$ |
| $188,308-$ | $24-$ |
| $233,426-$ | $27-$ |
| $237,475-$ | $30-$ |
| $131,958-$ | $28-$ |


|  |  | EL PASO | ELEC | COMPANY |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Accoun | T 370 | METERS |  |  |  |
|  |  | SUMMARY | OF | SALVAGE |  |  |  |
| YEAR | REGULAR | COST OF REMOVAL | PCT | GROSS <br> SALVAGE | PCT | NET <br> SALVAGE | PCT |
| THREE-Y | R MOVING AVER |  |  |  |  |  |  |
| 04-06 | 619,932 | 84,862 | 14 |  | 0 | 84,862- | 14. |
| 05-07 | 797,607 | 30,942 | 4 |  | 0 | 30,942- | $4-$ |
| 06-08 | 939,549 | 15,662 | 2 |  | 0 | 15,662- | $2-$ |
| 07-09 | 559,558 |  | 0 |  | 0 |  | 0 |
| 08-10 | 236,661 |  | 0 | 4,122 | 2 | 4,122 | 2 |
| 09-11 | 129,612 |  | 0 | 15,761 | 12 | 15,761 | 12 |
| 10-12 | 129,612 |  | 0 | 22,263 | 17 | 22,263 | 17 |
| 11-13 | 181, 811 | 22,160 | 12 | 23,162 | 13 | 1,002 | 1 |
| 12-14 | 88,563 | 22,160 | 25 | 11,522 | 13 | 10,637- | $12-$ |
| 13-15 | 88,563 | 24,764 | 28 | 7,171 | 8 | 17,593- | $20-$ |
| 14-16 |  | 4,881 |  | 2,377 |  | 2,504- |  |
| 15-17 |  | 6,062 |  | 2,711 |  | 3,351- |  |
| 16-18 |  | 5,320 |  | 1,439 |  | 3,881- |  |
| 17-19 |  | 9,671 |  | 2,014 |  | 7,658- |  |

FIVE-YEAR AVERAGE

## EL PASO ELECTRIC COMPANY

ACCOUNT 371.00 INSTALLATIONS ON CUSTOMERS' PREMISES

SUMMARY OF BOOK SALVAGE

|  | REGULAR | COST OF REMOVAL |  | $\begin{aligned} & \text { GROSS } \\ & \text { SALVAGE } \end{aligned}$ |  | NET SALVAGE |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | RETIREMENTS | AMOUNT | PCT | AMOUNT | PCT | AMOUNT | PCT |
| 1993 | 85,549 | 20,953 | 24 | 23,474 | 27 | 2,521 | 3 |
| 1994 | 51,518 | 14,589 | 28 | 11,944 | 23 | 2,645- | 5 |
| 1995 | 53,376 | 17,371 | 33 | 8,348 | 16 | 9,023- | 17 |
| 1996 | 37,660 | 26,901 | 71 | 18,462 | 49 | 8,439- | 22 |
| 1997 | 60,426 | 28,610 | 47 | 17,271 | 29 | 11,339- | 19 |
| 1998 | 46,834 | 17,749 | 38 | 10,271 | 22 | 7,478- | 16 |
| 1999 | 62,481 | 21,564 | 35 | 18,860 | 30 | 2,704- | 4 |
| 2000 | 91,814 | 5,666 | 6 | 8,217 | 9 | 2,551 | 3 |
| 2001 | 48,207 | 5,505 | 11 | 11,386 | 24 | 5,881 | 12 |
| 2002 | 130,178 |  | 0 |  | 0 |  | 0 |
| 2003 | 113,286 |  | 0 |  | 0 |  | 0 |
| 2004 | 87,763 |  | 0 |  | 0 |  | 0 |
| 2005 | 77,186 | 17,434 | 23 |  | 0 | 17,434- | 23 |
| 2006 | 60,252 | 52 | 0 |  | 0 | 52- | 0 |
| 2007 | 15,366 | 29,120 | 190 |  | 0 | 29,120- | 190 |
| 2008 | 8,836 | 785 | 9 |  | 0 | 785- | 9 |
| 2009 | 25,418 | 3,367 | 13 |  | 0 | 3,367- | 13 |
| 2010 | 4,590 | 354 | 8 |  | 0 | 354 - | 8 |
| 2011 | 1,340 |  | 0 |  | 0 |  | 0 |
| 2012 | 530 |  | 0 |  | 0 |  | 0 |
| 2013 | 206,467 | 51,661 | 25 |  | 0 | 51,661- | 25 |
| 2014 | 73,919 | 27,718 | 37 |  | 0 | 27,718- | 37 |
| 2015 | 101, 819 | 40,390 | 40 | 9,270 | 9 | 31,120- | 31 |
| 2016 | 98,304 | 34,262 | 35 | 6,927 | 7 | 27,335- | 28 |
| 2017 | 350,450 | 117,371 | 33 | 30,362 | 9 | 87, 009- | 25 |
| 2018 | 107, 806 | 43,341 | 40 | 6,331 | 6 | 37, 010- | 34 |
| 2019 | 159, 033 |  | 0 | 3,377 | 2 | 3,377 | 2 |
| TOTAL | 2,160,408 | 524,762 | 24 | 184,500 | 9 | 340, 263- | 16 |

THREE-YEAR MOVING AVERAGES

| $93-95$ | 63,481 | 17,638 | 28 | 14,589 | 23 | $3,049-$ | $5-$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $94-96$ | 47,518 | 19,620 | 41 | 12,918 | 27 | $6,702-$ | $14-$ |
| $95-97$ | 50,487 | 24,294 | 48 | 14,694 | 29 | $9,600-$ | $19-$ |
| $96-98$ | 48,307 | 24,420 | 51 | 15,335 | 32 | $9,085-$ | $19-$ |
| $97-99$ | 56,580 | 22,641 | 40 | 15,467 | 27 | $7,174-$ | $13-$ |
| $98-00$ | 67,043 | 14,993 | 22 | 12,449 | 19 | $2,544-$ | $4-$ |
| $99-01$ | 67,501 | 10,912 | 16 | 12,821 | 19 | 1,909 | 3 |
| $00-02$ | 90,066 | 3,724 | 4 | 6,534 | 7 | 2,811 | 3 |
| $01-03$ | 97,224 | 1,835 | 2 | 3,795 | 4 | 1,960 | 2 |
| $02-04$ | 110,409 |  | 0 |  | 0 | 0 | $5,811-$ |
| $03-05$ | 92,745 | 5,811 | 6 |  | 0 | $6-$ |  |

## EL PASO ELECTRIC COMPANY

ACCOUNT 371.00 INSTALLATIONS ON CUSTOMERS' PREMISES

| SUMMARY OF BOOK SALVAGE |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | REGULAR | COST OF REMOVAL |  | GROSS <br> SALVAGE |  | NET SALVAGE |  |
| YEAR | RETIREMENTS | AMOUNT | PCT | AMOUNT | PCT | AMOUNT | PCT |
| THREE-YEAR MOVING AVERAGES |  |  |  |  |  |  |  |
| 04-06 | 75,067 | 5,829 | 8 |  | 0 | 5,829- | 8- |
| 05-07 | 50,935 | 15,535 | 31 |  | 0 | 15,535- | 31- |
| 06-08 | 28,151 | 9,986 | 35 |  | 0 | 9,986- | 35- |
| 07-09 | 16,540 | 11,091 | 67 |  | 0 | 11,091- | 67- |
| 08-10 | 12,948 | 1,502 | 12 |  | 0 | 1,502- | 12- |
| 09-11 | 10,449 | 1,240 | 12 |  | 0 | 1,240- | 12- |
| 10-12 | 2,153 | 118 | 5 |  | 0 | 118- | $5-$ |
| 11-13 | 69,446 | 17,220 | 25 |  | 0 | 17,220- | 25- |
| 12-14 | 93,639 | 26,460 | 28 |  | 0 | 26,460- | 28- |
| 13-15 | 127,402 | 39,923 | 31 | 3,090 | 2 | 36,833- | 29 - |
| 14-16 | 91,347 | 34,123 | 37 | 5,399 | 6 | 28,724- | 31- |
| 15-17 | 183,524 | 64,008 | 35 | 15,520 | 8 | 48,488- | 26- |
| 16-18 | 185,520 | 64,991 | 35 | 14,540 | 8 | 50,451- | 27- |
| 17-19 | 205,763 | 53,570 | 26 | 13,357 | 6 | 40, 214- | 20- |

FIVE-YEAR AVERAGE
15-19
163, 482
47,073 29
11, 253
35,819- 22 -

## EL PASO ELECTRIC COMPANY

ACCOUNT 373.00 STREET LIGHTING AND SIGNAL SYSTEMS

|  | SUMMARY OF BOOK SALVAGE |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | REGULAR | COST OF REMOVAL |  | $\begin{aligned} & \text { GROSS } \\ & \text { SALVAG } \end{aligned}$ |  | NET SALVAGE |  |
| YEAR | RETIREMENTS | AMOUNT | PCT | AMOUNT | PCT | AMOUNT | PCT |
| 1993 | 24,002 | 4,661 | 19 | 2,425 | 10 | 2,236- | 9 - |
| 1994 | 47,994 | 19,516 | 41 | 11,510 | 24 | 8,006- | 17- |
| 1995 | 36,371 | 11,808 | 32 | 8,127 | 22 | 3,681- | 10- |
| 1996 | 4,899 | 2,691 | 55 | 2,604 | 53 | 87- | 2 - |
| 1997 | 6,390 | 2,609 | 41 | 1,460 | 23 | 1,149- | 18- |
| 1998 | 13,000 | 4,317 | 33 | 2,320 | 18 | 1,997- | 15- |
| 1999 | 16,309 | 2,980 | 18 | 2,096 | 13 | 884- | $5-$ |
| 2000 | 65,496 | 4,301 | 7 | 2,832 | 4 | 1,469- | $2-$ |
| 2001 | 63,267 | 11,459 | 18 | 13,504 | 21 | 2,045 | 3 |
| 2002 | 16,890 |  | 0 |  | 0 |  | 0 |
| 2003 | 14,954 |  | 0 |  | 0 |  | 0 |
| 2004 | 107,508 |  | 0 | 18,030 | 17 | 18,030 | 17 |
| 2005 | 180 | 10,517 |  |  | 0 | 10,517- |  |
| 2006 | 85,840 | 20,116 | 23 |  | 0 | 20,116- | 23- |
| 2007 | 33, 043 | 17,460 | 53 |  | 0 | 17,460- | 53- |
| 2008 | 15,008 | 1,265 | 8 |  | 0 | 1,265- | 8 - |
| 2009 | 10,201 | 1,691 | 17 |  | 0 | 1,691- | 17 - |
| 2010 | 1, 051 | 301 | 29 |  | 0 | 301- | 29- |
| 2011 | 9,322 |  | 0 |  | 0 |  | 0 |
| 2012 | 1,613 |  | 0 |  | 0 |  | 0 |
| 2013 | 31,503 | 7,883 | 25 |  | 0 | 7,883- | 25- |
| 2014 | 22,783 | 19, 096 | 84 |  | 0 | 19,096- | 84- |
| 2015 | 11,892 | 19,249 | 162 | 8,710 | 73 | 10,539- | 89- |
| 2016 | 28,910 | 14,733 | 51 | 6,620 | 23 | 8,114- | 28 - |
| 2017 | 18,947 | 11,279 | 60 | 8,326 | 44 | 2,953- | 16- |
| 2018 | 15,752 | 29,617 | 188 | 5,360 | 34 | 24,258- | 154- |
| 2019 | 8,805 | 22,712 | 258 | 3,100 | 35 | 19,612- | 223- |
| TOTAL | 711,932 | 240, 261 | 34 | 97, 023 | 14 | 143,238- | $20-$ |

THREE-YEAR MOVING AVERAGES

| $93-95$ | 36,122 | 11,995 | 33 | 7,354 | 20 | $4,641-$ | $13-$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $94-96$ | 29,755 | 11,338 | 38 | 7,414 | 25 | $3,925-$ | $13-$ |
| $95-97$ | 15,887 | 5,703 | 36 | 4,064 | 26 | $1,639-$ | $10-$ |
| $96-98$ | 8,096 | 3,206 | 40 | 2,128 | 26 | $1,078-$ | $13-$ |
| $97-99$ | 11,900 | 3,302 | 28 | 1,959 | 16 | $1,343-$ | $11-$ |
| $98-00$ | 31,602 | 3,866 | 12 | 2,416 | 8 | $1,450-$ | $5-$ |
| $99-01$ | 48,357 | 6,247 | 13 | 6,144 | 13 | $103-$ | 0 |
| $00-02$ | 48,551 | 5,253 | 11 | 5,445 | 11 | 192 | 0 |
| $01-03$ | 31,704 | 3,820 | 12 | 4,501 | 14 | 682 | 2 |
| $02-04$ | 46,451 |  | 0 | 6,010 | 13 | 6,010 | 13 |
| $03-05$ | 40,881 | 3,506 | 9 | 6,010 | 15 | 2,504 | 6 |

## EL PASO ELECTRIC COMPANY

ACCOUNT 373.00 STREET LIGHTING AND SIGNAL SYSTEMS


FIVE-YEAR AVERAGE
15-19
16,861
19,518116
$6,423 \quad 38$
13,095-78-

## EL PASO ELECTRIC COMPANY

ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS

| SUMMARY OF BOOK SALVAGE |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| REGULAR | COST OF REMOVAL |  | $\begin{gathered} \text { GROSS } \\ \text { SALVAGE } \end{gathered}$ |  | NET SALVAGE |  |
| RETIREMENTS | AMOUNT | PCT | AMOUNT | PCT | AMOUNT | PCT |
| 449,545 |  | 0 |  | $\bigcirc$ |  | $\bigcirc$ |
| 182,929 |  | 0 |  | 0 |  | 0 |
| 2,586 |  | 0 |  | 0 |  | 0 |
| 5,479 |  | 0 |  | 0 |  | 0 |
| 22,944 |  | 0 |  | 0 |  | 0 |
| 460,453 |  | 0 |  | 0 |  | 0 |
| 233,445 |  | 0 |  | 0 |  | 0 |
| 493,516 |  | 0 |  | 0 |  | 0 |
| 577,894 | 1,427 | 0 | 9,864 | 2 | 8,437 | 1 |
|  | 2,361 |  | 9,935 |  | 7,574 |  |
|  | 857 |  | 134,884 |  | 134, 027 |  |
| 2,428,791 | 4,646 | 0 | 154,683 | 6 | 150, 037 | 6 |

THREE-YEAR MOVING AVERAGES

| $96-98$ | 149,848 | 0 | 0 | 0 |
| ---: | ---: | ---: | ---: | ---: |
| $97-99$ | 60,976 | 0 | 0 | 0 |
| $98-00$ | 61,838 | 0 | 0 | 0 |
| $99-01$ | 61,838 | 0 | 0 | 0 |
| $00-02$ | 862 | 0 | 0 | 0 |
| $01-03$ |  |  |  |  |
| $02-04$ |  | 0 | 0 | 0 |
| $03-05$ | 1,826 | 0 | 0 | 0 |
| $04-06$ | 1,826 | 0 | 0 | 0 |
| $05-07$ | 9,474 | 0 | 0 | 0 |
| $06-08$ | 7,648 | 0 | 0 | 0 |
| $07-09$ | 7,648 | 0 | 0 | 0 |
| $08-10$ | 153,484 | 0 | 0 | 0 |
| $09-11$ | 231,299 |  |  | 0 |


|  |  | EL P | PASO | ELEC | COMPANY |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | T 390.00 | 00 S | RUCT | AND IMPROV | MENT |  |  |
|  |  | SUMM | MMARY | OF | SALVAGE |  |  |  |
|  | REGULAR | COST <br> REMO | T OF OVAL |  | GROSS SALVAG |  | NET SALVAGE |  |
| YEAR | RETIREMENTS | AMOUNT |  | PCT | AMOUNT | PCT |  | PCT |
| THREE-YEAR MOVING AVERAGES |  |  |  |  |  |  |  |  |
| 10-12 | 231, 299 |  |  | 0 |  | 0 |  | 0 |
| 11-13 | 77,815 |  |  | 0 |  | 0 |  | 0 |
| 12-14 | 164,505 |  |  | 0 |  | 0 |  | 0 |
| 13-15 | 357,137 |  | 476 | 0 | 3,288 | 1 | 2,812 | 1 |
| 14-16 | 357, 137 |  | , 263 | 0 | 6,600 | 2 | 5,337 | 1 |
| 15-17 | 192,631 |  | , 263 | 1 | 6,600 | 3 | 5,337 | 3 |
| 16-18 |  |  | 787 |  | 3,312 |  | 2,525 |  |
| 17-19 |  |  | 286 |  | 44,961 |  | 44,676 |  |
| FIVE-YEAR AVERAGE |  |  |  |  |  |  |  |  |
| 15-19 | 115,579 |  | 929 | 1 | 30,937 | 27 | 30, 007 | 26 |

## EL PASO ELECTRIC COMPANY

ACCOUNT 396.00 POWER OPERATED EQUIPMENT

SUMMARY OF BOOK SALVAGE

| YEAR | REGULAR RETIREMENTS | COST OF REMOVAL AMOUNT | PCT | $\begin{aligned} & \text { GROSS } \\ & \text { SALVAGE } \\ & \text { AMOUNT } \end{aligned}$ | PCT | NET <br> SALVAGE AMOUNT | PCT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1994 | 10,224 |  | 0 |  | $\bigcirc$ |  | 0 |
| 1995 |  |  |  |  |  |  |  |
| 1996 |  |  |  | 11,500 |  | 11,500 |  |
| 1997 |  |  |  |  |  |  |  |
| 1998 |  |  |  |  |  |  |  |
| 1999 |  |  |  |  |  |  |  |
| 2000 | 2,099 |  | 0 |  | 0 |  | 0 |
| 2001 |  |  |  |  |  |  |  |
| 2002 | 21,615 |  | 0 |  | 0 |  | 0 |
| 2003 |  |  |  |  |  |  |  |
| 2004 |  |  |  |  |  |  |  |
| 2005 |  |  |  |  |  |  |  |
| 2006 |  |  |  |  |  |  |  |
| 2007 |  |  |  |  |  |  |  |
| 2008 |  |  |  |  |  |  |  |
| 2009 |  |  |  |  |  |  |  |
| 2010 | 64,217 |  | 0 | 15,500 | 24 | 15,500 | 24 |
| 2011 |  |  |  | 424 |  | 424 |  |
| 2012 | 321, 549 |  | $\bigcirc$ |  | 0 |  | 0 |
| 2013 | 5,628 |  | 0 |  | 0 |  | 0 |
| 2014 | 621 |  | $\bigcirc$ | 651 | 105 | 651 | 105 |
| 2015 | 31,014 | 228 | 1 | 14,015 | 45 | 13,787 | 44 |
| 2016 | 19,745 | 265 | 1 | 10,727 | 54 | 10,462 | 53 |
| 2017 | 65,323 | 14- | 0 | 8, 023 | 12 | 8, 037 | 12 |
| 2018 | 109,650 | 4 | 0 | 35,312 | 32 | 35,308 | 32 |
| 2019 | 7,200 | 17 | 0 | 6,533 | 91 | 6,517 | 91 |
| TOTAL | 658,885 | 499 | $\bigcirc$ | 102,685 | 16 | 102,186 | 16 |

THREE-YEAR MOVING AVERAGES

| $94-96$ | 3,408 | 0 | 3,833 | 112 | 3,833 | 112 |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- |
| $95-97$ |  |  | 3,833 |  | 3,833 |  |
| $96-98$ |  |  | 3,833 |  |  |  |
| $97-99$ | 700 | 0 | 0 | 3,833 |  |  |
| $98-00$ | 700 | 0 | 0 | 0 |  |  |
| $99-01$ | 7,905 | 0 | 0 | 0 |  |  |
| $00-02$ | 7,205 | 0 | 0 | 0 |  |  |
| $01-03$ | 7,205 | 0 | 0 | 0 |  |  |
| $02-04$ |  |  |  | 0 |  |  |
| $03-05$ |  |  |  | 0 |  |  |
| $04-06$ |  |  |  | 0 |  |  |
| $05-07$ |  |  |  |  |  |  |

## EL PASO ELECTRIC COMPANY

| ACCOUNT 396.00 POWER OPERATED EQUIPMENT |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SUMMARY OF BOOK SALVAGE |  |  |  |  |  |  |  |  |
|  | REGULAR | COST <br> REMO | OF VAL |  | GROSS SALVAG |  | NET SALVAGE |  |
| YEAR | RETIREMENTS |  |  | PCT | AMOUNT | PCT |  | PCT |
| THREE-YEAR MOVING AVERAGES |  |  |  |  |  |  |  |  |
| 06-08 |  |  |  |  |  |  |  |  |
| 07-09 |  |  |  |  |  |  |  |  |
| 08-10 | 21,406 |  |  | 0 | 5,167 | 24 | 5,167 | 24 |
| 09-11 | 21,406 |  |  | 0 | 5,308 | 25 | 5,308 | 25 |
| 10-12 | 128,589 |  |  | 0 | 5,308 | 4 | 5,308 | 4 |
| 11-13 | 109, 059 |  |  | 0 | 141 | 0 | 141 | 0 |
| 12-14 | 109, 266 |  |  | 0 | 217 | 0 | 217 | 0 |
| 13-15 | 12,421 |  | 76 | 1 | 4,889 | 39 | 4,813 | 39 |
| 14-16 | 17,127 |  | 164 | 1 | 8,464 | 49 | 8,300 | 48 |
| 15-17 | 38,694 |  | 160 | 0 | 10,922 | 28 | 10,762 | 28 |
| 16-18 | 64,906 |  | 85 | 0 | 18, 020 | 28 | 17,936 | 28 |
| 17-19 | 60,724 |  | 2 | 0 | 16,623 | 27 | 16,621 | 27 |
| FIVE-YEAR AVERAGE |  |  |  |  |  |  |  |  |
| 15-19 | 46,586 |  | 100 | 0 | 14,922 | 32 | 14, 822 | 32 |

## PART IX. DETAILED DEPRECIATION CALCULATIONS

## EL PASO ELECTRIC COMPANY

## ACCOUNT 311.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

RIO GRANDE UNIT 6 INTERIM SURVIVOR CURVE.. IOWA 100-R3
PROBABLE RETIREMENT YEAR.. 12-2021
NET SALVAGE PERCENT.. -5

| 1957 | 367,404.00 | 373,491 | 383, 865 | 1,909 | 1.99 | 959 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1959 | 24,307.00 | 24,686 | 25,372 | 151 | 1.99 | 76 |
| 1960 | 661.00 | 671 | 690 | 4 | 1.99 | 2 |
| 1961 | 21.00 | 21 | 22 |  |  |  |
| 1962 | 991.00 | 1,005 | 1,033 | 8 | 1.99 | 4 |
| 1963 | 87.00 | 88 | 90 | 1 | 1.99 | 1 |
| 1964 | 15.00 | 15 | 15 |  |  |  |
| 1965 | 339.00 | 343 | 353 | 3 | 1.99 | 2 |
| 1966 | 3,966.00 | 4,012 | 4,123 | 41 | 1.99 | 21 |
| 1968 | 4,292.00 | 4,336 | 4,456 | 50 | 1.99 | 25 |
| 1969 | 563.00 | 568 | 584 | 7 | 1.99 | 4 |
| 1972 | 3,871.00 | 3,899 | 4, 007 | 57 | 1.99 | 29 |
| 1973 | 928.00 | 934 | 960 | 14 | 1.99 | 7 |
| 1975 | 15,338.00 | 15,406 | 15,834 | 271 | 1.99 | 136 |
| 1976 | 10,472.00 | 10,506 | 10,798 | 198 | 2.00 | 99 |
| 1979 | 4,621.00 | 4,621 | 4,749 | 103 | 2.00 | 52 |
| 1981 | 927.00 | 925 | 951 | 23 | 2.00 | 12 |
| 1983 | 262.00 | 261 | 268 | 7 | 2.00 | 4 |
| 1985 | 186,589.00 | 185, 098 | 190,239 | 5,679 | 2.00 | 2,840 |
| 1987 | 11,630.00 | 11,498 | 11,817 | 394 | 2.00 | 197 |
| 1988 | 6,307.00 | 6,224 | 6,397 | 225 | 2.00 | 112 |
| 1994 | 26,748.45 | 26,034 | 26,757 | 1,329 | 2.00 | 664 |
| 1995 | 65,286.16 | 63,353 | 65,113 | 3,438 | 2.00 | 1,719 |
| 1997 | 59,140.97 | 57,010 | 58,594 | 3,504 | 2.00 | 1,752 |
| 1999 | 4,121.96 | 3,942 | 4, 051 | 277 | 2.00 | 138 |
| 2000 | 131,347.50 | 125, 043 | 128,516 | 9,399 | 2.00 | 4,700 |
| 2001 | 214,105.93 | 202,813 | 208,446 | 16,365 | 2.00 | 8,182 |
| 2004 | 112,528.68 | 104,620 | 107,526 | 10,629 | 2.00 | 5,314 |
| 2018 | 33, 946.17 | 15,276 | 15,700 | 19,943 | 2.00 | 9,972 |
|  | 1,290,816.82 | 1,246,699 | 1,281,328 | 74,030 |  | 37,023 |

RIO GRANDE UNIT 7
INTERIM SURVIVOR CURVE.. IOWA 100-R3
PROBABLE RETIREMENT YEAR.. 12-2022
NET SALVAGE PERCENT.. -5

| 1958 | $338,477.00$ | 338,455 | 355,401 |
| ---: | ---: | ---: | ---: |
| 1960 | $24,022.00$ | 23,985 | 25,223 |
| 1961 | 21.00 | 21 | 22 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 311.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

RIO GRANDE UNIT 7
INTERIM SURVIVOR CURVE.. IOWA 100-R3
PROBABLE RETIREMENT YEAR.. 12-2022
NET SALVAGE PERCENT. . -5

| 1962 | 991.00 | 988 | 1,041 |
| :--- | ---: | ---: | ---: |
| 1963 | 87.00 | 87 | 91 |
| 1964 | 15.00 | 15 | 16 |
| 1965 | 339.00 | 337 | 356 |
| 1966 | $3,966.00$ | 3,940 | 4,164 |
| 1968 | $4,292.00$ | 4,255 | 4,507 |
| 1969 | 563.00 | 558 | 591 |
| 1972 | $3,871.00$ | 3,820 | 4,065 |
| 1973 | 928.00 | 915 | 974 |
| 1975 | $15,338.00$ | 15,076 | 16,105 |
| 1976 | $10,472.00$ | 10,279 | 10,996 |
| 1979 | $4,621.00$ | 4,515 | 4,852 |
| 1981 | 927.00 | 902 | 973 |
| 1983 | 262.00 | 254 | 275 |
| 1984 | $186,589.00$ | 180,564 | 195,918 |
| 1987 | $11,630.00$ | 11,175 | 12,212 |
| 1988 | $6,307.00$ | 6,044 | 6,616 |
| 1994 | $26,748.46$ | 25,115 | 27,492 |
| 1995 | $65,286.14$ | 61,037 | 66,814 |
| 1997 | $59,140.95$ | 54,764 | 59,947 |
| 1999 | $4,121.94$ | 3,774 | 4,131 |
| 2000 | $131,347.48$ | 119,469 | 130,776 |
| 2001 | $214,105.89$ | 193,340 | 211,638 |
| 2004 | $112,528.66$ | 98,954 | 108,319 |
| 2018 | $42,985.49$ | 15,045 | 16,469 |
|  |  |  |  |
|  | $1,269,983.01$ | $1,177,683$ | $1,269,984$ |


| 6 | 2.99 | 2 |
| ---: | ---: | ---: |
| 594 | 3.00 | 198 |
| 1,737 | 3.00 | 579 |
| 2,151 | 3.00 | 717 |
| 197 | 3.00 | 66 |
| 7,139 | 3.00 | 2,380 |
| 13,173 | 3.00 | 4,391 |
| 9,836 | 3.00 | 3,279 |
| 28,666 | 3.00 | 9,555 |
|  |  |  |
| 63,498 |  | 21,167 |

RIO GRANDE UNIT 8
INTERIM SURVIVOR CURVE.. IOWA 100-R3
PROBABLE RETIREMENT YEAR.. 12-2033
NET SALVAGE PERCENT. . -5

| 1973 | $921,156.00$ | 742,607 | 923,641 | 43,573 | 13.68 | 3,185 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1975 | $15,338.00$ | 12,240 | 15,224 | 881 | 13.70 | 64 |
| 1976 | $10,472.00$ | 8,310 | 10,336 | 660 | 13.72 | 48 |
| 1979 | $4,621.00$ | 3,603 | 4,481 | 371 | 13.75 | 27 |
| 1981 | 927.00 | 466.00 | 713 | 353 | 887 | 87 |
| 1983 | $186,590.00$ | 140,414 | 174,644 | 50.77 | 13.79 | 6 |
| 1984 |  |  | 21,275 | 13.80 | 1,542 |  |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 311.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

RIO GRANDE UNIT 8 INTERIM SURVIVOR CURVE.. IOWA 100-R3
PROBABLE RETIREMENT YEAR.. 12-2033
NET SALVAGE PERCENT.. -5

| 1987 | $11,630.00$ | 8,529 | 10,608 | 1,603 | 13.83 | 116 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1988 | $6,307.00$ | 4,582 | 5,699 | 923 | 13.84 | 67 |
| 1994 | $26,748.46$ | 18,121 | 22,539 | 5,547 | 13.88 | 400 |
| 1995 | $65,286.30$ | 43,592 | 54,219 | 14,332 | 13.89 | 1,032 |
| 1997 | $59,140.95$ | 38,260 | 47,587 | 14,511 | 13.90 | 1,044 |
| 1999 | $4,121.94$ | 2,570 | 3,197 | 1,132 | 13.91 | 81 |
| 2000 | $131,347.48$ | 80,213 | 99,767 | 38,147 | 13.92 | 2,740 |
| 2001 | $213,621.89$ | 127,608 | 158,716 | 65,586 | 13.92 | 4,712 |
| 2004 | $154,211.51$ | 85,045 | 105,777 | 56,145 | 13.93 | 4,031 |
| 2013 | $438,201.00$ | 145,869 | 181,429 | 278,682 | 13.96 | 19,963 |
| 2017 | $20,066.21$ | 3,198 | 3,978 | 17,092 | 13.97 | 1,223 |
| 2018 | $40,958.65$ | 4,142 | 5,152 | 37,855 | 13.98 | 2,708 |
|  |  |  |  |  |  | 42,993 |

RIO GRANDE COMMON
INTERIM SURVIVOR CURVE.. IOWA 100-R3
PROBABLE RETIREMENT YEAR.. 12-2033
NET SALVAGE PERCENT.. -5

| 2005 | $59,452.18$ | 31,741 | 35,301 | 27,124 | 13.94 | 1,946 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2006 | $223,451.27$ | 115,125 | 128,036 | 106,588 | 13.94 | 7,646 |
| 2007 | $71,430.81$ | 35,340 | 39,303 | 35,699 | 13.95 | 2,559 |
| 2010 | $4,210.00$ | 1,786 | 1,986 | 2,434 | 13.96 | 174 |
| 2012 | $132,627.00$ | 48,543 | 53,987 | 85,272 | 13.96 | 6,108 |
| 2013 | $158,055.00$ | 52,614 | 58,514 | 107,443 | 13.96 | 7,696 |
| 2015 | $606,430.00$ | 154,877 | 172,245 | 464,506 | 13.97 | 33,250 |
| 2016 | $146,146.24$ | 30,674 | 34,114 | 119,340 | 13.97 | 8,543 |
| 2017 | $831,006.78$ | 132,445 | 147,298 | 725,259 | 13.97 | 51,915 |
| 2018 | $1,873,514.65$ | 189,480 | 210,729 | $1,756,461$ | 13.98 | 125,641 |
| 2019 | $327,085.07$ | 11,859 | 13,189 | 330,250 | 13.98 | 23,623 |
|  | $4,433,409.00$ | 804,484 | 894,702 | $3,760,378$ |  | 269,101 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 311.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

NEWMAN UNIT 1
INTERIM SURVIVOR CURVE.. IOWA 100-R3
PROBABLE RETIREMENT YEAR.. 12-2022
NET SALVAGE PERCENT. . -5

| 1959 | 1,015,330.00 | 1,014,529 | 1,041,505 | 24,591 | 2.98 | 8,252 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1960 | 1,394.00 | 1,392 | 1,429 | 35 | 2.98 | 12 |
| 1961 | 2,946.00 | 2,939 | 3, 017 | 76 | 2.98 | 26 |
| 1962 | 2,488.00 | 2,480 | 2,546 | 66 | 2.98 | 22 |
| 1963 | 1,318.00 | 1,313 | 1,348 | 36 | 2.98 | 12 |
| 1964 | 1,032.00 | 1, 027 | 1, 054 | 29 | 2.98 | 10 |
| 1965 | 15,374.00 | 15,286 | 15,692 | 450 | 2.98 | 151 |
| 1966 | 3,360.00 | 3,338 | 3,427 | 101 | 2.98 | 34 |
| 1967 | 50.00 | 50 | 51 | 1 | 2.98 |  |
| 1973 | 27.00 | 27 | 28 | 1 | 2.99 |  |
| 1974 | 1,686.00 | 1,659 | 1,703 | 67 | 2.99 | 22 |
| 1975 | 4,144.00 | 4,073 | 4,181 | 170 | 2.99 | 57 |
| 1976 | 13,439.00 | 13,191 | 13,542 | 569 | 2.99 | 190 |
| 1977 | 7,795.00 | 7,640 | 7,843 | 342 | 2.99 | 114 |
| 1983 | 546.00 | 529 | 543 | 30 | 2.99 | 10 |
| 1985 | 34.00 | 33 | 34 | 2 | 2.99 | 1 |
| 1994 | 15,615.07 | 14,661 | 15,051 | 1,345 | 3.00 | 448 |
| 1995 | 28,972.00 | 27,086 | 27,806 | 2,614 | 3.00 | 871 |
| 1996 | 4,277.22 | 3,980 | 4, 086 | 405 | 3.00 | 135 |
| 1997 | 7,935.40 | 7,348 | 7,543 | 789 | 3.00 | 263 |
| 1999 | 161.31 | 148 | 152 | 17 | 3.00 | 6 |
| 2000 | 53,615.96 | 48,767 | 50,064 | 6,233 | 3.00 | 2,078 |
| 2001 | 30,924.52 | 27,925 | 28,668 | 3,803 | 3.00 | 1,268 |
| 2003 | 38,307.92 | 34,019 | 34,924 | 5,300 | 3.00 | 1,767 |
| 2004 | 7,790.39 | 6,851 | 7,033 | 1,147 | 3.00 | 382 |
| 2005 | 11,383.55 | 9,899 | 10,162 | 1,791 | 3.00 | 597 |
|  | 1,269,946.34 | 1,250,190 | 1,283,433 | 50,011 |  | 16,728 |

NEWMAN UNIT 2
INTERIM SURVIVOR CURVE.. IOWA 100-R3
PROBABLE RETIREMENT YEAR.. 12-2022
NET SALVAGE PERCENT. . -5

| 1962 | $447,455.00$ | 446,059 | 403,445 | 66,383 | 2.98 | 22,276 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1963 | $53,202.00$ | 52,992 | 47,929 | 7,933 | 2.98 | 2,662 |
| 1964 | $1,032.00$ | 1,027 | 929 | 155 | 2.98 | 52 |
| 1965 | $15,374.00$ | 15,286 | 13,826 | 2,317 | 2.98 | 778 |
| 1966 | $3,360.00$ | 3,338 | 3,019 | 509 | 2.98 | 171 |
| 1967 | 50.00 | 50 | 45 | 7 | 2.98 | 2 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 311.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

NEWMAN UNIT 2
INTERIM SURVIVOR CURVE.. IOWA 100-R3
PROBABLE RETIREMENT YEAR.. 12-2022
NET SALVAGE PERCENT. . -5

| 1973 | 27.00 | 27 | 24 | 4 | 2.99 | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1974 | 1,686.00 | 1,659 | 1,501 | 270 | 2.99 | 90 |
| 1975 | 4,144.00 | 4,073 | 3,684 | 667 | 2.99 | 223 |
| 1976 | 13,439.00 | 13,191 | 11,931 | 2,180 | 2.99 | 729 |
| 1977 | 7,795.00 | 7,640 | 6,910 | 1,275 | 2.99 | 426 |
| 1983 | 546.00 | 529 | 478 | 95 | 2.99 | 32 |
| 1985 | 35.00 | 34 | 31 | 6 | 2.99 | 2 |
| 1994 | 15,615.06 | 14,661 | 13,260 | 3,135 | 3.00 | 1,045 |
| 1995 | 28,971.98 | 27,086 | 24,498 | 5,922 | 3.00 | 1,974 |
| 1996 | 4,277.21 | 3,980 | 3,600 | 891 | 3.00 | 297 |
| 1997 | 7,935.39 | 7,348 | 6,646 | 1,686 | 3.00 | 562 |
| 1999 | 161.31 | 148 | 134 | 36 | 3.00 | 12 |
| 2000 | 53,615.94 | 48,767 | 44,108 | 12,189 | 3.00 | 4,063 |
| 2001 | 30,924.48 | 27,925 | 25,257 | 7,213 | 3.00 | 2,404 |
| 2003 | 38,308.88 | 34, 020 | 30,770 | 9,454 | 3.00 | 3,151 |
| 2004 | 7,540.49 | 6,631 | 5,998 | 1,920 | 3.00 | 640 |
| 2005 | 11,223.76 | 9,760 | 8,828 | 2,957 | 3.00 | 986 |
| 2018 | 288,685.12 | 101, 039 | 91,386 | 211,733 | 3.00 | 70,578 |
|  | 1,035,404.62 | 827,270 | 748,238 | 338,937 |  | 113,156 |

NEWMAN UNIT 3
INTERIM SURVIVOR CURVE.. IOWA 100-R3
PROBABLE RETIREMENT YEAR.. 12-2026
NET SALVAGE PERCENT.. -5

| 1965 | $37,152.00$ | 34,510 | 37,490 | 1,520 | 6.90 | 220 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1966 | $285,387.00$ | 264,558 | 287,401 | 12,255 | 6.90 | 1,776 |
| 1967 | $43,434.00$ | 27.00 | 40,173 | 43,642 | 1,964 | 6.91 |
| 1973 | $1,686.00$ | 25 | 1,532 | 1,664 | 1 | 6.93 |
| 1974 | $4,144.00$ | 3,755 | 4,079 | 106 | 6.93 | 284 |
| 1975 | $13,439.00$ | 12,139 | 13,187 | 272 | 6.93 | 15 |
| 1976 | $7,795.00$ | 7,019 | 7,625 | 924 | 6.94 | 39 |
| 1977 | 546.00 | 35.00 | 481 | 31 | 523 | 560 |
| 1983 | $15,615.06$ | 12,857 | 13,967 | 51 | 6.95 | 133 |
| 1985 | $28,971.98$ | 23,639 | 25,680 | 3 | 6.96 | 81 |
| 1994 | $4,277.21$ | 3,457 | 3,755 | 2,429 | 6.97 | 7 |
| 1995 | $7,935.39$ | 6,350 | 6,898 | 4,740 | 6.98 | 348 |
| 1996 |  |  | 1,436 | 6.98 | 679 |  |
| 1997 |  | 6,98 | 105 |  |  |  |
|  |  |  |  |  | 205 |  |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 311.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

NEWMAN UNIT 3
INTERIM SURVIVOR CURVE.. IOWA 100-R3
PROBABLE RETIREMENT YEAR.. 12-2026
NET SALVAGE PERCENT. . -5

| 1999 | 161.31 | 126 | 137 | 32 | 6.98 | 5 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2000 | $83,961.43$ | 64,833 | 70,431 | 17,729 | 6.98 | 2,540 |
| 2001 | $30,924.48$ | 23,548 | 25,581 | 6,889 | 6.98 | 987 |
| 2003 | $38,309.88$ | 28,220 | 30,657 | 9,569 | 6.99 | 1,369 |
| 2004 | $7,539.49$ | 5,449 | 5,919 | 1,997 | 6.99 | 286 |
| 2013 | $461,958.00$ | 233,530 | 253,694 | 231,362 | 6.99 | 33,099 |
| 2019 | $23,887.46$ | 1,641 | 1,783 | 23,299 | 7.00 | 3,328 |
|  |  |  |  |  |  | 45,506 |

NEWMAN UNIT 4
INTERIM SURVIVOR CURVE.. IOWA 100-R3
PROBABLE RETIREMENT YEAR.. 12-2026
NET SALVAGE PERCENT.. -5

| 1975 | $14,838,635.91$ | $13,446,653$ | $9,614,828$ | $5,965,740$ | 6.93 | 860,857 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1977 | $7,795.00$ | 7,019 | 5,019 | 3,166 | 6.94 | 456 |
| 1978 | $24,253.00$ | 21,765 | 15,563 | 9,903 | 6.94 | 1,427 |
| 1981 | 999.00 | 546.00 | 35.00 | 887 | 481 | 31 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 311.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

NEWMAN UNIT 5
INTERIM SURVIVOR CURVE.. IOWA 100-R3
PROBABLE RETIREMENT YEAR.. 12-2045
NET SALVAGE PERCENT. . -5

| 2009 | $24,010,650.00$ | $7,261,829$ | $5,850,492$ | $19,360,691$ | 25.78 | 750,997 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2013 | $808,896.00$ | 169,919 | 136,895 | 712,446 | 25.83 | 27,582 |
| 2014 | $116,803.00$ | 21,426 | 17,262 | 105,381 | 25.84 | 4,078 |
| 2015 | $551,902.00$ | 85,598 | 68,962 | 510,535 | 25.85 | 19,750 |
| 2017 | $372,742.54$ | 34,363 | 27,685 | 363,695 | 25.87 | 14,059 |
| 2018 | $71,334.90$ | 4,078 | 3,285 | 71,616 | 25.88 | 2,767 |
|  |  |  |  |  |  | 8 |
|  | $25,932,328.44$ | $7,577,213$ | $6,104,581$ | $21,124,364$ |  | 819,233 |

NEWMAN COMMON
INTERIM SURVIVOR CURVE.. IOWA 100-R3
PROBABLE RETIREMENT YEAR.. 12-2045
NET SALVAGE PERCENT.. -5

| 2007 | $160,779.12$ | 54,871 | 48,529 | 120,290 | 25.75 | 4,671 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2008 | $20,186.31$ | 64.00 | 605 | 5,753 | 15,443 | 25.77 |
| 2009 | $94,960.00$ | 24,570 | 17 | 50 | 25.78 | 599 |
| 2011 | $1,839.00$ | 432 | 21,730 | 382 | 77,978 | 25.81 |
| 2012 | $457,993.00$ | 96,207 | 85,087 | 1,549 | 25.82 | 3,021 |
| 2013 | $471,692.00$ | 86,525 | 76,524 | 495,806 | 25.83 | 60 |
| 2014 | $311,977.00$ | 48,386 | 42,793 | 284,753 | 25.84 | 15,323 |
| 2015 | $12,694.27$ | 1,581 | 1,398 | 11,931 | 25.85 | 11,017 |
| 2016 | $305,492.93$ | 28,163 | 24,908 | 295,860 | 25.87 | 461 |
| 2017 | 727,892 | 643,756 | $12,726,789$ | 25.88 | 491,762 |  |
| 2018 | $12,733,852.36$ | 84,410 | 74,653 | $4,470,851$ | 25.89 | 172,686 |
| 2019 | $4,329,051.87$ |  |  |  |  |  |
|  | $18,900,581.86$ | $1,159,561$ | $1,025,528$ | $18,820,083$ |  | 727,244 |
|  | $73,389,401.30$ | $30,172,638$ | $25,203,337$ | $51,855,535$ | $3,059,195$ |  |

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COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 17.0 4.17
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## EL PASO ELECTRIC COMPANY

## ACCOUNT 312.00 BOILER PLANT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

RIO GRANDE UNIT 6
INTERIM SURVIVOR CURVE.. IOWA 70-R4
PROBABLE RETIREMENT YEAR.. 12-2021
NET SALVAGE PERCENT.. -5

| 1957 | 1,952,987.00 | 1,984,954 | 2, 050,636 |
| :---: | :---: | :---: | :---: |
| 1959 | 34,915.00 | 35,458 | 36,661 |
| 1960 | 3,165.00 | 3,212 | 3,323 |
| 1961 | 584.00 | 592 | 613 |
| 1962 | 107.00 | 108 | 112 |
| 1963 | 6,331.00 | 6,415 | 6,648 |
| 1964 | 782.00 | 792 | 821 |
| 1966 | 949.00 | 960 | 996 |
| 1967 | 2.00 | 2 | 2 |
| 1968 | 307.00 | 310 | 322 |
| 1970 | 34.00 | 34 | 36 |
| 1972 | 33,512.00 | 33,755 | 35,188 |
| 1973 | 14,376.00 | 14,469 | 15,095 |
| 1974 | 1,291. 00 | 1,298 | 1,356 |
| 1975 | 217,588.00 | 218,561 | 228,467 |
| 1976 | 67,406.00 | 67,644 | 70,776 |
| 1977 | 1,904.00 | 1,909 | 1,999 |
| 1978 | 22,593.00 | 22,627 | 23,723 |
| 1979 | 57,878.00 | 57,900 | 60,772 |
| 1980 | 497.00 | 497 | 522 |
| 1981 | 297,424.00 | 296,840 | 312, 295 |
| 1982 | 29,160.00 | 29,065 | 30,618 |
| 1983 | 42,945.00 | 42,748 | 45, 092 |
| 1985 | 5,883.00 | 5,839 | 6,177 |
| 1987 | 344.00 | 340 | 361 |
| 1988 | 3,675.00 | 3,628 | 3,859 |
| 1990 | 925.00 | 909 | 971 |
| 1992 | 1,102.00 | 1,078 | 1,157 |
| 1994 | 13,793.94 | 13,429 | 14,484 |
| 1997 | 29,458.19 | 28,403 | 30,931 |
| 2001 | 34,025.85 | 32,240 | 35,727 |
| 2004 | 68,602.54 | 63,796 | 72,033 |
| 2009 | 27,902.00 | 24,610 | 29,297 |
| 2011 | 559.00 | 475 | 587 |
|  | 2,973, 007.52 | 2,994,897 | 3,121,658 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 312.00 BOILER PLANT EQUIPMENT

## CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

RIO GRANDE UNIT 7
INTERIM SURVIVOR CURVE.. IOWA 70-R4
PROBABLE RETIREMENT YEAR.. 12-2022
NET SALVAGE PERCENT.. -5

| 1957 | 2,295,521.55 | 2,297,544 | 2,410,298 |
| :---: | :---: | :---: | :---: |
| 1959 | 3,405.00 | 3,403 | 3,575 |
| 1960 | 3,465.00 | 3,461 | 3,638 |
| 1961 | 584.00 | 583 | 613 |
| 1962 | 107.00 | 107 | 112 |
| 1963 | 6,331.00 | 6,308 | 6,648 |
| 1964 | 782.00 | 778 | 821 |
| 1966 | 949.00 | 943 | 996 |
| 1967 | 2.00 | 2 | 2 |
| 1968 | 307.00 | 304 | 322 |
| 1970 | 34.00 | 34 | 36 |
| 1972 | 33,512.00 | 33, 085 | 35,188 |
| 1973 | 14,376.00 | 14,176 | 15,095 |
| 1974 | 1,291.00 | 1,271 | 1,356 |
| 1975 | 217,588.00 | 213,976 | 228,467 |
| 1976 | 67,406.00 | 66,196 | 70,776 |
| 1977 | 1,904.00 | 1,867 | 1,999 |
| 1978 | 18,659.00 | 18,266 | 19,592 |
| 1979 | 290.00 | 283 | 305 |
| 1980 | 58, 973.00 | 57,541 | 61,922 |
| 1981 | 298, 936.00 | 291, 164 | 313, 883 |
| 1982 | 29,160.00 | 28,349 | 30,618 |
| 1983 | 42,945.00 | 41,656 | 45, 092 |
| 1985 | 48,367.00 | 46,714 | 50,785 |
| 1987 | 344.00 | 331 | 361 |
| 1988 | 3,675.00 | 3,523 | 3,841 |
| 1990 | 13,381.00 | 12,754 | 13,906 |
| 1997 | 29,458.18 | 27,288 | 29,752 |
| 1999 | 50,111.81 | 45,894 | 50,039 |
| 2001 | 100,256.17 | 90,567 | 98,746 |
| 2002 | 284,995.01 | 255,432 | 278,499 |
| 2004 | 43,499.06 | 38, 263 | 41,718 |
| 2005 | 7,295.00 | 6,346 | 6,919 |
| 2006 | 509,765.70 | 437,875 | 477,418 |
| 2008 | 181, 117.00 | 150,826 | 164,447 |
| 2010 | 35.00 | 28 | 31 |
| 2015 | 49,352.00 | 31, 092 | 33,900 |
| 2016 | 134,912.00 | 76,277 | 83,165 |
| 2018 | 51,403.58 | 17,991 | 19,616 |
|  | 4,604,495.06 | 4,322,498 | 4,604,496 |


| 18 | 2.99 | 6 |
| ---: | ---: | ---: |
| 144 | 2.99 | 48 |
| 1,179 | 3.00 | 393 |
| 2,579 | 3.00 | 860 |
| 6,523 | 3.00 | 2,174 |
| 20,746 | 3.00 | 6,915 |
| 3,956 | 3.00 | 1,319 |
| 741 | 3.00 | 247 |
| 57,836 | 3.00 | 19,279 |
| 25,726 | 3.00 | 8,575 |
| 6 | 3.00 | 2 |
| 17,920 | 3.00 | 5,973 |
| 58,492 | 3.00 | 19,497 |
| 34,358 | 3.00 | 11,453 |
|  |  | 76,741 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 312.00 BOILER PLANT EQUIPMENT

## CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

RIO GRANDE UNIT 8
INTERIM SURVIVOR CURVE.. IOWA 70-R4
PROBABLE RETIREMENT YEAR.. 12-2033
NET SALVAGE PERCENT.. - 5

| 1973 | $5,474,879.84$ | $4,463,002$ | $5,478,137$ | 270,487 | 12.96 | 20,871 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| 1975 | $217,588.00$ | 175,342 | 215,225 | 13,243 | 13.11 | 1,010 |
| 1976 | $97,454.00$ | 78,075 | 95,834 | 6,493 | 13.17 | 493 |
| 1977 | $1,904.00$ | 1,516 | 1,861 | 138 | 13.24 | 10 |
| 1978 | $19,958.00$ | 15,790 | 19,382 | 1,574 | 13.29 | 118 |
| 1979 | 290.00 | 228 | 280 | 25 | 13.35 | 2 |
| 1980 | $71,928.00$ | 56,137 | 68,906 | 6,619 | 13.40 | 494 |
| 1981 | $386,123.00$ | 299,195 | 367,249 | 38,181 | 13.45 | 2,839 |
| 1982 | $29,160.00$ | 22,423 | 27,523 | 3,095 | 13.50 | 229 |
| 1983 | $23,642.00$ | 179,050 | 219,776 | 26,598 | 13.54 | 1,964 |
| 1985 | $5,883.00$ | 4,415 | 5,419 | 758 | 13.62 | 56 |
| 1987 | 344.00 | 253 | 311 | 51 | 13.69 | 4 |
| 1988 | $6,587.00$ | 4,806 | 5,899 | 1,017 | 13.72 | 44 |
| 1990 | $18,983.00$ | 13,561 | 16,646 | 3,287 | 13.77 | 239 |
| 1997 | $29,458.18$ | 19,097 | 23,441 | 7,490 | 13.90 | 539 |
| 2000 | $1,421,260.49$ | 869,741 | $1,067,568$ | 424,755 | 13.93 | 30,492 |
| 2001 | $267,970.48$ | 160,310 | 196,773 | 84,596 | 13.94 | 6,069 |
| 2002 | $401,007.78$ | 234,247 | 287,528 | 133,530 | 13.94 | 9,579 |
| 2004 | $361,408.85$ | 199,538 | 244,924 | 134,555 | 13.96 | 9,639 |
| 2005 | 73.07 | 399 | 48 | 29 | 13.96 | 2 |
| 2006 | $595,297.21$ | 307,068 | 376,912 | 248,150 | 13.97 | 17,763 |
| 2007 | $71,044.45$ | 35,212 | 43,221 | 31,376 | 13.97 | 2,246 |
| 2008 | $1,157,, 793.64$ | 548,419 | 673,160 | 542,523 | 13.98 | 38,807 |
| 2009 | $86,895.00$ | 39,114 | 48,011 | 43,229 | 13.98 | 3,092 |
| 2010 | $312,197.00$ | 132,631 | 162,799 | 165,008 | 13.98 | 11,803 |
| 2011 | 193.00 | 77 | 95 | 108 | 13.99 | 8 |
| 2012 | $241,994.00$ | 88,602 | 108,755 | 145,339 | 13.99 | 10,389 |
| 2013 | $74,141.00$ | 24,696 | 30,313 | 47,535 | 13.99 | 3,398 |
| 2015 | $1,180,874.00$ | 301,759 | 370,396 | 869,522 | 13.99 | 62,153 |
| 2016 | $92,198.71$ | 191,667 | 235,263 | 722,546 | 13.99 | 51,647 |
| 2017 | $775,785.28$ | 123,498 | 151,588 | 662,986 | 13.99 | 47,390 |
| 2018 | $902,538.20$ | 91,706 | 112,565 | 835,100 | 14.00 | 59,650 |
| 2019 | $219,643.40$ | 7,952 | 9,761 | 220,865 | 14.00 | 15,776 |
|  |  |  |  |  |  | 408,845 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 312.00 BOILER PLANT EQUIPMENT

## CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

RIO GRANDE COMMON
INTERIM SURVIVOR CURVE.. IOWA 70-R4
PROBABLE RETIREMENT YEAR.. 12-2033
NET SALVAGE PERCENT.. -5

| 2011 | $12,940.00$ | 5,131 | 5,772 | 7,815 | 13.99 | 559 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2013 | $64,743.00$ | 21,565 | 24,259 | 43,721 | 13.99 | 3,125 |
| 2015 | $802,691.00$ | 205,118 | 230,742 | 612,083 | 13.99 | 43,751 |
| 2016 | $1,021.00$ | 215 | 242 | 830 | 13.99 | 59 |
| 2018 | $58,049.89$ | 5,898 | 6,635 | 54,318 | 14.00 | 3,880 |
|  | $939,444.89$ | 237,927 | 267,650 | 718,767 | 51,374 |  |

NEWMAN UNIT 1
INTERIM SURVIVOR CURVE.. IOWA 70-R4
PROBABLE RETIREMENT YEAR.. 12-2022
NET SALVAGE PERCENT. . 5

| 1960 | $2,933,802.21$ | $2,930,226$ | $3,080,492$ |
| :--- | ---: | ---: | ---: |
| 1961 | $1,348.00$ | 1,345 | 1,415 |
| 1963 | $30,740.00$ | 30,628 | 32,277 |
| 1966 | $4,207.00$ | 4,180 | 4,417 |
| 1967 | $2,382.00$ | 2,365 | 2,501 |
| 1968 | $5,741.00$ | 5,693 | 6,028 |
| 1969 | $5,416.00$ | 5,365 | 5,687 |
| 1970 | 551.00 | 545 | 579 |
| 1972 | $1,296.00$ | 1,280 | 1,361 |
| 1973 | 32.00 | 32 | 34 |
| 1975 | $20,973.00$ | 20,625 | 22,022 |
| 1976 | $23,988.00$ | 23,557 | 25,187 |
| 1977 | $47,202.00$ | 46,288 | 49,562 |
| 1979 | $70,512.00$ | 68,916 | 74,038 |
| 1980 | $3,899.00$ | 3,804 | 4,094 |
| 1981 | $14,402.00$ | 14,028 | 15,122 |
| 1983 | $16,341.00$ | 15,851 | 17,158 |
| 1985 | $8,849.00$ | 8,547 | 9,291 |
| 1986 | $1,411.00$ | 1,360 | 1,482 |
| 1988 | $13,676.00$ | 13,111 | 14,360 |
| 1990 | $89,243.00$ | 85,058 | 93,705 |
| 1992 | 73.00 | 69 | 77 |
| 1994 | $22,268.21$ | 20,916 | 23,284 |
| 1995 | $245,317.10$ | 229,442 | 255,416 |
| 1997 | $30,257.73$ | 28,028 | 31,201 |
| 1999 | $882,397.44$ | 808,136 | 899,621 |
| 2004 | $39,363.99$ | 34,626 | 38,546 |


| 98 | 3.00 | 33 |
| ---: | ---: | ---: |
| 2,167 | 3.00 | 722 |
| 570 | 3.00 | 190 |
| 26,897 | 3.00 | 8,966 |
| 2,786 | 3.00 | 929 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 312.00 BOILER PLANT EQUIPMENT

## CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

NEWMAN UNIT 1
INTERIM SURVIVOR CURVE.. IOWA 70-R4
PROBABLE RETIREMENT YEAR.. 12-2022
NET SALVAGE PERCENT.. -5

| 2006 | $2,403,287.56$ | $2,064,360$ | $2,298,055$ | 225,397 | 3.00 | 75,132 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2012 | 117.00 | 861.00 | 98 | 164 | 183 | 95 |
| 2015 | $313,276.00$ | 177,121 | 197,172 | 3.00 | 8 |  |
| 2016 | $1,125,420.20$ | 537,138 | 597,944 | 51,768 | 3.00 | 40 |
| 2017 | 73,324 | 81,625 | 138,747 | 3.00 | 194,589 |  |
| 2018 | $209,498.46$ | 19,364 | 21,556 | 113,987 | 3.00 | 46,116 |
| 2019 | $129,088.61$ |  |  |  | 37,996 |  |
|  | $8,696,637.51$ | $7,275,580$ | $7,905,587$ | $1,225,882$ |  | 408,627 |

NEWMAN UNIT 2
INTERIM SURVIVOR CURVE.. IOWA 70-R4
PROBABLE RETIREMENT YEAR.. 12-2022
NET SALVAGE PERCENT.. -5

| 1962 | 2,749,530.00 | 2,741,530 | 2,362,704 | 524,303 | 2.92 | 179,556 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1963 | 14,360.06 | 14,308 | 12,331 | 2,747 | 2.92 | 941 |
| 1966 | 4,207.00 | 4,180 | 3,602 | 815 | 2.94 | 277 |
| 1967 | 2,382.00 | 2,365 | 2,038 | 463 | 2.94 | 157 |
| 1968 | 5,741.00 | 5,693 | 4,906 | 1,122 | 2.95 | 380 |
| 1969 | 5,416.00 | 5,365 | 4,624 | 1, 063 | 2.95 | 360 |
| 1970 | 551.00 | 545 | 470 | 109 | 2.95 | 37 |
| 1972 | 1,296.00 | 1,280 | 1,103 | 258 | 2.96 | 87 |
| 1973 | 32.00 | 32 | 28 | 6 | 2.96 | 2 |
| 1975 | 20,973.00 | 20,625 | 17,775 | 4,247 | 2.97 | 1,430 |
| 1976 | 23,988.00 | 23,557 | 20,302 | 4,886 | 2.97 | 1,645 |
| 1977 | 47,202.00 | 46,288 | 39,892 | 9,670 | 2.97 | 3,256 |
| 1979 | 73,071.00 | 71,418 | 61,549 | 15,175 | 2.98 | 5,092 |
| 1980 | 3,899.00 | 3,804 | 3,278 | 816 | 2.98 | 274 |
| 1981 | 14,402.00 | 14,028 | 12,090 | 3,032 | 2.98 | 1,017 |
| 1983 | 19,475.00 | 18,891 | 16,281 | 4,168 | 2.99 | 1,394 |
| 1985 | 8,849.00 | 8,547 | 7,366 | 1,925 | 2.99 | 644 |
| 1986 | 1,411.00 | 1,360 | 1,172 | 309 | 2.99 | 103 |
| 1988 | 6,211.00 | 5,954 | 5,131 | 1,390 | 2.99 | 465 |
| 1990 | 1,619.00 | 1,543 | 1,330 | 370 | 2.99 | 124 |
| 1992 | 73.00 | 69 | 59 | 17 | 2.99 | 6 |
| 1994 | 22,850.55 | 21,463 | 18,497 | 5,496 | 3.00 | 1,832 |
| 1995 | 1,206.94 | 1,129 | 973 | 294 | 3.00 | 98 |
| 1997 | 30,257.70 | 28,028 | 24,155 | 7,616 | 3.00 | 2,539 |
| 1999 | 552,679.41 | 506,167 | 436, 225 | 144, 089 | 3.00 | 48, 030 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 312.00 BOILER PLANT EQUIPMENT

## CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

NEWMAN UNIT 2
INTERIM SURVIVOR CURVE.. IOWA 70-R4 PROBABLE RETIREMENT YEAR.. 12-2022 NET SALVAGE PERCENT.. -5

| 2000 | $784,646.73$ | 713,932 | 615,280 |
| :--- | ---: | ---: | ---: |
| 2001 | $1,108,368.75$ | $1,001,253$ | 862,899 |
| 2004 | $13,138.14$ | 11,557 | 9,960 |
| 2005 | $225,391.26$ | 196,066 | 168,973 |
| 2010 | $85,771.00$ | 68,445 | 58,987 |
| 2013 | 317.00 | 228 | 196 |
| 2014 | $395,038.00$ | 268,394 | 231,307 |
| 2015 | $11,926.00$ | 7,513 | 6,475 |
| 2016 | $176,706.00$ | 99,907 | 86,102 |
| 2017 | $247,824.58$ | 118,281 | 101,937 |
| 2018 | $2,058,917.66$ | 720,614 | 621,039 |
| 2019 | $196,686.11$ | 29,504 | 25,427 |
|  |  |  |  |
|  | $8,916,413.89$ | $6,783,863$ | $5,846,465$ |


| 208,599 | 3.00 | 69,533 |
| ---: | ---: | ---: |
| 300,888 | 3.00 | 100,296 |
| 3,835 | 3.00 | 1,278 |
| 67,687 | 3.00 | 22,562 |
| 31,072 | 3.00 | 10,357 |
| 136 | 3.00 | 45 |
| 183,483 | 3.00 | 61,161 |
| 6,047 | 3.00 | 2,016 |
| 99,440 | 3.00 | 33,147 |
| 158,279 | 3.00 | 52,760 |
| $1,540,824$ | 3.00 | 513,608 |
| 181,093 | 3.00 | 60,364 |
|  |  |  |
| $3,515,769$ |  | $1,176,873$ |

NEWMAN UNIT 3
INTERIM SURVIVOR CURVE.. IOWA 70-R4
PROBABLE RETIREMENT YEAR.. 12-2026
NET SALVAGE PERCENT.. -5

| 1966 | $2,789,040.91$ | $2,593,444$ |
| :--- | ---: | ---: |
| 1967 | $206,675.00$ | 191,729 |
| 1968 | $5,741.00$ | 5,314 |
| 1969 | $5,416.00$ | 5,001 |
| 1970 | 551.00 | 508 |
| 1972 | $1,296.00$ | 1,187 |
| 1973 | 32.00 | 29 |
| 1975 | $20,973.00$ | 19,049 |
| 1976 | $23,988.00$ | 21,716 |
| 1977 | $47,202.00$ | 42,594 |
| 1979 | $61,908.00$ | 55,465 |
| 1980 | $3,899.00$ | 3,480 |
| 1981 | $14,402.00$ | 12,805 |
| 1983 | $16,341.00$ | 14,406 |
| 1985 | $8,849.00$ | 7,727 |
| 1986 | $1,411.00$ | 1,226 |
| 1988 | $13,676.00$ | 11,753 |
| 1990 | $81,092.00$ | 68,834 |
| 1992 | 73.00 | 61 |
| 1994 | $207,012.09$ | 170,604 |

$2,744,265$
202,879
5,623
5,292
538
1,256
31
20,157
22,979
45,071
58,691
3,682
13,550
15,244
8,176
1,297
12,436
72,837
65
180,525
184,228
14,130
405
395
41
105
3
1,865
2,209
4,491
6,313
412
1,572
1,914
1,115
184
1,923
12,310
12
36,837

| 6.63 | 27,787 |
| :--- | ---: |
| 6.66 | 2,122 |
| 6.68 | 61 |
| 6.70 | 59 |
| 6.72 | 6 |
| 6.76 | 16 |
| 6.78 |  |
| 6.81 | 274 |
| 6.83 | 323 |
| 6.84 | 657 |
| 6.87 | 919 |
| 6.88 | 60 |
| 6.89 | 228 |
| 6.91 | 277 |
| 6.93 | 161 |
| 6.93 | 27 |
| 6.95 | 277 |
| 6.96 | 1,769 |
| 6.97 | 2 |
| 6.97 | 5,285 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 312.00 BOILER PLANT EQUIPMENT

## CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

NEWMAN UNIT 3
INTERIM SURVIVOR CURVE.. IOWA 70-R4 PROBABLE RETIREMENT YEAR.. 12-2026 NET SALVAGE PERCENT.. -5

| 1995 | $1,206.95$ | 986 | 1,043 | 224 | 6.98 | 32 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1997 | $30,257.70$ | 24,238 | 25,648 | 6,123 | 6.98 | 877 |
| 1999 | $111,553.83$ | 87,316 | 92,394 | 24,738 | 6.99 | 3,539 |
| 2004 | $171,533.26$ | 124,107 | 131,324 | 48,786 | 6.99 | 6,979 |
| 2005 | $250,287.74$ | 177,281 | 187,591 | 75,211 | 6.99 | 10,760 |
| 2007 | $31,353.08$ | 21,097 | 22,324 | 10,597 | 7.00 | 1,514 |
| 2008 | $351,350.57$ | 229,253 | 242,585 | 126,333 | 7.00 | 18,048 |
| 2009 | $392,201.00$ | 246,992 | 261,356 | 150,455 | 7.00 | 21,494 |
| 2011 | 668.00 | 385 | 407 | 294 | 7.00 | 42 |
| 2016 | $1,316,151.00$ | 460,648 | 487,437 | 894,522 | 7.00 | 127,789 |
| 2017 | $44,927.22$ | 12,414 | 13,136 | 34,038 | 7.00 | 4,863 |
| 2018 | $239,207.85$ | 44,324 | 46,902 | 204,267 | 7.00 | 29,181 |
| 2019 | $292,958.29$ | 20,508 | 21,701 | 285,906 | 7.00 | 40,844 |
|  |  |  |  |  |  |  |
|  | $6,743,234.49$ | $4,676,481$ | $4,948,440$ | $2,131,957$ |  | 306,272 |

NEWMAN UNIT 4
INTERIM SURVIVOR CURVE.. IOWA 70-R4 PROBABLE RETIREMENT YEAR.. 12-2026
NET SALVAGE PERCENT.. -5

| 1988 | 139,925.00 | 120,246 | 121,616 | 25,306 | 6.95 | 3,641 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1990 | 1,619.00 | 1,374 | 1,390 | 310 | 6.96 | 45 |
| 1992 | 73.00 | 61 | 62 | 15 | 6.97 | 2 |
| 1994 | 22,850.55 | 18,832 | 19,047 | 4,947 | 6.97 | 710 |
| 1995 | 2,488.49 | 2,032 | 2,055 | 558 | 6.98 | 80 |
| 1996 | 13,753.72 | 11,129 | 11,256 | 3,186 | 6.98 | 456 |
| 1997 | 40,792.36 | 32,677 | 33, 049 | 9,783 | 6.98 | 1,402 |
| 1999 | 58,852.47 | 46,065 | 46,590 | 15,205 | 6.99 | 2,175 |
| 2004 | 328,880.51 | 237,949 | 240,659 | 104,665 | 6.99 | 14,974 |
| 2005 | 85,869.00 | 60,822 | 61,515 | 28,648 | 6.99 | 4, 098 |
| 2007 | 21.35 | 14 | 14 | 8 | 7.00 | 1 |
| 2012 | 99,967.00 | 54,292 | 54,910 | 50,055 | 7.00 | 7,151 |
| 2014 | 2,202,071.00 | 1,017,357 | 1,028,946 | 1,283,229 | 7.00 | 183,318 |
| 2015 | 136,363.00 | 56,027 | 56,665 | 86,516 | 7.00 | 12,359 |
| 2018 | 141, 053.26 | 26,136 | 26,434 | 121,672 | 7.00 | 17,382 |
| 2019 | 28,482.04 | 1,994 | 2,017 | 27,889 | 7.00 | 3,984 |
|  | 3,303, 061.75 | 1,687,007 | 1,706,224 | 1,761,991 |  | 251,778 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 312.00 BOILER PLANT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

NEWMAN UNIT 5
INTERIM SURVIVOR CURVE.. IOWA 70-R4
PROBABLE RETIREMENT YEAR.. 12-2045
NET SALVAGE PERCENT.. -5

| 2009 | $284,318.00$ | 86,199 | 88,054 | 210,479 | 25.84 | 8,145 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2011 | $105,108,024.98$ | $27,261,974$ | $27,848,780$ | $82,514,646$ | 25.88 | $3,188,356$ |
| 2014 | $33,449.00$ | 6,148 | 6,280 | 28,841 | 25.92 | 1,113 |
| 2015 | $665,280.00$ | 103,301 | 105,525 | 593,019 | 25.93 | 22,870 |
| 2016 | $147,060.00$ | 18,358 | 18,753 | 135,660 | 25.94 | 5,230 |
| 2017 | $866,997.74$ | 79,992 | 81,714 | 828,634 | 25.95 | 31,932 |
| 2018 | $431,841.46$ | 24,767 | 25,300 | 428,133 | 25.96 | 16,492 |
| 2019 | $5,304,640.56$ | 105,271 | 107,537 | $5,462,336$ | 25.96 | 210,414 |
|  |  |  |  |  |  | $3,484,552$ |

NEWMAN COMMON
INTERIM SURVIVOR CURVE.. IOWA 70-R4
PROBABLE RETIREMENT YEAR.. 12-2045
NET SALVAGE PERCENT.. -5

| 2010 | $43,764.00$ | 12,336 | 8,577 | 37,375 | 25.86 | 1,445 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2011 | $17,000.35$ | 4,409 | 3,066 | 14,785 | 25.88 | 571 |
| 2012 | $2,397,353.00$ | 565,418 | 393,144 | $2,124,076$ | 25.89 | 82,042 |
| 2013 | $416,566.00$ | 87,614 | 60,919 | 376,475 | 25.91 | 14,530 |
| 2015 | 528.00 | 82 | 57 | 497 | 25.93 | 19 |
| 2016 | $248,959.73$ | 31,079 | 21,610 | 239,798 | 25.94 | 9,244 |
| 2017 | $3,457,802.02$ | 319,029 | 221,826 | $3,408,866$ | 25.95 | 131,363 |
| 2018 | $160,966.13$ | 9,232 | 6,419 | 162,595 | 25.96 | 6,263 |
| 2019 | $9,731.17$ | 193 | 134 | 10,084 | 25.96 | 388 |
|  | $6,752,670.40$ | $1,029,392$ | 715,753 | $6,374,551$ |  |  |
|  |  |  |  |  | $6,410,927$ |  |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 17.4 3.74

## EL PASO ELECTRIC COMPANY

ACCOUNT 313.00 ENGINES AND ENGINE-DRIVEN GENERATORS
CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

NEWMAN UNIT 1
INTERIM SURVIVOR CURVE.. IOWA 55-R2.5
PROBABLE RETIREMENT YEAR.. 12-2022
NET SALVAGE PERCENT.. 0

| 1983 | $316,489.00$ | 291,436 | 316,489 |
| ---: | ---: | ---: | ---: |
| 1992 | $11,008.00$ | 9,897 | 11,008 |
|  | $327,497.00$ | 301,333 | 327,497 |

## NEWMAN UNIT 4

INTERIM SURVIVOR CURVE.. IOWA 55-R2.5
PROBABLE RETIREMENT YEAR.. 12-2026
NET SALVAGE PERCENT.. 0

| 1976 | $9,083,664.12$ | $7,781,158$ | $7,551,507$ | $1,532,158$ | 6.48 | 236,444 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1978 | $14,739.00$ | 12,542 | 12,172 | 2,567 | 6.54 | 393 |
| 1981 | $16,258.00$ | 13,681 | 13,277 | 2,981 | 6.62 | 450 |
| 1982 | $13,482.00$ | 11,300 | 10,966 | 2,516 | 6.64 | 379 |
| 1983 | $103,713.00$ | 86,565 | 84,010 | 19,703 | 6.66 | 2,958 |
| 1994 | $21,573.67$ | 16,851 | 16,354 | 5,220 | 6.83 | 764 |
| 2005 | $269,140.04$ | 180,830 | 175,493 | 93,647 | 6.92 | 13,533 |
| 2006 | $1,214,289.08$ | 797,071 | 773,546 | 440,743 | 6.92 | 63,691 |
| 2007 | $211,049.46$ | 134,795 | 130,817 | 80,233 | 6.93 | 11,578 |
| 2008 | $773,305.00$ | 479,178 | 465,036 | 308,269 | 6.93 | 44,483 |
| 2010 | $1,590,460.00$ | 912,876 | 885,934 | 704,526 | 6.94 | 101,517 |
| 2011 | $23,225.00$ | 12,689 | 12,314 | 10,911 | 6.95 | 1,570 |
| 2012 | $19,378.00$ | 9,993 | 9,698 | 9,680 | 6.95 | 1,393 |
| 2014 | $1,367,730.00$ | 599,421 | 581,730 | 786,000 | 6.96 | 112,931 |
| 2015 | $570,068.00$ | 222,332 | 215,770 | 354,298 | 6.96 | 50,905 |
| 2016 | $3,223,034.91$ | $1,072,271$ | $1,040,624$ | $2,182,411$ | 6.96 | 313,565 |
| 2017 | $602,564.82$ | 157,661 | 153,008 | 449,557 | 6.97 | 64,499 |
| 2019 | $5,662,358.32$ | 378,982 | 367,797 | $5,294,562$ | 6.97 | 759,622 |
|  |  |  |  |  |  |  |
|  | $24,780,032.42$ | $12,880,196$ | $12,500,053$ | $12,279,980$ |  | $1,780,675$ |

NEWMAN UNIT 5
INTERIM SURVIVOR CURVE.. IOWA 55-R2.5
PROBABLE RETIREMENT YEAR.. 12-2045
NET SALVAGE PERCENT.. 0

| 2009 | $31,709,713.19$ | $9,194,548$ | $4,371,672$ | $27,338,041$ | 24.61 | $1,110,851$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2010 | $1,153.00$ | 311 | 148 | 1,005 | 24.70 | 41 |
| 2011 | $1,348.00$ | 334 | 159 | 1,189 | 24.78 | 48 |
| 2012 | $17,187.00$ | 3,868 | 1,839 | 15,348 | 24.86 | 617 |

## EL PASO ELECTRIC COMPANY

ACCOUNT 313.00 ENGINES AND ENGINE-DRIVEN GENERATORS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

NEWMAN UNIT 5
INTERIM SURVIVOR CURVE.. IOWA 55-R2.5
PROBABLE RETIREMENT YEAR.. 12-2045
NET SALVAGE PERCENT.. 0

| 2013 | $3,794,837.00$ | 762,610 | 362,593 | $3,432,244$ | 24.93 | 137,675 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2014 | $59,128.00$ | 10,375 | 4,933 | 54,195 | 25.00 | 2,168 |
| 2015 | $76,615.00$ | 11,328 | 5,386 | 71,229 | 25.07 | 2,841 |
| 2016 | $9,235,878.45$ | $1,097,777$ | 521,953 | $8,713,926$ | 25.13 | 346,754 |
| 2017 | $187,497.81$ | 16,434 | 7,814 | 179,684 | 25.19 | 7,133 |
| 2018 | $1,299,787.62$ | 71,072 | 33,792 | $1,265,995$ | 25.24 | 50,158 |
| 2019 | $2,049,572.36$ | 38,962 | 18,525 | $2,031,047$ | 25.29 | 80,310 |
|  |  |  |  |  | $1,738,596$ |  |
|  | $48,432,717.43$ | $11,207,619$ | $5,328,814$ | $43,103,903$ |  |  |
|  | $73,540,246.85$ | $24,389,148$ | $18,156,364$ | $55,383,883$ |  | $3,519,271$ |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 15.7 4.79

## EL PASO ELECTRIC COMPANY

## ACCOUNT 314.00 TURBOGENERATOR UNITS

## CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

RIO GRANDE UNIT 6
INTERIM SURVIVOR CURVE.. IOWA 75-R2.5
PROBABLE RETIREMENT YEAR.. 12-2021
NET SALVAGE PERCENT.. -5

| 1957 | $2,648,949.00$ | $2,688,053$ | $2,781,396$ |
| :--- | ---: | ---: | ---: |
| 1959 | $87,471.00$ | 88,686 | 91,845 |
| 1960 | $1,740.00$ | 1,763 | 1,827 |
| 1961 | $1,580.00$ | 1,600 | 1,659 |
| 1962 | 407.00 | 412 | 427 |
| 1965 | 87.00 | 88 | 91 |
| 1966 | 944.00 | 953 | 991 |
| 1970 | $1,577.00$ | 1,589 | 1,656 |
| 1973 | $17,661.00$ | 17,749 | 18,544 |
| 1976 | $30,882.00$ | 30,946 | 32,426 |
| 1977 | $5,457.00$ | 5,463 | 5,730 |
| 1979 | $5,726.00$ | 5,720 | 6,012 |
| 1980 | 509.00 | 508 | 534 |
| 1981 | $1,701.00$ | 1,695 | 1,786 |
| 1982 | $4,872.00$ | 4,849 | 5,116 |
| 1983 | $6,687.00$ | 6,647 | 7,021 |
| 1985 | $1,882.00$ | 1,865 | 1,976 |
| 1986 | $1,354.00$ | 1,340 | 1,422 |
| 1987 | $1,532.00$ | 1,513 | 1,609 |
| 1990 | $3,754.00$ | 3,687 | 3,942 |
| 1993 | $509,331.00$ | 496,763 | 534,798 |
| 1994 | 538.01 | 523 | 565 |
| 1995 | $17,943.45$ | 17,403 | 18,841 |
| 1999 | $74,195.78$ | 70,893 | 77,906 |
| 2006 | 26.73 | 24 | 28 |
| 2007 | $13,742.98$ | 12,426 | 14,430 |
| 2008 | $29,363.91$ | 26,234 | 30,832 |
| 2009 | $52,515.00$ | 46,269 | 55,141 |
| 2011 | $4,931.00$ | 4,187 | 5,178 |
| 2015 | $32,638.00$ | 23,693 | 30,339 |
|  |  |  |  |
|  | $3,559,997.86$ | $3,563,541$ | $3,734,067$ |


| 3,931 | 2.00 | 1,966 |
| :--- | :--- | :--- |
| 3,931 |  | 1,966 |

RIO GRANDE UNIT 7
INTERIM SURVIVOR CURVE.. IOWA 75-R2.5
PROBABLE RETIREMENT YEAR.. 12-2022
NET SALVAGE PERCENT.. -5

| 1958 | $2,849,904.00$ | $2,843,049$ | $2,934,942$ | 57,457 | 2.93 | 19,610 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1959 | 300.00 | 299 | 309 | 6 | 2.93 | 2 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 314.00 TURBOGENERATOR UNITS

## CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

RIO GRANDE UNIT 7
INTERIM SURVIVOR CURVE.. IOWA 75-R2.5
PROBABLE RETIREMENT YEAR.. 12-2022
NET SALVAGE PERCENT.. -5

| 1960 | 1,440.00 | 1,435 | 1,481 | 31 | 2.93 | 11 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1961 | 1,580.00 | 1,573 | 1,624 | 35 | 2.94 | 12 |
| 1962 | 407.00 | 405 | 418 | 9 | 2.94 | 3 |
| 1963 | 10,589.00 | 10,525 | 10,865 | 253 | 2.94 | 86 |
| 1965 | 87.00 | 86 | 89 | 3 | 2.95 | 1 |
| 1966 | 944.00 | 936 | 966 | 25 | 2.95 | 8 |
| 1970 | 1,577.00 | 1,557 | 1,607 | 49 | 2.96 | 17 |
| 1973 | 17,661.00 | 17,377 | 17,939 | 605 | 2.96 | 204 |
| 1974 | 106,426.00 | 104,561 | 107,941 | 3,807 | 2.97 | 1,282 |
| 1976 | 30,882.00 | 30, 260 | 31, 238 | 1,188 | 2.97 | 400 |
| 1977 | 5,457.00 | 5,339 | 5,512 | 218 | 2.97 | 73 |
| 1979 | 5,726.00 | 5,585 | 5,766 | 247 | 2.97 | 83 |
| 1980 | 509.00 | 496 | 512 | 22 | 2.97 | 7 |
| 1981 | 1,701.00 | 1,653 | 1,706 | 80 | 2.98 | 27 |
| 1982 | 4,872.00 | 4,726 | 4,879 | 237 | 2.98 | 80 |
| 1983 | 6,687.00 | 6,474 | 6,683 | 338 | 2.98 | 113 |
| 1984 | 1,882.00 | 1,818 | 1,877 | 99 | 2.98 | 33 |
| 1986 | 1,354.00 | 1,302 | 1,344 | 78 | 2.98 | 26 |
| 1987 | 1,532.00 | 1,470 | 1,518 | 91 | 2.98 | 31 |
| 1990 | 3,754.00 | 3,572 | 3,687 | 254 | 2.98 | 85 |
| 1994 | 538.01 | 505 | 521 | 44 | 2.99 | 15 |
| 1995 | 17,943.45 | 16,756 | 17,298 | 1,543 | 2.99 | 516 |
| 1997 | 862,356.73 | 797,651 | 823,433 | 82,042 | 2.99 | 27,439 |
| 1999 | 21, 357.86 | 19,533 | 20,164 | 2,261 | 2.99 | 756 |
| 2005 | 25,662.02 | 22,299 | 23,020 | 3,925 | 2.99 | 1,313 |
| 2006 | 29.40 | 25 | 26 | 5 | 2.99 | 2 |
| 2008 | 12,055.56 | 10,030 | 10,354 | 2,304 | 2.99 | 771 |
| 2016 | 110,958.00 | 62,568 | 64,590 | 51,916 | 3.00 | 17,305 |
| 2019 | 98,195.27 | 14,730 | 15,206 | 87,899 | 3.00 | 29,300 |
|  | 4,204,367.30 | 3,988,595 | 4,117,514 | 297, 071 |  | 99,611 |

RIO GRANDE UNIT 8
INTERIM SURVIVOR CURVE.. IOWA 75-R2.5
PROBABLE RETIREMENT YEAR.. 12-2033
NET SALVAGE PERCENT.. -5

| 1973 | $6,928,400.20$ | $5,568,875$ | $6,921,558$ | 353,263 | 13.09 | 26,987 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1974 | $7,924.00$ | 6,336 | 7,875 | 445 | 13.13 | 34 |
| 1976 | $30,882.00$ | 24,424 | 30,357 | 2,069 | 13.21 | 157 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 314.00 TURBOGENERATOR UNITS

## CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

RIO GRANDE UNIT 8 INTERIM SURVIVOR CURVE.. IOWA 75-R2.5
PROBABLE RETIREMENT YEAR.. 12-2033
NET SALVAGE PERCENT.. -5

| 1977 | $5,457.00$ | 4,292 | 5,335 | 395 | 13.24 | 30 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1978 | $80,616.00$ | 63,013 | 78,319 | 6,328 | 13.28 | 477 |
| 1979 | $5,726.00$ | 4,448 | 5,528 | 484 | 13.31 | 36 |
| 1980 | 509.00 | 393 | 488 | 46 | 13.34 | 3 |
| 1981 | $1,701.00$ | 1,304 | 1,621 | 165 | 13.37 | 12 |
| 1982 | $4,872.00$ | 3,708 | 4,609 | 507 | 13.40 | 38 |
| 1983 | $6,687.00$ | 5,053 | 6,280 | 741 | 13.42 | 55 |
| 1985 | $13,975.00$ | 10,394 | 12,919 | 1,755 | 13.47 | 130 |
| 1986 | $1,354.00$ | 998 | 1,240 | 181 | 13.50 | 13 |
| 1987 | $1,532.00$ | 1,119 | 1,391 | 218 | 13.52 | 16 |
| 1988 | 235.00 | 170 | 211 | 35 | 13.54 | 3 |
| 1990 | $3,754.00$ | 2,662 | 3,309 | 633 | 13.58 | 47 |
| 1993 | $15,179.66$ | 10,384 | 12,906 | 3,032 | 13.64 | 222 |
| 1994 | 538.01 | 363 | 451 | 114 | 13.65 | 8 |
| 1995 | $17,943.46$ | 11,939 | 14,839 | 4,002 | 13.67 | 293 |
| 1999 | $21,357.86$ | 13,270 | 16,493 | 5,932 | 13.73 | 432 |
| 2000 | $2,196,999.57$ | $1,337,558$ | $1,662,452$ | 644,398 | 13.74 | 46,899 |
| 2004 | $376,079.70$ | 206,654 | 256,850 | 138,033 | 13.79 | 10,010 |
| 2005 | $14,749.49$ | 7,849 | 9,756 | 5,731 | 13.80 | 415 |
| 2007 | $20,450.85$ | 10,090 | 12,541 | 8,933 | 13.82 | 646 |
| 2008 | $140,999.30$ | 66,507 | 82,662 | 65,388 | 13.83 | 4,728 |
| 2010 | $3,186.00$ | 1,346 | 1,673 | 1,672 | 13.85 | 121 |
| 2011 | 142.00 | $54,453.00$ | 27,998 | 34,799 | 53,877 | 13.85 |
| 2013 | 84 | 32,810 | 40,780 | 94,599 | 13.88 | 6 |
| 2015 | $128,932.00$ | $74,204.00$ | 15,502 | 19,267 | 58,647 | 13.89 |

NEWMAN UNIT 1
INTERIM SURVIVOR CURVE.. IOWA 75-R2.5
PROBABLE RETIREMENT YEAR.. 12-2022
NET SALVAGE PERCENT.. -5

| 1960 | $3,591,429.01$ | $3,578,114$ | $3,607,185$ | 163,815 | 2.93 | 55,910 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1963 | $4,924.00$ | 558.00 | 4,894 | 5,934 | 236 | 2.94 |
| 1966 | $5,143.00$ | 5,089 | 557 | 28 | 2.95 | 80 |
| 1968 | 5,130 | 270 | 2.95 | 9 |  |  |
|  |  |  |  | 92 |  |  |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 314.00 TURBOGENERATOR UNITS

## CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

NEWMAN UNIT 1
INTERIM SURVIVOR CURVE.. IOWA 75-R2.5
PROBABLE RETIREMENT YEAR.. 12-2022
NET SALVAGE PERCENT.. -5

| 1972 | 168,741.00 | 166,223 | 167,574 | 9,605 | 2.96 | 3,245 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1976 | 582.00 | 570 | 575 | 36 | 2.97 | 12 |
| 1977 | 336.00 | 329 | 332 | 21 | 2.97 | 7 |
| 1980 | 5,191.00 | 5,055 | 5,096 | 354 | 2.97 | 119 |
| 1981 | 2,376.00 | 2,309 | 2,328 | 167 | 2.98 | 56 |
| 1982 | 3,363.00 | 3,262 | 3,289 | 243 | 2.98 | 82 |
| 1983 | 32,328.00 | 31,298 | 31,552 | 2,392 | 2.98 | 803 |
| 1990 | 477.00 | 454 | 458 | 43 | 2.98 | 14 |
| 1993 | 876,964.00 | 825,646 | 832,354 | 88,458 | 2.99 | 29,585 |
| 1995 | 1,310, 387.34 | 1,223,704 | 1,233,646 | 142,260 | 2.99 | 47,579 |
| 1999 | 1,184.21 | 1,083 | 1, 092 | 152 | 2.99 | 51 |
| 2000 | 1,960,390.13 | 1,781,430 | 1,795,904 | 262,506 | 2.99 | 87,795 |
| 2001 | 8,542.98 | 7,708 | 7,771 | 1,200 | 2.99 | 401 |
| 2004 | 97,010.48 | 85,236 | 85,929 | 15,932 | 2.99 | 5,328 |
| 2006 | 1,191,724.24 | 1,022,621 | 1,030,930 | 220,381 | 2.99 | 73,706 |
| 2007 | 52,088.00 | 44,060 | 44,418 | 10,274 | 2.99 | 3,436 |
| 2010 | 8,959.00 | 7,144 | 7,202 | 2,205 | 2.99 | 737 |
| 2011 | 38,896.00 | 30,167 | 30,412 | 10,429 | 2.99 | 3,488 |
| 2014 | 3,235,641.00 | 2,194,090 | 2,211,916 | 1,185,507 | 3.00 | 395,169 |
| 2016 | 165,785.00 | 93,485 | 94,245 | 79,830 | 3.00 | 26,610 |
| 2017 | 137,126.94 | 65,304 | 65,835 | 78,149 | 3.00 | 26,050 |
| 2018 | 612,068.49 | 213, 271 | 215,004 | 427,668 | 3.00 | 142,556 |
| 2019 | 204,167.57 | 30,626 | 30,875 | 183,501 | 3.00 | 61,167 |
|  | 13, 716, 383.39 | 11,423,725 | 11,516,540 | 2,885,663 |  | 964, 087 |

NEWMAN UNIT 2
INTERIM SURVIVOR CURVE.. IOWA 75-R2.5
PROBABLE RETIREMENT YEAR.. 12-2022
NET SALVAGE PERCENT.. -5

| 1962 | $2,744,836.55$ | $2,730,279$ | $2,763,783$ | 118,295 | 2.94 | 40,236 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1963 | $131,311.00$ | 130,515 | 132,117 | 5,760 | 2.94 | 1,959 |
| 1966 | 559.00 | 554 | 561 | 26 | 2.95 | 9 |
| 1968 | $5,143.00$ | 582.00 | 3,089 | 56.00 | 570 | 329 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 314.00 TURBOGENERATOR UNITS

## CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

NEWMAN UNIT 2
INTERIM SURVIVOR CURVE.. IOWA 75-R2.5
PROBABLE RETIREMENT YEAR.. 12-2022
NET SALVAGE PERCENT.. -5

| 1983 | 349.00 | 377.00 | 338 | 342 | 24 | 2.98 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1990 | $1,301,972.32$ | $1,215,846$ | $1,230,766$ | 460 | 2.98 | 8 |
| 1995 | $1,184.19$ | 1,083 | 1,096 | 136,305 | 2.99 | 45,587 |
| 1999 | $662,637.90$ | 602,147 | 609,536 | 86,234 | 2.99 | 49 |
| 2000 | $869,304.19$ | 784,334 | 793,959 | 118,811 | 2.99 | 39,736 |
| 2001 | $66,777.11$ | 58,672 | 59,392 | 10,724 | 2.99 | 3,587 |
| 2004 | $1,912,890.75$ | $1,662,204$ | $1,682,601$ | 325,934 | 2.99 | 109,008 |
| 2005 | 243.00 | 194 | 196 | 59 | 2.99 | 20 |
| 2010 | $1,825,074$ | $1,847,470$ | 978,553 | 3.00 | 326,184 |  |
| 2014 | $2,691,450.00$ | $23,176.00$ | 14,575 | 14,754 | 9,581 | 3.00 |
| 2015 | $924,840.31$ | 322,254 | 326,208 | 644,874 | 3.00 | 214,958 |
| 2018 | $90,310.24$ | 13,547 | 13,713 | 81,113 | 3.00 | 27,038 |
| 2019 |  |  |  |  |  |  |
|  | $11,439,309.56$ | $9,378,684$ | $9,493,772$ | $2,517,503$ |  | 840,772 |

