

**El Paso Electric** 

# **System Expansion Plan**

# 2026-2035

# **Prepared By:**

System Planning & Interconnections





# 2025









#### MEMORANDUM

July 2, 2025

FROM: Juan C. Vicente, Engineer | System Planning & Interconnections

TO: Dave Hawkins, VP | SYS Plan & OPS Support

CC: Roberto Favela, Director | System Planning & Interconnections Donna Enriquez, Supervisor | System Planning & Interconnections

SUBJECT: 2025 System Expansion Plan – 2026-2035

Enclosed is the El Paso Electric Company ("EPE") System Expansion Plan ("The Plan") 2026-2035. The Plan is a forecast of recommended electrical transmission and substation capital additions and/or modifications which, from an internal system planning perspective, are deemed necessary for maintaining adequate system reliability.

The Plan has been prepared by System Planning & Interconnections in collaboration and coordination with multiple EPE departments and is presented here to provide formal recommendations to appropriate management, engineering, and operational personnel for implementation in an economical and timely fashion. System expansion projects have been identified with regards to implementation dates, descriptions, and justifications.

Please acknowledge through your signature your approval for dissemination of the Plan to all external and internal stakeholders. The signed memorandum will only be included in the internal version of the 2025 System Expansion Plan.

David C Hawkins VP | SYS Plan & OPS Support

2025 System Expansion Plan - 2026-2035





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## 1 EXECUTIVE SUMMARY

El Paso Electric Company's ("EPE") System Planning & Interconnections Department performs System Expansion Plan ("Plan") studies annually as described in EPE's Open Access Transmission Tariff ("OATT") Attachment K ("Attachment K"). This process is a technical evaluation of EPE's Bulk Electric System performed for a ten-year planning horizon (currently from 2026 through 2035). The Plan determines system facility additions and upgrades necessary to comply with Western Electricity Coordinating Council ("WECC") and the North American Electric Reliability Corporation ("NERC") reliability requirements under these conditions:

- Equipment will not be loaded more than its normal facility limits for All Facilities in Service ("AFIS").
- Equipment will not be loaded more than its emergency facility limits for any single-element ("N-1") contingency.
- Real-time violations that have been identified because of actual system conditions or real- time contingency analysis will be addressed.
- Conformance with NERC Standard TPL-001-5 criteria, as applicable, will be applied to certain planning events.
- Equipment voltage limits (high or low) will not be exceeded.
- System Expansion Projects Scheduled for Completion before Peak of 2026, and Project Schedule for 2026-2035 System Expansion Plan Projects. Future local generation resources serving native load have been identified by EPE Resource Planning input and/or in a 2024 EPE L&R (with updates as of October 1, 2024) as detailed in the Generation Resources are summarized in Table 2. Input from EPE's Resource planning on future generation was taken as modeling assumed this took first assumptions and modeling priority. Second modeling and assumptions priority for generation retirements and additions were 2024 EPE L&R (with updates as of October 1, 2024) assumptions.

This Plan's content has been organized as follows:

- An Introduction Section briefly summarizes requirements and scope of the EPE System Expansion Plan
- A Planning Organizations Section lists and summarizes all regional and subregional planning groups that EPE participates in.
- A General Assumptions Section that addresses Load Projections, Demand Side Management, Generation Resources, Reliability Criteria, System Operating Limit ("SOL") Methodology for the Operating Horizon, Open Planning Meetings, and Base Case System Assumptions.
- The Tables Section consists of:
  - Table 1. which identifies Peak Energy Efficiency Adjustment assumed for the current System Expansion Plan.
  - Table 2. which identifies Projected EPE Local Generation assumed for the current System Expansion Plan.





- Table 3. identifies projects (driven by Transmission System Needs) scheduled for completion before the peak of 2026.
- Table 4. lists new or modified projects driven by Transmission System needs for the current System Expansion Plan's first five (5) years: 2026-2030.
- Table 5. lists new or modified projects driven by Transmission System needs for the current System Expansion Plan's last five (5) years: 2031-2035.
- Table 6. identifies reactive support projects identified in the current System Expansion Plan.
- A description of major EPE planned projects, driven by Transmission System Needs, for each year is provided under the Transmission Project Summary. Information includes the Project Name, Operating Voltage, Planned in Service Date, Project Description, and Project Justification.

The basis for native system peak demand projections has historically been set by EPE's annual Long-Term Forecast Report. Typically, EPE System Planning applies the forecasted native system MW demand for each future year by starting with the expected value from the most recent Long-Term Forecast Report and adding 50% of the difference between the upper bound and the expected value (i.e., modeled within peak/summer powerflow cases). Incorporated within EPE's 2024 Long-Term Forecast Report and the 2024 Loads and Resources with updates as of October 1, 2024 ("L&R") are EPE Public Policy requirements. It is in this manner that Public Policy requirements are considered in the Plan. However, in this year's plan, EPE System Planning used the following approach:

- Increased Planning Year 1 (2026) by 120 MW of load
- Planning Years 2-5 were increased by 100 MW of annual load.
- For Planning Years 6-10, the system load growth was increased by 50 MW.
- For all planning years, the system load growth was scaled by zones.

EPE System Planning, in coordination with Distribution Planning & other Departments, identified the high growth areas and decided on this load methodology to more accurately reflect the rapidly growing areas in EPE's service territory.

The system performance analyses presented in this Plan include an assessment of outage impacts, generator interconnection impacts, and economic planning evaluations. The major projects identified within this report are represented in Section 6 – EPE Transmission Planned Project Maps by geographical area and estimated in-service year.





## 2 INTRODUCTION

El Paso Electric Company's ("EPE") System Planning & Interconnections Department performs System Expansion Plan ("Plan") studies annually as described in EPE's Open Access Transmission Tariff ("OATT") Attachment K ("Attachment K"). This process is a technical evaluation of EPE's Bulk Electric System performed for a ten-year planning horizon (currently from 2026 through 2035). The Plan determines system facility additions and upgrades necessary to comply with Western Electricity Coordinating Council ("WECC") and the North American Electric Reliability Corporation ("NERC") reliability requirements under these conditions:

- Equipment will not be loaded more than its normal facility limits for All Facilities in Service ("AFIS").
- Equipment will not be loaded more than its emergency facility limits for any single- element ("N-1") contingency.
- Real-time violations that have been identified because of actual system conditions or real-time contingency analysis will be addressed.
- Conformance with EPE's Planning Criteria for NERC Standard TPL-001-5.1 will be applied to certain planning events.
- Equipment voltage limits (high or low) will not be exceeded.

The projects presented within El Paso Electric Company System Expansion Plan 2026-2035 are a result of technical analyses performed by the System Planning & Interconnections Department. This new Plan updates and replaces EPE's previous 2025-2034 System Expansion Plan.





### 3 PLANNING ORGANIZATIONS

EPE engages in regional and subregional planning organizations. EPE's participation in these planning organizations facilitates EPE's coordination of its transmission plans with the plans of the other transmission providers/entities. See EPE's OATT, Attachment K for more details on how these activities relate to EPE's planning process.

#### 3.1 Regional Planning Organizations

3.1.1 Western Electricity Coordinating Council (WECC)

EPE actively participates in WECC committees.

WECC is a non-profit corporation approved by the Federal Energy Regulatory Commission (FERC) to serve as the Regional Entity tasked with assuring a reliable Bulk Electric System in the Western Interconnection geographical area of the United States of America.

3.1.2 WestConnect

EPE actively participates in the WestConnect regional transmission planning process.

WestConnect members collaboratively assess stakeholder needs and may develop cost-effective transmission projects. EPE is an active member participant in the WestConnect regional transmission planning process established by FERC Order No. 1000.

#### 3.2 Subregional Planning Group

#### 3.2.1 Southwest Area Transmission (SWAT) Subregional Planning Group

EPE actively participates in the activities of the Southwest Area Transmission (SWAT) Subregional Planning Group that is comprised of transmission regulators/governmental entities, transmission users, transmission operators and environmental entities.

The SWAT addresses future transmission needs on a subregional basis.





## 4 GENERAL ASSUMPTIONS

#### 4.1 Load Projections

EPE's Long-Term Forecast Report provides energy and native system peak demand projections. The 2024 Forecast predicted a 10-year CAGR of 1.6% for native system peak demand. The 2024 Forecast predicted a Native System Energy increase for 2024 of 3.22% compared to the year 2023. The 2024 Forecast also predicted that Native System Peak Demand in 2024 will decrease 1.92% compared to the 2023 peak. The Forecast includes demand side management and energy efficiency programs as detailed in the next section.