NEWMAN UNIT 3
INTERIM SURVIVOR CURVE.. IOWA 75-R2.5
PROBABLE RETIREMENT YEAR.. 12-2026
NET SALVAGE PERCENT.. -5
1966
1967
1968
1976
1977
1980
1981
1982
1983
1990
1994
1995
1999
2001
2005
2007
2008
2009
2010
$3,748,861.00$
$222,425.00$
$5,143.00$
582.00
335.00
$5,191.00$
$2,376.00$
$3,363.00$
349.00
477.00
$430,949.75$
$1,282,857.32$
$56,979.76$
$8,542.95$
$42,346.06$
$70,776.72$
$315,516.15$
$679,380.00$
$2,169.00$
$3,462,412$
205,005
4,730
524
301
4,611
2,102
2,964
306
403
353,907
$1,044,127$
44,468
6,487
29,900
47,516
205,431
427,025
1,307
$3,500,849$
207,281
4,783
530
304
4,662
2,125
2,997
309
407
357,836
$1,055,718$
44,962
6,559
30,232
48,043
207,712
431,765
1,322
435,455
26,265
618
81
47
788
369
534
57
93
94,661
291,282
14,867
2,411
14,231
26,272
123,580
281,584
956
6.72

64, 800
6.73 3,903

| 6.74 | 92 |
| :--- | :--- |
| 6.82 | 12 |

$6.83 \quad 7$
$\begin{array}{ll}6.85 & 115\end{array}$
$\begin{array}{ll}6.86 & 54 \\ 6.87 & 78\end{array}$
6.87

8
$6.91 \quad 13$
$6.92 \quad 13,679$
$\begin{array}{lr}6.93 & 42,032 \\ 6.94 & 2,142\end{array}$
$6.95 \quad 347$
$6.96 \quad 2,045$
$\begin{array}{lr}6.96 & 3,775 \\ 6.96 & 17,756\end{array}$
$\begin{array}{ll}6.96 & 17,756 \\ 6.96 & 40,457\end{array}$
$956 \quad 6.97 \quad 137$

## EL PASO ELECTRIC COMPANY

## ACCOUNT 314.00 TURBOGENERATOR UNITS

## CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

NEWMAN UNIT 3
INTERIM SURVIVOR CURVE.. IOWA 75-R2.5
PROBABLE RETIREMENT YEAR.. 12-2026
NET SALVAGE PERCENT.. -5

| 2011 | $5,154.00$ | 2,959 | 2,992 | 2,420 | 6.97 | 347 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2013 | $48,273.00$ | 24,342 | 24,612 | 26,074 | 6.97 | 3,741 |
| 2014 | $103,176.00$ | 47,587 | 48,115 | 60,220 | 6.97 | 8,640 |
| 2015 | $171,938.00$ | 70,540 | 71,323 | 109,212 | 6.97 | 15,669 |
| 2016 | $69,037.00$ | 24,071 | 24,338 | 48,151 | 6.98 | 6,898 |
| 2017 | $322,753.76$ | 88,844 | 89,830 | 249,061 | 6.98 | 35,682 |
| 2018 | $3,172,214.38$ | 585,925 | 592,429 | $2,738,396$ | 6.98 | 392,320 |
| 2019 | $1,318,699.25$ | 92,549 | 93,576 | $1,291,058$ | 6.98 | 184,965 |
|  |  |  |  |  |  | $8,839,714$ |

NEWMAN UNIT 4
INTERIM SURVIVOR CURVE.. IOWA 75-R2.5
PROBABLE RETIREMENT YEAR.. 12-2026
NET SALVAGE PERCENT.. -5

| 1975 | $8,169,644.93$ | $7,378,819$ | $8,578,127$ |
| :--- | ---: | ---: | ---: |
| 1977 | 336.00 | 302 | 353 |
| 1978 | $54,860.00$ | 49,071 | 57,603 |
| 1979 | $169,001.00$ | 150,668 | 177,451 |
| 1980 | $5,191.00$ | 4,611 | 5,451 |
| 1981 | $3,117.00$ | 2,758 | 3,273 |
| 1982 | $3,363.00$ | 2,964 | 3,531 |
| 1983 | 424.00 | 372 | 445 |
| 1990 | 477.00 | 403 | 501 |
| 1995 | $1,362,236.32$ | $1,108,734$ | $1,405,311$ |
| 1996 | $7,236,555.43$ | $5,836,090$ | $7,397,194$ |
| 1999 | $1,184.19$ | 924 | 1,171 |
| 2000 | $834,457.14$ | 642,932 | 814,911 |
| 2001 | $3,211,265.78$ | $2,438,574$ | $3,090,872$ |
| 2004 | $2,805,168.50$ | $2,024,156$ | $2,565,600$ |
| 2006 | $220,841.69$ | 152,264 | 192,993 |
| 2007 | $1,271,795.15$ | 853,818 | $1,082,207$ |
| 2008 | $42,965.05$ | 27,974 | 35,457 |
| 2009 | $3,200,491.00$ | $2,011,672$ | $2,549,777$ |
| 2010 | $26,199.00$ | 15,789 | 20,012 |
| 2012 | $1,468,751.00$ | 795,723 | $1,008,572$ |
| 2016 | $3,454,586.15$ | $1,204,486$ | $1,526,676$ |

25,037
201,189
72
61,269
280,958
379,827
38,890
253,178
9,656
810,739
7,497
533,616
$2,100,640$

| 6.93 | 3,613 |
| :--- | ---: |
| 6.93 | 29,032 |
| 6.94 | 10 |
| 6.94 | 8,828 |
| 6.95 | 40,426 |
| 6.95 | 54,651 |
| 6.96 | 5,588 |
| 6.96 | 36,376 |
| 6.96 | 1,387 |
| 6.96 | 116,485 |
| 6.97 | 1,076 |
| 6.97 | 76,559 |
| 6.98 | 300,951 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 314.00 TURBOGENERATOR UNITS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

NEWMAN UNIT 4
INTERIM SURVIVOR CURVE.. IOWA 75-R2.5
PROBABLE RETIREMENT YEAR.. 12-2026
NET SALVAGE PERCENT.. -5

| 2017 | $67,288.64$ | 18,522 | 23,476 | 47,177 | 6.98 | 6,759 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2018 | $254,135.82$ | 46,940 | 59,496 | 207,347 | 6.98 | 29,706 |
| 2019 | $104,639.89$ | 7,344 | 9,308 | 100,563 | 6.98 | 14,407 |
|  |  |  |  |  |  |  |
|  | $33,968,974.68$ | $24,775,910$ | $30,609,768$ | $5,057,655$ |  | 725,854 |

NEWMAN UNIT 5
INTERIM SURVIVOR CURVE.. IOWA 75-R2.5
PROBABLE RETIREMENT YEAR.. 12-2045
NET SALVAGE PERCENT.. -5

| 2011 | $38,397,553.01$ | $9,914,459$ | $7,770,954$ | $32,546,476$ | 25.36 | $1,283,378$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2012 | $156,960.00$ | 36,843 | 28,878 | 135,930 | 25.39 | 5,354 |
| 2016 | $148,338.99$ | 18,413 | 14,432 | 141,324 | 25.51 | 5,540 |
| 2017 | $21,483,821.45$ | $1,975,180$ | $1,548,146$ | $21,009,866$ | 25.53 | 822,948 |
| 2018 | $1,001,016.75$ | 57,157 | 44,800 | $1,006,268$ | 25.56 | 39,369 |
| 2019 | $463,281.94$ | 9,145 | 7,168 | 479,278 | 25.58 | 18,736 |
|  |  |  |  |  |  | $2,175,325$ |

NEWMAN COMMON
INTERIM SURVIVOR CURVE.. IOWA 75-R2.5
PROBABLE RETIREMENT YEAR.. 12-2045
NET SALVAGE PERCENT. . 5

| 2009 | $30,272.00$ | 9,135 | 31,786 |  |  |
| ---: | ---: | ---: | :---: | :---: | :---: |
| 2019 | $27,824.94$ | 549 | 75,844 | $46,628-$ |  |
|  | $58,096.94$ | 9,684 | 107,629 | $46,628-$ |  |

## EL PASO ELECTRIC COMPANY

ACCOUNT 315.00 ACCESSORY ELECTRIC EQUIPMENT
CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

RIO GRANDE UNIT 6
INTERIM SURVIVOR CURVE.. IOWA 65-S4
PROBABLE RETIREMENT YEAR.. 12-2021
NET SALVAGE PERCENT. . -5

| 1957 | 532,902.00 | 542,072 | 520, 284 | 39,263 | 1.88 | 20,885 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1959 | 2,400.00 | 2,439 | 2,341 | 179 | 1.90 | 94 |
| 1960 | 841.00 | 854 | 820 | 63 | 1.91 | 33 |
| 1961 | 92.00 | 93 | 89 | 7 | 1.91 | 4 |
| 1966 | 8.00 | 8 | 8 |  |  |  |
| 1967 | 12.00 | 12 | 12 | 1 | 1.95 | 1 |
| 1969 | 537.00 | 542 | 520 | 44 | 1.96 | 22 |
| 1972 | 659.00 | 664 | 637 | 55 | 1.97 | 28 |
| 1974 | 470.00 | 473 | 454 | 40 | 1.98 | 20 |
| 1976 | 1,545.00 | 1,551 | 1,489 | 134 | 1.99 | 67 |
| 1983 | 112.00 | 111 | 107 | 11 | 2.00 | 6 |
| 1984 | 8,814.00 | 8,761 | 8,409 | 846 | 2.00 | 423 |
| 1986 | 17,443.00 | 17,283 | 16,588 | 1,727 | 2.00 | 864 |
| 1988 | 10,329.00 | 10,198 | 9,788 | 1,057 | 2.00 | 528 |
| 1994 | 10,166.61 | 9,899 | 9,501 | 1,174 | 2.00 | 587 |
| 1997 | 14,870.91 | 14,340 | 13,764 | 1,851 | 2.00 | 926 |
| 2001 | 71,186.11 | 67,453 | 64,742 | 10,004 | 2.00 | 5,002 |
| 2007 | 49,835.30 | 45,110 | 43,297 | 9,030 | 2.00 | 4,515 |
| 2008 | 2,751.42 | 2,461 | 2,362 | 527 | 2.00 | 264 |
| 2010 | 64.00 | 56 | 54 | 13 | 2.00 | 6 |
| 2011 | 1.00 | 1 | 1 |  |  |  |
| 2014 | 59,220.00 | 45,599 | 43,766 | 18,415 | 2.00 | 9,208 |
|  | 784,259.35 | 769,980 | 739, 032 | 84,440 |  | 43,483 |

RIO GRANDE UNIT 7
INTERIM SURVIVOR CURVE.. IOWA 65-S4
PROBABLE RETIREMENT YEAR.. 12-2022
NET SALVAGE PERCENT.. -5

| 1958 | 483,575.00 | 484,473 | 461,284 | 46,470 | 2.76 | 16,837 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1959 | 5,863.00 | 5,870 | 5,589 | 567 | 2.77 | 205 |
| 1960 | 841.00 | 841 | 801 | 82 | 2.79 | 29 |
| 1961 | 92.00 | 92 | 88 | 9 | 2.81 | 3 |
| 1966 | 8.00 | 8 | 8 |  |  |  |
| 1967 | 12.00 | 12 | 11 | 1 | 2.89 |  |
| 1969 | 537.00 | 533 | 507 | 56 | 2.91 | 19 |
| 1971 | 659.00 | 652 | 621 | 71 | 2.93 | 24 |
| 1974 | 470.00 | 463 | 441 | 53 | 2.95 | 18 |
| 1977 | 1,545.00 | 1,516 | 1,443 | 179 | 2.97 | 60 |

## EL PASO ELECTRIC COMPANY

ACCOUNT 315.00 ACCESSORY ELECTRIC EQUIPMENT
CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

RIO GRANDE UNIT 7
INTERIM SURVIVOR CURVE.. IOWA 65-S4
PROBABLE RETIREMENT YEAR.. 12-2022
NET SALVAGE PERCENT. . -5

| 1983 | 112.00 | 109 | 104 | 14 | 2.99 | 5 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1985 | $8,814.00$ | 8,514 | 8,106 | 1,148 | 3.00 | 383 |
| 1990 | $27,680.00$ | 26,381 | 25,118 | 3,946 | 3.00 | 1,315 |
| 1994 | $10,166.61$ | 9,551 | 9,094 | 1,581 | 3.00 | 527 |
| 1997 | $14,870.91$ | 13,777 | 13,118 | 2,497 | 3.00 | 832 |
| 2008 | $5,154.23$ | 4,292 | 4,087 | 1,325 | 3.00 | 442 |
| 2009 | 184.00 | 469.00 | 150 | 352 | 143 | 50 |
| 2012 | $70,143.00$ | 47,656 | 45,375 | 3.00 | 17 |  |
| 2014 | $24,070.00$ | 15,164 | 14,438 | 28,275 | 3.00 | 52 |
| 2015 | $144,074.26$ | 50,425 | 48,011 | 10,835 | 3.00 | 9,425 |
| 2018 | $57,347.82$ | 8,602 | 8,190 | 52,025 | 3.00 | 3,612 |
| 2019 |  |  |  |  | 3,00 | 34,422 |
|  | $856,687.83$ | 679,433 | 646,912 | 252,610 |  | 85,569 |

RIO GRANDE UNIT 8
INTERIM SURVIVOR CURVE.. IOWA 65-S4
PROBABLE RETIREMENT YEAR.. 12-2033
NET SALVAGE PERCENT.. -5

| 1973 | 672,084.55 | 556,894 | 591, 081 | 114,607 | 12.20 | 9,394 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1976 | 1,545.00 | 1,252 | 1,329 | 293 | 12.72 | 23 |
| 1983 | 112.00 | 86 | 91 | 26 | 13.55 | 2 |
| 1985 | 13,423.00 | 10,088 | 10,707 | 3,387 | 13.69 | 247 |
| 1986 | 18, 932.00 | 14,090 | 14,955 | 4,924 | 13.75 | 358 |
| 1987 | 2,176.00 | 1,604 | 1,702 | 582 | 13.80 | 42 |
| 1994 | 10,166.61 | 6,897 | 7,320 | 3,355 | 13.97 | 240 |
| 1995 | 187.51 | 125 | 133 | 64 | 13.98 | 5 |
| 1997 | 14,870.91 | 9,628 | 10,219 | 5,395 | 13.99 | 386 |
| 1999 | 46,243.03 | 28,860 | 30,632 | 17,923 | 13.99 | 1,281 |
| 2004 | 1,167,106.75 | 643, 882 | 683,409 | 542, 053 | 14.00 | 38,718 |
| 2010 | 608,846.00 | 258,439 | 274,304 | 364,984 | 14.00 | 26,070 |
| 2013 | 15, 816.00 | 5,266 | 5,589 | 11,018 | 14.00 | 787 |
| 2015 | 864,898.37 | 220,897 | 234,458 | 673,686 | 14.00 | 48,120 |
| 2016 | 2,746.00 | 577 | 612 | 2,271 | 14.00 | 162 |
| 2018 | 243,748.16 | 24,767 | 26,287 | 229,648 | 14.00 | 16,403 |
| 2019 | 2,852,620.73 | 103,276 | 109,616 | 2,885,636 | 14.00 | 206,117 |
|  | 6,535,522.62 | 1,886,628 | 2,002,447 | 4,859,852 |  | 348, 355 |

## EL PASO ELECTRIC COMPANY

ACCOUNT 315.00 ACCESSORY ELECTRIC EQUIPMENT
CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

NEWMAN UNIT 1
INTERIM SURVIVOR CURVE.. IOWA 65-S4
PROBABLE RETIREMENT YEAR.. 12-2022
NET SALVAGE PERCENT. . -5

| 1960 | $869,064.00$ | 869,437 | 879,644 | 32,873 | 2.79 | 11,782 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| 1962 | $1,856.00$ | 1,854 | 1,876 | 73 | 2.82 | 26 |
| 1963 | $24,005.00$ | 23,954 | 24,235 | 970 | 2.84 | 342 |
| 1966 | $1,099.00$ | 272.00 | 1,094 | 270 | 1,107 | 273 |
| 1968 | 263.00 | 260 | 263 | 12 | 2.90 | 16 |
| 1971 | $3,066.00$ | 13.00 | 3,008 | 3,043 | 13 | 2.93 |
| 1977 | 267.00 | 13 | 259 | 13 | 176 | 2.97 |
| 1979 | $4,004.00$ | 244.00 | 3,859 | 235 | 3,904 |  |
| 1983 | $39,539.00$ | 37,905 | 38,350 | 18 | 2.99 | 4 |
| 1986 | $9,398.00$ | 8,897 | 9,001 | 300 | 3.00 | 59 |
| 1987 | $180,019.73$ | 169,124 | 171,109 | 18 | 3.00 | 6 |
| 1988 | $11,623.01$ | 10,873 | 11,001 | 17,911 | 3.00 | 100 |
| 1992 | $3,442.45$ | 3,189 | 3,226 | 1,204 | 3.00 | 6 |
| 1994 |  |  |  | 388 | 3.00 | 5,970 |
| 1995 |  |  |  |  | 4,055 |  |
| 1997 | $148,175.19$ | $1,134,231$ | $1,147,547$ | 58,037 |  | 129 |

NEWMAN UNIT 2
INTERIM SURVIVOR CURVE.. IOWA 65-S4
PROBABLE RETIREMENT YEAR.. 12-2022
NET SALVAGE PERCENT. . -5

| 1962 | 859,299.00 | 858,288 | 868,800 | 33,464 | 2.82 | 11,867 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1963 | 73,114.00 | 72,957 | 73,851 | 2,919 | 2.84 | 1,028 |
| 1966 | 1, 099.00 | 1,094 | 1,107 | 47 | 2.88 | 16 |
| 1968 | 273.00 | 271 | 274 | 12 | 2.90 | 4 |
| 1972 | 263.00 | 260 | 263 | 13 | 2.94 | 4 |
| 1977 | 3,066.00 | 3,008 | 3,045 | 174 | 2.97 | 59 |
| 1980 | 13.00 | 13 | 13 |  |  |  |
| 1983 | 267.00 | 259 | 262 | 18 | 2.99 | 6 |
| 1985 | 5,624.00 | 5,433 | 5,500 | 406 | 3.00 | 135 |
| 1986 | 4, 004.00 | 3,859 | 3,906 | 298 | 3.00 | 99 |
| 1987 | 244.00 | 235 | 238 | 18 | 3.00 | 6 |
| 1988 | 2,017.00 | 1,934 | 1,958 | 160 | 3.00 | 53 |
| 1990 | 16,331.00 | 15,565 | 15,756 | 1,392 | 3.00 | 464 |
| 1994 | 1,457.55 | 1,369 | 1,386 | 145 | 3.00 | 48 |

## EL PASO ELECTRIC COMPANY

ACCOUNT 315.00 ACCESSORY ELECTRIC EQUIPMENT
CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

NEWMAN UNIT 2
INTERIM SURVIVOR CURVE.. IOWA 65-S4
PROBABLE RETIREMENT YEAR.. 12-2022
NET SALVAGE PERCENT. . -5

| 1995 | $11,623.01$ | 10,873 | 11,006 | 1,198 | 3.00 | 399 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1997 | $3,442.45$ | 3,189 | 3,228 | 387 | 3.00 | 129 |
| 2005 | $70,818.46$ | 61,612 | 62,367 | 11,993 | 3.00 | 3,998 |
|  |  |  |  |  |  |  |
|  | $1,052,955.47$ | $1,040,219$ | $1,052,959$ | 52,644 | 18,315 |  |

NEWMAN UNIT 3
INTERIM SURVIVOR CURVE.. IOWA 65-S4
PROBABLE RETIREMENT YEAR.. 12-2026
NET SALVAGE PERCENT. . -5

| 1966 | 700,883.00 | 656,307 | 661,424 | 74,503 | 6.26 | 11,901 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1967 | 43,632.00 | 40,743 | 41, 061 | 4,753 | 6.33 | 751 |
| 1968 | 273.00 | 254 | 256 | 31 | 6.39 | 5 |
| 1971 | 263.00 | 243 | 245 | 31 | 6.56 | 5 |
| 1977 | 3, 066.00 | 2,773 | 2,795 | 425 | 6.81 | 62 |
| 1980 | 13.00 | 12 | 12 | 2 | 6.89 |  |
| 1983 | 267.00 | 236 | 238 | 43 | 6.94 | 6 |
| 1985 | 5,624.00 | 4,913 | 4,951 | 954 | 6.96 | 137 |
| 1986 | 4,004.00 | 3,480 | 3,507 | 697 | 6.97 | 100 |
| 1987 | 244.00 | 211 | 213 | 44 | 6.98 | 6 |
| 1988 | 12,748.00 | 10,957 | 11,042 | 2,343 | 6.98 | 336 |
| 1990 | 18,788.00 | 15,948 | 16,072 | 3,655 | 6.99 | 523 |
| 1994 | 1,457.55 | 1,201 | 1,210 | 320 | 7.00 | 46 |
| 1995 | 5,603.01 | 4,576 | 4,612 | 1,271 | 7.00 | 182 |
| 1997 | 3,442.45 | 2,757 | 2,778 | 836 | 7.00 | 119 |
| 2018 | 87,961.49 | 16,299 | 16,426 | 75,933 | 7.00 | 10,848 |
| 2019 | 262,622.46 | 18,384 | 18,527 | 257, 226 | 7.00 | 36,747 |
|  | 1,150,891.96 | 779,294 | 785,370 | 423, 067 |  | 61,774 |

NEWMAN UNIT 4
INTERIM SURVIVOR CURVE.. IOWA 65-S4
PROBABLE RETIREMENT YEAR.. 12-2026
NET SALVAGE PERCENT.. -5

| 1975 | $6,121,853.00$ | $5,576,307$ | $6,132,219$ | 295,727 | 6.74 | 43,876 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1977 | $3,066.00$ | 13.00 | 2,773 | 12 | 3,049 | 170 |
| 1980 | $33,017.00$ | 29,124 | 32,027 | 6.81 | 25 |  |
| 1983 |  | 2,640 | 6.94 | 380 |  |  |

## EL PASO ELECTRIC COMPANY

ACCOUNT 315.00 ACCESSORY ELECTRIC EQUIPMENT
CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

NEWMAN UNIT 4
INTERIM SURVIVOR CURVE.. IOWA 65-S4
PROBABLE RETIREMENT YEAR.. 12-2026
NET SALVAGE PERCENT.. -5

| 1985 | $36,788.00$ | 32,140 | 35,344 | 3,283 | 6.96 | 472 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1986 | $56,525.00$ | 49,124 | 54,021 | 5,330 | 6.97 | 765 |
| 1987 | $33,956.00$ | 29,349 | 32,275 | 3,379 | 6.98 | 484 |
| 1988 | $27,685.00$ | 23,796 | 26,168 | 2,901 | 6.98 | 416 |
| 1994 | $1,457.55$ | 1,201 | 1,321 | 210 | 7.00 | 30 |
| 1995 | $11,623.01$ | 9,492 | 10,438 | 1,766 | 7.00 | 252 |
| 1997 | $3,442.45$ | 2,757 | 3,032 | 583 | 7.00 | 83 |
| 2000 | $3,312.77$ | 24.00 | 2,560 | 14 | 2,815 | 663 |
| 2011 |  | 15 | 7.00 | 95 |  |  |
|  |  |  | 10 | 7.00 | 1 |  |

$6,332,762.78 \quad 5,758,649 \quad 6,332,739 \quad 316,662 \quad 46,879$

NEWMAN UNIT 5
INTERIM SURVIVOR CURVE.. IOWA 65-S4
PROBABLE RETIREMENT YEAR.. 12-2045
NET SALVAGE PERCENT. . 5

| 2009 | $7,527,349.00$ | $2,274,294$ | $2,343,787$ | $5,559,929$ | 25.99 | 213,926 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2011 | $12,308,989.00$ | $3,185,228$ | $3,282,555$ | $9,641,883$ | 25.99 | 370,984 |
| 2017 | $46,588.25$ | 4,291 | 4,422 | 44,496 | 26.00 | 1,711 |
| 2019 | $4,215,650.49$ | 83,527 | 86,079 | $4,340,354$ | 26.00 | 166,937 |
|  |  |  |  |  |  |  |
|  | $24,098,576.74$ | $5,547,340$ | $5,716,844$ | $19,586,662$ |  | 753,558 |

## NEWMAN COMMON

INTERIM SURVIVOR CURVE.. IOWA 65-S4
PROBABLE RETIREMENT YEAR.. 12-2045
NET SALVAGE PERCENT.. -5
$\left.\begin{array}{rrrrrr}2019 & 157,236.60 & 3,115 & 4 & 165,095 & 26.00\end{array}\right] 6,350$

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 18.6 3.29

## EL PASO ELECTRIC COMPANY

## ACCOUNT 316.00 MISCELLANEOUS POWER PLANT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

RIO GRANDE UNIT 6
INTERIM SURVIVOR CURVE.. IOWA 70-S2.5
PROBABLE RETIREMENT YEAR.. 12-2021
NET SALVAGE PERCENT. . -5

| 1957 | 52,277.00 | 53, 088 | 54,867 | 24 | 1.94 | 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1959 | 13,613.00 | 13,812 | 14,275 | 19 | 1.95 | 10 |
| 1960 | 136.00 | 138 | 143 |  |  |  |
| 1961 | 4,013.00 | 4,068 | 4,204 | 9 | 1.95 | 5 |
| 1962 | 872.00 | 884 | 914 | 2 | 1.95 | 1 |
| 1963 | 553.00 | 560 | 579 | 2 | 1.96 | 1 |
| 1964 | 57.00 | 58 | 60 |  |  |  |
| 1965 | 357.00 | 361 | 373 | 2 | 1.96 | 1 |
| 1966 | 4,634.00 | 4,685 | 4,842 | 24 | 1.96 | 12 |
| 1967 | 1,278.00 | 1,291 | 1,334 | 8 | 1.96 | 4 |
| 1968 | 27,848.00 | 28,118 | 29,060 | 180 | 1.97 | 91 |
| 1969 | 1,680.00 | 1,695 | 1,752 | 12 | 1.97 | 6 |
| 1972 | 1,004.00 | 1,011 | 1,045 | 9 | 1.97 | 5 |
| 1974 | 3,781.00 | 3,800 | 3,927 | 43 | 1.98 | 22 |
| 1975 | 2,141.00 | 2,150 | 2,222 | 26 | 1.98 | 13 |
| 1976 | 1,076.00 | 1,080 | 1,116 | 14 | 1.98 | 7 |
| 1977 | 1,382.00 | 1,385 | 1,431 | 20 | 1.98 | 10 |
| 1978 | 2,785.00 | 2,789 | 2,882 | 42 | 1.98 | 21 |
| 1979 | 18,411.00 | 18,417 | 19, 034 | 297 | 1.98 | 150 |
| 1981 | 13,943.00 | 13,912 | 14,378 | 262 | 1.99 | 132 |
| 1982 | 30,252.00 | 30,146 | 31,156 | 608 | 1.99 | 306 |
| 1983 | 2,021.00 | 2,011 | 2,078 | 44 | 1.99 | 22 |
| 1985 | 14,928.00 | 14,813 | 15,309 | 365 | 1.99 | 183 |
| 1987 | 23,234.00 | 22,980 | 23,750 | 646 | 1.99 | 325 |
| 1990 | 3,347.00 | 3,291 | 3,401 | 113 | 1.99 | 57 |
| 1992 | 7,334.00 | 7,177 | 7,417 | 283 | 2.00 | 142 |
| 1993 | 457.95 | 447 | 462 | 19 | 2.00 | 10 |
| 1994 | 37,774.22 | 36,772 | 38,004 | 1,659 | 2.00 | 830 |
| 1995 | 17,295.97 | 16,788 | 17,351 | 810 | 2.00 | 405 |
| 1996 | 716,873.22 | 693,591 | 716,832 | 35,885 | 2.00 | 17,942 |
| 1997 | 71,598.68 | 69, 034 | 71,347 | 3,831 | 2.00 | 1,916 |
| 1998 | 133,175.54 | 127,918 | 132,204 | 7,630 | 2.00 | 3,815 |
| 1999 | 40,752.51 | 38,983 | 40,289 | 2,501 | 2.00 | 1,250 |
| 2000 | 110,502.00 | 105,224 | 108,750 | 7,277 | 2.00 | 3,638 |
| 2001 | 108,657.88 | 102,954 | 106,404 | 7,687 | 2.00 | 3,844 |
| 2011 | 133.00 | 113 | 117 | 23 | 2.00 | 12 |
| 2012 | 12,898.00 | 10,692 | 11,050 | 2,493 | 2.00 | 1,246 |
| 2014 | 6,288.00 | 4,842 | 5,004 | 1,598 | 2.00 | 799 |
|  | 1,489, 363.97 | 1,441, 078 | 1,489,365 | 74,467 |  | 37,245 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 316.00 MISCELLANEOUS POWER PLANT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

RIO GRANDE UNIT 7
INTERIM SURVIVOR CURVE.. IOWA 70-S2.5
PROBABLE RETIREMENT YEAR.. 12-2022
NET SALVAGE PERCENT. . 5

| 1958 | 19,151.00 | 19,131 | 20,109 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1959 | 4,741.00 | 4,733 | 4,978 |  |  |  |
| 1960 | 136.00 | 136 | 143 |  |  |  |
| 1961 | 4,014.00 | 4,002 | 4,215 |  |  |  |
| 1962 | 872.00 | 869 | 916 |  |  |  |
| 1963 | 553.00 | 550 | 581 |  |  |  |
| 1964 | 57.00 | 57 | 60 |  |  |  |
| 1965 | 357.00 | 355 | 375 |  |  |  |
| 1966 | 4,634.00 | 4,601 | 4,866 |  |  |  |
| 1967 | 1,278.00 | 1,268 | 1,342 |  |  |  |
| 1968 | 27,848.00 | 27,601 | 29,240 |  |  |  |
| 1969 | 1,680.00 | 1,663 | 1,764 |  |  |  |
| 1972 | 1,004.00 | 991 | 1,054 |  |  |  |
| 1974 | 3,781.00 | 3,722 | 3,970 |  |  |  |
| 1975 | 2,141.00 | 2,105 | 2,248 |  |  |  |
| 1976 | 1,076.00 | 1,056 | 1,130 |  |  |  |
| 1977 | 1,382.00 | 1,355 | 1,451 |  |  |  |
| 1978 | 2,785.00 | 2,726 | 2,924 |  |  |  |
| 1979 | 18,411.00 | 17,993 | 19,332 |  |  |  |
| 1981 | 13,943.00 | 13,577 | 14,640 |  |  |  |
| 1982 | 30,252.00 | 29,405 | 31,765 |  |  |  |
| 1983 | 2,021.00 | 1,961 | 2,122 |  |  |  |
| 1985 | 17,730.00 | 17,124 | 18,617 |  |  |  |
| 1987 | 61.00 | 59 | 64 |  |  |  |
| 1990 | 3,347.00 | 3,189 | 3,514 |  |  |  |
| 1992 | 94.00 | 89 | 99 |  |  |  |
| 1993 | 457.95 | 432 | 481 |  |  |  |
| 1994 | 37,774.15 | 35,490 | 39,597 | 65 | 2.99 | 22 |
| 1995 | 17,295.95 | 16,182 | 18, 055 | 106 | 2.99 | 35 |
| 1996 | 716,873.15 | 667,630 | 744,898 | 7,819 | 2.99 | 2,615 |
| 1997 | 29,203.60 | 27, 063 | 30,195 | 469 | 2.99 | 157 |
| 1998 | 133,175.52 | 122,691 | 136,891 | 2,944 | 3.00 | 981 |
| 1999 | 40,752.50 | 37,321 | 41,640 | 1,150 | 3.00 | 383 |
| 2000 | 110,501.96 | 100,543 | 112,179 | 3,848 | 3.00 | 1,283 |
| 2001 | 123,244.49 | 111,334 | 124, 219 | 5,188 | 3.00 | 1,729 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 316.00 MISCELLANEOUS POWER PLANT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

RIO GRANDE UNIT 7
INTERIM SURVIVOR CURVE.. IOWA 70-S2.5
PROBABLE RETIREMENT YEAR.. 12-2022
NET SALVAGE PERCENT.. -5

| 2002 | $463,285.80$ | 415,229 | 463,285 | 23,165 | 3.00 | 7,722 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2004 | $10,168.71$ | 8,945 | 9,980 | 697 | 3.00 | 232 |
| 2014 | $5,350.00$ | 3,635 | 4,056 | 1,562 | 3.00 | 521 |
|  |  |  |  |  |  | 15,680 |

RIO GRANDE UNIT 8
INTERIM SURVIVOR CURVE.. IOWA 70-S2.5
PROBABLE RETIREMENT YEAR.. 12-2033
NET SALVAGE PERCENT. . -5

| 1973 | 317,792.00 | 259,538 | 327,572 | 6,110 | 12.55 | 487 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1975 | 2,141.00 | 1,729 | 2,182 | 66 | 12.71 | 5 |
| 1976 | 1,076.00 | 864 | 1,090 | 39 | 12.78 | 3 |
| 1977 | 1,286.00 | 1,027 | 1,296 | 54 | 12.85 | 4 |
| 1978 | 2,785.00 | 2,210 | 2,789 | 135 | 12.92 | 10 |
| 1979 | 18,411.00 | 14,512 | 18,316 | 1,015 | 12.99 | 78 |
| 1981 | 13,943.00 | 10,837 | 13,678 | 962 | 13.12 | 73 |
| 1982 | 30,242.00 | 23,333 | 29,449 | 2,305 | 13.18 | 175 |
| 1983 | 7,645.00 | 5,853 | 7,387 | 640 | 13.24 | 48 |
| 1985 | 14,897.00 | 11,215 | 14,155 | 1,487 | 13.35 | 111 |
| 1987 | 826.00 | 611 | 771 | 96 | 13.45 | 7 |
| 1990 | 3,347.00 | 2,398 | 3,027 | 488 | 13.58 | 36 |
| 1992 | 1,468.00 | 1,027 | 1,296 | 245 | 13.65 | 18 |
| 1993 | 457.94 | 316 | 399 | 82 | 13.68 | 6 |
| 1994 | 37,774.14 | 25,728 | 32,472 | 7,191 | 13.72 | 524 |
| 1995 | 17,295.95 | 11,608 | 14,651 | 3,510 | 13.75 | 255 |
| 1996 | 716,873.15 | 473,790 | 597,986 | 154,731 | 13.77 | 11,237 |
| 1997 | 2,656,463.50 | 1,725,955 | 2,178,386 | 610,901 | 13.80 | 44,268 |
| 1998 | 133,175.52 | 85,011 | 107, 295 | 32,539 | 13.82 | 2,354 |
| 1999 | 40,752.50 | 25,514 | 32, 202 | 10,588 | 13.84 | 765 |
| 2000 | 150,468.03 | 92,253 | 116,436 | 41,556 | 13.86 | 2,998 |
| 2001 | 1,524,446.98 | 913,678 | 1,153,184 | 447,486 | 13.88 | 32,240 |
| 2005 | 79,100.00 | 42,346 | 53,446 | 29,609 | 13.93 | 2,126 |
| 2006 | 8.00 | 4 | 5 | 3 | 13.94 |  |
| 2014 | 75,484.00 | 22,367 | 28,230 | 51, 028 | 13.99 | 3,647 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 316.00 MISCELLANEOUS POWER PLANT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

RIO GRANDE UNIT 8
INTERIM SURVIVOR CURVE.. IOWA 70-S2.5
PROBABLE RETIREMENT YEAR.. 12-2033
NET SALVAGE PERCENT. . -5

| 2017 | $22,559.39$ | 3,589 | 4,530 | 19,158 | 14.00 | 1,368 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2018 | 988.52 | 100 | 126 | 912 | 14.00 | 65 |
| 2019 | $80,000.82$ | 2,896 | 3,655 | 80,346 | 14.00 | 5,739 |
|  | $5,951,707.44$ | $3,760,309$ | $4,746,012$ | $1,503,280$ |  | 108,647 |

RIO GRANDE COMMON
INTERIM SURVIVOR CURVE.. IOWA 70-S2.5
PROBABLE RETIREMENT YEAR.. 12-2033
NET SALVAGE PERCENT. . -5

| 2006 | $47,427.49$ | 24,500 | 34,887 | 14,912 | 13.94 | 1,070 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2007 | $505,951.76$ | 251,063 | 357,501 | 173,749 | 13.95 | 12,455 |
| 2008 | $5,388.12$ | 2,555 | 3,638 | 2,019 | 13.96 | 145 |
| 2009 | $167,199.00$ | 75,332 | 107,269 | 68,290 | 13.97 | 4,888 |
| 2011 | $9,090.00$ | 3,609 | 5,139 | 4,405 | 13.98 | 315 |
| 2013 | $257,488.00$ | 85,767 | 122,128 | 148,235 | 13.99 | 10,596 |
| 2014 | $77,412.00$ | 22,938 | 32,663 | 48,620 | 13.99 | 3,475 |
| 2015 | $171,487.00$ | 43,822 | 62,400 | 117,661 | 13.99 | 8,410 |
| 2016 | $35,706.00$ | 7,502 | 10,682 | 26,809 | 13.99 | 1,916 |
| 2017 | $75,784.59$ | 12,057 | 17,169 | 62,405 | 14.00 | 4,458 |
| 2018 | $172,114.96$ | 17,488 | 24,902 | 155,819 | 14.00 | 11,130 |
| 2019 | $413,647.29$ | 14,976 | 21,325 | 413,005 | 14.00 | 29,500 |
|  |  |  |  |  |  | 8,358 |

NEWMAN UNIT 1
INTERIM SURVIVOR CURVE.. IOWA 70-S2.5
PROBABLE RETIREMENT YEAR.. 12-2022
NET SALVAGE PERCENT. . -5

| 1959 | $178,963.00$ | 178,653 | 187,911 |
| :--- | ---: | ---: | ---: |
| 1960 | 81.00 | 81 | 85 |
| 1961 | $9,487.00$ | 9,458 | 9,961 |
| 1962 | 149.00 | 148 | 156 |
| 1963 | 358.00 | 356 | 376 |
| 1964 | $1,091.00$ | 1,085 | 1,146 |
| 1965 | $1,250.00$ | 1,242 | 1,313 |
| 1966 | $6,842.00$ | 6,793 | 7,184 |
| 1967 | 715.00 | 709 | 751 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 316.00 MISCELLANEOUS POWER PLANT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

NEWMAN UNIT 1
INTERIM SURVIVOR CURVE.. IOWA 70-S2.5
PROBABLE RETIREMENT YEAR.. 12-2022
NET SALVAGE PERCENT. . -5

| 1968 | $4,130.00$ | 4,093 | 4,337 |
| :--- | ---: | ---: | ---: |
| 1969 | 197.00 | 195 | 207 |
| 1970 | 312.00 | 309 | 328 |
| 1972 | $1,917.00$ | 1,892 | 2,013 |
| 1974 | $1,107.00$ | 1,090 | 1,162 |
| 1975 | 232.00 | 228 | 244 |
| 1976 | $7,372.00$ | 7,238 | 7,741 |
| 1977 | $6,276.00$ | 6,152 | 6,590 |
| 1978 | $2,458.00$ | 2,406 | 2,581 |
| 1979 | $18,600.00$ | 18,178 | 19,530 |
| 1980 | 917.00 | 283.00 | 276 |
| 1981 | $8,462.00$ | 8,225 | 963 |
| 1982 | 57.00 | 55 | 297 |
| 1983 | $29,399.00$ | 28,394 | 30,885 |
| 1985 | 390.00 | 372 | 60 |
| 1990 | $252,758.25$ | 237,474 | 258,689 |
| 1994 | $28,767.29$ | 26,914 | 29,318 |
| 1995 | $3,272.03$ | 998,616 | $1,087,829$ |
| 1996 | $1,072,415.31$ | 32,819 | 35,751 |
| 1997 | 35,53 |  |  |
| 1999 | $63,879.37$ | 58,500 | 63,726 |
| 2000 | $35,075.07$ | 31,914 | 34,765 |
| 2001 | $14,389.28$ | 12,999 | 14,160 |
| 2002 | $4,110.32$ | 3,684 | 4,013 |
| 2003 | $269,582.28$ | 239,490 | 260,885 |
| 2004 | $14,154.28$ | 12,451 | 13,563 |
| 2006 | 331.75 | 285 | 310 |
| 2014 | $105,911.00$ | 71,957 | 78,385 |
|  |  |  |  |
|  | $2,177,691.23$ | $2,005,625$ | $2,176,490$ |


| 4 | 2.99 | 1 |
| ---: | ---: | ---: |
| 6,707 | 2.99 | 2,243 |
| 887 | 2.99 | 297 |
| 38,056 | 2.99 | 12,728 |
| 1,435 | 2.99 | 480 |
| 3,347 | 3.00 | 1,116 |
| 2,064 | 3.00 | 688 |
| 948 | 3.00 | 316 |
| 303 | 3.00 | 101 |
| 22,176 | 3.00 | 7,392 |
| 1,299 | 3.00 | 433 |
| 38 | 3.00 | 13 |
| 32,821 | 3.00 | 10,940 |
|  |  | 36,748 |

NEWMAN UNIT 2
INTERIM SURVIVOR CURVE.. IOWA 70-S2.5
PROBABLE RETIREMENT YEAR.. 12-2022
NET SALVAGE PERCENT.. -5

| 1962 | $39,041.00$ | 38,888 | 40,993 |
| ---: | ---: | ---: | ---: |
| 1963 | $3,356.00$ | 3,341 | 3,524 |
| 1964 | $1,091.00$ | 1,085 | 1,146 |
| 1965 | $1,250.00$ | 1,242 | 1,313 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 316.00 MISCELLANEOUS POWER PLANT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

NEWMAN UNIT 2
INTERIM SURVIVOR CURVE.. IOWA 70-S2.5
PROBABLE RETIREMENT YEAR.. 12-2022
NET SALVAGE PERCENT. . -5

| 1966 | 6,842.00 | 6,793 | 7,184 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1967 | 715.00 | 709 | 751 |  |  |  |
| 1968 | 4,131.00 | 4, 094 | 4,338 |  |  |  |
| 1969 | 197.00 | 195 | 207 |  |  |  |
| 1970 | 312.00 | 309 | 328 |  |  |  |
| 1972 | 1,917.00 | 1,892 | 2,013 |  |  |  |
| 1974 | 1,107.00 | 1, 090 | 1,162 |  |  |  |
| 1975 | 232.00 | 228 | 244 |  |  |  |
| 1976 | 7,372.00 | 7,238 | 7,741 |  |  |  |
| 1977 | 6,276.00 | 6,152 | 6,590 |  |  |  |
| 1978 | 2,458.00 | 2,406 | 2,581 |  |  |  |
| 1979 | 18,600.00 | 18,178 | 19,530 |  |  |  |
| 1980 | 917.00 | 894 | 963 |  |  |  |
| 1981 | 283.00 | 276 | 297 |  |  |  |
| 1982 | 8,462.00 | 8,225 | 8,858 | 28 | 2.97 | 9 |
| 1985 | 29,399.00 | 28,394 | 30,578 | 291 | 2.98 | 98 |
| 1990 | 390.00 | 372 | 401 | 9 | 2.99 | 3 |
| 1994 | 252,758.21 | 237,474 | 255,737 | 9,660 | 2.99 | 3,231 |
| 1995 | 28,767.29 | 26,914 | 28,984 | 1,222 | 2.99 | 409 |
| 1996 | 1,948, 687.35 | 1,814,828 | 1,954,394 | 91,727 | 2.99 | 30,678 |
| 1998 | 20,578.58 | 18,958 | 20,416 | 1,192 | 3.00 | 397 |
| 1999 | 106,657.72 | 97,676 | 105,188 | 6,803 | 3.00 | 2,268 |
| 2000 | 35, 075.03 | 31,914 | 34,368 | 2,460 | 3.00 | 820 |
| 2001 | 14,389.26 | 12,999 | 13,999 | 1,110 | 3.00 | 370 |
| 2002 | 4,110.31 | 3,684 | 3,967 | 349 | 3.00 | 116 |
| 2003 | 269,582.26 | 239,490 | 257,908 | 25,154 | 3.00 | 8,385 |
| 2004 | 14,154.28 | 12,451 | 13,409 | 1,453 | 3.00 | 484 |
|  | 2,829,108.29 | 2,628,389 | 2,829,106 | 141,458 |  | 47,268 |

NEWMAN UNIT 3
INTERIM SURVIVOR CURVE.. IOWA 70-S2.5
PROBABLE RETIREMENT YEAR.. 12-2026
NET SALVAGE PERCENT.. -5

| 1966 | $37,311.00$ | 34,654 | 39,177 |
| ---: | ---: | ---: | ---: |
| 1967 | $6,896.00$ | 6,392 | 7,241 |
| 1968 | $4,131.00$ | 3,820 | 4,338 |
| 1969 | 197.00 | 182 | 207 |
| 1970 | 312.00 | 287 | 328 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 316.00 MISCELLANEOUS POWER PLANT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

NEWMAN UNIT 3
INTERIM SURVIVOR CURVE.. IOWA 70-S2.5
PROBABLE RETIREMENT YEAR.. 12-2026
NET SALVAGE PERCENT. . -5

| 1972 | 1,918.00 | 1,757 | 2,014 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1974 | 1,107.00 | 1,008 | 1,162 |  |  |  |
| 1975 | 232.00 | 211 | 244 |  |  |  |
| 1976 | 7,372.00 | 6,675 | 7,741 |  |  |  |
| 1977 | 6,276.00 | 5,664 | 6,590 |  |  |  |
| 1978 | 2,458.00 | 2,210 | 2,581 |  |  |  |
| 1979 | 18,600.00 | 16,671 | 19,530 |  |  |  |
| 1980 | 917.00 | 819 | 963 |  |  |  |
| 1981 | 283.00 | 252 | 297 |  |  |  |
| 1982 | 8,462.00 | 7,495 | 8,885 |  |  |  |
| 1985 | 29,399.00 | 25,685 | 30,869 |  |  |  |
| 1990 | 390.00 | 331 | 400 | 10 | 6.92 | 1 |
| 1994 | 252,758.21 | 208,362 | 251,530 | 13,867 | 6.95 | 1,995 |
| 1995 | 1,168, 219.41 | 954, 870 | 1,152,696 | 73,935 | 6.95 | 10,638 |
| 1996 | 1,050,490.42 | 850,402 | 1,026,584 | 76,430 | 6.96 | 10,981 |
| 1998 | 20,234.54 | 16, 036 | 19,358 | 1,888 | 6.97 | 271 |
| 1999 | 43,644.79 | 34,187 | 41,270 | 4,557 | 6.97 | 654 |
| 2000 | 2,681,439.63 | 2,072,526 | 2,501,903 | 313,609 | 6.98 | 44,930 |
| 2001 | 14,389.26 | 10,967 | 13,239 | 1,870 | 6.98 | 268 |
| 2002 | 4,110.31 | 3,085 | 3,724 | 592 | 6.98 | 85 |
| 2003 | 269,582.27 | 198,757 | 239,935 | 43,127 | 6.99 | 6,170 |
| 2004 | 14,154.28 | 10,241 | 12,363 | 2,499 | 6.99 | 358 |
| 2007 | 11.72 | 8 | 10 | 3 | 6.99 |  |
|  | 5,645,295.84 | 4,473,554 | 5,395,175 | 532,386 |  | 76,351 |

NEWMAN UNIT 4
INTERIM SURVIVOR CURVE.. IOWA 70-S2.5
PROBABLE RETIREMENT YEAR.. 12-2026
NET SALVAGE PERCENT.. -5

| 1975 | $503,252.00$ | 457,073 | 528,415 |
| ---: | ---: | ---: | ---: |
| 1977 | $6,276.00$ | 5,664 | 6,590 |
| 1978 | $20,612.00$ | 18,536 | 21,643 |
| 1979 | $18,600.00$ | 16,671 | 19,530 |
| 1980 | 917.00 | 819 | 963 |
| 1981 | $2,092.00$ | 1,861 | 2,197 |
| 1982 | $9,819.00$ | 8,697 | 10,310 |
| 1985 | $9,779.00$ | 8,544 | 10,268 |
| 1990 | $10,432.00$ | 8,860 | 10,954 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 316.00 MISCELLANEOUS POWER PLANT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

NEWMAN UNIT 4
INTERIM SURVIVOR CURVE.. IOWA 70-S2.5
PROBABLE RETIREMENT YEAR.. 12-2026
NET SALVAGE PERCENT.. -5

| 1994 | $252,758.21$ | 208,362 | 265,396 |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1995 | $721,545.84$ | 589,772 | 757,623 |  |  |  |
| 1996 | $1,228,296.63$ | 994,342 | $1,289,711$ | 6,787 | 6.97 | 974 |
| 1999 | $308,927.57$ | 241,980 | 317,587 | 96,220 | 6.98 | 13,785 |
| 2000 | $2,703,892.03$ | $2,089,880$ | $2,742,867$ | 107,689 | 6.98 | 15,428 |
| 2001 | $2,165,098.39$ | $1,650,091$ | $2,165,665$ | 3,283 | 6.98 | 470 |
| 2002 | $50,483.31$ | 37,887 | 49,725 | 3,044 | 6.99 | 435 |
| 2003 | $36,965.41$ | 27,254 | 35,770 | 643,610 | 6.99 | 49,157 |
| 2004 | $3,421,582.37$ | $2,475,559$ | $3,249,052$ | 14,130 | 7.00 | 2,019 |
| 2016 | $23,923.00$ | 8,373 | 10,989 |  |  | 82,268 |

NEWMAN UNIT 5
INTERIM SURVIVOR CURVE.. IOWA 70-S2.5
PROBABLE RETIREMENT YEAR.. 12-2045
NET SALVAGE PERCENT. . -5

| 2009 | $1,111,963.00$ | 338,336 | 513,205 | 654,356 | 25.71 | 25,451 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2011 | $659,294.00$ | 171,652 | 260,371 | 431,888 | 25.78 | 16,753 |
|  | $1,771,257.00$ | 509,988 | 773,576 | $1,086,244$ | 42,204 |  |

NEWMAN ZERO LIQUID DISCHARGE
INTERIM SURVIVOR CURVE.. IOWA 70-S2.5
PROBABLE RETIREMENT YEAR.. 12-2045
NET SALVAGE PERCENT.. -5

| 2011 | $13,079,566.00$ | $3,405,370$ | $3,040,880$ | $10,692,665$ | 25.78 | 414,766 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2013 | $799,390.00$ | 168,703 | 150,646 | 688,713 | 25.84 | 26,653 |
| 2014 | $496,618.00$ | 91,426 | 81,640 | 439,809 | 25.87 | 17,001 |
|  |  |  |  |  |  | 458,420 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 316.00 MISCELLANEOUS POWER PLANT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

NEWMAN COMMON
INTERIM SURVIVOR CURVE.. IOWA 70-S2.5
PROBABLE RETIREMENT YEAR.. 12-2045
NET SALVAGE PERCENT.. -5

| 2004 | $49,032.56$ | 19,469 | 17,049 | 34,435 | 25.44 | 1,354 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2005 | 0.40 |  | 0 |  |  |  |
| 2006 | $134,487.48$ | 48,782 | 42,718 | 98,494 | 25.56 | 3,853 |
| 2007 | $534,839.12$ | 184,053 | 161,174 | 400,407 | 25.62 | 15,629 |
| 2008 | $139,666.00$ | 45,344 | 39,707 | 106,942 | 25.67 | 4,166 |
| 2009 | $745,434.00$ | 226,812 | 198,618 | 584,088 | 25.71 | 22,718 |
| 2011 | $4,804.00$ | 1,251 | 1,095 | 3,949 | 25.78 | 153 |
| 2012 | $2,791.00$ | 660 | 578 | 2,353 | 25.81 | 91 |
| 2013 | $311,991.00$ | 65,842 | 57,657 | 269,933 | 25.84 | 10,446 |
| 2014 | $551,150.00$ | 101,465 | 88,852 | 489,855 | 25.87 | 18,935 |
| 2015 | $196,656.34$ | 30,577 | 26,776 | 179,713 | 25.89 | 6,941 |
| 2016 | $60,024.22$ | 7,501 | 6,569 | 56,457 | 25.91 | 2,179 |
| 2017 | $113,496.72$ | 10,484 | 9,181 | 109,991 | 25.92 | 4,243 |
| 2018 | $101,106.19$ | 5,803 | 5,082 | 101,080 | 25.94 | 3,897 |
| 2019 | $125,450.88$ | 2,490 | 2,180 | 129,543 | 25.95 | 4,992 |
|  |  |  |  |  |  |  |
|  | $3,070,929.91$ | 750,533 | 657,238 | $2,567,238$ |  | 99,597 |
|  | $52,596,308.43$ | $30,353,622$ | $35,532,076$ | $19,694,047$ |  | $1,092,786$ |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 18.0 2.08

## EL PASO ELECTRIC COMPANY

## ACCOUNT 341.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

COPPER POWER STATION
INTERIM SURVIVOR CURVE.. IOWA 60-R4 PROBABLE RETIREMENT YEAR.. 12-2030 NET SALVAGE PERCENT.. 0

| 1980 | $569,351.47$ | 448,831 | 561,994 | 7,358 | 10.29 | 715 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1982 | $11,100.00$ | 8,640 | 10,818 | 282 | 10.41 | 27 |
| 1994 | $17,445.00$ | 12,218 | 15,298 | 2,147 | 10.84 | 198 |
| 1999 | $4,097.00$ | 2,670 | 3,343 | 754 | 10.92 | 69 |
| 2006 | $68,671.81$ | 37,861 | 47,407 | 21,265 | 10.97 | 1,938 |
| 2014 | $22,828.00$ | 7,614 | 9,534 | 13,294 | 10.99 | 1,210 |
| 2016 | $91,987.00$ | 22,156 | 27,742 | 64,245 | 11.00 | 5,840 |
| 2019 | $6,383.89$ | 278 | 348 | 6,036 | 11.00 | 549 |
|  |  |  |  |  | 10,546 |  |

RIO GRANDE UNIT 9
INTERIM SURVIVOR CURVE.. IOWA 60-R4 PROBABLE RETIREMENT YEAR.. 12-2045 NET SALVAGE PERCENT.. 0

| 2012 | $14,315.00$ | 3,221 | 1,825 | 12,490 | 25.80 | 484 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2013 | $21,964,717.00$ | $4,410,515$ | $2,498,923$ | $19,465,794$ | 25.83 | 753,612 |
| 2014 | $55,737.00$ | 9,778 | 5,540 | 50,197 | 25.85 | 1,942 |
| 2015 | $57,899.00$ | 0.16 | 8,579 | 4,861 | 53,038 | 25.87 |
| 2016 | $65,464.88$ | 1,239 | 0 |  | 2,050 |  |
| 2019 |  |  | 702 | 64,763 | 25.93 | 2,498 |
|  | $22,158,133.04$ | $4,433,332$ | $2,511,851$ | $19,646,282$ |  | 760,586 |

MONTANA POWER STATION UNIT 1
INTERIM SURVIVOR CURVE.. IOWA 60-R4
PROBABLE RETIREMENT YEAR.. 12-2045
NET SALVAGE PERCENT.. 0

| 2015 | 0.37 |  | 0 |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2016 | 0.13 | 0 | 40,929 | 25.91 | 1,580 |  |
| 2017 | $53,393.15$ | 4,699 | 12,464 | 37,640 | 25.92 | 1,452 |
| 2018 | $44,026.81$ | 2,408 | 6,387 | 206,991 | 25.93 | 7,983 |
| 2019 | $217,926.95$ | 4,123 | 10,936 |  | 11,015 |  |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 341.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

MONTANA POWER STATION UNIT 2
INTERIM SURVIVOR CURVE.. IOWA 60-R4
PROBABLE RETIREMENT YEAR.. 12-2045
NET SALVAGE PERCENT.. 0

| 2016 | 0.13 |  | 0 |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2018 | $38,756.30$ | 2,120 | 8,246 | 30,511 | 25.92 | 1,177 |
| 2019 | $218,425.00$ | 4,133 | 16,075 | 202,350 | 25.93 | 7,804 |
|  |  |  |  |  |  | 8,981 |

MONTANA POWER STATION UNIT 3
INTERIM SURVIVOR CURVE.. IOWA 60-R4
PROBABLE RETIREMENT YEAR.. 12-2045
NET SALVAGE PERCENT.. 0

| 2016 | 0.17 |  | 0 |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2018 | $21,889.97$ | 1,197 | 4,825 | 17,065 | 25.92 | 658 |
| 2019 | $184,924.94$ | 3,499 | 14,105 | 170,820 | 25.93 | 6,588 |
|  | $206,815.08$ | 4,696 | 18,930 | 187,885 | 7,246 |  |

MONTANA POWER STATION UNIT 4
INTERIM SURVIVOR CURVE.. IOWA 60-R4
PROBABLE RETIREMENT YEAR.. 12-2045
NET SALVAGE PERCENT.. 0

| 2018 | $52,232.69$ | 2,857 | 8,775 | 43,457 | 25.92 | 1,677 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2019 | $185,253.51$ | 3,505 | 10,766 | 174,488 | 25.93 | 6,729 |
|  | $237,486.20$ | 6,362 | 19,541 | 217,945 | 8,406 |  |

MONTANA POWER STATION COMMON
INTERIM SURVIVOR CURVE.. IOWA 60-R4 PROBABLE RETIREMENT YEAR.. 12-2045
NET SALVAGE PERCENT.. 0

| 2015 | $12,407,156.00$ | $1,838,368$ | $1,273,174$ | $11,133,982$ | 25.87 | 430,382 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2016 | $462,284.88$ | 55,054 | 38,128 | 424,157 | 25.89 | 16,383 |


|  |  | EL P | SO ELECTRIC C | MPANY |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ACCOUNT 341.00 STRUCTURES AND IMPROVEMENTS |  |  |  |  |  |  |
| CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL |  |  |  |  |  |  |
| RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019 |  |  |  |  |  |  |
|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| (1) | (2) | (3) | (4) | (5) | (6) | ( 7 ) |
| MONTANA POWER STATION COMMON |  |  |  |  |  |  |
| INTERIM SURVIVOR CURVE.. IOWA 60-R4 |  |  |  |  |  |  |
| PROBABLE RETIREMENT YEAR.. 12-2045 |  |  |  |  |  |  |
| NET SALVAGE PERCENT.. 0 |  |  |  |  |  |  |
| 2017 | 20,325.37 | 1,789 | 1,239 | 19,086 | 25.91 | 737 |
| 2018 | 69,116.48 | 3,781 | 2,619 | 66,498 | 25.92 | 2,566 |
| 2019 | 5, 049, 094.68 | 95,529 | 66,159 | 4,982,935 | 25.93 | 192,169 |
|  | 18, 007,977.41 | 1,994,521 | 1,381,319 | 16,626,658 |  | 642,237 |
|  | 41,974, 804.74 | 6,996, 662 | 4,662, 234 | 37, 312,569 |  | 1,449,017 |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 25.8 3.45 |  |  |  |  |  |  |

## EL PASO ELECTRIC COMPANY

| EL PASO ELECTRIC COMPANY |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ACCOUNT 341.00 STRUCTURES AND IMPROVEMENTS - SOLAR |  |  |  |  |  |  |
| CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL |  |  |  |  |  |  |
| RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019 |  |  |  |  |  |  |
|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| SOLAR FACILITIES |  |  |  |  |  |  |
| INTERIM SURVIVOR CURVE.. IOWA 35-S2 |  |  |  |  |  |  |
| PROBABLE RETIREMENT YEAR.. 12-2034 |  |  |  |  |  |  |
| NET SALVAGE PERCENT.. 0 |  |  |  |  |  |  |
| 2009 | 39,814.00 | 16,988 | 14,564 | 25,250 | 13.96 | 1,809 |
| 2013 | 52,054.00 | 16,102 | 13,805 | 38, 249 | 14.49 | 2,640 |
|  | 91, 868.00 | 33,090 | 28,369 | 63,499 |  | 4,449 |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 14.3 4.84 |  |  |  |  |  |  |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 342.00 FUEL HOLDERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

COPPER POWER STATION
INTERIM SURVIVOR CURVE.. IOWA 50-R4
PROBABLE RETIREMENT YEAR.. 12-2030
NET SALVAGE PERCENT.. 0

| 1980 | $267,720.00$ | 214,026 | 264,794 | 2,926 | 9.27 | 316 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1981 | $207,840.00$ | 164,879 | 203,989 | 3,851 | 9.44 | 408 |
| 1985 | $5,333.00$ | 4,101 | 5,074 | 259 | 9.95 | 26 |
| 2017 | $30,797.65$ | 5,707 | 7,061 | 23,737 | 10.99 | 2,160 |
|  | $511,690.65$ | 388,713 | 480,918 | 30,773 |  | 2,910 |

RIO GRANDE UNIT 9
INTERIM SURVIVOR CURVE.. IOWA 50-R4
PROBABLE RETIREMENT YEAR.. 12-2045
NET SALVAGE PERCENT.. 0

| 2013 | $3,118,540.00$ | 630,319 | 497,843 | $2,620,697$ | 25.62 | 102,291 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2015 | $280,628.00$ | 41,774 | 32,994 | 247,634 | 25.73 | 9,624 |
| 2016 | $26,734.00$ | 3,197 | 2,525 | 24,209 | 25.77 | 939 |
| 2018 | $89,857.58$ | 4,930 | 3,894 | 85,964 | 25.84 | 3,327 |
| 2019 | $253,018.91$ | 4,797 | 3,789 | 249,230 | 25.87 | 9,634 |
|  | $3,768,778.49$ | 685,017 | 541,045 | $3,227,734$ |  | 125,815 |

MONTANA POWER STATION COMMON
INTERIM SURVIVOR CURVE.. IOWA 50-R4
PROBABLE RETIREMENT YEAR.. 12-2045
NET SALVAGE PERCENT.. 0

| 2015 | $5,489,927.00$ | 817,231 | 526,337 | $4,963,590$ | 25.73 | 192,911 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2016 | $9,689,787.30$ | $1,158,705$ | 746,263 | $8,943,524$ | 25.77 | 347,052 |
| 2017 | $40,162.88$ | 3,547 | 2,284 | 37,878 | 25.81 | 1,468 |
| 2018 | $41,440.78$ | 2,273 | 1,464 | 39,977 | 25.84 | 1,547 |
| 2019 | $5,616,109.70$ | 106,481 | 68,579 | $5,547,531$ | 25.87 | 214,439 |
|  | $20,877,427.66$ | $2,088,237$ | $1,344,928$ | $19,532,500$ | 757,417 |  |
|  |  |  |  |  |  |  |
|  | $25,157,896.80$ | $3,161,967$ | $2,366,890$ | $22,791,007$ | 886,142 |  |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT |  |  |  |  |  |  |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 343.00 PRIME MOVERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

RIO GRANDE UNIT 9
INTERIM SURVIVOR CURVE.. IOWA 40-S1
PROBABLE RETIREMENT YEAR.. 12-2045
NET SALVAGE PERCENT.. 0

```
\begin{tabular}{|c|c|c|}
\hline 2013 & 55,119, 692.31 & 12,005,620 \\
\hline 2015 & 226,256.00 & 36,110 \\
\hline 2016 & 740,668.00 & 94,835 \\
\hline 2017 & 376,461.48 & 35,549 \\
\hline 2018 & 2,128,825.45 & 124,685 \\
\hline 2019 & 963,154.84 & 19,398 \\
\hline & 59, 555, 058.08 & 12,316, 197 \\
\hline \multicolumn{3}{|l|}{MONTANA POWER STATION UNIT 1} \\
\hline \multicolumn{3}{|l|}{INTERIM SURVIVOR CURVE.. IOWA 40-S1} \\
\hline \multicolumn{3}{|l|}{PROBABLE RETIREMENT YEAR.. 12-2045} \\
\hline NET S & VAGE PERCENT. & \\
\hline
\end{tabular}
NET SALVAGE PERCENT.. 0
```

| 2015 | $41,566,855.25$ | $6,634,070$ |
| ---: | ---: | ---: |
| 2016 | $12,002,288.82$ | $1,536,773$ |
| 2017 | $314,755.88$ | 29,722 |
| 2018 | $2,676,625.13$ | 156,770 |
| 2019 | $22,049,315.82$ | 444,073 |
|  | $78,609,840.90$ | $8,801,408$ |

$6,357,400$
$1,472,683$
28,482
150,232
425,553
$8,434,351$

| $35,209,455$ | 23.38 |
| ---: | ---: |
| $10,529,606$ | 23.63 |
| 286,273 | 23.88 |
| $2,526,393$ | 24.11 |
| $21,623,763$ | 24.33 |
|  |  |
| $70,175,490$ |  |

$$
\begin{array}{r}
1,505,965 \\
445,603 \\
11,988 \\
104,786 \\
888,770 \\
2,957,112
\end{array}
$$

MONTANA POWER STATION UNIT 2
INTERIM SURVIVOR CURVE.. IOWA 40-S1
PROBABLE RETIREMENT YEAR.. 12-2045
NET SALVAGE PERCENT.. 0

| 2015 | $50,230,343.00$ | $8,016,763$ | $7,400,563$ | $42,829,780$ | 23.38 | $1,831,898$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2017 | $709,092.25$ | 66,960 | 61,813 | 647,279 | 23.88 | 27,105 |
| 2018 | $56,092.24$ | 3,285 | 3,033 | 53,060 | 24.11 | 2,201 |
| 2019 | $22,508,197.70$ | 453,315 | 418,471 | $22,089,726$ | 24.33 | 907,921 |
|  | $73,503,725.19$ | $8,540,323$ | $7,883,880$ | $65,619,845$ |  | $2,769,125$ |

2,769,125

8,731,563
26,262
68,973
25, 854
90,682
14,108
8, 957,443

46,388, 129
199,994 671, 695 350, 607 949,047 24.33
$50,597,615$

2, 031, 004
8,554
28,426
14, 682
84,535
39, 007
2,206,208

## EL PASO ELECTRIC COMPANY

## ACCOUNT 343.00 PRIME MOVERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

MONTANA POWER STATION UNIT 3
INTERIM SURVIVOR CURVE.. IOWA 40-S1
PROBABLE RETIREMENT YEAR.. 12-2045
NET SALVAGE PERCENT.. 0

| 2016 | $50,480,044.14$ | $6,463,465$ | $5,155,151$ | $45,324,893$ | 23.63 | $1,918,108$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2017 | $35,212.76$ | $51,285.90$ | 3,325 | 2,652 | 32,561 | 23.88 |
| 2018 | 2,004 | 2,396 | 48,890 | 24.11 | 1,364 |  |
| 2019 | $12,443,014.35$ | 250,602 | 199,876 | $12,243,138$ | 24.33 | 503,212 |
|  |  |  |  |  |  |  |
|  | $63,009,557.15$ | $6,720,396$ | $5,360,075$ | $57,649,482$ | $2,424,712$ |  |

MONTANA POWER STATION UNIT 4
INTERIM SURVIVOR CURVE.. IOWA 40-S1 PROBABLE RETIREMENT YEAR.. 12-2045 NET SALVAGE PERCENT.. 0

| 2016 | $49,380,041.64$ | $6,322,621$ | $4,555,580$ | $44,824,461$ | 23.63 | $1,896,930$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2017 | $5,665.96$ | 535 | 385 | 5,280 | 23.88 | 221 |
| 2018 | $51,228.00$ | 3,000 | 2,162 | 49,066 | 24.11 | 2,035 |
| 2019 | $12,988,503.50$ | 261,588 | 188,480 | $12,800,024$ | 24.33 | 526,100 |
|  |  |  |  |  |  |  |
|  | $62,425,439.10$ | $6,587,744$ | $4,746,607$ | $57,678,832$ | $2,425,286$ |  |

MONTANA POWER STATION COMMON
INTERIM SURVIVOR CURVE.. IOWA 40-S1
PROBABLE RETIREMENT YEAR.. 12-2045
NET SALVAGE PERCENT.. 0

| 2015 | 24,750,764.00 | 3,950, 222 | 3, 011,482 | 21,739, 282 | 23.38 | 929,824 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2016 | 7,977,795.33 | 1,021,477 | 778,731 | 7,199,064 | 23.63 | 304,658 |
| 2017 | 227,231.98 | 21,458 | 16,359 | 210,873 | 23.88 | 8,831 |
| 2018 | 1,051,552.70 | 61,589 | 46,953 | 1,004,600 | 24.11 | 41,667 |
| 2019 | 680,190.98 | 13,699 | 10,444 | 669,747 | 24.33 | 27,528 |
|  | 34, 687, 534.99 | 5, 068,445 | 3,863,968 | 30, 823, 567 |  | 1,312,508 |
|  | 371, 791, 155.41 | 48, 034, 513 | 39,246,324 | 332,544,831 |  | 14, 094, 951 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 344.00 GENERATORS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

COPPER POWER STATION
INTERIM SURVIVOR CURVE.. IOWA 45-S3 PROBABLE RETIREMENT YEAR.. 12-2030 NET SALVAGE PERCENT.. 0

| 1980 | $490,433.99$ | 398,286 | 439,985 | 50,449 | 8.04 | 6,275 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1981 | $165,233.00$ | 133,284 | 147,238 | 17,995 | 8.21 | 2,192 |
| 2003 | $8,031,516.27$ | $4,850,715$ | $5,358,565$ | $2,672,951$ | 10.80 | 247,495 |
| 2008 | $183,557.85$ | 93,987 | 103,827 | 79,731 | 10.95 | 7,281 |
| 2009 | $26,669.00$ | 13,049 | 14,415 | 12,254 | 10.96 | 1,118 |
| 2010 | $184,727.00$ | 85,730 | 94,706 | 90,021 | 10.97 | 8,206 |
| 2012 | $36,792.00$ | 14,924 | 16,486 | 20,306 | 10.99 | 1,848 |
| 2016 | $319,161.20$ | 77,039 | 85,105 | 234,057 | 11.00 | 21,278 |
| 2017 | $811,112.47$ | 150,210 | 165,936 | 645,176 | 11.00 | 58,652 |
| 2018 | $68,195.22$ | 8,183 | 9,040 | 59,155 | 11.00 | 5,378 |
| 2019 | $51,994.47$ | 2,261 | 2,498 | 49,497 | 11.00 | 4,500 |
|  |  |  |  |  |  | 364,223 |

RIO GRANDE UNIT 9
INTERIM SURVIVOR CURVE.. IOWA 45-S3
PROBABLE RETIREMENT YEAR.. 12-2045
NET SALVAGE PERCENT.. 0

$$
\begin{array}{rrrrrrr}
2014 & 8,420,577.00 & 1,496,842 & 977,806 & 7,442,771 & 25.44 & 292,562 \\
& 8,420,577.00 & 1,496,842 & 977,806 & 7,442,771 & 292,562
\end{array}
$$

MONTANA POWER STATION UNIT 1
INTERIM SURVIVOR CURVE.. IOWA 45-S3 PROBABLE RETIREMENT YEAR.. 12-2045
NET SALVAGE PERCENT.. 0

| 2015 | $4,453,424.00$ | 667,123 | 380,013 | $4,073,411$ | 25.54 | 159,491 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2016 | 0.07 |  | 0 |  |  |  |
| 2017 | $15,176.96$ | 1,345 | 766 | 14,411 | 25.71 | 561 |
| 2019 | $1,654,089.86$ | 31,428 | 17,902 | $1,636,188$ | 25.82 | 63,369 |
|  | $6,122,690.89$ | 699,896 | 398,681 | $5,724,010$ |  | 223,421 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 344.00 GENERATORS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

MONTANA POWER STATION UNIT 2
INTERIM SURVIVOR CURVE.. IOWA 45-S3
PROBABLE RETIREMENT YEAR.. 12-2045
NET SALVAGE PERCENT.. 0

| 2015 | $4,518,913.00$ | 676,933 | 386,848 | $4,132,065$ | 25.54 | 161,788 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2016 | 0.07 |  | 0 |  |  | 745 |
| 2017 | $20,165.07$ | 1,787 | 1,021 | 19,144 | 25.71 | 60,667 |
| 2019 | $1,583,612.76$ | 30,089 | 17,195 | $1,566,418$ | 25.82 |  |
|  |  |  |  |  |  | 223,200 |

MONTANA POWER STATION UNIT 3
INTERIM SURVIVOR CURVE.. IOWA 45-S3
PROBABLE RETIREMENT YEAR.. 12-2045
NET SALVAGE PERCENT.. 0

| 2016 | $4,534,801.97$ | 544,856 | 432,226 | $4,102,576$ | 25.63 | 160,069 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2018 | $43,254.16$ | 2,379 | 1,887 | 41,367 | 25.77 | 1,605 |
| 2019 | $1,663,040.30$ | 31,598 | 25,066 | $1,637,974$ | 25.82 | 63,438 |
|  |  |  |  |  |  |  |
|  | $6,241,096.43$ | 578,833 | 459,179 | $5,781,917$ | 225,112 |  |

MONTANA POWER STATION UNIT 4
INTERIM SURVIVOR CURVE.. IOWA 45-S3
PROBABLE RETIREMENT YEAR.. 12-2045
NET SALVAGE PERCENT.. 0

| 2016 | $4,490,700.58$ | 539,558 | 393,370 | $4,097,330$ | 25.63 | 159,865 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2019 | $1,635,527.31$ | 31,075 | 22,656 | $1,612,872$ | 25.82 | 62,466 |
|  | $6,126,227.89$ | 570,633 | 416,026 | $5,710,202$ | 222,331 |  |

MONTANA POWER STATION COMMON
INTERIM SURVIVOR CURVE.. IOWA 45-S3
PROBABLE RETIREMENT YEAR.. 12-2045
NET SALVAGE PERCENT.. 0

| 2015 | 63.16 | 9 | 10 | 53 | 25.54 | 2 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 63.16 | 9 | 10 | 53 | 2 |  |  |


| EL PASO ELECTRIC COMPANY |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ACCOUNT 344.00 GENERATORS - SOLAR |  |  |  |  |  |  |
| CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019 |  |  |  |  |  |  |
| YEAR <br> (1) | ORIGINAL COST (2) | CALCULATED ACCRUED (3) | ALLOC. BOOK RESERVE (4) | FUTURE BOOK ACCRUALS (5) | REM. <br> LIFE <br> (6) | ANNUAL ACCRUAL (7) |
| SOLAR FACILITIES |  |  |  |  |  |  |
| INTERIM SURVIVOR CURVE.. IOWA 25-S2.5 |  |  |  |  |  |  |
| PROBABLE RETIREMENT YEAR.. 12-2034 |  |  |  |  |  |  |
| NET SALVAGE PERCENT. . 0 |  |  |  |  |  |  |
| 2009 | 226,663.00 | 103,728 | 88,650 | 138,013 | 12.16 | 11,350 |
| 2011 | 360, 913.00 | 141,864 | 121, 242 | 239,671 | 12.97 | 18,479 |
| 2012 | 309, 233.00 | 110,823 | 94,713 | 214,520 | 13.32 | 16,105 |
| 2013 | 47,621.00 | 15,329 | 13,101 | 34,520 | 13.63 | 2,533 |
| 2015 | 242,832.00 | 58,525 | 50,018 | 192,814 | 14.14 | 13,636 |
|  | 1,187, 262.00 | 430, 269 | 367,724 | 819,538 |  | 62,103 |
| COMPOSITE REMAI |  | NG LIFE AND | ANNUAL ACCRUA | RATE, PERCEN | . 13 | 5.23 |

## EL PASO ELECTRIC COMPANY

ACCOUNT 345.00 ACCESSORY ELECTRIC EQUIPMENT
CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

COPPER POWER STATION
INTERIM SURVIVOR CURVE.. IOWA 45-S1.5
PROBABLE RETIREMENT YEAR.. 12-2030
NET SALVAGE PERCENT.. 0

| 1980 | $451,417.00$ | 354,606 | 363,571 | 87,846 | 8.78 | 10,005 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2012 | $536,392.00$ | 218,902 | 224,436 | 311,956 | 10.82 | 28,831 |
| 2017 | $15,875.13$ | 2,943 | 3,017 | 12,858 | 10.94 | 1,175 |
| 2018 | $1,239.49$ | 149 | 153 | 1,087 | 10.95 | 99 |
| 2019 | $1,301,936.99$ | 56,804 | 58,240 | $1,243,697$ | 10.96 | 113,476 |
|  | $2,306,860.61$ | 633,404 | 649,418 | $1,657,443$ |  | 153,586 |

RIO GRANDE UNIT 9
INTERIM SURVIVOR CURVE.. IOWA 45-S1.5
PROBABLE RETIREMENT YEAR.. 12-2045
NET SALVAGE PERCENT.. 0

| 2013 | $4,666,024.00$ | 984,251 | 778,270 |
| ---: | ---: | ---: | ---: |
| 2014 | $50,603.00$ | 9,287 | 7,343 |
| 2015 | $193,495.00$ | 29,943 | 23,677 |
| 2016 | $248,559.77$ | 30,826 | 24,375 |
| 2019 | $27,928.77$ | 545 | 431 |
|  |  |  |  |
|  | $5,186,610.54$ | $1,054,852$ | 834,096 |


| $3,887,754$ | 24.09 |
| ---: | ---: |
| 43,260 | 24.29 |
| 169,818 | 24.47 |
| 224,185 | 24.65 |
| 27,498 | 25.10 |

161,385
1,781
6,940
9, 095
1,096
$5,186,610.54 \quad 1,054,852$
4,352,515
180, 297

MONTANA POWER STATION UNIT 1
INTERIM SURVIVOR CURVE.. IOWA 45-S1.5 PROBABLE RETIREMENT YEAR.. 12-2045
NET SALVAGE PERCENT.. 0

| 2015 | $2,298,034.00$ | 355,621 | 256,078 | $2,041,956$ | 24.47 | 83,447 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2016 | $6,460.42$ | $73,776.95$ | 601 | 577 | 5,884 | 24.65 |
| 2017 | $737,246.97$ | 14,398 | 4,863 | 68,913 | 24.81 | 239 |
| 2019 |  |  | 10,368 | 726,879 | 25.10 | 28,978 |
|  | $3,115,518.34$ | 377,574 | 271,887 | $2,843,632$ |  | 115,423 |

## EL PASO ELECTRIC COMPANY

ACCOUNT 345.00 ACCESSORY ELECTRIC EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

MONTANA POWER STATION UNIT 2
INTERIM SURVIVOR CURVE.. IOWA 45-S1.5
PROBABLE RETIREMENT YEAR.. 12-2045
NET SALVAGE PERCENT.. 0

| 2015 | $2,319,983.00$ | 359,017 | 258,548 | $2,061,435$ | 24.47 | 84,243 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2017 | $11,595.07$ | 1,061 | 764 | 10,831 | 24.81 | 437 |
| 2018 | $11,229.51$ | 637 | 459 | 10,771 | 24.96 | 432 |
| 2019 | $687,154.74$ | 13,420 | 9,664 | 677,490 | 25.10 | 26,992 |
|  | $3,029,962.32$ | 374,135 | 269,436 | $2,760,527$ |  | 112,104 |

MONTANA POWER STATION UNIT 3
INTERIM SURVIVOR CURVE.. IOWA 45-S1.5
PROBABLE RETIREMENT YEAR.. 12-2045
NET SALVAGE PERCENT.. 0

| 2016 | $2,305,411.81$ | 285,917 | 187,884 | $2,117,528$ | 24.65 | 85,904 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2019 | $381,237.87$ | 7,446 | 4,893 | 376,345 | 25.10 | 14,994 |
|  | $2,686,649.68$ | 293,363 | 192,777 | $2,493,873$ |  | 100,898 |

MONTANA POWER STATION UNIT 4
INTERIM SURVIVOR CURVE.. IOWA 45-S1.5
PROBABLE RETIREMENT YEAR.. 12-2045
NET SALVAGE PERCENT.. 0

| 2016 | 1,837, 822.10 | 227,927 | 133,705 | 1,704,117 | 24.65 | 69,133 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2019 | 412,952.31 | 8,065 | 4,731 | 408, 221 | 25.10 | 16,264 |
|  | 2, 250,774.41 | 235,992 | 138,436 | 2,112,338 |  | 85,397 |
| MONTANA POWER STATION COMMON |  |  |  |  |  |  |
| INTERIM SURVIVOR CURVE.. IOWA 45-S1.5 |  |  |  |  |  |  |
| PROBABLE RETIREMENT YEAR.. 12-2045 |  |  |  |  |  |  |
| NET SALVAGE PERCENT.. 0 |  |  |  |  |  |  |
| 2015 | 7,655,912.00 | 1,184,752 | 949, 251 | 6,706,661 | 24.47 | 274, 077 |
| 2016 | 718,565.63 | 89,117 | 71,403 | 647,163 | 24.65 | 26,254 |



| EL PASO ELECTRIC COMPANY |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ACCOUNT 345.00 ACCESSORY ELECTRIC EQUIPMENT - SOLAR |  |  |  |  |  |  |
| CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019 |  |  |  |  |  |  |
| YEAR <br> (1) | ORIGINAL COST (2) | CALCULATED ACCRUED (3) | ALLOC. BOOK RESERVE (4) | FUTURE BOOK ACCRUALS (5) | REM. <br> LIFE <br> (6) | ANNUAL ACCRUAL (7) |
| SOLAR FACILITIES |  |  |  |  |  |  |
| INTERIM SURVIVOR CURVE.. IOWA 25-S2.5 |  |  |  |  |  |  |
| PROBABLE RETIREMENT YEAR.. 12-2034 |  |  |  |  |  |  |
| NET SALVAGE PERCENT. . 0 |  |  |  |  |  |  |
| 2009 | 48,070.00 | 21,998 | 17,565 | 30,505 | 12.16 | 2,509 |
| 2011 | 57,817.00 | 22,726 | 18,147 | 39,670 | 12.97 | 3, 059 |
| 2012 | 61,473.00 | 22,031 | 17,592 | 43,881 | 13.32 | 3,294 |
|  | 167,360.00 | 66,755 | 53,304 | 114, 056 |  | 8,862 |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 12.9 5.30 |  |  |  |  |  |  |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 346.00 MISCELLANEOUS POWER PLANT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

COPPER POWER STATION
INTERIM SURVIVOR CURVE.. IOWA 50-R4 PROBABLE RETIREMENT YEAR.. 12-2030 NET SALVAGE PERCENT.. 0

| 1980 | $362,392.76$ | 289,711 | 362,393 |
| :--- | ---: | ---: | ---: |
| 1981 | $81,622.00$ | 64,751 | 81,622 |
| 1982 | $71,612.00$ | 56,390 | 71,612 |
| 1983 | $1,335.00$ | 1,043 | 1,335 |
| 1994 | $66,355.00$ | 46,679 | 66,355 |
| 1995 | $448,516.00$ | 311,441 | 448,516 |
| 1996 | $1,572,516.00$ | $1,077,205$ | $1,572,516$ |
| 1997 | $50,533.00$ | 34,112 | 50,533 |
| 1998 | $44,484.00$ | 29,550 | 44,484 |
| 1999 | $19,864.00$ | 12,975 | 19,864 |
| 2000 | $132,241.00$ | 84,866 | 132,241 |
| 2001 | $653,839.54$ | 411,245 | 653,840 |
| 2002 | $210,134.73$ | 129,376 | 210,135 |
| 2003 | $100,682.83$ | 60,543 | 99,898 |
| 2004 | $8,366.12$ | 4,905 | 8,093 |
| 2007 | $42,554.16$ | 22,666 | 37,400 |
| 2012 | $147,216.00$ | 59,746 | 98,583 |
| 2015 | $156,360.00$ | 45,424 | 74,951 |
|  |  |  |  |
|  | $4,170,624.14$ | $2,742,628$ | $4,034,370$ |


| 785 | 10.90 | 72 |
| ---: | ---: | ---: |
| 273 | 10.91 | 25 |
| 5,155 | 10.95 | 471 |
| 48,633 | 10.98 | 4,429 |
| 81,409 | 10.99 | 7,408 |
|  |  | 12,405 |

RIO GRANDE UNIT 9
INTERIM SURVIVOR CURVE.. IOWA 50-R4
PROBABLE RETIREMENT YEAR.. 12-2045
NET SALVAGE PERCENT.. 0

| 2013 | $347,016.00$ | 70,139 | 54,834 | 292,182 | 25.62 | 11,404 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2015 | $63,044.00$ | 9,385 | 7,337 | 55,707 | 25.73 | 2,165 |
|  | $410,060.00$ | 79,524 | 62,171 | 347,889 | 13,569 |  |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 346.00 MISCELLANEOUS POWER PLANT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

MONTANA POWER STATION UNIT 1
INTERIM SURVIVOR CURVE.. IOWA 50-R4
PROBABLE RETIREMENT YEAR.. 12-2045
NET SALVAGE PERCENT.. 0

| 2015 | $157,176.29$ | 23,397 | 26,823 | 130,353 | 25.73 | 5,066 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2016 | $9,448.44$ | 1,130 | 1,295 | 8,153 | 25.77 | 316 |
| 2017 | $25,577.62$ | 2,259 | 2,590 | 22,988 | 25.81 | 891 |
| 2019 | $105,366.45$ | 1,998 | 2,291 | 103,076 | 25.87 | 3,984 |
|  |  |  |  |  |  | 10,257 |

MONTANA POWER STATION UNIT 2
INTERIM SURVIVOR CURVE.. IOWA 50-R4 PROBABLE RETIREMENT YEAR.. 12-2045 NET SALVAGE PERCENT.. 0

| 2015 | $163,198.86$ | 24,294 | 28,231 | 134,968 | 25.73 | 5,246 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2016 | $9,445.55$ | 1,129 | 1,312 | 8,134 | 25.77 | 316 |
| 2017 | $1,398.71$ | 124 | 144 | 1,255 | 25.81 | 49 |
| 2019 | $101,707.62$ | 1,928 | 2,240 | 99,467 | 25.87 | 3,845 |
|  |  |  |  |  |  | 9,456 |

MONTANA POWER STATION UNIT 3
INTERIM SURVIVOR CURVE.. IOWA 50-R4 PROBABLE RETIREMENT YEAR.. 12-2045
NET SALVAGE PERCENT.. 0

| 2016 | 164,399.45 | 19,659 | 20,543 | 143, 856 | 25.77 | 5,582 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2019 | 64,958.90 | 1,232 | 1,287 | 63,671 | 25.87 | 2,461 |
|  | 229,358.35 | 20,891 | 21,831 | 207,528 |  | 8, 043 |
| MONTANA POWER STATION UNIT 4 |  |  |  |  |  |  |
| INTERIM SURVIVOR CURVE.. IOWA 50-R4 |  |  |  |  |  |  |
| PROBABLE RETIREMENT YEAR.. 12-2045 |  |  |  |  |  |  |
| NET SALVAGE PERCENT.. 0 |  |  |  |  |  |  |
| 2016 | 159,884.27 | 19,119 | 18,247 | 141, 638 | 25.77 | 5,496 |
| 2019 | 71,343.41 | 1,353 | 1,291 | 70,052 | 25.87 | 2,708 |
|  | 231,227.68 | 20,472 | 19,538 | 211,690 |  | 8,204 |

## EL PASO ELECTRIC COMPANY

ACCOUNT 346.00 MISCELLANEOUS POWER PLANT EQUIPMENT
CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

MONTANA POWER STATION COMMON
INTERIM SURVIVOR CURVE.. IOWA 50-R4
PROBABLE RETIREMENT YEAR.. 12-2045
NET SALVAGE PERCENT.. 0

| 2015 | $460,840.04$ | 68,601 | 86,225 | 374,615 | 25.73 | 14,559 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2016 | $246,367.59$ | 29,461 | 37,030 | 209,338 | 25.77 | 8,123 |
| 2017 | $28,253.29$ | 2,495 | 3,136 | 25,117 | 25.81 | 973 |
| 2018 | 13.50 | 1 | 1 | 12 | 25.84 | 206 |
| 2019 | $5,456.71$ | 103 | 129 | 5,327 | 25.87 |  |
|  | $740,931.13$ | 100,661 | 126,522 | 614,409 | 23,861 |  |
|  |  |  |  |  | 85,795 |  |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 23.6 1.35