The basis for native system peak demand projections has historically been set by EPE's annual Long-Term Forecast Report. Typically, EPE System Planning applies the forecasted native system MW demand for each future year by starting with the expected value from the most recent Long-Term Forecast Report and adding 50% of the difference between the upper bound and the expected value (i.e., modeled within peak/summer powerflow cases). Incorporated within EPE's 2024 Long-Term Forecast Report and the 2024 Loads and Resources with updates as of October 1, 2024 ("L&R") are EPE Public Policy requirements. It is in this manner that Public Policy requirements are considered in the Plan. However, in this year's plan, EPE System Planning used the following approach:

- Increased Planning Year 1 (2026) by 120 MW of load
- Planning Years 2-5 were increased by 100 MW of annual load.
- For Planning Years 6-10, the system load growth was increased by 50 MW.
- For all planning years, the system load growth was scaled by zones.

EPE System Planning, in coordination with Distribution Planning & other Departments, identified the high growth areas and decided on this load methodology to more accurately reflect the rapidly growing areas in EPE's service territory.

Each substation load was projected for the planning years based on available historical 2024 coincident peak load, Distribution System's monthly (non-coincident) load reports, load projections from the latest 2024 Distribution Expansion Plan Report update ("2024 Distribution Plan Update"), plus other input from EPE Distribution planning, and input from EPE's Load Forecasting and Commercial Services departments. EPE System Planning & Interconnections Group forecasts future substation loads by substation transformers based on these inputs.

#### 4.2 Demand Side Management

In Attachment K within EPE's OATT (posted on EPE's website at www.epelectric.com), EPE includes demand side resources through energy efficiency programs to mitigate the need for new transmission. Mandated energy efficiency goals accounted for in the Forecast are shown on Table 1.





1. EPE expects an increase in its total cumulative energy efficiency load adjustments compared to the previous forecast. The 2024 Forecast shows a continuous increase in the energy efficiency demand adjustment with a projected peak of 99 MW in 2033.

Demand savings achieved through the EPE Energy Efficiency Programs are across all customer classes and across the whole transmission system. No single project or customer provides a significant amount of demand savings to dramatically impact the transmission system.

#### 4.3 Generation Resources

EPE's Resource Planning Department ("RP") identified future generation resources and purchased power to serve native load in its 2024 Loads & Resources 2025-2044 document ("L&R") dated October 1, 2024, and from further input from EPE's Resource Planning Department to this document. This document compares owned resources and power purchases against forecasted load to determine new resources that may be needed.

System Planning & Interconnections modeled generation based on the L&R and other documents while developing the Plan. The resource generation mix consists of photovoltaic ("PV"), battery energy storage system ("BESS"), gas and/or steam turbines. The generation reflected in Table 2 – Projected EPE Local Generation was assumed in the System Expansion Plan modeling.

#### 4.4 Reliability Criteria

The Plan follows Good Utility Practice and planning as described in EPE's OATT Attachment K. It uses a deterministic approach for transmission system planning. Each annual review verifies that modeling, assumptions, and planned facilities meet WECC and NERC compliance requirements under normal (N-0), and single contingency (N-1) conditions for EPE's transmission area. Under these two conditions, the network must be operated within WECC, NERC and EPE's Planning Criteria for NERC Standard TPL-001-5.1 to supply projected customer loads and firm transmission services over the ten-year planning horizon. In addition, for this 2025 Plan, there was some consideration to study results for initially-out-of-service (IOS) single bulk electric system (BES) element conditions. The Plan uses steady state powerflow analyses to identify transmission projects (facility upgrades and/or additions) required to mitigate any criteria violations with the goal of providing sufficient lead time to incorporate them. The Plan summarizes each individual expansion project's scope, in- service date, justification, and purpose. Additionally, EPE reviews operational planning cases to determine transmission line loading conditions, mitigation practices and the need to upgrade transmission lines to facilitate operational needs and practices.

The Plan focuses on facilities under heavy summer coincidental peak demand conditions which are typically considered worst case scenarios for EPE's system since EPE is a summer peaking utility. Light Winter cases are examined as well.





EPE strives to complete all system improvements in a prudent, safe, and timely fashion. Nevertheless, scheduling factors may delay projects, forcing EPE to apply temporary alternatives or measures to mitigate potential overloads.

#### 4.5 Southwest Power Pool Reliability Coordinator Area System Operating Limit Methodology Western Interconnection Revision 2.1

On April 1, 2024, Revision 2.1 of the Southwest Power Pool Reliability Coordinator Area System Operating Limit Methodology Western Interconnection went into effect. The latest revision of these methodology documents requires that EPE operate its system in the pre-contingency state (All-Facilities-in-Service, AFIS) so that all facilities shall be within their normal (continuous) facility (thermal) ratings and that for the post-contingency state for single (element) contingencies, all facilities shall be within their emergency facility (thermal) ratings.