## EL PASO ELECTRIC COMPANY

## ACCOUNT 350.10 LAND RIGHTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. IOWA 80-R3
NET SALVAGE PERCENT.. 0

| 1951 | $15,275.26$ | 11,013 | 15,275 |
| :--- | ---: | ---: | ---: |
| 1952 | 41.73 | 30 | 42 |
| 1953 | 550.50 | 389 | 550 |
| 1955 | $20,387.85$ | 14,065 | 20,388 |
| 1956 | $38,702.06$ | 26,385 | 38,702 |
| 1957 | $89,645.89$ | 60,377 | 89,646 |
| 1958 | $29,536.78$ | 19,649 | 29,536 |
| 1959 | $18,172.65$ | 11,935 | 17,941 |
| 1960 | $41,276.70$ | 26,752 | 40,214 |
| 1961 | $5,826.87$ | 3,726 | 5,601 |
| 1962 | $9,733.61$ | 6,139 | 9,228 |
| 1963 | $75,681.96$ | 47,065 | 70,748 |
| 1964 | $15,799.75$ | 9,683 | 14,555 |
| 1965 | $19,856.23$ | 11,988 | 18,020 |
| 1966 | $21,384.40$ | 12,716 | 19,115 |
| 1967 | $11,449.68$ | 6,702 | 10,074 |
| 1968 | $40,970.31$ | 23,599 | 35,474 |
| 1969 | $310,487.13$ | 175,891 | 264,400 |
| 1970 | $53,398.94$ | 29,743 | 44,710 |
| 1971 | $44,592.89$ | 24,409 | 36,692 |
| 1972 | $7,029.57$ | 3,779 | 5,681 |
| 1973 | $22,378.65$ | 11,813 | 17,757 |
| 1974 | $49,951.89$ | 25,869 | 38,886 |
| 1975 | $85,383.90$ | 43,375 | 65,201 |
| 1976 | $29,894.34$ | 14,884 | 22,374 |
| 1977 | $8,971.30$ | 4,376 | 6,578 |
| 1978 | $1,220,096.96$ | 582,596 | 875,759 |
| 1979 | $45,436.98$ | 21,230 | 31,913 |
| 1980 | $93,757.93$ | 42,836 | 64,391 |
| 1981 | $29,847.36$ | 13,323 | 20,027 |
| 1982 | $28,842.42$ | 12,572 | 18,898 |
| 1983 | $8,926.63$ | 3,796 | 5,706 |
| 1984 | $2,061,078.70$ | 854,564 | $1,284,582$ |
| 1985 | $15,271.07$ | 6,168 | 9,272 |
| 1986 | $1,212.16$ | 477 | 717 |
| 1987 | $219,448.40$ | 83,884 | 126,094 |
| 1988 | $6,316.34$ | 2,345 | 3,525 |
| 1989 | $2,623,279.26$ | 945,036 | $1,420,579$ |
| 1990 | $482,502.79$ | 168,451 | 253,216 |
| 1991 | $234,043.48$ | 79,107 | 118,914 |
| 2003 | $923,884.28$ | 184,546 | 277,410 |
| 2004 | $160,833.96$ | 30,217 | 45,422 |
| 2006 | $533,274.85$ | 87,521 | 131,562 |
|  |  |  | 1 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 350.10 LAND RIGHTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. IOWA 80-R3 NET SALVAGE PERCENT.. 0

| 2013 | 2,439,651.00 | 194,245 | 291,989 | 2,147,662 | 73.63 | 29,168 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2016 | 301, 706.00 | 12,973 | 19,501 | 282, 205 | 76.56 | 3,686 |
| 2017 | 547,311.79 | 16,830 | 25,299 | 522,013 | 77.54 | 6,732 |
| 2019 | 5,874,643.18 | 35,953 | 54, 044 | 5,820,599 | 79.51 | 73,206 |
|  | 18, 917, 746.38 | 4, 005, 022 | 6, 016,208 | 12,901,538 |  | 192,753 |
|  | MPOSITE REMAI | G LIFE AND | NUAL ACCRU | RATE, PERCE | . 66 | 1.02 |


| EL PASO ELECTRIC COMPANY |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ACCOUNT 350.10 LAND RIGHTS ISLETA |  |  |  |  |  |  |
| CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019 |  |  |  |  |  |  |
| YEAR <br> (1) | ORIGINAL COST (2) | CALCULATED ACCRUED (3) | ALLOC. BOOK RESERVE (4) | FUTURE BOOK ACCRUALS (5) | REM. <br> LIFE <br> (6) | ANNUAL ACCRUAL (7) |
| INTERIM SURVIVOR CURVE.. SQUARE PROBABLE RETIREMENT YEAR.. 12-2043 NET SALVAGE PERCENT.. 0 |  |  |  |  |  |  |
| 2018 | 16, 824,155.75 | 989,597 | 1,540,524 | 15,283, 632 | 24.00 | 636,818 |
|  | 16,824,155.75 | 989, 597 | 1,540,524 | 15,283,632 |  | 636,818 |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 24.0 3.79 |  |  |  |  |  |  |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 352.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. IOWA 75-R4
NET SALVAGE PERCENT. . 5

| 1956 | $29,981.00$ | 24,063 | 31,480 |
| :--- | ---: | ---: | ---: |
| 1957 | $37,951.00$ | 30,099 | 39,849 |
| 1958 | $13,335.00$ | 10,449 | 14,002 |
| 1959 | $4,459.00$ | 3,450 | 4,682 |
| 1960 | $48,046.00$ | 36,700 | 50,448 |
| 1962 | $4,090.00$ | 3,042 | 4,294 |
| 1963 | $21,859.00$ | 16,033 | 22,952 |
| 1964 | $3,042.00$ | 2,199 | 3,164 |
| 1966 | $6,572.00$ | 4,611 | 6,635 |
| 1967 | $32,486.00$ | 22,445 | 32,299 |
| 1971 | 456.00 | 295 | 425 |
| 1972 | $2,819.00$ | 1,789 | 2,574 |
| 1981 | $4,582.00$ | 2,406 | 3,462 |
| 1982 | $1,439.00$ | 737 | 1,061 |
| 1984 | $3,241,336.00$ | $1,577,375$ | $2,269,916$ |
| 1985 | $47,694.00$ | 22,596 | 32,517 |
| 1986 | $359,249.00$ | 165,471 | 238,120 |
| 1987 | $14,928.00$ | 6,679 | 9,611 |
| 1988 | $16,942.00$ | 7,358 | 10,589 |
| 1989 | $281,386.00$ | 118,457 | 170,465 |
| 1990 | $8,045.00$ | 3,280 | 4,720 |
| 1991 | $7,422.00$ | 2,926 | 4,211 |
| 1992 | $11,851.63$ | 42,593 | 61,293 |
| 1995 | $204,486.52$ | 69,538 | 100,068 |
| 1997 | $51,534.00$ | 16,118 | 23,195 |
| 1999 | $8,688.00$ | 2,479 | 3,567 |
| 2000 | $186,804.00$ | 50,737 | 73,013 |
| 2001 | $5,617.00$ | 1,448 | 2,084 |
| 2002 | $339,287.33$ | 82,747 | 119,077 |
| 2003 | $111,377.29$ | 25,619 | 36,867 |
| 2004 | 140.01 | $36,842.89$ | 9,476 |
| 2005 | $451,866.31$ | 85,151 | 13,636 |
| 2006 | 451 | 122,536 |  |
| 2007 | $85,199.55$ | 14,874 | 21,404 |
| 2008 | $35,297.00$ | 5,668 | 8,157 |
| 2009 | $1,067,512.00$ | 156,622 | 225,386 |
| 2010 | $3,221.00$ | 427 | 614 |
| 2011 | $729,999.00$ | 86,668 | 124,720 |
| 2012 | $60,714.00$ | 6,367 | 9,162 |
| 2013 | $720,228.00$ | 65,437 | 94,167 |
| 2014 | $133,432.00$ | 10,256 | 14,759 |
| 2015 | $575,101.79$ | 36,153 | 52,026 |
| 2016 | $1,607,154.42$ | 78,756 | 113,334 |
|  |  |  |  |


| 30 | 23.36 | 1 |
| ---: | ---: | ---: |
| 266 | 24.88 | 11 |
| 1,811 | 25.65 | 71 |
| 54 | 28.85 | 2 |
| 386 | 29.68 | 13 |
| 1,349 | 37.49 | 36 |
| 450 | 38.40 | 12 |
| $1,133,487$ | 40.24 | 28,168 |
| 17,562 | 41.16 | 427 |
| 139,091 | 42.10 | 3,304 |
| 6,063 | 43.04 | 141 |
| 7,200 | 43.98 | 164 |
| 124,990 | 44.93 | 2,782 |
| 3,727 | 45.88 | 81 |
| 3,582 | 46.84 | 76 |
| 56,151 | 47.80 | 1,175 |
| 114,643 | 50.71 | 2,261 |
| 30,916 | 52.66 | 587 |
| 5,555 | 54.62 | 102 |
| 123,131 | 55.60 | 2,215 |
| 3,814 | 56.59 | 67 |
| 237,175 | 57.58 | 4,119 |
| 80,079 | 58.57 | 1,367 |
| 104 | 59.56 | 2 |
| 35,549 | 60.55 | 587 |
| 351,924 | 61.54 | 5,719 |
| 68,056 | 62.53 | 1,088 |
| 28,905 | 63.53 | 455 |
| 895,502 | 64.52 | 13,879 |
| 2,768 | 65.52 | 42 |
| 641,779 | 66.52 | 9,648 |
| 54,588 | 67.51 | 809 |
| 662,072 | 68.51 | 9,664 |
| 125,345 | 69.51 | 1,803 |
| 551,831 | 70.51 | 7,826 |
| $1,574,178$ | 71.50 | 22,016 |
|  |  |  |
| 10 |  |  |


| EL PASO ELECTRIC COMPANY |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ACCOUNT 352.00 STRUCTURES AND IMPROVEMENTS |  |  |  |  |  |  |
| CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019 |  |  |  |  |  |  |
| YEAR <br> (1) | ORIGINAL COST (2) | CALCULATED ACCRUED (3) | ALLOC. BOOK RESERVE <br> (4) | FUTURE BOOK ACCRUALS (5) | REM. <br> LIFE <br> (6) | ANNUAL ACCRUAL (7) |
| SURVIVOR CURVE.. IOWA 75-R4 |  |  |  |  |  |  |
| NET SALVAGE PERCENT.. -5 |  |  |  |  |  |  |
| 2017 | 421, 104.21 | 14,737 | 21,207 | 420, 952 | 72.50 | 5,806 |
| 2018 | 653, 206.46 | 13,717 | 19,739 | 666,128 | 73.50 | 9,063 |
| 2019 | 664,659.17 | 4,655 | 6,699 | 691,193 | 74.50 | 9,278 |
|  | 12,463,442.58 | 2,942,733 | 4,224, 229 | 8,862,386 |  | 144, 867 |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 61.2 1.16 |  |  |  |  |  |  |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 353.00 STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. IOWA 50-R4
NET SALVAGE PERCENT. . 5

| 1971 | $526,623.00$ |
| ---: | ---: |
| 1972 | $1,465,123.00$ |
| 1973 | $830,125.00$ |
| 1974 | $457,149.00$ |
| 1975 | $12,440.00$ |
| 1976 | $659,449.00$ |
| 1978 | $3,158,528.00$ |
| 1979 | $172,153.00$ |
| 1980 | $1,750,237.00$ |
| 1981 | $454,991.00$ |
| 1982 | $474,315.00$ |
| 1983 | $67,742.00$ |
| 1984 | $30,136,091.13$ |
| 1985 | $446,273.00$ |
| 1986 | $365,093.00$ |
| 1987 | $3,728,603.00$ |
| 1988 | $40,283.00$ |
| 1989 | $18,304,721.00$ |
| 1990 | $1,202,871.09$ |
| 1991 | $486,654.83$ |
| 1992 | $245,717.72$ |
| 1994 | $816,065.00$ |
| 1995 | $341,890.76$ |
| 1996 | $91,907.52$ |
| 1997 | $7,116,863.78$ |
| 1998 | $175,658.00$ |
| 1999 | $590,888.00$ |
| 2000 | $5,501,615.28$ |
| 2001 | $283,287.13$ |
| 2002 | $983,371.56$ |
| 2003 | $8,363,933.16$ |
| 2004 | $1,451,295.11$ |
| 2005 | $30,224.48$ |
| 2006 | $823,449.97$ |
| 2007 | $875,249.45$ |
| 2008 | $13,069,854.10$ |
| 2009 | $8,325,190.16$ |
| 2010 | $768,558.00$ |
| 2011 | $11,856,654.77$ |
| 2012 | $4,266,962.65$ |
| 2013 | $4,698,296.24$ |
| 2014 | $3,791,123.75$ |
| 2015 | $8,131,729.00$ |
|  |  |

$$
\begin{array}{r}
463,929 \\
1,274,393 \\
712,297 \\
386,501 \\
10,356 \\
540,089 \\
2,497,290 \\
133,618 \\
1,332,735 \\
339,578 \\
346,629 \\
48,439 \\
21,067,840 \\
304,675 \\
243,119 \\
2,419,490 \\
25,446 \\
11,239,831 \\
717,140 \\
281,248 \\
137,464 \\
425,864 \\
171,882 \\
44,430 \\
3,301,442 \\
78,019 \\
250,779 \\
2,224,028 \\
108,808 \\
357,878 \\
2,873,513 \\
468,739 \\
9,140 \\
232,065 \\
228,650 \\
3142,646 \\
1,828,711 \\
152,843 \\
2,111,433 \\
670,254 \\
640,331 \\
437,079 \\
766,741
\end{array}
$$

552, 954
1,538,379 871,631 480, 006 13, 062 692,421
3, 266, 284 174,763
1, 743, 126
444, 145
453, 367
63, 355
27,555,290
398,494
317,983
3,164,527
33, 282
14,700,928
937,970
367, 853
179, 793
557, 001
224, 810
58,111
4, 318, 060
102, 044
328, 002
2,908,876
142, 313
468, 080
3,758, 358
613, 078 11, 954
303, 525
299, 059
4,110,366
2, 391, 829
199, 908
2, 761,610
876,646
837,509
571, 669
1,002,845

| 50,170 | 12.35 | 4,062 |
| ---: | ---: | ---: |
| 5,998 | 13.04 | 460 |
| 94,623 | 13.74 | 6,887 |
| 33,596 | 14.46 | 2,323 |
| 44,664 | 15.20 | 2,938 |
| 7,774 | 15.95 | 487 |
| $4,087,606$ | 16.71 | 244,620 |
| 70,093 | 17.49 | 4,008 |
| 65,365 | 18.29 | 3,574 |
| 750,506 | 19.10 | 39,294 |
| 9,015 | 19.92 | 453 |
| $4,519,029$ | 20.76 | 217,680 |
| 325,045 | 21.61 | 15,041 |
| 143,135 | 22.48 | 6,367 |
| 78,211 | 23.36 | 3,348 |
| 299,867 | 25.15 | 11,923 |
| 134,175 | 26.06 | 5,149 |
| 38,392 | 26.98 | 1,423 |
| $3,154,647$ | 27.91 | 113,029 |
| 82,397 | 28.85 | 2,856 |
| 292,430 | 29.79 | 9,816 |
| $2,867,820$ | 30.75 | 93,262 |
| 155,138 | 31.71 | 4,892 |
| 564,460 | 32.67 | 17,278 |
| $5,023,772$ | 33.64 | 149,339 |
| 910,782 | 34.62 | 26,308 |
| 19,782 | 35.60 | 556 |
| 561,097 | 36.58 | 15,339 |
| 619,953 | 37.56 | 16,506 |
| $9,612,981$ | 38.55 | 249,364 |
| $6,349,621$ | 39.54 | 160,587 |
| 607,078 | 40.53 | 14,978 |
| $9,687,878$ | 41.52 | 233,330 |
| $3,603,665$ | 42.52 | 84,752 |
| $4,095,702$ | 43.51 | 94,132 |
| $3,409,011$ | 44.51 | 76,590 |
| $7,535,470$ | 45.51 | 165,578 |
|  |  |  |



SURVIVOR CURVE.. IOWA 50-R4 NET SALVAGE PERCENT. . 5

| 2016 | 27,725,691.45 | 2,037,838 | 2,665,352 | 26,446, 624 | 46.50 | 568,745 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2017 | 7,271,160.92 | 381, 736 | 499, 285 | 7,135,434 | 47.50 | 150, 220 |
| 2018 | 4,284,404.78 | 134,959 | 176,517 | 4,322,108 | 48.50 | 89,116 |
| 2019 | 2, 023, 057.91 | 21,242 | 27,783 | 2,096,428 | 49.50 | 42,352 |
|  | 188, 643,565.70 | 67,623,157 | 88,164,203 | 109, 911,541 |  | 2,948,962 |
|  | COMPOSITE REMAI | NG LIFE AND | NNUAL ACCRU | RATE, PERCE | 37 | 1.56 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 354.00 STEEL TOWERS AND FIXTURES

## CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. IOWA 75-R4 NET SALVAGE PERCENT.. -10

| 1984 | 4, 016,755.00 | 2,047,810 | 2,727,137 | 1,691, 294 | 40.24 | 42,030 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1985 | 74.00 | 37 | 49 | 32 | 41.16 | 1 |
| 1986 | 3,408.00 | 1,644 | 2,189 | 1,560 | 42.10 | 37 |
| 1987 | 57,701.00 | 27, 047 | 36,019 | 27,452 | 43.04 | 638 |
| 1989 | 18,753,205.00 | 8,270,595 | 11, 014, 229 | 9,614,296 | 44.93 | 213,984 |
| 1991 | 706,563.00 | 291, 823 | 388, 630 | 388, 589 | 46.84 | 8,296 |
| 1995 | 5,348.00 | 1,905 | 2,537 | 3,346 | 50.71 | 66 |
| 1997 | 3,811.00 | 1,249 | 1,663 | 2,529 | 52.66 | 48 |
| 1998 | 42,687.00 | 13,373 | 17,809 | 29,147 | 53.64 | 543 |
| 2000 | 258,419.00 | 73,530 | 97,922 | 186,339 | 55.60 | 3,351 |
| 2005 | 0.13 |  |  |  |  |  |
| 2006 | 5,079.53 | 1,003 | 1,336 | 4,251 | 61.54 | 69 |
| 2009 | 216,147.00 | 33,222 | 44,243 | 193,519 | 64.52 | 2,999 |
| 2011 | 56, 900.00 | 7,077 | 9,425 | 53,165 | 66.52 | 799 |
| 2012 | 1,109,100.00 | 121,842 | 162,261 | 1, 057,749 | 67.51 | 15,668 |
| 2013 | 364,942.00 | 34,736 | 46,259 | 355,177 | 68.51 | 5,184 |
| 2016 | 1, 289, 691.07 | 66,209 | 88,173 | 1,330,487 | 71.50 | 18,608 |
| 2017 | 3, 280, 950.86 | 120,290 | 160,194 | 3,448,852 | 72.50 | 47,570 |
|  | 30,170,781.59 | 11,113,392 | 14,800, 075 | 18,387,784 |  | 359,891 |
| COMPOSITE REMAINING LIFE AND |  |  | ANNUAL ACCRUAL RATE, PERCENT |  | . 51 | 1.19 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 355.00 WOOD AND STEEL POLES

## CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. IOWA 55-S3
NET SALVAGE PERCENT. . 20

| 1964 | 260.00 | 251 | 306 | 6 | 10.68 | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1965 | 53,553.55 | 51,341 | 62,601 | 1,663 | 11.06 | 150 |
| 1966 | 123,561.79 | 117,380 | 143, 124 | 5,150 | 11.46 | 449 |
| 1967 | 44,697.90 | 42, 061 | 51,286 | 2,351 | 11.87 | 198 |
| 1968 | 159,942.14 | 149, 044 | 181,732 | 10,199 | 12.29 | 830 |
| 1969 | 2,585,632.92 | 2,384,626 | 2,907,618 | 195,142 | 12.73 | 15,329 |
| 1970 | 211,260.96 | 192,716 | 234,982 | 18,531 | 13.19 | 1,405 |
| 1971 | 183,504.19 | 165,515 | 201,815 | 18,390 | 13.66 | 1,346 |
| 1972 | 28,927.40 | 25,782 | 31,436 | 3,277 | 14.15 | 232 |
| 1973 | 92,090.40 | 81, 052 | 98,828 | 11,680 | 14.66 | 797 |
| 1974 | 205,557.01 | 178,544 | 217,702 | 28,966 | 15.19 | 1,907 |
| 1975 | 346,600.58 | 296,967 | 362, 097 | 53,824 | 15.73 | 3,422 |
| 1976 | 123, 018.13 | 103,873 | 126,654 | 20,968 | 16.30 | 1,286 |
| 1977 | 36,917.79 | 30,705 | 37,439 | 6,862 | 16.88 | 407 |
| 1978 | 5,243,933.05 | 4,292,767 | 5,234,250 | 1,058,470 | 17.48 | 60,553 |
| 1979 | 198,509.59 | 159,776 | 194,818 | 43,394 | 18.11 | 2,396 |
| 1980 | 410, 278.68 | 324,493 | 395,660 | 96,674 | 18.75 | 5,156 |
| 1981 | 130,737.77 | 101,519 | 123, 784 | 33,101 | 19.41 | 1,705 |
| 1982 | 126,335.97 | 96,200 | 117, 298 | 34,305 | 20.10 | 1,707 |
| 1983 | 39,100.51 | 29,168 | 35,565 | 11,356 | 20.81 | 546 |
| 1984 | 9,296,819.43 | 6,789,095 | 8,278,068 | 2,878,115 | 21.53 | 133,679 |
| 1985 | 67, 027.42 | 47,850 | 58,344 | 22,089 | 22.28 | 991 |
| 1986 | 42,452.80 | 29,594 | 36, 085 | 14,858 | 23.05 | 645 |
| 1987 | 963,198.15 | 654,840 | 798,458 | 357, 380 | 23.84 | 14,991 |
| 1988 | 27,723.53 | 18,358 | 22,384 | 10,884 | 24.65 | 442 |
| 1989 | 20,793, 025.00 | 13,392, 288 | 16,329,463 | 8,622,167 | 25.48 | 338,390 |
| 1990 | 1,299, 408.66 | 812,811 | 991, 075 | 568,215 | 26.33 | 21,581 |
| 1991 | 1, 043,442.09 | 633,127 | 771,983 | 480,148 | 27.19 | 17,659 |
| 1992 | 17,364.97 | 10,203 | 12,441 | 8,397 | 28.07 | 299 |
| 1993 | 2, 912, 039.05 | 1,653,817 | 2,016,530 | 1,477,917 | 28.97 | 51,015 |
| 1994 | 2, 003,571.55 | 1, 098,109 | 1,338,945 | 1,065,341 | 29.88 | 35,654 |
| 1995 | 1,102,537.73 | 582,140 | 709,814 | 613,231 | 30.80 | 19,910 |
| 1996 | 5,649,141.45 | 2,866,894 | 3,495,657 | 3,283,313 | 31.74 | 103,444 |
| 1997 | 2,106,341.00 | 1, 025,754 | 1,250,721 | 1,276,888 | 32.68 | 39, 072 |
| 1998 | 1,507, 945.19 | 702,751 | 856,877 | 952,657 | 33.64 | 28,319 |
| 1999 | 1,181, 374.35 | 525,565 | 640,831 | 776,818 | 34.61 | 22,445 |
| 2000 | 1,270,898.69 | 538,490 | 656,591 | 868,487 | 35.58 | 24,409 |
| 2001 | 352, 755.32 | 141, 922 | 173, 048 | 250, 258 | 36.56 | 6,845 |
| 2002 | 877,300.63 | 334, 199 | 407,495 | 645,266 | 37.54 | 17,189 |
| 2003 | 1,159,769.20 | 416,751 | 508,152 | 883,571 | 38.53 | 22,932 |
| 2004 | 4,664,575.00 | 1,575,414 | 1,920,931 | 3,676,559 | 39.52 | 93,030 |
| 2005 | 928,837.60 | 293,643 | 358, 044 | 756,561 | 40.51 | 18,676 |
| 2006 | 62,187.85 | 18,303 | 22,317 | 52,308 | 41.51 | 1,260 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 355.00 WOOD AND STEEL POLES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. IOWA 55-S3
NET SALVAGE PERCENT. . 20

| 2007 | $625,988.03$ | 170,722 | 208,164 | 543,022 | 42.50 | 12,777 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2008 | $4,829,670.08$ | $1,211,803$ | $1,477,574$ | $4,318,030$ | 43.50 | 99,265 |
| 2009 | $696,439.00$ | 159,549 | 194,541 | 641,186 | 44.50 | 14,409 |
| 2010 | $1,473,299.00$ | 305,380 | 372,355 | $1,395,604$ | 45.50 | 30,673 |
| 2011 | $5,593,230.75$ | $1,037,321$ | $1,264,825$ | $5,447,052$ | 46.50 | 117,141 |
| 2012 | $9,016,252.09$ | $1,475,347$ | $1,798,918$ | $9,020,585$ | 47.50 | 189,907 |
| 2013 | $15,326,116.13$ | $2,173,488$ | $2,650,174$ | $15,741,165$ | 48.50 | 324,560 |
| 2014 | $2,639,010.08$ | 316,681 | 386,135 | $2,780,677$ | 49.50 | 56,175 |
| 2015 | $12,868,396.00$ | $1,263,471$ | $1,540,574$ | $13,901,501$ | 50.50 | 275,277 |
| 2016 | $6,045,537.58$ | 461,686 | 562,942 | $6,691,703$ | 51.50 | 129,936 |
| 2017 | $9,875,730.04$ | 538,622 | 656,752 | $11,194,124$ | 52.50 | 213,221 |
| 2018 | $14,731,560.48$ | 482,076 | 587,804 | $17,090,069$ | 53.50 | 319,441 |
| 2019 | $10,089,154.02$ | 110,052 | 134,188 | $11,972,796$ | 54.50 | 219,684 |
|  |  |  |  |  |  |  |
|  | $163,484,540.27$ | $52,691,896$ | $64,248,195$ | $131,933,253$ |  | $3,115,165$ |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 42.4 1.91

## EL PASO ELECTRIC COMPANY

## ACCOUNT 356.00 OVERHEAD CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. IOWA 60-R5
NET SALVAGE PERCENT.. -15

| 1956 | $146,272.02$ | 155,429 | 168,213 |
| :--- | ---: | ---: | ---: |
| 1957 | $704,843.42$ | 743,965 | 810,570 |
| 1958 | $134,966.97$ | 141,449 | 155,212 |
| 1959 | $59,410.78$ | 61,786 | 68,322 |
| 1960 | $172,635.92$ | 178,049 | 198,531 |
| 1961 | $30,353.87$ | 31,032 | 34,907 |
| 1962 | $59,669.77$ | 60,420 | 68,620 |
| 1963 | $419,687.88$ | 420,622 | 479,903 |
| 1964 | $78,008.11$ | 77,329 | 88,228 |
| 1965 | $98,298.61$ | 96,313 | 109,887 |
| 1966 | $196,059.68$ | 189,770 | 216,516 |
| 1967 | $50,228.98$ | 47,982 | 54,744 |
| 1968 | $78,467.25$ | 73,920 | 84,338 |
| 1969 | $4,389,413.96$ | $4,074,454$ | $4,648,696$ |
| 1970 | $240,182.42$ | 219,540 | 250,481 |
| 1971 | $140,778.76$ | 126,630 | 144,477 |
| 1972 | $4,331.31$ | 3,830 | 4,370 |
| 1973 | $86,552.63$ | 75,182 | 85,778 |
| 1974 | $125,203.94$ | 106,765 | 121,812 |
| 1975 | $214,114.22$ | 179,091 | 204,332 |
| 1976 | $82,001.04$ | 67,237 | 76,713 |
| 1977 | $45,063.42$ | 36,190 | 41,291 |
| 1978 | $6,274,378.22$ | $4,930,591$ | $5,625,495$ |
| 1979 | $120,396.33$ | 92,512 | 105,550 |
| 1980 | $273,032.84$ | 204,981 | 233,870 |
| 1981 | $83,929.04$ | 61,514 | 70,184 |
| 1982 | $85,727.06$ | 61,288 | 69,926 |
| 1983 | $7,433.17$ | 5,177 | 5,907 |
| 1984 | $10,445,319.43$ | $7,083,185$ | $8,081,470$ |
| 1985 | $122,949.49$ | 81,088 | 92,516 |
| 1986 | $8,924.57$ | 5,720 | 6,526 |
| 1987 | $1,461,532.50$ | 909,292 | $1,037,445$ |
| 1988 | $6,526.22$ | 3,936 | 4,491 |
| 1989 | $32,221,214.00$ | $18,823,633$ | $21,476,584$ |
| 1990 | $924,495.66$ | 522,548 | 596,194 |
| 1991 | $1,548,213.09$ | 845,409 | 964,559 |
| 1993 | $3,252,007.17$ | $1,651,761$ | $1,884,556$ |
| 1994 | $104,011.00$ | 50,835 | 58,000 |
| 1995 | $323,456.00$ | 151,888 | 173,295 |
| 1996 | $1,749,955.00$ | 788,216 | 899,305 |
| 1997 | $1,503,797.00$ | 648,512 | 739,911 |
| 1998 | $767,106.00$ | 316,109 | 360,660 |
| 1999 | $108,455.00$ | 42,614 | 48,620 |
|  |  |  |  |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 356.00 OVERHEAD CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. IOWA 60-R5
NET SALVAGE PERCENT.. -15

| 2000 | $136,281.00$ | 50,935 | 58,114 | 98,609 | 40.50 | 2,435 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2001 | $24,980.00$ | 8,857 | 10,105 | 18,622 | 41.50 | 449 |
| 2002 | $4,542.99$ | 1,524 | 1,739 | 3,485 | 42.50 | 82 |
| 2003 | $417,846.75$ | 132,144 | 150,768 | 329,756 | 43.50 | 7,581 |
| 2004 | $1,601,976.76$ | 475,914 | 542,988 | $1,299,285$ | 44.50 | 29,197 |
| 2005 | $11,239.99$ | 3,124 | 3,564 | 9,362 | 45.50 | 206 |
| 2006 | $18,896.47$ | 4,889 | 5,578 | 16,153 | 46.50 | 347 |
| 2007 | 61.29 | 15 | 17 | 53 | 47.50 | 1 |
| 2008 | $4,964,821.00$ | $1,094,348$ | $1,248,582$ | $4,460,962$ | 48.50 | 91,979 |
| 2009 | $480,169.09$ | 96,634 | 110,253 | 441,941 | 49.50 | 8,928 |
| 2010 | $381,848.00$ | 69,527 | 79,326 | 359,799 | 50.50 | 7,125 |
| 2011 | $331,951.00$ | 54,082 | 61,704 | 320,040 | 51.50 | 6,214 |
| 2012 | $72,725.20$ | 10,454 | 11,927 | 71,707 | 52.50 | 1,366 |
| 2013 | $5,292,660.48$ | 659,357 | 752,285 | $5,334,275$ | 53.50 | 99,706 |
| 2014 | $671,915.00$ | 70,834 | 80,817 | 691,885 | 54.50 | 12,695 |
| 2015 | $6,252,900.00$ | 539,313 | 615,323 | $6,575,512$ | 55.50 | 118,478 |
| 2016 | $5,757,857.43$ | 386,234 | 440,669 | $6,180,867$ | 56.50 | 109,396 |
| 2017 | $1,078,321.01$ | 51,674 | 58,957 | $1,181,112$ | 57.50 | 20,541 |
| 2018 | $959,064.79$ | 27,573 | 31,459 | $1,071,466$ | 58.50 | 18,316 |
| 2019 | $856,286.68$ | 8,203 | 9,359 | 975,371 | 59.50 | 16,393 |
|  |  |  |  |  |  |  |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 359.00 ROADS AND TRAILS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. IOWA 70-R3 NET SALVAGE PERCENT.. 0

| 1984 | $204,695.73$ | 95,798 | 152,924 | 51,772 | 37.24 | 1,390 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1992 | $114,156.16$ | 42,287 | 67,503 | 46,653 | 44.07 | 1,059 |
| 1997 | $162,489.55$ | 49,814 | 79,519 | 82,971 | 48.54 | 1,709 |
| 1999 | $298,154.03$ | 83,653 | 133,537 | 164,617 | 50.36 | 3,269 |
| 2000 | $238,490.86$ | 63,746 | 101,759 | 136,732 | 51.29 | 2,666 |
| 2009 | $77,514.00$ | 11,328 | 18,083 | 59,431 | 59.77 | 994 |
| 2016 | $1,119,075.47$ | 54,991 | 87,783 | $1,031,292$ | 66.56 | 15,494 |
| 2017 | $17,065.57$ | 600 | 958 | 16,108 | 67.54 | 238 |
| 2018 | $261,016.36$ | 5,518 | 8,808 | 252,208 | 68.52 | 3,681 |
| 2019 | $1,080,695.21$ | 7,565 | 12,077 | $1,068,619$ | 69.51 | 15,374 |
|  | $3,573,352.94$ | 415,300 | 662,951 | $2,910,402$ |  | 45,874 |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 63.4 1.28

## EL PASO ELECTRIC COMPANY

## ACCOUNT 360.10 LAND RIGHTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. IOWA 70-R4 NET SALVAGE PERCENT.. 0

| 1988 | 33,783.01 | 14,927 | 19,435 | 14,348 | 39.07 | 367 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1989 | 41,548.73 | 17,801 | 23,177 | 18,372 | 40.01 | 459 |
| 1990 | 33, 083.33 | 13,730 | 17,876 | 15,207 | 40.95 | 371 |
| 1991 | 42,621.21 | 17,109 | 22,276 | 20,345 | 41.90 | 486 |
| 1992 | 326,935.42 | 126,756 | 165, 035 | 161,900 | 42.86 | 3,777 |
| 1993 | 1,094.00 | 409 | 533 | 561 | 43.81 | 13 |
| 1994 | 5,529.00 | 1,992 | 2,594 | 2,935 | 44.78 | 66 |
| 1995 | 11,252.00 | 3,900 | 5,078 | 6,174 | 45.74 | 135 |
| 1996 | 3,290.00 | 1,095 | 1,426 | 1,864 | 46.71 | 40 |
| 1997 | 14,019.00 | 4,470 | 5,820 | 8,199 | 47.68 | 172 |
| 1998 | 6,927.00 | 2,112 | 2,750 | 4,177 | 48.66 | 86 |
| 1999 | 10,111.00 | 2,941 | 3,829 | 6,282 | 49.64 | 127 |
| 2000 | 6,916.00 | 1,915 | 2,493 | 4,423 | 50.62 | 87 |
| 2001 | 7,383.00 | 1,941 | 2,527 | 4,856 | 51.60 | 94 |
| 2002 | 2,821.00 | 702 | 914 | 1,907 | 52.59 | 36 |
| 2003 | 43,281.42 | 10,159 | 13,227 | 30,054 | 53.57 | 561 |
| 2004 | 252,126.61 | 55,612 | 72,406 | 179, 721 | 54.56 | 3,294 |
| 2005 | 88,977.90 | 18,368 | 23,915 | 65, 063 | 55.55 | 1,171 |
| 2010 | 1,330,649.00 | 180,210 | 234,629 | 1,096,020 | 60.52 | 18,110 |
| 2015 | 1,415.00 | 91 | 118 | 1,297 | 65.51 | 20 |
| 2019 | 315, 031.63 | 2,249 | 2,929 | 312,103 | 69.50 | 4,491 |
|  | 2,578,795.26 | 478,489 | 622,987 | 1,955,808 |  | 33,963 |
|  | MPOSITE REMAI | LIFE AND | AL ACCRU | ATE, PERCE | . 57 | . 32 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 361.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. IOWA 70-R3
NET SALVAGE PERCENT.. -5

| 1947 | 622.27 | 532 | 611 | 42 | 12.99 | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1948 | 5,427.80 | 4,606 | 5,291 | 408 | 13.43 | 30 |
| 1949 | 5,298.47 | 4,459 | 5,123 | 440 | 13.89 | 32 |
| 1950 | 6,259.13 | 5,224 | 6,001 | 571 | 14.36 | 40 |
| 1951 | 18,542.46 | 15,342 | 17,625 | 1,845 | 14.84 | 124 |
| 1952 | 9,782.16 | 8,020 | 9,214 | 1, 057 | 15.34 | 69 |
| 1953 | 5,773.47 | 4,689 | 5,387 | 675 | 15.85 | 43 |
| 1954 | 5,652.50 | 4,547 | 5,224 | 711 | 16.37 | 43 |
| 1955 | 62,860.80 | 50,059 | 57,509 | 8,495 | 16.91 | 502 |
| 1956 | 60,446.70 | 47,638 | 54,727 | 8,742 | 17.46 | 501 |
| 1957 | 3,881.42 | 3, 026 | 3,476 | 599 | 18.03 | 33 |
| 1958 | 12,561.30 | 9,685 | 11,126 | 2,063 | 18.60 | 111 |
| 1959 | 1,919.77 | 1,463 | 1,681 | 335 | 19.19 | 17 |
| 1960 | 6,157.57 | 4,638 | 5,328 | 1,137 | 19.79 | 57 |
| 1961 | 16,794.32 | 12,492 | 14,351 | 3,283 | 20.41 | 161 |
| 1962 | 15,114.01 | 11,102 | 12,754 | 3,116 | 21.03 | 148 |
| 1963 | 9,600.97 | 6,960 | 7,996 | 2,085 | 21.67 | 96 |
| 1964 | 10,551.15 | 7,546 | 8,669 | 2,410 | 22.32 | 108 |
| 1965 | 3,319.75 | 2,341 | 2,689 | 797 | 22.98 | 35 |
| 1966 | 395.24 | 275 | 316 | 99 | 23.65 | 4 |
| 1967 | 30,638.57 | 20,989 | 24,113 | 8, 057 | 24.33 | 331 |
| 1968 | 37,929.35 | 25,591 | 29,399 | 10,427 | 25.02 | 417 |
| 1969 | 21,504.38 | 14,283 | 16,409 | 6,171 | 25.72 | 240 |
| 1970 | 26,945.47 | 17,610 | 20, 231 | 8,062 | 26.43 | 305 |
| 1971 | 4,105.39 | 2,639 | 3, 032 | 1,279 | 27.14 | 47 |
| 1972 | 16,037.03 | 10,135 | 11,643 | 5,196 | 27.87 | 186 |
| 1973 | 49,658.98 | 30,831 | 35,419 | 16,723 | 28.61 | 585 |
| 1974 | 54,577.26 | 33,278 | 38,230 | 19, 076 | 29.35 | 650 |
| 1975 | 42, 282.52 | 25,300 | 29,065 | 15,332 | 30.11 | 509 |
| 1976 | 24,453.19 | 14,353 | 16,489 | 9,187 | 30.87 | 298 |
| 1977 | 11,083.69 | 6,378 | 7,327 | 4,311 | 31.64 | 136 |
| 1978 | 26,440.20 | 14,904 | 17,122 | 10,640 | 32.42 | 328 |
| 1979 | 19,595.28 | 10,817 | 12,427 | 8,148 | 33.20 | 245 |
| 1980 | 430, 145.07 | 232,344 | 266,921 | 184,731 | 33.99 | 5,435 |
| 1981 | 49,011.58 | 25,885 | 29,737 | 21,725 | 34.79 | 624 |
| 1982 | 38,982. 23 | 20,115 | 23,109 | 17,822 | 35.60 | 501 |
| 1983 | 156, 091.50 | 78,623 | 90,324 | 73,572 | 36.42 | 2,020 |
| 1984 | 49,549.94 | 24,349 | 27,973 | 24, 054 | 37.24 | 646 |
| 1985 | 58,960.11 | 28,239 | 32,442 | 29,466 | 38.07 | 774 |
| 1986 | 142,186.52 | 66,308 | 76,176 | 73,120 | 38.91 | 1,879 |
| 1987 | 156,582.13 | 71,049 | 81,622 | 82,789 | 39.75 | 2,083 |
| 1988 | 2,428.00 | 1,071 | 1,230 | 1,319 | 40.60 | 32 |
| 1989 | 179,715.25 | 76,935 | 88,384 | 100,317 | 41.46 | 2,420 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 361.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. IOWA 70-R3
NET SALVAGE PERCENT. . 5

| 1990 | $49,708.61$ | 20,639 | 23,711 | 28,483 | 42.32 | 673 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1992 | $66,448.38$ | 25,845 | 29,691 | 40,080 | 44.07 | 909 |
| 1993 | $104,449.00$ | 39,247 | 45,088 | 64,583 | 44.95 | 1,437 |
| 1994 | $142,021.47$ | 51,468 | 59,127 | 89,996 | 45.84 | 1,963 |
| 1995 | $26,972.00$ | 9,415 | 10,816 | 17,505 | 46.73 | 375 |
| 1996 | $1,517.00$ | 509 | 585 | 1,008 | 47.63 | 21 |
| 1997 | $25,538.76$ | 8,221 | 9,444 | 17,372 | 48.54 | 358 |
| 1998 | $4,305.00$ | 1,327 | 1,524 | 2,996 | 49.45 | 61 |
| 2000 | $848,691.42$ | 238,189 | 273,637 | 617,489 | 51.29 | 12,039 |
| 2001 | $59,830.00$ | 15,965 | 18,341 | 44,480 | 52.21 | 852 |
| 2003 | $48,377.86$ | 11,553 | 13,272 | 37,525 | 54.08 | 694 |
| 2004 | $164,980.49$ | 37,071 | 42,588 | 130,642 | 55.02 | 2,374 |
| 2005 | $45,831.37$ | 9,652 | 11,088 | 37,035 | 55.96 | 662 |
| 2006 | $196,168.65$ | 38,518 | 44,250 | 161,727 | 56.91 | 2,842 |
| 2007 | $23,172.93$ | 4,220 | 4,848 | 19,484 | 57.86 | 337 |
| 2008 | $84,898.73$ | 14,251 | 16,372 | 72,772 | 58.81 | 1,237 |
| 2009 | $19,406.00$ | 2,978 | 3,421 | 16,955 | 59.77 | 284 |
| 2010 | $2,086,711.00$ | 290,160 | 333,342 | $1,857,705$ | 60.73 | 30,590 |
| 2011 | $39,793.82$ | 4,954 | 5,691 | 36,093 | 61.70 | 585 |
| 2012 | $564,371.74$ | 62,050 | 71,284 | 521,306 | 62.67 | 8,318 |
| 2013 | $1,416,163.04$ | 135,106 | 155,213 | $1,331,758$ | 63.64 | 20,926 |
| 2014 | $223,771.34$ | 18,092 | 20,784 | 214,176 | 64.61 | 3,315 |
| 2015 | $262,363.00$ | 17,355 | 19,938 | 255,543 | 65.59 | 3,896 |
| 2016 | $2,187,446.81$ | 112,866 | 129,663 | $2,167,156$ | 66.56 | 32,559 |
| 2017 | $3,605,512.43$ | 133,033 | 152,831 | $3,632,957$ | 67.54 | 53,790 |
| 2018 | $2,680,277.50$ | 59,494 | 68,348 | $2,745,943$ | 68.52 | 40,075 |
| 2019 | $4,919,962.18$ | 36,162 | 41,544 | $5,124,416$ | 69.51 | 73,722 |
|  |  |  |  |  |  | 310 |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 63.1 1.46

## EL PASO ELECTRIC COMPANY

## ACCOUNT 362.00 STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. IOWA 65-R2
NET SALVAGE PERCENT.. -5

| 1949 | $132,785.39$ |
| ---: | ---: |
| 1950 | $154,482.58$ |
| 1951 | $14,430.28$ |
| 1952 | $180,419.37$ |
| 1953 | $387,333.37$ |
| 1954 | $230,058.09$ |
| 1955 | $1,135,479.90$ |
| 1956 | $659,221.01$ |
| 1957 | $374,558.35$ |
| 1958 | $185,114.29$ |
| 1959 | $491,666.14$ |
| 1960 | $501,793.03$ |
| 1961 | $906,271.17$ |
| 1962 | $5,985,649.41$ |
| 1963 | $87,922.18$ |
| 1964 | $400,555.68$ |
| 1965 | $292,893.27$ |
| 1966 | $500,346.56$ |
| 1967 | $319,100.35$ |
| 1968 | $1,053,457.46$ |
| 1969 | $697,514.04$ |
| 1970 | $630,760.87$ |
| 1971 | $667,652.22$ |
| 1972 | $757,663.36$ |
| 1973 | $122,135.52$ |
| 1974 | $715,664.54$ |
| 1975 | $1,642,629.05$ |
| 1976 | $1,959,201.97$ |
| 1977 | $224,490.42$ |
| 1978 | $1,112,069.70$ |
| 1979 | $156,304.54$ |
| 1980 | $2,060,100.29$ |
| 1981 | $677,360.53$ |
| 1982 | $495,451.80$ |
| 1983 | $3,041,273.46$ |
| 1984 | $640,730.20$ |
| 1985 | $937,138.22$ |
| 1986 | $451,516.43$ |
| 1987 | $2,121,394.43$ |
| 1988 | $383,155.22$ |
| 1989 | $4,195,982.44$ |
| 1990 | $2,502,513.27$ |
| 1991 | $2,083,436.75$ |
|  |  |


| 106,177 | 139,425 |
| ---: | ---: |
| 122,453 | 162,207 |
| 11,336 | 15,152 |
| 140,419 | 189,440 |
| 298,579 | 406,700 |
| 175,634 | 241,561 |
| 858,053 | $1,190,232$ |
| 492,937 | 683,768 |
| 277,117 | 384,398 |
| 135,460 | 187,901 |
| 355,737 | 493,454 |
| 358,765 | 497,654 |
| 640,198 | 888,038 |
| $4,176,086$ | $5,792,778$ |
| 60,575 | 84,025 |
| 272,345 | 377,778 |
| 196,446 | 272,496 |
| 330,979 | 459,111 |
| 208,043 | 288,583 |
| 676,786 | 938,791 |
| 441,353 | 612,214 |
| 392,896 | 544,998 |
| 409,187 | 567,596 |
| 456,644 | 633,425 |
| 72,368 | 100,384 |
| 416,648 | 577,945 |
| 939,063 | $1,302,603$ |
| $1,099,162$ | $1,524,682$ |
| 123,515 | 171,331 |
| 599,822 | 832,032 |
| 82,590 | 114,563 |
| $1,065,589$ | $1,478,112$ |
| 342,812 | 475,525 |
| 245,067 | 339,940 |
| $1,469,414$ | $2,038,270$ |
| 302,227 | 419,228 |
| 430,990 | 597,840 |
| 202,328 | 280,655 |
| 925,600 | $1,283,928$ |
| 162,534 | 225,456 |
| $1,729,093$ | $2,398,478$ |
| $1,000,920$ | $1,388,407$ |
| 807,403 | $1,119,974$ |
| 10 |  |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 362.00 STATION EQUIPMENT

## CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. IOWA 65-R2
NET SALVAGE PERCENT. . 5

| 1992 | $603,189.62$ | 226,346 | 313,972 | 319,377 | 41.77 | 7,646 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1993 | $4,259,761.00$ | $1,544,798$ | $2,142,837$ | $2,329,912$ | 42.55 | 54,757 |
| 1994 | $4,877,113.92$ | $1,707,229$ | $2,368,150$ | $2,752,820$ | 43.33 | 63,532 |
| 1995 | $2,686,212.84$ | 906,037 | $1,256,792$ | $1,563,731$ | 44.12 | 35,443 |
| 1996 | $3,565,975.39$ | $1,157,280$ | $1,605,299$ | $2,138,975$ | 44.91 | 47,628 |
| 1998 | $3,836,536.09$ | $1,145,908$ | $1,589,524$ | $2,438,839$ | 46.51 | 52,437 |
| 1999 | $1,099,558.01$ | 314,034 | 435,606 | 718,930 | 47.32 | 15,193 |
| 2000 | $4,471,004.40$ | $1,217,674$ | $1,689,073$ | $3,005,482$ | 48.14 | 62,432 |
| 2001 | $3,036,108.43$ | 786,682 | $1,091,231$ | $2,096,683$ | 48.96 | 42,824 |
| 2002 | $1,880,479.20$ | 462,330 | 641,312 | $1,333,191$ | 49.78 | 26,782 |
| 2003 | $6,876,593.16$ | $1,598,457$ | $2,217,269$ | $5,003,154$ | 50.61 | 98,857 |
| 2004 | $9,247,214.37$ | $2,024,058$ | $2,807,634$ | $6,901,941$ | 51.45 | 134,149 |
| 2005 | $4,210,946.31$ | 864,579 | $1,199,284$ | $3,222,210$ | 52.29 | 61,622 |
| 2006 | $5,283,396.30$ | $1,013,097$ | $1,405,298$ | $4,142,268$ | 53.13 | 77,965 |
| 2007 | $1,516,022.60$ | 269,623 | 374,002 | $1,217,822$ | 53.99 | 22,556 |
| 2008 | $10,664,651.53$ | $1,750,341$ | $2,427,953$ | $8,769,931$ | 54.84 | 159,919 |
| 2009 | $12,989,999.38$ | $1,951,540$ | $2,707,042$ | $10,932,457$ | 55.70 | 196,274 |
| 2010 | $7,839,712.21$ | $1,067,569$ | $1,480,858$ | $6,750,840$ | 56.57 | 119,336 |
| 2011 | $3,903,549.10$ | 476,723 | 661,277 | $3,437,450$ | 57.44 | 59,844 |
| 2012 | $15,715,505.73$ | $1,698,312$ | $2,355,782$ | $14,145,499$ | 58.31 | 242,591 |
| 2013 | $12,841,627.23$ | $1,205,174$ | $1,671,734$ | $11,811,975$ | 59.19 | 199,560 |
| 2014 | $17,697,216.39$ | $1,409,451$ | $1,955,093$ | $16,626,984$ | 60.07 | 276,793 |
| 2015 | $7,662,667.00$ | 500,046 | 693,629 | $7,352,171$ | 60.96 | 120,606 |
| 2016 | $8,088,380.63$ | 411,561 | 570,889 | $7,921,911$ | 61.85 | 128,083 |
| 2017 | $14,099,908.61$ | 512,546 | 710,969 | $14,093,935$ | 62.75 | 224,605 |
| 2018 | $27,826,349.93$ | 611,234 | 847,862 | $28,369,805$ | 63.64 | 445,786 |
| 2019 | $48,573,423.21$ | 352,934 | 489,566 | $50,512,529$ | 64.55 | 782,533 |
|  |  |  |  |  |  |  |
|  | $287,622,779.74$ | $50,796,913$ | $70,431,015$ | $231,572,904$ |  | $4,102,971$ |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 56.4 1.43

## EL PASO ELECTRIC COMPANY

## ACCOUNT 364.00 POLES, TOWERS AND FIXTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. IOWA 45-R3
NET SALVAGE PERCENT. . 30

| 1929 | $3,280.00$ | 4,264 | 4,264 |
| ---: | ---: | ---: | ---: |
| 1930 | $5,130.00$ | 6,669 | 6,669 |
| 1931 | $1,905.00$ | 2,476 | 2,476 |
| 1932 | $1,704.00$ | 2,215 | 2,215 |
| 1933 | $1,856.00$ | 2,413 | 2,413 |
| 1934 | $2,177.00$ | 2,830 | 2,830 |
| 1935 | $1,777.00$ | 2,310 | 2,310 |
| 1936 | $3,013.00$ | 3,917 | 3,917 |
| 1937 | $1,612.00$ | 2,096 | 2,096 |
| 1938 | 390.00 | 507 | 507 |
| 1939 | $2,265.00$ | 2,944 | 2,944 |
| 1940 | $3,372.00$ | 4,384 | 4,384 |
| 1941 | 639.00 | 831 | 831 |
| 1942 | $1,388.00$ | 1,804 | 1,804 |
| 1943 | $4,351.00$ | 5,656 | 5,656 |
| 1944 | $5,560.00$ | 7,185 | 6,327 |
| 1946 | 661.69 | 848 | 747 |
| 1949 | $3,600.00$ | 4,543 | 4,000 |
| 1950 | $10,600.00$ | 13,302 | 11,713 |
| 1951 | $12,822.00$ | 15,998 | 14,087 |
| 1952 | $2,817.10$ | 3,494 | 3,077 |
| 1953 | 7.90 | 10 | 10 |
| 1955 | $37,880.00$ | 46,147 | 40,634 |
| 1956 | $35,482.00$ | 42,959 | 37,827 |
| 1957 | $32,311.00$ | 38,877 | 34,233 |
| 1958 | $29,344.00$ | 35,095 | 30,903 |
| 1959 | $24,394.00$ | 28,992 | 25,529 |
| 1963 | $3,306.59$ | 3,829 | 3,372 |
| 1964 | $8,322.49$ | 9,567 | 8,424 |
| 1965 | $8,062.22$ | 9,200 | 8,101 |
| 1966 | $17,125.46$ | 19,394 | 17,077 |
| 1967 | $51,059.06$ | 57,350 | 50,499 |
| 1968 | $50,489.11$ | 56,213 | 49,498 |
| 1969 | $69,515.00$ | 76,694 | 67,532 |
| 1970 | $83,553.97$ | 91,289 | 80,384 |
| 1971 | $26,900.75$ | 29,096 | 25,620 |
| 1972 | $160,877.03$ | 172,099 | 151,540 |
| 1973 | $211,657.46$ | 223,792 | 197,058 |
| 1974 | $405,324.36$ | 423,292 | 372,726 |
| 1975 | $478,674.69$ | 493,397 | 434,456 |
| 1976 | $530,549.78$ | 539,357 | 474,926 |
| 1977 | $523,848.45$ | 524,829 | 462,134 |
| 1978 | $1,077,052.15$ | $1,062,573$ | 935,639 |
|  |  |  |  |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 364.00 POLES, TOWERS AND FIXTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. IOWA 45-R3
NET SALVAGE PERCENT. . 30

| 1979 | $1,291,669.60$ | $1,253,400$ | $1,103,671$ |
| :--- | :--- | :--- | :--- |
| 1980 | $1,262,124.11$ | $1,203,958$ | $1,060,135$ |
| 1981 | $1,253,022.58$ | $1,173,921$ | $1,033,686$ |
| 1982 | $1,676,489.56$ | $1,540,622$ | $1,356,581$ |
| 1983 | $1,312,682.33$ | $1,182,408$ | $1,041,159$ |
| 1984 | $1,571,541.15$ | $1,386,525$ | $1,220,893$ |
| 1985 | $1,733,487.78$ | $1,495,851$ | $1,317,159$ |
| 1986 | $1,877,579.30$ | $1,583,308$ | $1,394,168$ |
| 1987 | $1,795,974.26$ | $1,478,164$ | $1,301,585$ |
| 1988 | $1,776,177.74$ | $1,425,434$ | $1,255,154$ |
| 1989 | $1,997,138.10$ | $1,561,221$ | $1,374,720$ |
| 1990 | $1,575,164.56$ | $1,197,687$ | $1,054,613$ |
| 1991 | $2,066,613.30$ | $1,525,987$ | $1,343,695$ |
| 1992 | $1,660,273.05$ | $1,189,491$ | $1,047,396$ |
| 1993 | $1,770,004.72$ | $1,228,231$ | $1,081,508$ |
| 1994 | $2,144,602.87$ | $1,439,213$ | $1,267,287$ |
| 1995 | $3,509,597.25$ | $2,274,121$ | $2,002,458$ |
| 1996 | $2,908,934.61$ | $1,816,839$ | $1,599,802$ |
| 1997 | $3,175,827.48$ | $1,907,402$ | $1,679,546$ |
| 1998 | $3,204,732.10$ | $1,847,938$ | $1,627,186$ |
| 1999 | $5,017,810.87$ | $2,770,188$ | $2,439,265$ |
| 2000 | $5,660,755.73$ | $2,986,128$ | $2,629,409$ |
| 2001 | $4,774,544.76$ | $2,398,598$ | $2,112,065$ |
| 2002 | $4,035,045.15$ | $1,924,543$ | $1,694,640$ |
| 2003 | $4,148,373.25$ | $1,873,111$ | $1,649,352$ |
| 2004 | $6,464,916.18$ | $2,751,009$ | $2,422,377$ |
| 2005 | $9,417,229.48$ | $3,762,456$ | $3,312,998$ |
| 2006 | $4,212,170.89$ | $1,572,163$ | $1,384,354$ |
| 2007 | $6,750,025.87$ | $2,340,038$ | $2,060,500$ |
| 2008 | $6,683,683.62$ | $2,137,442$ | $1,882,106$ |
| 2009 | $6,588,687.92$ | $1,930,018$ | $1,699,461$ |
| 2010 | $5,832,179.58$ | $1,548,362$ | $1,363,397$ |
| 2011 | $7,807,302.67$ | $1,860,707$ | $1,638,429$ |
| 2012 | $7,455,012.55$ | $1,570,026$ | $1,382,473$ |
| 2013 | $6,159,693.99$ | $1,126,429$ | 991,867 |
| 2014 | $6,688,503.46$ | $1,037,581$ | 913,633 |
| 2015 | $8,061,961.93$ | $1,024,788$ | 902,368 |
| 2016 | $8,413,201.92$ | 833,631 | 734,047 |
|  | 193 |  |  |


| 575,499 | 11.41 | 50,438 |
| ---: | ---: | ---: |
| 580,626 | 11.98 | 48,466 |
| 595,243 | 12.57 | 47,354 |
| 822,855 | 13.19 | 62,385 |
| 665,328 | 13.82 | 48,142 |
| 822,110 | 14.46 | 56,854 |
| 936,375 | 15.13 | 61,889 |
| $1,046,685$ | 15.81 | 66,204 |
| $1,033,182$ | 16.51 | 62,579 |
| $1,053,877$ | 17.22 | 61,201 |
| $1,221,560$ | 17.94 | 68,091 |
| 993,101 | 18.68 | 53,164 |
| $1,342,902$ | 19.44 | 69,079 |
| $1,110,959$ | 20.20 | 54,998 |
| $1,219,498$ | 20.98 | 58,127 |
| $1,520,697$ | 21.77 | 69,853 |
| $2,560,018$ | 22.57 | 113,426 |
| $2,181,813$ | 23.38 | 93,320 |
| $2,449,030$ | 24.21 | 101,158 |
| $2,538,966$ | 25.04 | 101,396 |
| $4,083,889$ | 25.89 | 157,740 |
| $4,729,573$ | 26.74 | 176,873 |
| $4,094,843$ | 27.61 | 148,310 |
| $3,550,919$ | 28.49 | 124,637 |
| $3,743,533$ | 29.37 | 127,461 |
| $5,982,014$ | 30.27 | 197,622 |
| $8,929,400$ | 31.17 | 286,474 |
| $4,091,468$ | 32.08 | 127,540 |
| $6,714,534$ | 33.00 | 203,471 |
| $6,806,683$ | 33.93 | 200,610 |
| $6,865,833$ | 34.86 | 196,954 |
| $6,218,436$ | 35.81 | 173,651 |
| $8,511,064$ | 36.75 | 231,594 |
| $8,309,043$ | 37.71 | 220,341 |
| $7,015,735$ | 38.67 | 181,426 |
| $7,781,421$ | 39.63 | 196,352 |
| $9,578,183$ | 40.60 | 235,916 |
| $10,203,115$ | 41.57 | 245,444 |
|  |  |  |


| EL PASO ELECTRIC COMPANY |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ACCOUNT 364.00 POLES, TOWERS AND FIXTURES |  |  |  |  |  |  |
| CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL |  |  |  |  |  |  |
| RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019 |  |  |  |  |  |  |
|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| YEAR <br> (1) | $\begin{gathered} \text { COST } \\ (2) \end{gathered}$ | ACCRUED (3) | RESERVE (4) | ACCRUALS (5) | LIFE <br> (6) | ACCRUAL <br> (7) |
| SURVIVOR CURVE.. IOWA 45-R3 |  |  |  |  |  |  |
| NET SALVAGE PERCENT.. -30 |  |  |  |  |  |  |
| 2017 | 8,515,489.81 | 602,658 | 530,665 | 10,539,472 | 42.55 | 247,696 |
| 2018 | 7,667,680.81 | 325,654 | 286,752 | 9,681, 233 | 43.53 | 222,404 |
| 2019 | 9,513,207.90 | 134,678 | 118,589 | 12,248,581 | 44.51 | 275,187 |
|  | 183, 367, 772.05 | 70,296,666 | 61, 904, 538 | 176,473,566 |  | 5,697,660 |
|  | COMPOSITE REMAIN | NG LIFE AND | ANNUAL ACCRUA | RATE, PERCEN | . 31 | 3.11 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 365.00 OVERHEAD CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. IOWA 48-R2.5
NET SALVAGE PERCENT.. -15

| 1932 | 1,770.00 | 2,017 | 2,036 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1933 | 2,100.00 | 2,381 | 2,415 |  |  |  |
| 1934 | 1,553.00 | 1,751 | 1,786 |  |  |  |
| 1935 | 2,848.00 | 3,193 | 3,275 |  |  |  |
| 1936 | 3,132.00 | 3,492 | 3,602 |  |  |  |
| 1937 | 5,757.00 | 6,382 | 6,621 |  |  |  |
| 1938 | 2,865.00 | 3,157 | 3,276 | 19 | 2.01 | 9 |
| 1939 | 2,594.00 | 2,841 | 2,948 | 35 | 2.28 | 15 |
| 1940 | 4,978.00 | 5,421 | 5,626 | 99 | 2.55 | 39 |
| 1941 | 1,615.00 | 1,748 | 1,814 | 43 | 2.82 | 15 |
| 1943 | 3,548.00 | 3,800 | 3,943 | 137 | 3.30 | 42 |
| 1948 | 21,873.89 | 22,844 | 23,706 | 1,449 | 4.41 | 329 |
| 1949 | 7,946.80 | 8,257 | 8,569 | 570 | 4.63 | 123 |
| 1951 | 12,966.67 | 13,334 | 13,837 | 1,075 | 5.08 | 212 |
| 1952 | 6,053.70 | 6,192 | 6,426 | 536 | 5.31 | 101 |
| 1953 | 2,217.23 | 2,256 | 2,341 | 209 | 5.54 | 38 |
| 1958 | 37,774.00 | 37,313 | 38,722 | 4,718 | 6.77 | 697 |
| 1961 | 57,730.31 | 55,878 | 57,988 | 8,402 | 7.60 | 1,106 |
| 1962 | 82,193.07 | 78,984 | 81,966 | 12,556 | 7.89 | 1,591 |
| 1963 | 51,934.16 | 49,522 | 51,392 | 8,332 | 8.20 | 1,016 |
| 1964 | 97,719.88 | 92,407 | 95,896 | 16,482 | 8.53 | 1,932 |
| 1965 | 89,407.76 | 83,841 | 87,006 | 15,813 | 8.86 | 1,785 |
| 1966 | 135,692.37 | 126, 073 | 130,833 | 25,213 | 9.22 | 2,735 |
| 1967 | 181,205.86 | 166,753 | 173, 048 | 35,339 | 9.59 | 3,685 |
| 1968 | 285,669.69 | 260, 283 | 270,109 | 58,411 | 9.97 | 5,859 |
| 1969 | 348,763.94 | 314,345 | 326, 212 | 74,867 | 10.38 | 7,213 |
| 1970 | 384,486.79 | 342, 674 | 355, 611 | 86,549 | 10.80 | 8,014 |
| 1971 | 25,268.53 | 22,254 | 23,094 | 5,965 | 11.24 | 531 |
| 1972 | 296,878.86 | 258,192 | 267,939 | 73,472 | 11.70 | 6,280 |
| 1973 | 385, 224.76 | 330,595 | 343, 076 | 99,932 | 12.18 | 8,205 |
| 1974 | 452,458.62 | 382,982 | 397,440 | 122,887 | 12.67 | 9,699 |
| 1975 | 572,675.42 | 477,606 | 495, 637 | 162,940 | 13.19 | 12,353 |
| 1976 | 533,418.39 | 438, 094 | 454,633 | 158,798 | 13.72 | 11,574 |
| 1977 | 351,660.99 | 284,183 | 294,912 | 109,498 | 14.27 | 7,673 |
| 1978 | 906,102.23 | 720,076 | 747,260 | 294,758 | 14.83 | 19,876 |
| 1979 | 981,787.58 | 766,584 | 795,524 | 333,532 | 15.41 | 21,644 |
| 1980 | 795,517.88 | 609,708 | 632,726 | 282,120 | 16.01 | 17,621 |
| 1981 | 844,531.21 | 634,929 | 658,899 | 312,312 | 16.62 | 18,791 |
| 1982 | 1, 052,329.88 | 775,519 | 804,797 | 405,382 | 17.24 | 23,514 |
| 1983 | 689,640.78 | 497,662 | 516,450 | 276,637 | 17.88 | 15,472 |
| 1984 | 870,100.69 | 614,128 | 637,313 | 363,303 | 18.54 | 19,596 |
| 1985 | 1,142,594.49 | 788,114 | 817,867 | 496,117 | 19.21 | 25,826 |
| 1986 | 836,044.93 | 563, 045 | 584, 301 | 377,151 | 19.89 | 18,962 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 365.00 OVERHEAD CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. IOWA 48-R2.5
NET SALVAGE PERCENT.. -15

| 1987 | 761,338.28 | 500, 152 | 519, 034 | 356,505 | 20.58 | 17,323 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1988 | 1, 007,468.81 | 644,952 | 669,300 | 489,289 | 21.28 | 22,993 |
| 1989 | 1,106,778.77 | 689,435 | 715,463 | 557,333 | 22.00 | 25,333 |
| 1990 | 1, 004,161.62 | 608,191 | 631,152 | 523,634 | 22.72 | 23, 047 |
| 1991 | 1,320,648.43 | 776,459 | 805,772 | 712,974 | 23.46 | 30,391 |
| 1992 | 1,349,710.09 | 769,285 | 798,327 | 753,840 | 24.21 | 31, 138 |
| 1993 | 799,969.18 | 441, 390 | 458, 053 | 461,912 | 24.97 | 18,499 |
| 1994 | 996,774.23 | 531,592 | 551, 661 | 594,629 | 25.74 | 23,101 |
| 1995 | 1,977,351.84 | 1, 018, 072 | 1, 056,507 | 1,217,448 | 26.51 | 45,924 |
| 1996 | 1,663,940.60 | 825,211 | 856,365 | 1, 057,167 | 27.30 | 38,724 |
| 1997 | 1,803, 845.24 | 860, 014 | 892,481 | 1,181, 941 | 28.10 | 42, 062 |
| 1998 | 1,673,447.84 | 765,783 | 794,693 | 1,129,772 | 28.90 | 39, 092 |
| 1999 | 2,464,471.67 | 1, 079,326 | 1,120, 073 | 1,714, 069 | 29.72 | 57,674 |
| 2000 | 1,512,474.38 | 632,687 | 656,572 | 1,082,774 | 30.54 | 35,454 |
| 2001 | 2, 415,735.52 | 961,916 | 998,230 | 1,779,866 | 31.38 | 56,720 |
| 2002 | 1,737, 093.67 | 656,730 | 681,523 | 1,316,135 | 32.22 | 40,848 |
| 2003 | 1,820,914.30 | 651, 334 | 675,923 | 1,418,128 | 33.07 | 42,883 |
| 2004 | 2,906, 686.11 | 980,511 | 1,017,528 | 2,325,161 | 33.92 | 68,548 |
| 2005 | 4,992,114.41 | 1,579,962 | 1,639,609 | 4,101,323 | 34.79 | 117,888 |
| 2006 | 2,235,578.31 | 660,931 | 685,883 | 1,885, 032 | 35.66 | 52,861 |
| 2007 | 3,993,585.33 | 1, 096,489 | 1,137,884 | 3,454,739 | 36.54 | 94,547 |
| 2008 | 4,183,113.79 | 1, 060,348 | 1,100,379 | 3,710, 202 | 37.42 | 99,150 |
| 2009 | 3,390, 304.82 | 787,100 | 816,815 | 3, 082, 036 | 38.31 | 80,450 |
| 2010 | 3,190,336.07 | 671,846 | 697,210 | 2,971,676 | 39.21 | 75,789 |
| 2011 | 4,984,770.21 | 942,306 | 977,880 | 4,754,606 | 40.11 | 118,539 |
| 2012 | 4,201,595.98 | 702,646 | 729,172 | 4,102,663 | 41.02 | 100, 016 |
| 2013 | 3,425, 270.63 | 497, 306 | 516,080 | 3,422,981 | 41.94 | 81,616 |
| 2014 | 5,206,339.93 | 641,119 | 665, 323 | 5,321,968 | 42.86 | 124,171 |
| 2015 | 5, 059, 067.44 | 511,512 | 530, 823 | 5,287,105 | 43.78 | 120, 765 |
| 2016 | 9,854,461.46 | 776,739 | 806, 062 | 10,526,569 | 44.71 | 235,441 |
| 2017 | 4,579, 926.96 | 257, 868 | 267,603 | 4,999,313 | 45.65 | 109,514 |
| 2018 | 7,132,181. 23 | 240,975 | 250,072 | 7,951,936 | 46.59 | 170,679 |
| 2019 | 9,712, 207.33 | 109,345 | 113,474 | 11, 055,565 | 47.53 | 232,602 |
|  | 117, 036, 295.84 | 33,790,342 | 35, 065, 798 | 99,525,943 |  | 2,747,955 |
|  | COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 36.2 2.35 |  |  |  |  |  |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 366.00 UNDERGROUND CONDUIT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. IOWA 65-R4
NET SALVAGE PERCENT. . 5

| 1952 | 69.87 | 64 | 73 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1953 | 3,233.44 | 2,933 | 3,395 |  |  |  |
| 1957 | 17,755.63 | 15,560 | 18,595 | 48 | 10.75 | 4 |
| 1958 | 23,485.27 | 20,372 | 24,345 | 315 | 11.30 | 28 |
| 1959 | 1,024.57 | 880 | 1,052 | 24 | 11.86 | 2 |
| 1960 | 8,967.72 | 7,613 | 9,098 | 318 | 12.45 | 26 |
| 1961 | 4,755.42 | 3,990 | 4,768 | 225 | 13.06 | 17 |
| 1962 | 70,605.51 | 58,521 | 69,935 | 4,201 | 13.69 | 307 |
| 1963 | 13,389. 25 | 10,957 | 13,094 | 965 | 14.34 | 67 |
| 1964 | 7,826.61 | 6,321 | 7,554 | 664 | 15.00 | 44 |
| 1965 | 79,971.40 | 63,726 | 76,155 | 7,815 | 15.67 | 499 |
| 1966 | 26,373.62 | 20,722 | 24,764 | 2,928 | 16.36 | 179 |
| 1967 | 12, 058.25 | 9,340 | 11,162 | 1,499 | 17.05 | 88 |
| 1968 | 29,995.59 | 22,890 | 27,354 | 4,141 | 17.76 | 233 |
| 1969 | 170,812.21 | 128,361 | 153,396 | 25,957 | 18.48 | 1,405 |
| 1970 | 115,300.43 | 85,305 | 101, 943 | 19,122 | 19.20 | 996 |
| 1971 | 21,289.78 | 15,497 | 18,520 | 3,834 | 19.94 | 192 |
| 1972 | 3,807.43 | 2,725 | 3,256 | 742 | 20.69 | 36 |
| 1973 | 299,361.82 | 210,554 | 251,620 | 62,710 | 21.46 | 2,922 |
| 1974 | 770,539.83 | 532,366 | 636,198 | 172,869 | 22.23 | 7,776 |
| 1975 | 320,544.24 | 217,375 | 259,771 | 76,800 | 23.02 | 3,336 |
| 1976 | 679,247.57 | 451,954 | 540,102 | 173,108 | 23.81 | 7,270 |
| 1977 | 348,744.37 | 227,483 | 271,851 | 94,331 | 24.62 | 3,831 |
| 1978 | 736,270.06 | 470,514 | 562, 282 | 210,802 | 25.44 | 8,286 |
| 1979 | 723,393.09 | 452,585 | 540, 857 | 218,706 | 26.27 | 8,325 |
| 1980 | 894,628.90 | 547,431 | 654, 201 | 285,159 | 27.12 | 10,515 |
| 1981 | 815, 811.33 | 487,998 | 583,176 | 273,426 | 27.97 | 9,776 |
| 1982 | 700,253.44 | 409, 146 | 488, 945 | 246,321 | 28.83 | 8,544 |
| 1983 | 892,305.36 | 508, 823 | 608,063 | 328,858 | 29.70 | 11, 073 |
| 1984 | 1,605, 075.12 | 892,449 | 1,066,511 | 618,818 | 30.58 | 20,236 |
| 1985 | 1,337, 967.15 | 724,700 | 866, 044 | 538,822 | 31.47 | 17,122 |
| 1986 | 1,207,537.33 | 636,493 | 760,634 | 507,280 | 32.37 | 15,671 |
| 1987 | 1,411,487.33 | 723,246 | 864, 307 | 617, 755 | 33.28 | 18,562 |
| 1988 | 1,235,347.37 | 614,638 | 734,516 | 562,599 | 34.20 | 16,450 |
| 1989 | 1,229,239.00 | 593,322 | 709,043 | 581,658 | 35.12 | 16,562 |
| 1990 | 1,114,041.57 | 520, 980 | 622,591 | 547,153 | 36.05 | 15,178 |
| 1991 | 1,004,159.01 | 454, 348 | 542,963 | 511,404 | 36.99 | 13,825 |
| 1992 | 1,049,587.54 | 458,967 | 548,483 | 553,584 | 37.93 | 14,595 |
| 1993 | 1,081,834.06 | 456,472 | 545,502 | 590,424 | 38.88 | 15,186 |
| 1994 | 1,504,406.99 | 611,679 | 730,980 | 848,647 | 39.83 | 21,307 |
| 1995 | 2,457,277.98 | 961,000 | 1,148,432 | 1,431,710 | 40.79 | 35,100 |
| 1996 | 2,738,595.73 | 1,028,547 | 1,229,153 | 1,646,373 | 41.75 | 39,434 |
| 1997 | 2,252,983.99 | 810,868 | 969, 018 | 1,396,615 | 42.72 | 32,692 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 366.00 UNDERGROUND CONDUIT

## CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. IOWA 65-R4
NET SALVAGE PERCENT. . 5

| 1998 | $4,445,985.23$ | $1,530,497$ | $1,829,003$ | $2,839,281$ | 43.69 | 64,987 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1999 | $4,190,942.40$ | $1,377,001$ | $1,645,569$ | $2,754,921$ | 44.66 | 61,687 |
| 2000 | $3,818,249.54$ | $1,194,129$ | $1,427,030$ | $2,582,132$ | 45.64 | 56,576 |
| 2001 | $4,019,085.33$ | $1,193,301$ | $1,426,041$ | $2,793,999$ | 46.62 | 59,931 |
| 2002 | $4,977,792.08$ | $1,399,130$ | $1,672,014$ | $3,554,668$ | 47.60 | 74,678 |
| 2003 | $5,358,382.29$ | $1,421,316$ | $1,698,527$ | $3,927,774$ | 48.58 | 80,852 |
| 2004 | $7,901,354.10$ | $1,969,405$ | $2,353,515$ | $5,942,907$ | 49.57 | 119,889 |
| 2005 | $6,794,769.02$ | $1,584,931$ | $1,894,054$ | $5,240,453$ | 50.56 | 103,648 |
| 2006 | $5,073,437.78$ | $1,102,286$ | $1,317,274$ | $4,009,836$ | 51.55 | 77,785 |
| 2007 | $7,071,508.27$ | $1,423,314$ | $1,700,915$ | $5,724,169$ | 52.54 | 108,949 |
| 2008 | $5,443,699.10$ | $1,008,625$ | $1,205,346$ | $4,510,538$ | 53.53 | 84,262 |
| 2009 | $4,886,039.37$ | 826,395 | 987,574 | $4,142,767$ | 54.53 | 75,972 |
| 2010 | $2,440,363.75$ | 373,723 | 446,613 | $2,115,769$ | 55.52 | 38,108 |
| 2011 | $3,022,456.18$ | 414,025 | 494,776 | $2,678,803$ | 56.52 | 47,396 |
| 2012 | $4,692,725.35$ | 567,780 | 678,519 | $4,248,843$ | 57.51 | 73,880 |
| 2013 | $4,486,032.56$ | 470,327 | 562,059 | $4,148,275$ | 58.51 | 70,899 |
| 2014 | $5,850,132.74$ | 518,807 | 619,995 | $5,522,644$ | 59.51 | 92,802 |
| 2015 | $3,812,436.00$ | 276,531 | 330,465 | $3,672,593$ | 60.51 | 60,694 |
| 2016 | $6,402,652.64$ | 362,022 | 432,630 | $6,290,155$ | 61.50 | 102,279 |
| 2017 | $5,067,903.99$ | 204,657 | 244,573 | $5,076,726$ | 62.50 | 81,228 |
| 2018 | $5,500,517.88$ | 133,300 | 159,299 | $5,616,245$ | 63.50 | 88,445 |
| 2019 | $7,552,464.59$ | 60,982 | 72,876 | $7,857,212$ | 64.50 | 121,817 |
|  |  |  |  |  |  |  |
|  | $141,830,292.37$ | $33,892,199$ | $40,502,369$ | $108,419,438$ |  | $2,124,461$ |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 367.00 UNDERGROUND CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. IOWA 41-S2
NET SALVAGE PERCENT. . 20

| 1964 | 2,269.81 | 2,347 | 2,116 | 608 | 5.67 | 107 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1965 | 14,365.73 | 14,741 | 13,292 | 3,947 | 5.94 | 664 |
| 1966 | 23,893.58 | 24,322 | 21,931 | 6,741 | 6.22 | 1,084 |
| 1967 | 58,518.31 | 59,089 | 53,281 | 16,941 | 6.50 | 2,606 |
| 1968 | 19,101.74 | 19,120 | 17,241 | 5,681 | 6.80 | 835 |
| 1969 | 26,823.01 | 26,614 | 23,998 | 8,190 | 7.10 | 1,154 |
| 1970 | 69,095.13 | 67,929 | 61, 252 | 21,662 | 7.41 | 2,923 |
| 1974 | 70,763.39 | 66,856 | 60,284 | 24,632 | 8.72 | 2,825 |
| 1975 | 152,882.92 | 142,875 | 128,830 | 54,630 | 9.07 | 6,023 |
| 1976 | 115,858.54 | 107,020 | 96,500 | 42,530 | 9.44 | 4,505 |
| 1977 | 84,578.11 | 77,209 | 69,619 | 31,875 | 9.81 | 3,249 |
| 1978 | 222,473.04 | 200,616 | 180,895 | 86,073 | 10.19 | 8,447 |
| 1979 | 307, 885.79 | 274, 034 | 247, 096 | 122,367 | 10.59 | 11,555 |
| 1980 | 478,694.44 | 420,319 | 379, 002 | 195,431 | 11.00 | 17,766 |
| 1981 | 581, 489.31 | 503,426 | 453, 939 | 243,848 | 11.42 | 21,353 |
| 1982 | 303, 899.06 | 259,188 | 233,710 | 130,969 | 11.86 | 11, 043 |
| 1983 | 485, 959.74 | 408, 066 | 367,953 | 215,199 | 12.31 | 17,482 |
| 1984 | 662,719.86 | 547,571 | 493,745 | 301, 519 | 12.77 | 23,612 |
| 1985 | 748,302.52 | 607,768 | 548, 024 | 349,939 | 13.25 | 26,410 |
| 1986 | 506, 165.56 | 403,847 | 364,149 | 243,250 | 13.74 | 17,704 |
| 1987 | 596,418.40 | 466,781 | 420,896 | 294,806 | 14.26 | 20,674 |
| 1988 | 884,969.90 | 678,882 | 612,148 | 449, 816 | 14.79 | 30,414 |
| 1989 | 945, 918.50 | 710,687 | 640,826 | 494, 276 | 15.33 | 32, 242 |
| 1990 | 810,717.87 | 595,586 | 537, 040 | 435, 821 | 15.90 | 27,410 |
| 1991 | 1,069, 031.21 | 767,201 | 691,785 | 591, 052 | 16.48 | 35,865 |
| 1992 | 1,018,421.80 | 712,696 | 642,638 | 579,468 | 17.09 | 33,907 |
| 1993 | 1,110, 916.11 | 756,934 | 682,527 | 650,572 | 17.72 | 36,714 |
| 1994 | 2,102,360.21 | 1,393,108 | 1,256,165 | 1,266,667 | 18.36 | 68,991 |
| 1995 | 2,472,826.23 | 1,590, 077 | 1,433,772 | 1,533,619 | 19.03 | 80,590 |
| 1996 | 2,030, 041.77 | 1,264,359 | 1,140,072 | 1,295,978 | 19.72 | 65,719 |
| 1997 | 3,027,165.90 | 1,822,511 | 1,643,358 | 1,989,241 | 20.43 | 97,369 |
| 1998 | 3,767,259.38 | 2,186,487 | 1,971,555 | 2,549,156 | 21.17 | 120,414 |
| 1999 | 3,556,652.14 | 1,986,191 | 1,790,948 | 2,477,035 | 21.92 | 113,003 |
| 2000 | 3,208,600.83 | 1,718,552 | 1,549,618 | 2,300,703 | 22.70 | 101,353 |
| 2001 | 3,884,601.98 | 1,989,678 | 1,794, 092 | 2,867,430 | 23.50 | 122,018 |
| 2002 | 4,238, 354.54 | 2, 069,148 | 1,865,751 | 3,220,274 | 24.32 | 132,413 |
| 2003 | 3,599,463.37 | 1,667,703 | 1,503,768 | 2,815,588 | 25.17 | 111,863 |
| 2004 | 8,296,548.01 | 3,635,083 | 3,277,754 | 6,678,104 | 26.03 | 256,554 |
| 2005 | 8,748,496.84 | 3,605,186 | 3,250,796 | 7,247,400 | 26.92 | 269,220 |
| 2006 | 7,681,015.23 | 2,962,967 | 2,671,707 | 6,545,511 | 27.82 | 235, 281 |
| 2007 | 8,041,614.10 | 2,885,524 | 2,601,877 | 7,048,060 | 28.74 | 245,235 |
| 2008 | 7,538,046.87 | 2,499,677 | 2,253,958 | 6,791,698 | 29.67 | 228,908 |
| 2009 | 7,243,110.90 | 2,200,486 | 1,984,178 | 6,707,555 | 30.62 | 219, 058 |

## EL PASO ELECTRIC COMPANY

ACCOUNT 367.00 UNDERGROUND CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. IOWA 41-S2
NET SALVAGE PERCENT.. -20

| 2010 | $2,438,030.35$ | 672,194 | 606,117 | $2,319,519$ | 31.58 | 73,449 |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2011 | $4,916,395.56$ | $1,215,923$ | $1,096,398$ | $4,803,277$ | 32.55 | 147,566 |  |
| 2012 | $6,222,874.16$ | $1,360,569$ | $1,226,825$ | $6,240,624$ | 33.53 | 186,121 |  |
| 2013 | $8,471,564.39$ | $1,606,717$ | $1,448,776$ | $8,717,101$ | 34.52 | 252,523 |  |
| 2014 | $11,738,584.43$ | $1,886,156$ | $1,700,747$ | $12,385,554$ | 35.51 | 348,791 |  |
| 2015 | $10,425,291.00$ | $1,373,136$ | $1,238,156$ | $11,272,193$ | 36.50 | 308,827 |  |
| 2016 | $62,366.10$ | 6,389 | 5,761 | 69,078 | 37.50 | 1,842 |  |
| 2017 | $11,515,271.48$ | 842,642 | 759,810 | $13,058,516$ | 38.50 | 339,182 |  |
| 2018 | $10,637,835.50$ | 467,086 | 421,172 | $12,344,231$ | 39.50 | 312,512 |  |
| 2019 | $9,560,541.60$ | 139,966 | 126,207 | $11,346,443$ | 40.50 | 280,159 |  |
|  |  |  |  |  |  |  | $5,117,534$ |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 368.00 LINE TRANSFORMERS

## CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. IOWA 52-R3
NET SALVAGE PERCENT.. -15

| 1925 | 932.44 | 1,072 | 1,072 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1926 | 2,971.63 | 3,417 | 3,417 |  |  |  |
| 1927 | 2,051.34 | 2,359 | 2,359 |  |  |  |
| 1928 | 1,480.90 | 1,703 | 1,703 |  |  |  |
| 1929 | 2,908.48 | 3,345 | 3,345 |  |  |  |
| 1930 | 2,796.52 | 3,216 | 3,216 |  |  |  |
| 1931 | 1,751.77 | 2,015 | 2,015 |  |  |  |
| 1932 | 545.35 | 625 | 549 | 78 | 0.19 | 78 |
| 1933 | 843.94 | 963 | 846 | 125 | 0.38 | 125 |
| 1934 | 1,838.63 | 2,091 | 1,837 | 277 | 0.58 | 277 |
| 1935 | 2,767.01 | 3,132 | 2,751 | 431 | 0.81 | 431 |
| 1936 | 4,513.95 | 5,087 | 4,469 | 722 | 1.04 | 694 |
| 1937 | 6,385.45 | 7,162 | 6,292 | 1, 051 | 1.28 | 821 |
| 1938 | 4,284.49 | 4,783 | 4,202 | 725 | 1.52 | 477 |
| 1939 | 4,594.30 | 5,105 | 4,485 | 798 | 1.76 | 453 |
| 1940 | 4,415.99 | 4,882 | 4,289 | 789 | 2.01 | 393 |
| 1941 | 7,771.81 | 8,549 | 7,510 | 1,428 | 2.26 | 632 |
| 1942 | 1,571.24 | 1,720 | 1,511 | 296 | 2.51 | 118 |
| 1943 | 932.81 | 1,016 | 893 | 180 | 2.77 | 65 |
| 1944 | 670.57 | 726 | 638 | 133 | 3.02 | 44 |
| 1945 | 16,638.00 | 17,927 | 15,749 | 3,385 | 3.28 | 1,032 |
| 1946 | 23,756.72 | 25,460 | 22,366 | 4,954 | 3.54 | 1,399 |
| 1947 | 26,089.47 | 27,816 | 24,436 | 5,567 | 3.79 | 1,469 |
| 1948 | 31, 233.64 | 33,121 | 29,096 | 6,823 | 4.05 | 1,685 |
| 1949 | 30,503. 37 | 32,172 | 28, 263 | 6,816 | 4.31 | 1,581 |
| 1950 | 28,961.40 | 30,379 | 26,687 | 6,619 | 4.57 | 1,448 |
| 1951 | 42, 905.14 | 44,758 | 39,319 | 10, 022 | 4.83 | 2,075 |
| 1952 | 49,430.43 | 51, 281 | 45, 049 | 11,796 | 5.09 | 2,317 |
| 1953 | 64,631.28 | 66,664 | 58,563 | 15,763 | 5.36 | 2,941 |
| 1954 | 21,048.90 | 21,585 | 18,962 | 5,244 | 5.63 | 931 |
| 1955 | 4,174.00 | 4,255 | 3,738 | 1,062 | 5.91 | 180 |
| 1956 | 24,352.00 | 24,666 | 21,669 | 6,336 | 6.20 | 1,022 |
| 1957 | 36,112.00 | 36,338 | 31, 922 | 9,607 | 6.50 | 1,478 |
| 1958 | 97,118.20 | 97,060 | 85,265 | 26,421 | 6.81 | 3,880 |
| 1959 | 134,229.25 | 133,197 | 117,011 | 37,353 | 7.13 | 5,239 |
| 1960 | 110,621.41 | 108,964 | 95,723 | 31,492 | 7.46 | 4,221 |
| 1961 | 156,790.81 | 153, 229 | 134,609 | 45,700 | 7.81 | 5,851 |
| 1962 | 179,987.81 | 174,425 | 153, 229 | 53,757 | 8.18 | 6,572 |
| 1963 | 89,831.68 | 86,300 | 75,813 | 27,493 | 8.56 | 3,212 |
| 1964 | 158, 067.21 | 150,455 | 132,172 | 49,605 | 8.96 | 5,536 |
| 1965 | 212,482.34 | 200,324 | 175,981 | 68,374 | 9.37 | 7,297 |
| 1966 | 179,611.99 | 167,587 | 147, 222 | 59,332 | 9.81 | 6,048 |
| 1967 | 234,417.71 | 216,389 | 190, 094 | 79,486 | 10.26 | 7,747 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 368.00 LINE TRANSFORMERS

## CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. IOWA 52-R3
NET SALVAGE PERCENT. . -15

| 1968 | $229,566.79$ | 209,525 |
| ---: | ---: | ---: |
| 1969 | $270,902.56$ | 244,317 |
| 1970 | $278,353.39$ | 247,961 |
| 1971 | $300,524.03$ | 264,186 |
| 1972 | $420,269.81$ | 364,435 |
| 1973 | $846,102.22$ | 723,215 |
| 1974 | $1,115,116.26$ | 938,859 |
| 1975 | $695,596.46$ | 576,570 |
| 1976 | $961,978.14$ | 784,393 |
| 1977 | $1,195,997.47$ | 958,542 |
| 1978 | $1,626,740.92$ | $1,280,754$ |
| 1979 | $1,473,140.82$ | $1,138,308$ |
| 1980 | $1,505,778.32$ | $1,141,223$ |
| 1981 | $1,507,908.08$ | $1,120,156$ |
| 1982 | $1,670,241.57$ | $1,214,892$ |
| 1983 | $1,776,240.81$ | $1,264,111$ |
| 1984 | $2,043,921.98$ | $1,421,612$ |
| 1985 | $2,057,576.55$ | $1,397,888$ |
| 1986 | $2,742,199.66$ | $1,817,537$ |
| 1987 | $2,179,886.12$ | $1,408,184$ |
| 1988 | $2,445,056.47$ | $1,537,838$ |
| 1989 | $1,881,088.95$ | $1,150,677$ |
| 1990 | $2,099,046.05$ | $1,247,336$ |
| 1991 | $2,054,611.73$ | $1,184,592$ |
| 1992 | $2,037,147.17$ | $1,138,023$ |
| 1993 | $231,282.44$ | 125,008 |
| 1994 | $4,780,918.27$ | $2,496,337$ |
| 1995 | $4,429,354.65$ | $2,230,455$ |
| 1996 | $550,449.52$ | 266,842 |
| 1997 | $6,997,315.64$ | $3,260,529$ |
| 1998 | $4,511,154.04$ | $2,015,263$ |
| 1999 | $3,747,269.17$ | $1,601,918$ |
| 2000 | $2,735,213.55$ | $1,115,456$ |
| 2001 | $4,697,031.34$ | $1,823,035$ |
| 2002 | $4,105,494.25$ | $1,511,719$ |
| 2003 | $3,352,066.34$ | $1,167,565$ |
| 2004 | $1,089,435.47$ | 357,539 |
| 2005 | $15,718,615.72$ | $4,838,874$ |
| 2006 | $6,924,786.01$ | $1,989,363$ |
| 2007 | $16,842,649.24$ | $4,492,069$ |
| 2008 | $13,816,921.66$ | $3,397,961$ |
| 2009 | $14,549,945.36$ | $3,272,530$ |
| 2010 | $9,554,903.86$ | $1,948,307$ |
|  | 2 |  |


| 184,064 | 79,938 | 10.73 | 7,450 |
| ---: | ---: | ---: | ---: |
| 214,628 | 96,910 | 11.22 | 8,637 |
| 217,829 | 102,277 | 11.72 | 8,727 |
| 232,083 | 113,520 | 12.25 | 9,267 |
| 320,149 | 163,161 | 12.79 | 12,757 |
| 635,331 | 337,687 | 13.35 | 25,295 |
| 824,770 | 457,614 | 13.93 | 32,851 |
| 506,506 | 293,430 | 14.52 | 20,209 |
| 689,075 | 417,200 | 15.13 | 27,574 |
| 842,062 | 533,335 | 15.76 | 33,841 |
| $1,125,119$ | 745,633 | 16.40 | 45,465 |
| 999,983 | 694,129 | 17.06 | 40,688 |
| $1,002,543$ | 729,102 | 17.73 | 41,123 |
| 984,037 | 750,057 | 18.41 | 40,742 |
| $1,067,260$ | 853,518 | 19.11 | 44,663 |
| $1,110,498$ | 932,179 | 19.82 | 47,032 |
| $1,248,860$ | $1,101,650$ | 20.55 | 53,608 |
| $1,228,019$ | $1,138,194$ | 21.28 | 53,487 |
| $1,596,673$ | $1,556,857$ | 22.03 | 70,670 |
| $1,237,064$ | $1,269,805$ | 22.79 | 55,718 |
| $1,350,963$ | $1,460,852$ | 23.56 | 62,006 |
| $1,010,849$ | $1,152,403$ | 24.34 | 47,346 |
| $1,095,762$ | $1,318,141$ | 25.13 | 52,453 |
| $1,040,642$ | $1,322,161$ | 25.93 | 50,990 |
| 999,732 | $1,342,987$ | 26.74 | 50,224 |
| 109,817 | 156,158 | 27.56 | 5,666 |
| $2,192,986$ | $3,305,070$ | 28.39 | 116,417 |
| $1,959,414$ | $3,134,344$ | 29.23 | 107,230 |
| 234,416 | 398,601 | 30.08 | 13,251 |
| $2,864,315$ | $5,182,598$ | 30.93 | 167,559 |
| $1,770,372$ | $3,417,455$ | 31.80 | 107,467 |
| $1,407,256$ | $2,902,104$ | 32.67 | 88,831 |
| 979,908 | $2,165,588$ | 33.56 | 64,529 |
| $1,601,503$ | $3,800,083$ | 34.45 | 110,307 |
| $1,328,017$ | $3,393,301$ | 35.35 | 95,992 |
| $1,025,684$ | $2,829,192$ | 36.25 | 78,047 |
| 314,091 | 938,760 | 37.16 | 25,263 |
| $4,250,862$ | $13,825,546$ | 38.08 | 363,066 |
| $1,747,619$ | $6,215,885$ | 39.01 | 159,341 |
| $3,946,200$ | $15,422,847$ | 39.94 | 386,150 |
| $2,985,047$ | $12,904,413$ | 40.88 | 315,666 |
| $2,874,858$ | $13,857,579$ | 41.83 | 331,283 |
| $1,711,552$ | $9,276,587$ | 42.78 | 216,844 |
|  | 10 |  |  |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 368.00 LINE TRANSFORMERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. IOWA 52-R3
NET SALVAGE PERCENT.. -15

| 2011 | 15,249, 426.32 | 2,789, 059 | 2,450,137 | 15, 086,703 | 43.73 | 344,997 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2012 | 17, 096,629.93 | 2,763,961 | 2,428,089 | 17,233, 035 | 44.69 | 385,613 |
| 2013 | 10, 451, 153.72 | 1,467,739 | 1,289,382 | 10,729,445 | 45.65 | 235, 037 |
| 2014 | 12, 013,984.23 | 1,429,412 | 1,255,712 | 12,560,370 | 46.62 | 269,420 |
| 2015 | 11, 456, 828.14 | 1,117,402 | 981,617 | 12,193,735 | 47.59 | 256, 225 |
| 2016 | 20, 949, 366.27 | 1,589, 093 | 1,395,990 | 22,695,781 | 48.57 | 467,280 |
| 2017 | 15,340, 009.34 | 834,596 | 733,177 | 16,907,834 | 49.54 | 341, 297 |
| 2018 | 12, 068,975.96 | 395, 006 | 347, 006 | 13,532, 316 | 50.52 | 267,861 |
| 2019 | 12, 923, 815.70 | 140, 004 | 122,991 | 14,739,397 | 51.51 | 286,146 |
|  | 283,609, 011.85 | 77,179,496 | 67,802,856 | 258, 347, 508 |  | 6,629,377 |
|  | COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 39.0 2.34 |  |  |  |  |  |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 369.00 SERVICES

## CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. IOWA 65-S3
NET SALVAGE PERCENT.. -15

| 1939 | $11,846.03$ | 11,940 | 13,623 |
| ---: | ---: | ---: | ---: |
| 1940 | $11,803.19$ | 11,845 | 13,574 |
| 1941 | $14,682.50$ | 14,667 | 16,885 |
| 1942 | $7,016.95$ | 6,976 | 8,069 |
| 1943 | $2,587.40$ | 2,560 | 2,976 |
| 1944 | $6,103.35$ | 6,007 | 7,019 |
| 1945 | $10,204.13$ | 9,993 | 11,735 |
| 1946 | $19,097.14$ | 18,600 | 21,962 |
| 1947 | $28,423.52$ | 27,527 | 32,687 |
| 1948 | $38,963.42$ | 37,521 | 44,808 |
| 1949 | $42,692.59$ | 40,871 | 49,096 |
| 1950 | $75,892.48$ | 72,198 | 87,276 |
| 1951 | $76,085.81$ | 71,924 | 87,499 |
| 1952 | $80,461.65$ | 75,563 | 92,531 |
| 1953 | $108,262.61$ | 100,981 | 124,502 |
| 1954 | $114,629.62$ | 106,168 | 131,824 |
| 1955 | $324,398.13$ | 298,215 | 373,058 |
| 1956 | $113,961.79$ | 103,977 | 131,056 |
| 1957 | $125,132.36$ | 113,263 | 143,902 |
| 1958 | $203,082.15$ | 182,309 | 233,544 |
| 1959 | $158,397.88$ | 140,990 | 182,158 |
| 1960 | $112,291.96$ | 99,077 | 129,136 |
| 1961 | $180,208.67$ | 157,533 | 207,059 |
| 1962 | $172,583.18$ | 149,433 | 196,413 |
| 1963 | $152,305.67$ | 130,554 | 171,598 |
| 1964 | $189,983.56$ | 161,171 | 211,841 |
| 1965 | $196,336.00$ | 164,790 | 216,598 |
| 1966 | $201,519.07$ | 167,215 | 219,785 |
| 1967 | $236,600.99$ | 194,064 | 255,075 |
| 1968 | $234,812.50$ | 190,228 | 250,033 |
| 1969 | $292,910.49$ | 234,291 | 307,949 |
| 1970 | $321,234.23$ | 253,592 | 333,318 |
| 1971 | $239,492.08$ | 186,435 | 245,047 |
| 1972 | $331,021.07$ | 253,997 | 333,850 |
| 1973 | $414,087.15$ | 312,973 | 411,367 |
| 1974 | $555,876.28$ | 413,651 | 543,697 |
| 1975 | $350,564.88$ | 256,589 | 337,257 |
| 1976 | $466,416.91$ | 335,607 | 441,117 |
| 1977 | $763,302.19$ | 539,512 | 709,127 |
| 1978 | $799,826.65$ | 554,851 | 729,288 |
| 1979 | $800,868.43$ | 544,946 | 716,269 |
| 1980 | $875,574.26$ | 583,857 | 767,413 |
| 1981 | $711,501.78$ | 464,499 | 610,531 |
|  |  |  |  |
| 193 | 103 |  |  |


| 181 | 15.59 | 12 |
| ---: | ---: | ---: |
| 2,058 | 16.06 | 128 |
| 3,554 | 16.55 | 215 |
| 6,640 | 17.05 | 389 |
| 9,188 | 17.56 | 523 |
| 11,962 | 18.10 | 661 |
| 17,016 | 18.64 | 913 |
| 20,001 | 19.21 | 1,041 |
| 28,898 | 19.79 | 1,460 |
| 36,101 | 20.38 | 1,771 |
| 30,369 | 21.00 | 1,446 |
| 46,824 | 21.63 | 2,165 |
| 64,833 | 22.28 | 2,910 |
| 95,561 | 22.94 | 4,166 |
| 65,893 | 23.63 | 2,789 |
| 95,262 | 24.33 | 3,915 |
| 168,671 | 25.05 | 6,733 |
| 190,513 | 25.79 | 7,387 |
| 204,730 | 26.54 | 7,714 |
| 239,497 | 27.31 | 8,770 |
| 207,696 | 28.10 | 7,391 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 369.00 SERVICES

## CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. IOWA 65-S3
NET SALVAGE PERCENT.. -15

| 1982 | 801, 360.92 | 511, 681 | 672,546 | 249, 019 | 28.91 | 8,614 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1983 | 1, 049, 797.46 | 655, 087 | 861, 037 | 346, 230 | 29.73 | 11,646 |
| 1984 | 1,138, 303.76 | 693,390 | 911,382 | 397,667 | 30.57 | 13, 008 |
| 1985 | 1,044,420.03 | 620,504 | 815,581 | 385,502 | 31.42 | 12,269 |
| 1986 | 903,573.98 | 522,911 | 687,307 | 351, 803 | 32.29 | 10,895 |
| 1987 | 802,403.71 | 451,868 | 593,929 | 328,835 | 33.17 | 9,914 |
| 1988 | 738,189.56 | 403, 958 | 530, 957 | 317,961 | 34.07 | 9,333 |
| 1989 | 837,242.36 | 444, 682 | 584,484 | 378,345 | 34.98 | 10,816 |
| 1990 | 824,935.29 | 424,713 | 558, 237 | 390,439 | 35.90 | 10,876 |
| 1991 | 740,696.83 | 369, 290 | 485, 389 | 366,412 | 36.82 | 9,951 |
| 1992 | 851, 212.76 | 410, 235 | 539,207 | 439,688 | 37.76 | 11,644 |
| 1993 | 6,199.00 | 2,883 | 3,789 | 3,340 | 38.71 | 86 |
| 1994 | 1,507,909.00 | 675,760 | 888,209 | 845,886 | 39.67 | 21,323 |
| 1995 | 1,285,661.04 | 554, 323 | 728,594 | 749,916 | 40.63 | 18,457 |
| 1997 | 1,799,193.00 | 713,664 | 938, 030 | 1,131,042 | 42.58 | 26,563 |
| 1998 | 1, 008, 319.00 | 382, 483 | 502,730 | 656,837 | 43.56 | 15,079 |
| 1999 | 549,898.00 | 199, 055 | 261,635 | 370,748 | 44.54 | 8,324 |
| 2000 | 1,020,817.63 | 351, 642 | 462, 193 | 711,747 | 45.53 | 15,632 |
| 2001 | 871,771.03 | 285, 031 | 374,641 | 627,896 | 46.52 | 13,497 |
| 2002 | 835,903.25 | 258,510 | 339,782 | 621,507 | 47.52 | 13, 079 |
| 2003 | 939,163.09 | 273,995 | 360,135 | 719,903 | 48.51 | 14,840 |
| 2004 | 1,105,897.02 | 303, 078 | 398,361 | 873,421 | 49.51 | 17,641 |
| 2005 | 4,226,368.58 | 1,084,241 | 1,425,110 | 3,435,214 | 50.50 | 68, 024 |
| 2006 | 0.11 |  |  |  |  |  |
| 2007 | 2,775,535.97 | 613,828 | 806,806 | 2,385,060 | 52.50 | 45,430 |
| 2008 | 5,666.28 | 1,153 | 1,515 | 5,001 | 53.50 | 93 |
| 2010 | 969, 221.23 | 162,899 | 214,112 | 900,492 | 55.50 | 16,225 |
| 2011 | 839,696.00 | 126, 278 | 165,978 | 799,672 | 56.50 | 14,153 |
| 2012 | 1,187,345.00 | 157,545 | 207, 075 | 1,158,372 | 57.50 | 20,146 |
| 2013 | 891,459.00 | 102,518 | 134,748 | 890,430 | 58.50 | 15,221 |
| 2015 | 4, 828, 753.00 | 384, 439 | 505,301 | 5, 047,765 | 60.50 | 83,434 |
| 2016 | 795,015.88 | 49,233 | 64,711 | 849,557 | 61.50 | 13,814 |
| 2017 | 2,990, 342.85 | 132,260 | 173,841 | 3,265, 053 | 62.50 | 52,241 |
| 2018 | 2,783, 762.45 | 73,887 | 97,116 | 3,104, 211 | 63.50 | 48,885 |
| 2019 | 3,168, 374.79 | 28,020 | 36,830 | 3,606,801 | 64.50 | 55,919 |
|  | 56,297,451.56 | 20,228, 004 | 26,484, 850 | 38,257, 220 |  | 779,571 |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 49.1 1.38

## EL PASO ELECTRIC COMPANY

## ACCOUNT 370.00 METERS

## CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. IOWA 35-R2.5
NET SALVAGE PERCENT.. -15

| 1970 | $2,470.10$ | 2,531 | 2,841 |
| :--- | ---: | ---: | ---: |
| 1971 | $69,163.44$ | 70,357 | 79,538 |
| 1972 | $68,517.24$ | 69,182 | 78,795 |
| 1973 | $79,307.46$ | 79,426 | 91,204 |
| 1974 | $74,270.03$ | 73,770 | 85,411 |
| 1975 | $94,835.43$ | 93,388 | 109,061 |
| 1976 | $115,894.35$ | 113,096 | 133,279 |
| 1977 | $150,762.92$ | 145,736 | 173,377 |
| 1978 | $127,849.82$ | 122,284 | 147,027 |
| 1979 | $206,728.96$ | 195,556 | 237,738 |
| 1980 | $248,429.01$ | 232,229 | 285,693 |
| 1981 | $163,088.60$ | 150,524 | 187,552 |
| 1982 | $390,227.73$ | 355,289 | 448,762 |
| 1983 | $340,531.84$ | 305,457 | 388,830 |
| 1984 | $392,387.39$ | 346,299 | 440,820 |
| 1985 | $566,506.53$ | 491,407 | 625,535 |
| 1986 | $579,762.80$ | 493,758 | 628,527 |
| 1987 | $590,650.12$ | 493,134 | 627,733 |
| 1988 | $857,509.49$ | 701,005 | 892,342 |
| 1989 | $649,071.07$ | 518,666 | 660,234 |
| 1990 | $745,379.90$ | 581,421 | 740,118 |
| 1991 | $855,064.25$ | 650,115 | 827,562 |
| 1992 | $589,927.24$ | 436,513 | 555,658 |
| 1993 | $129,167.00$ | 92,860 | 118,206 |
| 1994 | $1,156,984.26$ | 807,061 | $1,027,345$ |
| 1995 | $392,360.06$ | 264,926 | 337,237 |
| 1997 | $1,542,295.21$ | 970,429 | $1,235,304$ |
| 1998 | $888,648.06$ | 537,840 | 684,642 |
| 1999 | $1,563,325.68$ | 908,153 | $1,156,030$ |
| 2000 | $1,749,442.40$ | 973,156 | $1,238,775$ |
| 2001 | $2,622,320.56$ | $1,392,364$ | $1,772,405$ |
| 2002 | $1,664,568.64$ | 841,181 | $1,070,778$ |
| 2003 | $1,245,095.77$ | 596,885 | 759,803 |
| 2004 | 247.30 | 2,112 | 143 |
| 2005 | $4,298,300.14$ | $1,830,360$ | $2,329,950$ |
| 2006 | $2,577,593.83$ | $1,027,314$ | $1,307,716$ |
| 2007 | $94,509.99$ | 35,059 | 44,628 |
| 2008 | $72,174.13$ | 24,758 | 31,516 |
| 2009 | $8,316,390.76$ | $2,615,043$ | $3,328,809$ |
| 2010 | $18,313.65$ | 5,235 | 6,664 |
| 2011 | $15,949.33$ | 4,098 | 5,217 |
| 2012 | $21,319.44$ | 4,847 | 6,170 |
| 2013 | $8,863,865.70$ | $1,753,273$ | $2,231,822$ |
|  |  |  |  |
| 193 |  |  |  |


| 2,782 | 7.70 | 361 |
| ---: | ---: | ---: |
| 10,425 | 8.14 | 1,281 |
| 25,948 | 8.60 | 3,017 |
| 38,200 | 9.08 | 4,207 |
| 51,515 | 9.59 | 5,372 |
| 93,794 | 10.12 | 9,268 |
| 86,198 | 10.68 | 8,071 |
| 117,069 | 11.26 | 10,397 |
| 155,762 | 11.86 | 13,133 |
| 122,758 | 12.48 | 9,836 |
| 30,336 | 13.12 | 2,312 |
| 303,187 | 13.77 | 22,018 |
| 113,977 | 14.45 | 7,888 |
| 538,335 | 15.85 | 33,964 |
| 337,303 | 16.58 | 20,344 |
| 641,795 | 17.32 | 37,055 |
| 773,084 | 18.07 | 42,783 |
| $1,243,264$ | 18.84 | 65,991 |
| 843,476 | 19.62 | 42,991 |
| 672,057 | 20.41 | 32,928 |
| 141 | 21.22 | 7 |
| $2,613,095$ | 22.04 | 118,561 |
| $1,656,517$ | 22.87 | 72,432 |
| 64,058 | 23.71 | 2,702 |
| 51,484 | 24.56 | 2,096 |
| $6,235,040$ | 25.43 | 245,184 |
| 14,397 | 26.30 | 547 |
| 13,125 | 27.18 | 483 |
| 18,347 | 28.08 | 653 |
| $7,961,624$ | 28.98 | 274,728 |

EL PASO ELECTRIC COMPANY

ACCOUNT 370.00 METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. IOWA 35-R2.5 NET SALVAGE PERCENT.. -15

| 2014 | 1,087,534.18 | 182,960 | 232,898 | 1, 017,766 | 29.88 | 34, 062 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2015 | 3,040,579.00 | 419, 600 | 534,128 | 2,962,538 | 30.80 | 96,186 |
| 2016 | 3,279,447.95 | 353,415 | 449,879 | 3,321,486 | 31.72 | 104,713 |
| 2017 | 2,686, 806.35 | 207,451 | 264,074 | 2,825,753 | 32.65 | 86,547 |
| 2018 | 2, 055,357.95 | 95, 232 | 121, 225 | 2,242,437 | 33.59 | 66,759 |
| 2019 | 3,669,322.26 | 56,671 | 72,139 | 4,147,581 | 34.53 | 120,115 |
|  | 61, 010, 255.32 | 22,721,426 | 28, 815,140 | 41,346,653 |  | 1,598,992 |
|  | OMPOSITE REMAI | NG LIFE AND | NNUAL ACCRU | RATE, PERCEN | . 25.9 | 2.62 |

## EL PASO ELECTRIC COMPANY

ACCOUNT 371.00 INSTALLATIONS ON CUSTOMERS' PREMISES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. IOWA 35-R2
NET SALVAGE PERCENT.. -15

| 1969 | 544.59 | 554 | 570 | 56 | 4.03 | 14 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1970 | 1,811. 32 | 1,826 | 1,878 | 205 | 4.32 | 47 |
| 1971 | 9,038.51 | 9,022 | 9,277 | 1,117 | 4.62 | 242 |
| 1972 | 14,382.79 | 14,210 | 14,612 | 1,928 | 4.93 | 391 |
| 1973 | 22,224.10 | 21,731 | 22,346 | 3,212 | 5.24 | 613 |
| 1974 | 18,470.90 | 17,867 | 18,372 | 2,870 | 5.56 | 516 |
| 1975 | 22,429.87 | 21,461 | 22,068 | 3,726 | 5.88 | 634 |
| 1976 | 18,812.23 | 17,789 | 18,292 | 3,342 | 6.22 | 537 |
| 1977 | 22,525.80 | 21,042 | 21,637 | 4,268 | 6.57 | 650 |
| 1978 | 26,194.64 | 24,151 | 24,834 | 5,290 | 6.94 | 762 |
| 1979 | 24,209.19 | 22,018 | 22,641 | 5,200 | 7.32 | 710 |
| 1980 | 23,668.30 | 21,223 | 21,823 | 5,396 | 7.71 | 700 |
| 1981 | 50,891.13 | 44,947 | 46,218 | 12,307 | 8.12 | 1,516 |
| 1982 | 85,598.29 | 74,391 | 76,495 | 21,943 | 8.55 | 2,566 |
| 1983 | 101,495.29 | 86,739 | 89,192 | 27,528 | 8.99 | 3,062 |
| 1984 | 70,313.91 | 59,029 | 60,698 | 20,163 | 9.45 | 2,134 |
| 1985 | 60,952.05 | 50,228 | 51,648 | 18,447 | 9.92 | 1,860 |
| 1986 | 66,340.96 | 53,601 | 55,117 | 21,175 | 10.41 | 2, 034 |
| 1987 | 91,448.13 | 72,354 | 74,400 | 30,765 | 10.92 | 2,817 |
| 1988 | 96,745.97 | 74,861 | 76,978 | 34,280 | 11.45 | 2,994 |
| 1989 | 125,836.91 | 95,138 | 97,828 | 46,884 | 11.99 | 3,910 |
| 1990 | 82,634.51 | 60,927 | 62,650 | 32,380 | 12.56 | 2,578 |
| 1991 | 132,038.94 | 94,882 | 97,565 | 54,280 | 13.13 | 4,134 |
| 1992 | 250, 292.88 | 175, 005 | 179,954 | 107,883 | 13.72 | 7,863 |
| 1993 | 122.15 | 83 | 85 | 55 | 14.33 | 4 |
| 1994 | 359, 042.48 | 236,413 | 243, 098 | 169,801 | 14.96 | 11,350 |
| 1995 | 366,096.93 | 233,362 | 239,961 | 181, 050 | 15.60 | 11,606 |
| 1996 | 601.97 | 371 | 381 | 311 | 16.25 | 19 |
| 1997 | 553, 001. 23 | 328,513 | 337,803 | 298,148 | 16.92 | 17,621 |
| 1998 | 333,861.42 | 190,872 | 196,269 | 187,672 | 17.60 | 10,663 |
| 1999 | 373,187.40 | 204,896 | 210,690 | 218,476 | 18.29 | 11,945 |
| 2000 | 312,788.75 | 164,436 | 169, 086 | 190,621 | 19.00 | 10, 033 |
| 2001 | 478,448.79 | 240, 208 | 247,001 | 303,215 | 19.72 | 15,376 |
| 2002 | 513,869.23 | 245,498 | 252,440 | 338,510 | 20.46 | 16,545 |
| 2003 | 916,813.79 | 415, 714 | 427,470 | 626,866 | 21.20 | 29,569 |
| 2004 | 324,199.49 | 138,905 | 142,833 | 229,996 | 21.96 | 10,473 |
| 2005 | 1,796,393.47 | 724, 226 | 744,706 | 1,321,146 | 22.73 | 58,123 |
| 2006 | 67,332.18 | 25,420 | 26,139 | 51,293 | 23.51 | 2,182 |
| 2007 | 965,946.51 | 339,594 | 349, 197 | 761,641 | 24.30 | 31,343 |
| 2008 | 362,620.38 | 117,835 | 121,167 | 295,846 | 25.11 | 11,782 |
| 2009 | 427,195.40 | 127,451 | 131, 055 | 360, 220 | 25.92 | 13,897 |
| 2010 | 452, 723.51 | 122,869 | 126,343 | 394, 289 | 26.74 | 14,745 |
| 2011 | 378,806.84 | 92,479 | 95,094 | 340, 534 | 27.57 | 12,352 |

## EL PASO ELECTRIC COMPANY

ACCOUNT 371.00 INSTALLATIONS ON CUSTOMERS' PREMISES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. IOWA 35-R2
NET SALVAGE PERCENT.. -15

| 2012 | 364,624.46 | 78,832 | 81,061 | 338, 257 | 28.42 | 11,902 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2013 | 382,403.53 | 71,994 | 74, 030 | 365, 734 | 29.27 | 12,495 |
| 2014 | 410,175.60 | 65,633 | 67,489 | 404,213 | 30.13 | 13,416 |
| 2015 | 314,376.63 | 41,421 | 42,592 | 318, 941 | 30.99 | 10,292 |
| 2016 | 599,675.52 | 61,673 | 63,417 | 626,210 | 31.87 | 19,649 |
| 2017 | 706, 343.52 | 51,987 | 53,457 | 758,838 | 32.76 | 23,164 |
| 2018 | 470,778.41 | 20,882 | 21,473 | 519,922 | 33.65 | 15,451 |
| 2019 | 448,252.94 | 6,629 | 6,817 | 508, 674 | 34.55 | 14,723 |
|  | 14, 098, 583.74 | 5,483, 192 | 5,638, 247 | 10,575,125 |  | 454, 004 |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 23.3 |  |  |  |  |  | 3.22 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 373.00 STREET LIGHTING AND SIGNAL SYSTEMS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. IOWA 55-R3
NET SALVAGE PERCENT. . 20

| 1939 | 1,868.78 | 2,119 | 2,219 | 24 | 3.03 | 8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1940 | 1,499.73 | 1,692 | 1,772 | 28 | 3.29 | 9 |
| 1941 | 693.70 | 779 | 816 | 16 | 3.55 | 5 |
| 1942 | 705.02 | 788 | 825 | 21 | 3.80 | 6 |
| 1943 | 374.69 | 416 | 436 | 14 | 4.06 | 3 |
| 1944 | 681.73 | 754 | 790 | 28 | 4.32 | 6 |
| 1946 | 562.50 | 616 | 645 | 30 | 4.83 | 6 |
| 1947 | 4,278.59 | 4,658 | 4,878 | 256 | 5.10 | 50 |
| 1948 | 13,715.76 | 14,855 | 15,557 | 902 | 5.36 | 168 |
| 1949 | 17,086.15 | 18,408 | 19,277 | 1,226 | 5.62 | 218 |
| 1950 | 13,222.72 | 14,165 | 14,834 | 1,033 | 5.90 | 175 |
| 1951 | 11,887.43 | 12,665 | 13,263 | 1, 002 | 6.17 | 162 |
| 1952 | 25,366.04 | 26,864 | 28,133 | 2,306 | 6.46 | 357 |
| 1953 | 31,199.75 | 32,845 | 34,396 | 3, 044 | 6.75 | 451 |
| 1955 | 2,026.00 | 2,105 | 2,204 | 227 | 7.37 | 31 |
| 1957 | 10,961.81 | 11,231 | 11,761 | 1,393 | 8.04 | 173 |
| 1958 | 51,577.45 | 52,440 | 54,917 | 6,976 | 8.40 | 830 |
| 1959 | 72,812.60 | 73,443 | 76,912 | 10,463 | 8.77 | 1,193 |
| 1960 | 186,953.31 | 186,979 | 195,810 | 28,534 | 9.16 | 3,115 |
| 1961 | 62, 059.48 | 61,527 | 64,433 | 10, 038 | 9.56 | 1,050 |
| 1962 | 132,518.04 | 130,167 | 136,314 | 22,708 | 9.98 | 2,275 |
| 1963 | 68,297.68 | 66,445 | 69,583 | 12,374 | 10.41 | 1,189 |
| 1964 | 52,604.75 | 50,662 | 53, 055 | 10, 071 | 10.86 | 927 |
| 1965 | 99,671.65 | 94,967 | 99,452 | 20,154 | 11.33 | 1,779 |
| 1966 | 41,457.64 | 39, 058 | 40,903 | 8,846 | 11.82 | 748 |
| 1967 | 119,743.67 | 111,479 | 116,744 | 26,948 | 12.33 | 2,186 |
| 1968 | 113,172.15 | 104, 077 | 108,992 | 26,815 | 12.85 | 2,087 |
| 1969 | 113,036.76 | 102,622 | 107,469 | 28,175 | 13.39 | 2,104 |
| 1970 | 64,494.94 | 57,778 | 60,507 | 16,887 | 13.94 | 1,211 |
| 1971 | 62,013.57 | 54,784 | 57,371 | 17,045 | 14.51 | 1,175 |
| 1972 | 191, 059.64 | 166,325 | 174,180 | 55,092 | 15.10 | 3,648 |
| 1973 | 104,934.38 | 89,953 | 94,201 | 31,720 | 15.71 | 2,019 |
| 1974 | 179,324.44 | 151,336 | 158,483 | 56,706 | 16.32 | 3,475 |
| 1975 | 82,068.19 | 68,114 | 71,331 | 27,151 | 16.96 | 1,601 |
| 1976 | 94,078.52 | 76,748 | 80,373 | 32,521 | 17.61 | 1,847 |
| 1977 | 72,356.49 | 57,985 | 60,723 | 26,105 | 18.27 | 1,429 |
| 1978 | 129,136.85 | 101, 601 | 106,399 | 48,565 | 18.94 | 2,564 |
| 1979 | 66,800.92 | 51,551 | 53,986 | 26,175 | 19.63 | 1,333 |
| 1980 | 99,297. 27 | 75,112 | 78,659 | 40,498 | 20.33 | 1,992 |
| 1981 | 68,559.88 | 50,799 | 53,198 | 29,074 | 21.04 | 1,382 |
| 1982 | 82,856.88 | 60,073 | 62,910 | 36,518 | 21.77 | 1,677 |
| 1983 | 70,603.66 | 50, 064 | 52,428 | 32,296 | 22.50 | 1,435 |
| 1984 | 68,653.12 | 47,558 | 49,804 | 32,580 | 23.25 | 1,401 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 373.00 STREET LIGHTING AND SIGNAL SYSTEMS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. IOWA 55-R3
NET SALVAGE PERCENT. . 20

| 1985 | 87,457.73 | 59,134 | 61,927 | 43, 022 | 24.01 | 1,792 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1986 | 54,690.20 | 36,072 | 37,776 | 27,852 | 24.77 | 1,124 |
| 1987 | 42,658.82 | 27,410 | 28,704 | 22,487 | 25.55 | 880 |
| 1988 | 4,728.54 | 2,957 | 3, 097 | 2,577 | 26.34 | 98 |
| 1989 | 8,738.04 | 5,312 | 5,563 | 4,923 | 27.14 | 181 |
| 1990 | 459,175.73 | 271, 097 | 283,900 | 267,111 | 27.94 | 9,560 |
| 1991 | 414,869.08 | 237,516 | 248,733 | 249,110 | 28.76 | 8,662 |
| 1992 | 705, 094.72 | 390,905 | 409,366 | 436,748 | 29.59 | 14,760 |
| 1993 | 471.79 | 253 | 265 | 301 | 30.42 | 10 |
| 1994 | 1,224,432.16 | 634,217 | 664,169 | 805,150 | 31.26 | 25,757 |
| 1995 | 507,695.77 | 253,551 | 265,526 | 343,709 | 32.11 | 10,704 |
| 1996 | 29,157.00 | 14, 015 | 14,677 | 20,311 | 32.97 | 616 |
| 1997 | 967,815.08 | 446, 817 | 467,919 | 693,459 | 33.84 | 20,492 |
| 1998 | 508, 019.67 | 224,787 | 235,403 | 374,221 | 34.72 | 10,778 |
| 1999 | 346,188.03 | 146,533 | 153,453 | 261,973 | 35.60 | 7,359 |
| 2000 | 225,488.34 | 91,066 | 95,367 | 175,219 | 36.49 | 4,802 |
| 2001 | 20,135.35 | 7,736 | 8,101 | 16, 061 | 37.39 | 430 |
| 2002 | 98,748.96 | 35,981 | 37,680 | 80,819 | 38.30 | 2,110 |
| 2003 | 97,851. 02 | 33,710 | 35,302 | 82,119 | 39.21 | 2,094 |
| 2005 | 506,249.68 | 153,971 | 161,243 | 446,257 | 41.06 | 10,868 |
| 2006 | 429, 206.02 | 121,834 | 127,588 | 387,459 | 41.99 | 9,227 |
| 2007 | 176,019.72 | 46,353 | 48,542 | 162,682 | 42.93 | 3,789 |
| 2008 | 52,363.46 | 12,716 | 13,317 | 49,519 | 43.87 | 1,129 |
| 2009 | 88,761.00 | 19,734 | 20,666 | 85,847 | 44.81 | 1,916 |
| 2010 | 40,223.83 | 8,100 | 8,483 | 39,786 | 45.77 | 869 |
| 2011 | 55,660.64 | 10, 056 | 10,531 | 56,262 | 46.72 | 1,204 |
| 2012 | 812.17 | 130 | 136 | 839 | 47.69 | 18 |
| 2013 | 174,892.37 | 24,230 | 25,374 | 184,497 | 48.65 | 3,792 |
| 2014 | 147,307.20 | 17,292 | 18,109 | 158,660 | 49.62 | 3,198 |
| 2015 | 162,817.66 | 15,666 | 16,406 | 178,975 | 50.59 | 3,538 |
| 2016 | 572,077.54 | 42,810 | 44,831 | 641,662 | 51.57 | 12,443 |
| 2017 | 373,862.67 | 20,067 | 21,015 | 427,620 | 52.54 | 8,139 |
| 2018 | 350,126.46 | 11,306 | 11,839 | 408, 313 | 53.52 | 7,629 |
| 2019 | 130, 939.09 | 1,400 | 1,467 | 155,660 | 54.51 | 2,856 |
|  | 11,751, 009.87 | 5,803,341 | 6,077,418 | 8, 023,794 |  | 242,324 |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 33.1 |  |  |  |  |  | 2.06 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS

## CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SYSTEMS OPERATIONS BUILDING
INTERIM SURVIVOR CURVE.. IOWA 80-R2.5
PROBABLE RETIREMENT YEAR.. 6-2041
NET SALVAGE PERCENT.. 0

| 1991 | $3,248,534.25$ | $1,846,987$ | $1,639,551$ | $1,608,984$ | 20.61 | 78,068 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1995 | $147,847.30$ | 78,534 | 69,714 | 78,134 | 20.75 | 3,765 |
| 1996 | $1,101.93$ | $4,017.94$ | 2,049 | 510 | 592 | 20.78 |
| 1997 | $15,214.70$ | 7,584 | 1,819 | 2,199 | 20.81 | 28 |
| 1998 | $95,821.92$ | 46,638 | 41,732 | 8,482 | 20.85 | 106 |
| 1999 | $38,230.33$ | 18,129 | 16,093 | 54,422 | 20.87 | 407 |
| 2000 | $38,583.83$ | 16,700 | 14,824 | 22,137 | 20.90 | 2,608 |
| 2003 | $45,754.98$ | 18,365 | 16,302 | 23,759 | 20.98 | 1,059 |
| 2005 | $749,370.72$ | 287,998 | 255,653 | 29,453 | 21.03 | 1,132 |
| 2006 | $102,763.13$ | 336,773 | 298,950 | 893,718 | 21.05 | 1,401 |
| 2010 | $1,103,813$ | 21.13 | 38,455 |  |  |  |
| 2014 | $1,947,260.00$ | 395,450 | 351,037 | $1,596,223$ | 21.19 | 75,329 |
| 2015 | $11,150.00$ | 1,923 | 1,707 | 9,443 | 21.21 | 445 |
| 2016 | $4,427,780.30$ | 617,675 | 548,304 | $3,879,477$ | 21.22 | 182,822 |
| 2017 | $1,501,783.48$ | 155,885 | 138,377 | $1,363,406$ | 21.24 | 64,190 |
| 2018 | $953,716.96$ | 62,097 | 55,123 | 898,594 | 21.25 | 42,287 |
| 2019 | $989,803.46$ | 22,300 | 19,795 | 970,008 | 21.26 | 45,626 |
|  |  |  |  |  |  |  |
|  | $15,318,735.23$ | $3,915,661$ | $3,475,891$ | $11,842,845$ |  | 560,769 |

STANTON TOWER
INTERIM SURVIVOR CURVE.. IOWA 80-R2.5
PROBABLE RETIREMENT YEAR.. 6-2058
NET SALVAGE PERCENT.. 0

| 2008 | $17,007,410.68$ | $3,937,726$ | $3,454,669$ |
| ---: | ---: | ---: | ---: |
| 2010 | $2,529,852.70$ | 503,011 | 441,305 |
| 2011 | $3,555,513.94$ | 645,895 | 566,660 |
| 2012 | $86,690.19$ | 14,200 | 12,458 |
| 2013 | $1,793,213.74$ | 260,070 | 228,166 |
| 2014 | $2,769,987.00$ | 347,633 | 304,987 |
| 2015 | $2,988,216.00$ | 314,121 | 275,587 |
| 2016 | $4,954,631.13$ | 414,306 | 363,481 |
| 2017 | $1,658,116.15$ | 101,361 | 88,927 |
| 2018 | $1,044,033.19$ | 39,245 | 34,431 |
| 2019 | $545,457.79$ | 7,047 | 6,183 |
|  |  |  |  |
|  | $38,933,122.51$ | $6,584,615$ | $5,776,854$ |

38, 933, 122. 51
6,584,615
5,776,854

369, 184
56,646
80, 911
2,006
42, 207
66,370
72,920
123, 219
42, 047
27, 009
14,408
896, 927

## EL PASO ELECTRIC COMPANY

## ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

EASTSIDE OPERATIONS CENTER
INTERIM SURVIVOR CURVE.. IOWA 80-R2.5
PROBABLE RETIREMENT YEAR.. 12-2065
NET SALVAGE PERCENT.. 0

| 2015 | $40,665,138.00$ | $3,661,489$ | $3,167,413$ | $37,497,725$ | 43.86 | 854,941 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2016 | $272,657.19$ | 19,470 | 16,843 | 255,814 | 43.95 | 5,821 |
| 2017 | $249,021.26$ | 12,972 | 11,222 | 237,800 | 44.04 | 5,400 |
| 2018 | $315,984.35$ | 10,118 | 8,753 | 307,232 | 44.13 | 6,962 |
| 2019 | $1,128,618.72$ | 12,121 | 10,485 | $1,118,133$ | 44.22 | 25,286 |
|  | $42,631,419.52$ | $3,716,170$ | $3,214,715$ | $39,416,705$ |  | 898,410 |

OTHER STRUCTURES
SURVIVOR CURVE.. IOWA 40-S0.5
NET SALVAGE PERCENT.. 0

| 1964 | $26,691.00$ | 21,086 | 14,292 | 12,399 | 8.40 | 1,476 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1965 | $15,860.00$ | 12,391 | 8,399 | 7,461 | 8.75 | 853 |
| 1966 | $243,327.23$ | 187,909 | 127,367 | 115,960 | 9.11 | 12,729 |
| 1967 | $202,507.00$ | 154,513 | 104,731 | 97,776 | 9.48 | 10,314 |
| 1968 | $299,598.00$ | 225,897 | 153,116 | 146,482 | 9.84 | 14,886 |
| 1969 | $53,498.00$ | 39,843 | 27,006 | 26,492 | 10.21 | 2,595 |
| 1970 | $33,169.00$ | 24,388 | 16,530 | 16,639 | 10.59 | 1,571 |
| 1971 | $8,087.00$ | 5,869 | 3,978 | 4,109 | 10.97 | 375 |
| 1972 | $15,465.00$ | 11,077 | 7,508 | 7,957 | 11.35 | 701 |
| 1973 | $167,354.00$ | 118,236 | 80,142 | 87,212 | 11.74 | 7,429 |
| 1974 | $48,381.00$ | 33,709 | 22,848 | 25,533 | 12.13 | 2,105 |
| 1975 | $117,087.00$ | 80,439 | 54,523 | 62,564 | 12.52 | 4,997 |
| 1976 | $264,998.00$ | 179,404 | 121,602 | 143,396 | 12.92 | 11,099 |
| 1977 | $154,940.00$ | 103,306 | 70,022 | 84,918 | 13.33 | 6,370 |
| 1978 | $33,195.00$ | 21,793 | 14,772 | 18,423 | 13.74 | 1,341 |
| 1979 | $11,823.00$ | 7,638 | 5,177 | 6,646 | 14.16 | 469 |
| 1980 | $85,641.96$ | 54,404 | 36,876 | 48,766 | 14.59 | 3,342 |
| 1981 | $322,292.00$ | 201,271 | 136,424 | 185,868 | 15.02 | 12,375 |
| 1982 | $104,206.56$ | 63,957 | 43,351 | 60,856 | 15.45 | 3,939 |
| 1983 | $104,279.95$ | 62,829 | 42,586 | 61,694 | 15.90 | 3,880 |
| 1984 | $61,639.69$ | 36,444 | 24,702 | 36,937 | 16.35 | 2,259 |
| 1985 | $59,784.13$ | 34,675 | 23,503 | 36,281 | 16.80 | 2,160 |
| 1986 | $151,138.98$ | 85,885 | 58,214 | 92,925 | 17.27 | 5,381 |
| 1987 | $194,092.00$ | 108,012 | 73,212 | 120,880 | 17.74 | 6,814 |
| 1989 | $283,178.19$ | 150,722 | 102,161 | 181,017 | 18.71 | 9,675 |
| 1990 | $243,327.40$ | 126,469 | 85,722 | 157,605 | 19.21 | 8,204 |
| 1992 | $107,041.28$ | 52,878 | 35,841 | 71,200 | 20.24 | 3,518 |
| 1994 | $454,129.13$ | 212,305 | 143,903 | 310,226 | 21.30 | 14,565 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS

## CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

OTHER STRUCTURES
SURVIVOR CURVE.. IOWA 40-S0.5
NET SALVAGE PERCENT.. 0

| 1995 | $205,690.41$ | 93,332 | 63,262 | 142,429 | 21.85 | 6,518 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1996 | $388,173.25$ | 170,699 | 115,702 | 272,471 | 22.41 | 12,158 |
| 1997 | $859,113.31$ | 365,553 | 247,776 | 611,337 | 22.98 | 26,603 |
| 1998 | $201,769.16$ | 82,877 | 56,175 | 145,594 | 23.57 | 6,177 |
| 1999 | $144,942.25$ | 57,397 | 38,904 | 106,038 | 24.16 | 4,389 |
| 2002 | $214,249.81$ | 74,827 | 50,719 | 163,531 | 26.03 | 6,282 |
| 2003 | $322,460.18$ | 107,379 | 72,783 | 249,677 | 26.68 | 9,358 |
| 2004 | $49,103.16$ | 15,541 | 10,534 | 38,569 | 27.34 | 1,411 |
| 2005 | $140,828.42$ | 42,143 | 28,565 | 112,263 | 28.03 | 4,005 |
| 2006 | $220,637.05$ | 62,220 | 42,173 | 178,464 | 28.72 | 6,214 |
| 2007 | $87,174.15$ | 23,014 | 15,599 | 71,575 | 29.44 | 2,431 |
| 2008 | $222,606.77$ | 54,706 | 37,080 | 185,526 | 30.17 | 6,149 |
| 2010 | $741,126.96$ | 154,154 | 104,487 | 636,639 | 31.68 | 20,096 |
| 2011 | $313,055.13$ | 58,933 | 39,946 | 273,110 | 32.47 | 8,411 |
| 2012 | $147,440.45$ | 24,807 | 16,814 | 130,626 | 33.27 | 3,926 |
| 2013 | $57,010.69$ | 8,409 | 5,700 | 51,311 | 34.10 | 1,505 |
| 2014 | $360,054.62$ | 45,547 | 30,872 | 329,182 | 34.94 | 9,421 |
| 2015 | $4,731,988.23$ | 495,676 | 335,975 | $4,396,013$ | 35.81 | 122,759 |
| 2016 | $1,220,705.33$ | 100,708 | 68,261 | $1,152,444$ | 36.70 | 31,402 |
| 2017 | $1,950,945.37$ | 116,569 | 79,012 | $1,871,933$ | 37.61 | 49,772 |
| 2018 | $302,599.41$ | 11,045 | 7,486 | 295,113 | 38.54 | 7,657 |
| 2019 | $880,425.26$ | 10,785 | 7,310 | 873,115 | 39.51 | 22,099 |
|  |  |  |  |  |  |  |
|  | $17,628,830.87$ | $4,593,670$ | $3,113,647$ | $14,515,184$ |  | 5 |

## EL PASO ELECTRIC COMPANY

ACCOUNT 391.00 OFFICE FURNITURE AND EQUIPMENT
CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. 20-SQUARE
NET SALVAGE PERCENT.. 0

| 2001 | $156,977.70$ | 145,204 | 156,978 |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| 2002 | $1,465,595.57$ | $1,282,396$ | $1,465,596$ |  |  |  |
| 2003 | $62,401.74$ | 51,481 | 62,402 |  |  |  |
| 2004 | $1,470,994.53$ | $1,140,021$ | $1,470,995$ |  |  |  |
| 2005 | $784,959.89$ | 569,096 | 784,960 |  |  |  |
| 2006 | $121,671.40$ | 82,128 | 121,671 |  |  |  |
| 2007 | $637,709.63$ | 398,569 | 637,710 |  |  |  |
| 2008 | $681,482.46$ | 391,852 | 681,482 |  |  |  |
| 2009 | $9,533.63$ | 5,005 | 9,534 |  |  |  |
| 2010 | $5,843.85$ | 2,776 | 5,844 | 5,860 | 12.50 | 4,078 |
| 2011 | $367,008.60$ | 155,979 | 367,009 | 14,555 | 13.50 | 149 |
| 2012 | $115,597.15$ | 43,349 | 109,737 | 2,163 | 14.50 | 2,049 |
| 2013 | $82,105.15$ | 26,684 | 67,550 | 31,767 | 15.50 | 4,499 |
| 2014 | $7,117.00$ | 1,957 | 4,954 | 74,231 | 16.50 | 8,135 |
| 2015 | $73,802.00$ | 16,605 | 42,035 | 142,356 | 17.50 | 13,278 |
| 2016 | $133,273.30$ | 23,323 | 59,042 | 245,635 | 18.50 | 3,095 |
| 2017 | $208,254.91$ | 26,032 | 65,899 | 60,348 | 19.50 |  |
| 2018 | $303,201.37$ | 22,740 | 57,566 |  |  |  |
| 2019 | $64,426.01$ | 1,611 | 4,078 | 576,914 |  |  |
|  |  |  |  |  |  |  |
|  | $6,751,955.89$ | $4,386,808$ | $6,175,042$ |  |  |  |
|  |  |  |  |  |  |  |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 17.6 0.49

| EL PASO ELECTRIC COMPANY |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ACCOUNT 393.00 STORES EQUIPMENT |  |  |  |  |  |  |
| CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019 |  |  |  |  |  |  |
| YEAR <br> (1) | ORIGINAL COST (2) | CALCULATED ACCRUED (3) | ALLOC. BOOK RESERVE (4) | FUTURE BOOK ACCRUALS (5) | REM. <br> LIFE <br> (6) | ANNUAL ACCRUAL (7) |
| SURVIVOR CURVE.. 25-SQUARE |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| 1995 | 23,571.22 | 23,100 | 23,571 |  |  |  |
| 1997 | 4,369.42 | 3,932 | 4,369 |  |  |  |
| 1998 | 15,464.20 | 13,299 | 15,464 |  |  |  |
| 1999 | 2,062.17 | 1,691 | 2,062 |  |  |  |
| 2004 | 7,880.61 | 4,886 | 6, 023 | 1,857 | 9.50 | 195 |
|  | 53,347.62 | 46,908 | 51,489 | 1,858 |  | 195 |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.5 0.37 |  |  |  |  |  |  |

## EL PASO ELECTRIC COMPANY

ACCOUNT 394.00 TOOLS, SHOP AND GARAGE EQUIPMENT
CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. 25-SQUARE
NET SALVAGE PERCENT.. 0

| 1992 | 0.25 |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1993 | 0.01 |  |  |  |  |  |
| 1994 | $182,442.45$ | 182,442 | 182,442 |  |  |  |
| 1995 | $7,285.34$ | 7,140 | 7,285 |  |  |  |
| 1996 | $168,391.99$ | 158,288 | 168,392 | 3,988 | 2.50 | 1,595 |
| 1997 | $215,123.08$ | 193,611 | 211,135 | 5,588 | 3.50 | 1,597 |
| 1998 | $89,898.59$ | 77,313 | 84,311 | 4,849 | 4.50 | 1,078 |
| 1999 | $45,835.65$ | 37,585 | 40,987 | 1,866 | 5.50 | 339 |
| 2000 | $12,490.79$ | 9,743 | 10,625 | 25,362 | 6.50 | 3,902 |
| 2001 | $131,389.69$ | 97,228 | 106,028 | 16,511 | 7.50 | 2,201 |
| 2002 | $69,769.18$ | 48,838 | 53,258 | 7,782 | 8.50 | 916 |
| 2003 | $27,767.36$ | 18,326 | 19,985 | 70,393 | 9.50 | 7,410 |
| 2004 | $217,340.15$ | 134,751 | 146,947 | 142,643 | 12.50 | 11,411 |
| 2007 | $313,676.74$ | 156,838 | 171,034 | 140,929 | 15.50 | 9,092 |
| 2010 | $240,653.60$ | 91,448 | 99,725 | 14,200 | 16.50 | 861 |
| 2011 | $22,566.80$ | 7,673 | 8,367 | 147,818 | 17.50 | 8,447 |
| 2012 | $219,690.49$ | 65,907 | 71,872 | 239,590 | 18.50 | 12,951 |
| 2013 | $334,404.64$ | 86,945 | 94,815 | 391,315 | 19.50 | 20,067 |
| 2014 | $514,830.00$ | 113,263 | 123,515 | 195,906 | 20.50 | 9,556 |
| 2015 | $243,753.00$ | 43,876 | 47,847 | 340,911 | 21.50 | 15,856 |
| 2016 | $402,336.21$ | 56,327 | 61,425 | 504,099 | 22.50 | 22,404 |
| 2017 | $565,800.16$ | 56,580 | 61,701 | 969,280 | 23.50 | 41,246 |
| 2018 | $1,037,142.18$ | 62,229 | 67,862 | 604,020 | 24.50 | 24,654 |
| 2019 | $617,487.64$ | 12,350 | 13,467 |  |  |  |
|  |  |  |  |  |  |  |
|  | $5,680,075.99$ | $1,718,701$ | $1,853,025$ | $3,827,051$ |  | 195,583 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 395.00 LABORATORY EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. 15-SQUARE
NET SALVAGE PERCENT.. 0

| 2004 | $192,560.17$ | 192,560 | 192,560 |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2005 | $49,129.80$ | 47,492 | 45,691 | 3,439 | 0.50 | 3,439 |
| 2007 | $414,152.23$ | 345,125 | 332,038 | 82,114 | 2.50 | 32,846 |
| 2008 | $11,738.77$ | 9,000 | 8,659 | 3,080 | 3.50 | 880 |
| 2010 | $415,102.66$ | 262,897 | 252,928 | 162,175 | 5.50 | 29,486 |
| 2011 | $517,148.78$ | 293,053 | 281,940 | 235,209 | 6.50 | 36,186 |
| 2012 | $316,791.37$ | 158,396 | 152,390 | 164,401 | 7.50 | 21,920 |
| 2013 | $30,060.00$ | 13,026 | 12,532 | 17,528 | 8.50 | 2,062 |
| 2014 | $442,295.00$ | 162,176 | 156,026 | 286,269 | 9.50 | 30,134 |
| 2015 | $400,113.00$ | 120,034 | 115,482 | 284,631 | 10.50 | 27,108 |
| 2016 | $802,637.69$ | 187,279 | 180,178 | 622,460 | 11.50 | 54,127 |
| 2017 | $931,011.19$ | 155,172 | 149,288 | 781,723 | 12.50 | 62,538 |
| 2018 | $122,182.71$ | 12,218 | 11,755 | 110,428 | 13.50 | 8,180 |
| 2019 | $581,209.01$ | 19,372 | 18,637 | 562,572 | 14.50 | 38,798 |
|  |  |  |  |  |  |  |
|  | 5, 226,132.38 | $1,977,800$ | $1,910,104$ | $3,316,028$ |  | 347,704 |
|  |  |  |  |  |  |  |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 396.00 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. IOWA 21-R2.5 NET SALVAGE PERCENT.. +15

| 1999 | 53,296.61 | 33,977 | 37,508 | 7,794 | 5.25 | 1,485 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2000 | 18,771.36 | 11,587 | 12,791 | 3,165 | 5.75 | 550 |
| 2001 | 32,732.87 | 19,489 | 21,514 | 6,309 | 6.29 | 1,003 |
| 2004 | 1,911.68 | 996 | 1,100 | 525 | 8.13 | 65 |
| 2005 | 8,539.02 | 4,213 | 4,651 | 2,607 | 8.81 | 296 |
| 2007 | 922,486.89 | 401,764 | 443,519 | 340,595 | 10.24 | 33,261 |
| 2009 | 14,473.95 | 5,407 | 5,969 | 6,334 | 11.77 | 538 |
| 2010 | 163,750.56 | 55,874 | 61,681 | 77,507 | 12.57 | 6,166 |
| 2013 | 85,916.45 | 20,587 | 22,727 | 50,302 | 15.08 | 3,336 |
| 2014 | 49,907.00 | 10,181 | 11,239 | 31, 182 | 15.96 | 1,954 |
| 2015 | 714,189.00 | 119, 967 | 132,435 | 474,626 | 16.85 | 28,168 |
| 2016 | 1,698,864.02 | 223,479 | 246,705 | 1,197,329 | 17.75 | 67,455 |
| 2017 | 164,322.73 | 15,564 | 17,182 | 122,492 | 18.66 | 6,564 |
| 2018 | 227,365.28 | 12,976 | 14,324 | 178,936 | 19.59 | 9,134 |
| 2019 | 143,801.26 | 2,736 | 3, 021 | 119,211 | 20.53 | 5,807 |
|  | 4,300, 328.68 | 938,797 | 1, 036,366 | 2,618,914 |  | 165,782 |
|  | MPOSITE REMAI | LIFE AND | NUAL ACCRU | ATE, PERCEN | . 15.8 | 3.86 |

## EL PASO ELECTRIC COMPANY

## ACCOUNT 397.00 COMMUNICATION EQUIPMENT

## CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. 15-SQUARE
NET SALVAGE PERCENT.. 0

| 2003 | 0.19 |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2004 | $1,267,061.83$ | $1,267,062$ | $1,267,062$ |  |  |  |
| 2005 | $212,305.76$ | 205,230 | 172,933 | 39,373 | 0.50 | 39,373 |
| 2006 | $2,589,374.71$ | $2,330,437$ | $1,963,692$ | 625,683 | 1.50 | 417,122 |
| 2007 | $3,129,064.33$ | $2,607,543$ | $2,197,189$ | 931,875 | 2.50 | 372,750 |
| 2008 | $482,036.87$ | 369,563 | 311,404 | 170,633 | 3.50 | 48,752 |
| 2009 | $818,608.69$ | 573,026 | 482,848 | 335,761 | 4.50 | 74,614 |
| 2010 | $480,535.43$ | 304,338 | 256,444 | 224,091 | 5.50 | 40,744 |
| 2011 | $6,669,762.72$ | $3,779,554$ | $3,184,759$ | $3,485,004$ | 6.50 | 536,154 |
| 2012 | $880,838.98$ | 440,419 | 371,109 | 509,730 | 7.50 | 67,964 |
| 2013 | $1,104,193.98$ | 478,480 | 403,181 | 701,013 | 8.50 | 82,472 |
| 2014 | $1,588,013.00$ | 582,277 | 490,643 | $1,097,370$ | 9.50 | 115,513 |
| 2015 | $637,735.00$ | 191,320 | 161,212 | 476,523 | 10.50 | 45,383 |
| 2016 | $3,250,578.76$ | 758,458 | 639,098 | $2,611,481$ | 11.50 | 227,085 |
| 2017 | $4,063,375.81$ | 677,243 | 570,664 | $3,492,712$ | 12.50 | 279,417 |
| 2018 | $2,433,353.26$ | 243,335 | 205,041 | $2,228,312$ | 13.50 | 165,060 |
| 2019 | $1,009,369.15$ | 33,642 | 28,347 | 981,022 | 14.50 | 67,657 |
|  |  |  |  |  |  |  |
|  | $30,616,208.47$ | $14,841,927$ | $12,705,626$ | $17,910,582$ |  | $2,580,060$ |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.9 8.43

## EL PASO ELECTRIC COMPANY

## ACCOUNT 398.00 MISCELLANEOUS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2019

|  | ORIGINAL | CALCULATED | ALLOC. BOOK | FUTURE BOOK | REM. | ANNUAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | COST | ACCRUED | RESERVE | ACCRUALS | LIFE | ACCRUAL |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ |

SURVIVOR CURVE.. 15-SQUARE
NET SALVAGE PERCENT.. 0

| 2004 | $9,773.71$ | 9,774 | 9,774 |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| 2006 | $8,443.72$ | 7,599 | 5,568 | 2,876 | 1.50 | 1,917 |
| 2007 | $404,801.10$ | 337,333 | 247,159 | 157,642 | 2.50 | 63,057 |
| 2009 | $248,862.72$ | 174,204 | 127,637 | 121,226 | 4.50 | 26,939 |
| 2010 | $153,929.31$ | 97,488 | 71,428 | 82,501 | 5.50 | 15,000 |
| 2011 | $749,639.70$ | 424,798 | 311,244 | 438,396 | 6.50 | 67,446 |
| 2012 | $490,964.60$ | 245,482 | 179,861 | 311,104 | 7.50 | 41,481 |
| 2013 | $505,422.86$ | 219,015 | 160,469 | 344,954 | 8.50 | 40,583 |
| 2014 | $264,413.00$ | 96,952 | 71,035 | 193,378 | 9.50 | 20,356 |
| 2016 | $712,764.87$ | 166,309 | 121,853 | 590,912 | 11.50 | 51,384 |
| 2017 | $481,547.21$ | 80,259 | 58,805 | 422,742 | 12.50 | 33,819 |
| 2018 | $154,348.09$ | 15,435 | 11,309 | 143,039 | 13.50 | 10,595 |
| 2019 | $390,450.66$ | 13,014 | 9,535 | 380,916 | 14.50 | 26,270 |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, NET SALVAGE PERCENT, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO ELECTRIC PLANT AS OF DECEMBER 31, 2019



[^0]:    $1 \quad 16$ U.S.C. § 824d.
    218 C.F.R. § 35.13.
    3 Electronic Tariff Filings, Order No. 714, 124 FERC II 61,270 (2008), final rule, Order No. 714-A, 147 FERC II 61,115 (2014).

[^1]:    9 See, e.g., LS Power Grid Cal., LLC, 175 FERC II 61,256 (2021); NextEra Energy Transmission Midwest, LLC, 161 FERC $\mathbb{I}$ 61,140 (2017); PJM Interconnection, L.L.C., 155 FERC II 61,097 (2016), order on reh'g \& compliance, 158 FERC II 61,060 (2017); NextEra Energy Transmission W., LLC, 154 FERC II 61,009 (2016); PJM Interconnection, L.L.C., 152 FERC II 61,180 (2015).

[^2]:    20 Direct Testimony of Adrien M. McKenzie, CFA, Exhibit No. EPE-0016 ("McKenzie Testimony").

    McKenzie Testimony at 21:11-26:13.
    22 Ass'n of Bus. Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc., Opinion No. 569-A, 171 FERC II 61,154, order addressing arguments raised on

[^3]:    reh'g, \& setting aside prior order, in part, Opinion No. 569-B, 173 FERC II 61,159 (2020).

    McKenzie Testimony at 24:6-50:2.
    Id. at 1:18-2:3.
    $I d$. at 50:4-69:19.
    Id. at 70:2-84:20.
    Id. at $85: 18-86: 6$.
    Id. at 88:19-25.

[^4]:    ${ }^{36}$ Prieto Testimony at 11:11-12:9; Wolfram Testimony at 22:21-23:2.
    37 Prieto Testimony at 7:20-8:9.

[^5]:    39
    See, e.g., Nw. Corp., 152 FERC II 61,250, at P 46 (2015); Nev. Power Co., 151
    FERC II 61,131, at P 87 (2015); Xcel Energy Transmission Dev. Co., 149 FERC II 61,181, at P 54 (2014); PacifiCorp, 147 FERC II 61,227, at P 83 (2014); Empire Dist. Elec. Co., 140 FERC $\mathbb{I}$ 61,087, at P 49 (2012); S. Cal. Edison Co., 136 FERC If 61,074, at P 29 (2011).

[^6]:    B. For Service On The Palo-Verde Facilities-Connecting Palo-Verde andWestwing
    The following rates apply to Non Firm Point to Point Transmission Servicebetween any Point of Receipt and any Point of Delivery on the portion of the Palo VerdeFacilities (also referred to as the Transmission Provider's "External" system) connecting Palo Verde and Westwing. The following are each a Point of Receipt and a Point of Delivery served by the Transmission Provider on these facilities: PALOVERDE500 and

[^7]:    Notes
    A

[^8]:    Notes

[^9]:    Notes
    A Net Schedule 1 Annual Revenue Requirement projection is set to Actual amount from previous year plus Sch 1 True Up Adjustment
    Explanatory comment(s) for Originally Projected Sch 1 Rev Req without True Up Adjustment from Previous Filing:

[^10]:    ${ }^{1}$ The Commission accepted the Settlement in a Letter Order dated June 10, 1998, in Docket No. OA96-200-004.

[^11]:    General Note: References to pages in this formulary rate are indicated as: (page\#, line\#, col.\#)

[^12]:    Yes
    If initial year rates are effective enter Yes, otherwise enter No

[^13]:    Notes Special depreciation rates may be utilized for specific incentive transmission projects if approved by the FERC.
    B Incentive ROE requires authorization by the Commission

[^14]:    Total Amount for Projected Attachment H
    (Lines 27+54+81)

[^15]:    An over or under collection will be recovered pro-rata over year collected, held for one year, and returned prorata over next year:

[^16]:    Notes
    Special depreciation rates may be utilized for specific incentive transmission projects if approved by the FERC.
    B Incentive ROE requires authorization by the Commission

[^17]:    Total Amount for Projected Attachment H
    (Lines 27+54+81)

[^18]:    1 Increases in income tax rates would have the opposite effect by increasing rate base.

[^19]:    1 January 1, 2019 actuarial valuation performed by prior actuary
    2 Includes assumed administrative expenses of $\$ 469,681$ for the 2019 plan year and $\$ 868,426$ for the 2020 plan year. Assumed administrative expenses for 2020 are equal to the 2020 PBGC premiums paid from plan assets.
    3 Counts include 39 alternate payees, 14 of whom have survived the original participant.

[^20]:    1 January 1, 2019 actuarial valuation performed by prior actuary.
    2 See section 2.7 for definition of vested benefits.

[^21]:    1 Net of revoked excess application of funding balance, if any.

[^22]:    1 At-risk maximum applies only for plans not in at-risk status for purposes of determining maximum deductible contributions for the plan year.

[^23]:    Reflects at-risk status, if applicable.
    2 Using variable rate premium of $\$ 45$ per $\$ 1,000$ of unfunded vested benefits.
    3 Using maximum per-participant premium of $\$ 561$.

[^24]:    1 January 1, 2019 actuarial valuation performed by prior actuary.

[^25]:    1 January 1, 2019 actuarial valuation performed by prior actuary.

[^26]:    1 Fiscal year 2019 benefit cost determined by prior actuary.
    2 Service Cost includes assumed expenses equal to $0.5 \%$ of plan assets

[^27]:    1 Before any immediate recognition on the same date

[^28]:    ${ }^{1}$ Headcounts as of 01/01/2020 reflect 39 alternate payees, 14 of whom have survived the original participant.

[^29]:    ${ }^{1}$ Headcounts as of 01/01/2020 reflect 39 alternate payees, 14 of whom have survived the original participant.

[^30]:    Age and service for purposes of determining category are based on exact (not rounded) values.

[^31]:    1 Reflects discounted contributions made for the 2019 plan year only if paid on or before the certification date. Includes security posted by the beginning of the plan year in the form of a bond or cash held in escrow.
    2 Reflects elections made to-date (other than elections to apply the funding balances to 2020 MRC).
    3 AVA if AVA/Funding Target (disregarding at-risk assumptions) $>=100 \%$; otherwise (AVA-funding balances).

[^32]:    - Before Normal Retirement Age

    Payable upon the death of a participant employed by the company who had completed 5 years of Vesting Service. If the participant dies before attaining age 50 with 10 years of service, the amount payable to the spouse, to whom the participant was legally married during the one year period immediately preceding his death, is $50 \%$ of the amount the participant would have been entitled to had the participant separated from service on the date of his death, survived to the earliest retirement age, retired with an immediate qualified joint and survivor annuity and died the day after the earliest retirement age. If the participant dies after attaining age 50 with 10 years of service, the amount payable to the eligible spouse is $50 \%$ of the participant's Accrued Benefit, commencing immediately.

[^33]:    1 If plan sponsor is in bankruptcy, FTO is calculated using interest rates that are not stabilized for purposes of restrictions on accelerated payments.

[^34]:    1 If plan sponsor is in bankruptcy, FTO is calculated using interest rates that are not stabilized for purposes of restrictions on accelerated payments.

[^35]:    1 January 1,2019 actuarial valuation performed by prior actuary.

[^36]:    January 1, 2019 actuarial valuation performed by prior actuary.
    2 Whether any amounts in this table that differ from those disclosed at year-end must be disclosed in subsequent interim financial statements should be determined.
    3 The current liability (for each underfunded plan) was measured as the discounted value of benefits expected to be paid over the next 12 months in excess of the fair value of the plan's assets at the measurement date.
    4 Amount shown is pre-tax and should be adjusted by plan sponsor for tax effects.

[^37]:    J. January 1,2019 actuarial valuation performed by prior actuary.

    2 Net of retiree contributions.
    3 Only if future expenses are accrued in APBO through a load on service cost.

[^38]:    1.Before any immediate recognition on the same date

[^39]:    1. Fiscal year 2019 benefit cost determined by prior actuary.
    ${ }^{2}$ Includes administrative expenses equal to $0.5 \%$ of fair value of assets.
[^40]:    ${ }^{1}$ Ass'n of Bus. Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc., Opinion No. 569-A, 171 FERC $\mathbb{T} 61,154$ (2020), order on reh'g, \& setting aside prior order, in part, Opinion No. 569-B, 173 FERC 9 [ 61,159 (2020).

[^41]:    ${ }^{2}$ Bluefield Waterworks \& Improvement Co. v. Pub. Serv. Comm'n of W. Va., 262 U.S. 679 (1923) ("Bluefield").
    ${ }^{3}$ FPC v. Hope Natural Gas Co., 320 U.S. 591 (1944) ("Hope").

[^42]:    ${ }^{4}$ See, e.g., Midwest Indep. Transmission Sys. Operator, Inc., 106 FERC $\mathbb{I} 61,302$, at P 8 (2004) ("Midwest ISO"), aff'd in relevant part sub. nom. Pub. Serv. Comm'n of Ky. v. FERC, 397 F.3d 1004 (D.C. Cir. 2005).
    ${ }^{5}$ See, e.g., id., 106 FERC If 61,302, at PP 13-14. The Commission observed that:
    [W]e are guided by the principle, enunciated by the Supreme Court, that an approved ROE should be "reasonably sufficient to assure confidence in the financial soundness of the utility [or, in this case, utilities] and should be adequate under efficient and economical management, to maintain and support its credit, and enable it to raise the money necessary for the proper discharge of its public duties.
    Id. at P 13 (quoting Bluefield, 262 U.S. at 693).
    ${ }^{6}$ Coakley Mass. Attorney Gen. v. Bangor Hydro-Electric Co., Opinion No. 531, 147 FERC II 61,234, at P 144, order on paper hearing, Opinion No. 531-A, 149 FERC I[ 61,032 (2014), order on reh'g, Opinion No. 531-B, 150 FERC $\mathbb{I}[61,165$ (2015), vacated \& remanded sub nom. Emera Me. v. FERC, 854 F.3d 9 (D.C. Cir. 2017).

[^43]:    ${ }^{7}$ FERC, About FERC, https://www.ferc.gov/what-ferc (last visited Oct. 22, 2021).

[^44]:    ${ }^{8}$ Promoting Transmission Investment Through Pricing Reform, Order No. 679-A, 117 FERC II 61,345, at P 69 (2006), order on reh'g, 119 FERC $\mathbb{I}$ 61,062 (2007).

[^45]:    ${ }^{9}$ Because the Risk Premium approach produces a single point estimate and not a range, the Commission imputed a range around the point estimate based on the average spread between the low and high boundaries of the two-step DCF and CAPM ranges.
    ${ }^{10}$ Opinion No. 569-A at P 194.

[^46]:    ${ }^{11}$ Opinion No. 569-A at P 132.

[^47]:    ${ }^{12}$ Federal Reserve Bank of New York, Consumers' Inflation Expectations Remain Elevated for the Short- and Medium-Term, Press Release (Oct. 12, 2021), https://www.newyorkfed.org/newsevents/news/research/2021/20211012.
    ${ }^{13}$ Social Security Administration, Fact Sheet: 2022 Social Security Changes, https://www.ssa.gov/news/press/factsheets/colafacts2022.pdf.
    ${ }^{14}$ Federal Reserve, Transcript of Chair Powell's Press Conference (Sept. 22, 2021), https://www.federalreserve.gov/mediacenter/files/FOMCpresconf20210922.pdf.

[^48]:    ${ }^{15}$ The Chicago Board Options Exchange Volatility Index (commonly known as the "VIX"), which is a key measure of expectations of near-term volatility and market sentiment, rose to levels not seen since the 2008-2009 Financial Crisis during March 2020 and remains above pre-pandemic levels.

[^49]:    ${ }^{16}$ S\&P Global Ratings, COVID-19: The Outlook For North American Regulated Utilities Turns Negative (Apr. 2, 2020), https://www.spglobal.com/ratings/en/research/articles/200402-covid-19-the-outlook-for-north-american-regulated-utilities-turns-negative-11415155.
    ${ }^{17}$ S\&P Global Ratings, North American Regulated Utilities Face Tough Financial Policy Tradeoffs To Avoid Ratings Pressure Amid The COVID-19 Pandemic (May 11, 2020), https://www.spglobal.com/ratings/en/research/articles/200511-north-american-regulated-utilities-face-tough-financial-policy-tradeoffs-to-avoid-ratings-pressure-amid-the-c-11474798.
    ${ }^{18}$ S\&P Global Ratings, North American Regulated Utilities' Negative Outlook Could See Modest Improvement (Jan. 20, 2021), https://www.spglobal.com/ratings/en/research/articles/210120-north-american-regulated-utilities-negative-outlook-could-see-modest-improvement-11793259.
    ${ }^{19}$ S\&P Global Ratings, Industry Top Trends 2021: North America Regulated Utilities-An Industry With A Negative Outlook Despite Its Predictable Cash Flows (Dec. 10, 2020), https://www.spglobal.com/_assets/documents/ratings/research/100047936.pdf.

[^50]:    ${ }^{20}$ S\&P Global Ratings, Report: North American Regulated Utilities' Credit Quality Begins The Year On A Downward Path (Apr. 7, 2021), https://www.spglobal.com/ratings/en/research/articles/210407-north-american-regulated-utilities-credit-quality-begins-the-year-on-a-downward-path-11847341.
    ${ }^{21}$ S\&P Global Ratings, Will Rising Inflation Threaten North American Investor-Owned Regulated Utilities' Credit Quality? (July 20, 2021), https://www.spglobal.com/ratings/en/research/articles/210720-will-rising-inflation-threaten-north-american-investor-owned-regulated-utilities-credit-quality-12010362.
    ${ }^{22}$ Moody's Investors Service, FAQ on credit implications of the coronavirus outbreak, Sector Comment (Mar. 26, 2020).
    ${ }^{23}$ See, e.g., Moody's Investors Service, Portland General Electric Company, Credit Opinion (Mar. 29, 2021).

[^51]:    ${ }^{24}$ The Value Line Investment Survey, Summary \& Index (Feb. 14, 2020).

[^52]:    ${ }^{25}$ The FOMC is a committee composed of twelve members that serves as the monetary policymaking body of the Federal Reserve System.
    ${ }^{26}$ Federal Reserve, Press Release (Mar. 23, 2020), https://www.federalreserve.gov/monetarypolicy/files/monetary20200323a1.pdf.
    ${ }^{27}$ See, e.g., Federal Reserve System, Federal Reserve takes additional actions to provide up to $\$ 2.3$ trillion in loans to support the economy (Apr. 9, 2020), https://www.federalreserve.gov/newsevents/pressreleases/monetary20200409a.htm. The Federal Reserve discontinued purchases under its Corporate Credit Facilities in December 2020.

[^53]:    Source
    Value Line Investment Survey, Forecast for the U.S. Economy (Feb. 26, 2021). IHS Markit, Long-Term Macro Forecast - Baseline (Mar. 1, 2021). Wolters Kluwer, Blue Chip Financial Forecasts (Jun. 1, 2021).

[^54]:    ${ }^{32}$ Id. at P 130.
    ${ }^{33}$ Ass'n of Businesses Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc., Opinion No. 551, 156 FERC II 61,234, at P 122 (2016), order on briefs, reh'g, \& initial decision, Opinion No. 569.
    ${ }^{34}$ Id. at P 121.
    ${ }^{35}$ Id.
    ${ }^{36}$ Id.

[^55]:    ${ }^{37}$ Opinion No. 531 at P 145 n. 285 ; Opinion No. 551 at P 121.
    ${ }^{38}$ For example, over the years 1962-2019, 10-year Treasury bond yields averaged 6.12\%. Fred Economic Data, Market Yield on U.S. Treasury Securities at 10-Year Constant Maturity, https://fred.stlouisfed.org/series/DGS10 (last visited Oct. 25, 2021).

[^56]:    ${ }^{39}$ Opinion No. 551 at P 124.

[^57]:    ${ }^{40}$ Opinion No. 569-A at P 194.

[^58]:    ${ }^{41}$ Midwest ISO, 106 FERC 9161,302 , at P 8.
    ${ }^{42}$ Id. This is consistent with Emera Maine, which noted that "[w]hether a rate . . . is unlawful depends on the particular circumstances of the case." Emera Maine, 854 F.3d at 23.

[^59]:    ${ }^{43}$ See, e.g., Opinion No. 569-A at P 43.
    ${ }^{44}$ See, e.g., Opinion No. 531 at P 145; Opinion No. 531-B at P 84; Opinion No. 551 at P 122.

[^60]:    ${ }^{45}$ Opinion No. 569 at P 33.

[^61]:    ${ }^{47}$ The constant growth DCF model is dependent on a number of strict assumptions, which in practice are never entirely met. These include a constant growth rate for both dividends and earnings; a stable dividend payout ratio; the discount rate exceeds the growth rate; a constant growth rate for book value and price; a constant earned rate of return on book value; no sales of

[^62]:    stock at a price above or below book value; a constant price-earnings ratio; a constant discount rate (i.e., no changes in risk or interest rate levels and a flat yield curve); and all of the above extend to infinity. (As discussed in the text below, the Commission's two-stage DCF model also depends on these assumptions, with the sole exception of the constant earnings growth rate.) Nevertheless, the constant growth DCF method provides a workable and practical approach to estimate investors' required return that is widely referenced in utility ratemaking.

[^63]:    ${ }^{48}$ Opinion No. 569 at P 98.

[^64]:    ${ }^{49}$ Opinion No. 569 at P 387; Opinion No. 569-A at P 161.

[^65]:    ${ }^{50}$ Opinion No. 569-A at P 154.
    ${ }^{51}$ Opinion No. 569 at P 395; Opinion No. 569-A at P 153.

[^66]:    ${ }^{52}$ Opinion No. 569-A at P 154.

[^67]:    ${ }^{53}$ Id. at P 210.

[^68]:    ${ }^{54}$ Roger A. Morin, New Regulatory Finance, Pub. Util. Reports, Inc., 71 (2006).
    ${ }^{55}$ Opinion No. 569-A at P 75.
    ${ }^{56}$ See, e.g., Opinion No. 569-A at P 61.

[^69]:    ${ }^{57}$ Constellation Mystic Power, LLC, 176 FERC ๆ 61,019, at PP 77, 85 (2021) ("Mystic").

[^70]:    ${ }^{58}$ Felicia Marston and Robert S. Harris, Risk and Return: A Revisit Using Expected Returns, Fin. Review (Feb. 1993) ("Marston \& Harris"). Value Line betas are also derived based on weekly percentage changes in the New York Stock Exchange Average.
    ${ }^{59}$ Direct Testimony of Rochelle Langfeldt, Illinois Commerce Commission, Docket No. 01-0432 (2001), at 27 (citing " $[t]$ he average Value Line adjusted beta for the Electric sample.").

[^71]:    ${ }^{60}$ See, e.g., Roger A. Morin, New Regulatory Finance, Pub. Utils. Reports, Inc., 71 (2006) ("Value Line is the largest and most widely circulated independent investment advisory service, and influences the expectations of a large number of institutional and individual investors.").

[^72]:    ${ }^{61}$ My use of the growth rate screen adopted in Opinion No. 569-A should not be considered an endorsement of this approach, which is based on an incorrect notion that using the DCF model to estimate the market return requires an assumption of constant growth for each of the specific firms in the NYSE. The NYSE includes a broad sample of companies at all stages of growth and the use of all of those companies to estimate the required return on common stocks reasonably reflects investors' consensus expectations about the NYSE as a whole.

[^73]:    ${ }^{62}$ Morningstar, 2015 Ibbotson SBBI Classic Yearbook, at 99 (2015).

[^74]:    ${ }^{63}$ Opinion No. 569-A at P 108.

[^75]:    ${ }^{64}$ Id. at P 111.
    ${ }^{65}$ Id.
    ${ }^{66}$ Id.
    ${ }^{67}$ Opinion No. 569-B at PP 127-28, Appendix I.
    ${ }^{68}$ Mystic at PP 71-75.

[^76]:    ${ }^{69}$ S\&P Global Ratings, U.S. Public Finance: Applying Key Rating Factors to U.S. Cooperative Utilities, Criteria | Governments (Nov. 21, 2007).
    ${ }^{70}$ S\&P Global Ratings, U.S. Municipal Retail Electric and Gas Utilities: Methodology and Assumptions (Sept. 27, 2018), https://www.spglobal.com/ratings/en/research/articles/180927-criteria-governments-u-s-public-finance-u-s-municipal-retail-electric-and-gas-utilities-methodology-and-assum-10570235.
    ${ }^{71}$ Moody's Investors Service, U.S. Public Power Electric Utilities With Generation Ownership Exposure (Nov. 28, 2017) http://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBC_1096768.
    ${ }^{72}$ Fitch Ratings, Inc., Exposure Draft: U.S. Public Power Rating Criteria, Public Finance (June 14, 2018).

[^77]:    ${ }^{73}$ Missouri River Energy Services, 130 FERC $9[63,014$, at PP 228, 229, 231 (2010) (emphasis original).

[^78]:    ${ }^{74}$ Opinion No. 531 at P 147.

[^79]:    ${ }^{75}$ Opinion No. 569-A at PP 201, 204, 205, 210, 216, 217, 219, 221, 222.

[^80]:    ${ }^{76}$ See, e.g., Nat'l Ass'n of Regulatory Util. Comm'rs, Utility Regulatory Policy in the U.S. and Canada, 1995-1996 (Dec. 1996). The Virginia State Corporation Commission is required by statute to consider the earned returns on book value, which establish lower and upper boundaries for the allowed ROE. Virginia Code § 56-585.1.A.2.a. The Ohio Public Utility Commission also considers prospective earned rates of return in evaluating the impact of electric security plans. Ohio R.C. 4928.143(E).
    ${ }^{77}$ North Carolina Utilities Commission, Order Accepting Stipulations, Granting Partial Rate Increase, and Requiring Customer Notice, Docket No. E-7, SUB 1187, et al., at 94 (Mar. 31, 2021).
    ${ }^{78}$ S\&P Global Market Intelligence, The rate case process: establishing a fair return for regulated utilities, RRA Regulatory Focus (June 29, 2020).

[^81]:    ${ }^{79}$ David C. Parcell, The Cost of Capital - A Practitioner's Guide, Society of Utility and Regulatory Financial Analysts at 115-16 (2010).
    ${ }^{80}$ Id.
    ${ }^{81}$ Id.
    ${ }^{82}$ Roger A. Morin, New Regulatory Finance, Pub. Utils. Reports, Inc., 395 (2006).

[^82]:    ${ }^{83}$ S\&P Global Ratings, Utilities: Key Credit Factors For The Regulated Utilities Industry, at P 49 (Nov. 19, 2013), https://www.maalot.co.i1/Publications/MT20200205141836.PDF.
    ${ }^{84} \mathrm{Id}$ at 50.
    ${ }^{85} I d$.
    ${ }^{86}$ See, e.g., S\&P Global Ratings, Utility-earned ROEs exceeded authorized since 2016, but 2019 may not match 2018 (June 10, 2019), https://www.spglobal.com/marketintelligence/en/news-insights/research/utility-earned-roes-exceeded-authorized-since-2016-but-2019-may-not-match2018.

[^83]:    ${ }^{87}$ S\&P Global Market Intelligence, Utility operating company financials mixed: ROE slips, Financial Focus (Dec. 11, 2019).
    ${ }^{88}$ Moody's Investors Service, Lower Authorized Equity Returns Will Not Hurt Near-Term Credit Profiles, Sector In-Depth (Mar. 10, 2015).
    ${ }^{89}$ Id.
    ${ }^{90}$ Moody's Investors Service, Regulated Electric and Gas Utilities, at P 15 (Jun. 23, 2017) https://www.moodys.com/research/Regulated-Electric-and-Gas-Utilities--PBC_1072530.
    ${ }^{91}$ CFRA is one of the world's largest providers of institutional-grade independent investment research and acquired the equity and fund research arm of Standard \& Poor's Corporation in October 2016.

[^84]:    ${ }^{92}$ CFRA, Electric Utilities, Industry Surveys at 50 (Aug. 2018).
    ${ }^{93}$ Opinion No. 569 at P 212.
    ${ }^{94}$ Id. at P 217.
    ${ }^{95}$ Aswath Damodaran, Return on Capital (ROC), Return on Invested Capital (ROIC) and Return on Equity (ROE): Measurement and Implications, New York University, Stern School of Business (July 2007).
    ${ }^{96}$ Opinion No. 569 at PP 204, 205.

[^85]:    ${ }^{97}$ Damodaran, supra n .95 at 49.
    ${ }^{98}$ See, e.g., Kenneth Lehn, Anil Makhija, EVA, Accounting Profits, and CEO Turnover: An Empirical Examination, 1985-1994, Journal of Applied Corporate Finance, Vol 10.2 (Summer 1997) at 90 (documenting a significant, positive correlation between ROE, market-based performance measures, and CEO turnover); D. Craig Nichols, James M. Wahlen, How Do Earnings Numbers Relate to Stock Returns? A Review of Classic Accounting Research with Updated Evidence, Accounting Horizons, Vol 18, No. 4 (Dec. 2004) at 272-274, 285 (documenting a significant positive relationship between stock returns and accounting earnings).
    ${ }^{99}$ Damodaran, supra n. 95 at 6.

[^86]:    ${ }^{100}$ Opinion No. 569 at P 201.
    ${ }^{101}$ Id. at P 208.

[^87]:    ${ }^{102}$ Walter A. Morton, The Investor Capitalization Theory of the Cost of Equity Capital, Land Econ. 248-63 (Aug. 1970).

[^88]:    ${ }^{103}$ Opinion No. 569 at P 205.
    ${ }^{104}$ www.valueline.com (Oct. 15, 2021).
    ${ }^{105}$ This is unstated in Opinion No. 569, but without this assumption, the difference in stock prices between Firm A and Firm B is easily explained. If the risks of Firm A are considerably higher than those of Firm B, the price investors are willing to pay to receive the same expected stream of cash flows will be significantly lower.

[^89]:    ${ }^{106}$ Opinion No. 569 at P 225.
    ${ }^{107}$ Opinion No. 569-A at P 80.
    ${ }^{108} I d$ at P 78.
    ${ }^{109}$ Opinion No. 569-A at P 131 (citing Opinion No. 569 at P 223).

[^90]:    ${ }^{110}$ Consider two utilities, both with a rate base of $\$ 1,000$ and an authorized ROE of $10 \%$. If Utility A's common equity ratio were $60 \%$, the Expected Earnings result would be calculated as ( $\$ 1,000$ $\times 60 \% \times 10 \%) /(\$ 1,000 \times 60 \%)=10 \%$. For Utility B with a common equity ratio of $40 \%$, the Expected Earnings result would be calculated as ( $\$ 1,000 \times 40 \% \times 10 \%) /(\$ 1,000 \times 40 \%)=10 \%$. To the extent that the risk associated with Utility B's greater financial leverage were found to justify a ROE higher than that of Utility A, Utility B's Expected Earnings result would also be higher.

[^91]:    ${ }^{111}$ Further, Opinion No. 569's suggestion (P 224) that the relative age of a utility's plant alone can be viewed as a key determinant of its risk is incorrect. Risk is a function of numerous factors that might affect the investors' ability to earn a fair ROE. While the relative age of a utility's facilities might arguably be a consideration, it is just as likely that older facilities could be viewed as riskier due to the presumptively greater potential for unplanned outages or catastrophic failure.
    ${ }^{112}$ Opinion No. 569-A at P 126.
    ${ }^{113}$ Opinion No. 569 at P 213.

[^92]:    ${ }^{114}$ If such a requirement were governing, the Commission would be forced to jettison its continued reference to GDP growth in applying the DCF model. In contrast to the evidence I have presented to demonstrate the relevance of earned returns to investors' evaluation of electric utilities, there is

[^93]:    ${ }^{115}$ So. Cal. Edison Co., 92 FERC 9161,070 at 61,263 \& n. 38 (2000).
    ${ }^{116}$ Use of an average return in developing the rate of return is well supported. See, e.g., Roger A. Morin, New Regulatory Finance, Pub. Util. Reports, Inc., 305-06 (2006), which discusses the need to adjust Value Line's end-of-year data, consistent with the Commission's prior findings.

[^94]:    ${ }^{117}$ Opinion No. 569 at P 68 (footnote omitted); Opinion No. 569-A at P 175 (footnote omitted). For example, the Commission noted that evidence concerning "ROEs of non-utility companies, ... non-utility stock prices, [and] investor expectations for non-utility stocks" may be relevant. Id.

[^95]:    ${ }^{118}$ See also, James C. Bonbright, Albert L. Danielsen, David R. Kamerschen, Principles of Public Utility Rates, Pub. Util. Reports, Inc. (1988) at 318 (noting, "Virtually all cost of capital witnesses use this method, and most of them consider it their primary technique. . . [T]he majority of cost of capital witnesses use the most basic version of this model . . .").
    ${ }^{119}$ See, e.g., New York Department of Public Service, Order Adopting Terms of Joint Proposal and Establishing Electric and Gas Rate Plan, Case 17-E-0459 at 38 (June 14, 2018); Regulatory Commission of Alaska, Order No. P-97-004(151) at 146 (Nov. 27, 2002); Mont. Pub. Serv. Comm'n, Order No. 7575c at P 114 (Sept. 26, 2018).
    ${ }^{120}$ Opinion No. 531 at P 142.
    ${ }^{121}$ Coakley v. Bangor Hydro-Elec. Co., 165 FERC II 61,030, at PP 32, 40 (2018); Ass'n of Buss. Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc., 165 FERC 9161,118 , at PP 34, 42 (2018).

[^96]:    ${ }^{122}$ Opinion No. 569-A at P 57 (citing 254 F.3d 289 (D.C. Cir. 2001)).
    ${ }^{123} \mathrm{Id}$. at P 59 .
    ${ }^{124}$ Opinion No, 569 at P 152 (citing Roger A Morin, New Regulatory Finance, Pub. Util. Reports, Inc. at 308 (2006)).
    ${ }^{125}$ See, e.g., Oklahoma Gas and Electric Company, Oklahoma Corporation Commission, Cause No. PUD 201700496, Direct Testimony of Roger A. Morin at 21 (Jan. 16, 2018) (noting, "I used Value Line's growth forecasts as well as analysts' long-term growth forecasts reported in Zacks as proxies for investors' growth expectations in applying the DCF model."); San Diego Gas \& Electric Co., Docket No. ER19-221, at Exhibit Nos. SD-0019, SD-0024 and SD-0025 (Oct. 30, 2018).
    ${ }^{126}$ Opinion No. 569-A at P 60 (footnote omitted).

[^97]:    ${ }^{127} \mathrm{Id}$. at P 59.
    ${ }^{128}$ System Energy Resources, Inc., Opinion No. 446, 92 FERC $\mathbb{1}$ 61,119, at 61,444 (2000) (citations omitted).

[^98]:    ${ }^{129}$ Myron J. Gordon, The Cost of Capital to a Public Utility, MSU Pub. Util. Studies at 100-01 (1974).
    ${ }^{130} \mathrm{Id}$. at 89 .
    ${ }^{131}$ Joseph R. Gordon and Myron T. Gordon, The Finite Horizon Expected Return Model, Financial Analysts Journal at 52-61 (May-Jun. 1997).
    ${ }^{132}$ Id.

[^99]:    ${ }^{133}$ www.valueline.com (retrieved Sept. 20, 2021).

[^100]:    ${ }^{134}$ Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities, Order No. 1000, 136 FERC II 61,051, at P 45 (2011), order on reh'g and clarification, Order No. 1000-A, 139 FERC II 61,132 (2012), order on reh'g and clarification, Order No. 1000-B, 141 FERC II 61,044 (2012), aff'd, S.C. Pub. Serv. Auth. v. FERC, 762 F.3d 41 (D.C. Cir. 2014) (per curiam).
    ${ }^{135}$ Electric Transmission Incentives Policy Under Section 219 of the Federal Power Act, Notice of Proposed Rulemaking, 170 FERC II 61,206, at P 27 (2020).

[^101]:    ${ }^{136}$ Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection, 176 FERC $\mathbb{T} 61,024$ at P 3 (2021).
    137 Edison Electric Institute, Issues \& Policy: Finance \& Tax, https://www.eei.org/issuesandpolicy/Pages/FinanceAndTax.aspx (last visited Sept. 20, 2021).
    ${ }^{138}$ S\&P Global Market Intelligence, RRA Financial Focus - Utility Capital Expenditures Update (Apr. 8, 2021).
    ${ }^{139}$ Id. (emphasis added).

[^102]:    ${ }^{140}$ S\&P Global Ratings, Keeping The Lights On: U.S. Utilities' Exposure To Physical Climate Risks (Sep. 16, 2021), https://www.spglobal.com/ratings/en/research/articles/210916-keeping-the-lights-on-u-s-utilities-exposure-to-physical-climate-risks-12098174.

[^103]:    ${ }^{141}$ Opinion No. 569 at P 33.

[^104]:    ${ }^{142}$ Roger A. Morin, New Regulatory Finance, Pub. Util. Reports, Inc., 189 (2006).

[^105]:    ${ }^{143}$ See, e.g., Transcon. Gas Pipe Line Corp., Opinion No. 414-A, 84 FERC $\mathbb{I} 61,084$, order on reh'g, Opinion No. 414-B, 85 FERC II 61,323 (1998); Ky. W. Va. Gas. Co., 2 FERC II 61,139 (1978) ("Kentucky West Virginia").

[^106]:    ${ }^{144}$ Id at 61,325 (citing Fla. Gas Transmission Co., 47 FPC 341 at 363 (1972)).

[^107]:    ${ }^{145}$ Moody's Investors Service, FAQ on credit implications of the coronavirus outbreak, Sector Comment (Mar. 26, 2020).

[^108]:    (a) www.zacks.com (retrieved Aug. 12, 2021).
    (b) IBES growth rates from Refinitiv, as provided by www.fidelity.com (retrieved Aug. 12, 2021). Eliminated growth rates greater than $20 \%$, as well as all negative values.

[^109]:    (a) Weighted average for dividend-paying stocks in the NYSE based on data from www.zacks.com (retrieved Aug. 12, 2021). (c) Six-month average yield on 30-year Treasury bonds for Aug. 2021 from https://fred.stlouisfed.org/. (d) Roger A. Morin, New Regulatory Finance, Pub. Util. Reports, Inc. (2006) at 190. (e) The Value Line Investment Survey (Jul. 23, Aug, 13 and Sep. 10, 2021).
    (f) Duff \& Phelps, 2021 CRSP Deciles Size Study -- Supplementary Data Exhibits, Cost of Capital Navigator.
    (g) Excludes highlighted values. (h) Average Baa utility bond yiel
    (i) $200 \%$ of Median - All Values.

[^110]:    ${ }^{1}$ Uniform System of Accounts, 18 C.F.R. Part 101, Account Nos. 391, Office Furniture and Equipment; 393, Stores Equipment; 394, Tools, Shop and Garage Equipment; 395, Laboratory Equipment; 396, Power Operated Equipment; 398, Miscellaneous Equipment.

[^111]:    ${ }^{1}$ Marston, Anson, Robley Winfrey and Jean C. Hempstead. Engineering Valuation and Depreciation, 2nd Edition. New York, McGraw-Hill Book Company. 1953.
    ${ }^{2}$ Winfrey, Robley, Statistical Analyses of Industrial Property Retirements. Iowa State College, Engineering Experiment Station, Bulletin 125. 1935.
    ${ }^{3}$ Marston, Anson, Robley Winfrey, and Jean C. Hempstead, Supra Note 1.
    ${ }^{4}$ Wolf, Frank K. and W. Chester Fitch. Depreciation Systems. Iowa State University Press. 1994.