#### 4.6 Open Planning Meetings

The transmission planning process, per Attachment K, includes Open Planning meetings while developing this Plan. Two meetings were held -- one in October 2024 and the second in March 2025 -- to allow third party participants to review or submit data and request studies of potential Stakeholder needs. Stakeholders are allowed to submit data up to the posted due dates to be incorporated into EPE's Plan case models. Data submitted after the due dates will not be incorporated into the current Plan, although they will be considered in the next year's planning cycle, if applicable. To date, no applicable Stakeholder data has been submitted to EPE that was incorporated into the Plan. The purpose of the Plan is to identify and evaluate, on a regular basis, future electric transmission system modifications and additions or alternatives that may be required to serve the anticipated area load growth, existing third-party customers' transmission needs, Public Policy requirements and NERC/WECC reliability requirements in the EPE service territory for a ten-year planning horizon.

#### 4.7 Plan Case System Assumptions

System expansion analyses utilize powerflow studies and stability studies for each Plan year from 2026 through 2035. These analyses incorporated in-progress system expansion projects assumed to be completed before the peak of 2026. System modeling also includes the following assumptions:

- The forecasted substation load for each Plan year was adjusted to the modified projected coincidental peak loads using the Forecast and historical load data.
- Generation, system configuration, imports, and interchange schedules -- including contractual agreements with third-party entities -- were set according to load demand in each Plan case.





- Plan cases modeled PNM's Afton G1 and Afton S1 as "Off" when the Arroyo PST power flow was set to 151 MW north to south.
- Eddy County flow from the DC tie was modeled at zero (0) MW open ended at the Artesia bus in each of the Plan cases.
- EPE's share of Southern New Mexico Imports ("SNMI") was set at a schedule of 645 MW (per contractual rights) and EPE imports ("EPI") at 747 MW in all Plan cases.
- No on-line generation was modeled at Lordsburg. Luna Energy Facility ("LEF") was left as scheduled in the WECC cases used with the assumption that 100 MW scheduled to EPE under the Phelps Dodge (Freeport) Exchange Agreement and additional power from LEF to EPE, if needed, to meet EPI of 747 MW.
- The rebuilding of 69 kV lines will be designed to operate at 115 kV to support conversion of the EPE 69 kV systems to 115 kV future operational use. Lines will operate at their planned voltage until future conversions are implemented.
- The 59 MVAR line shunt reactor at the Hidalgo 345 kV Substation bus end of the Hidalgo-Greenlee 345 kV Line and the 49 MVAR line shunt reactor at the Macho Springs 345 kV Substation bus end of the Macho-Springerville 345 kV Line are "must-on" line shunt reactors for every Plan case. However, the Luna 345 kV Line shunt reactors were modeled on or off as needed. These reactors can be switched off during an outage of a Path 47 345 kV line.

Note that the final generation sites may have not yet been determined for the resource additions called for in the L&R to be phased in from 2026 to 2035. Therefore, the transmission configuration used in the Plan studies may change requiring different upgrades assumed in future interconnection and facility studies, per FERC's Large Generator Interconnection Procedures ("LGIP").

#### 4.8 Case Development

#### 4.8.1 WECC-Approved Cases

Plan cases were developed with the General Electric Positive Sequence Load Flow ("GE-PSLF") program, which was used for the numerous powerflow, and contingency studies performed for the Plan. Each case is a "database" of the WECC transmission system -- originating from the latest "WECC cases" for the appropriate year. These WECC-approved Heavy Summer and Light Winter base cases contain system configurations and conditions from other nearby Transmission Planners. System Planning & Interconnections then incorporates EPE's latest forecasted loads, expected generation resources, both of which incorporate EPE's Public Policy requirements, and any topology changes not already included in the WECC-supplied cases. Many projects listed in the previous plan are removed (or reverted to the existing topology) to re-verify their needs and schedule in the current Plan.





#### 4.8.2 Topology Changes

In addition to the most current load and generation updates, System Planning & Interconnections incorporates topology changes not already included in the WECC-supplied cases such as planned substation- level and transmission changes. Substation changes, such as those detailed in EPE's latest 2024 Distribution Plan Update with updates document, include capacity upgrades, additions, deletions, location changes, and/or postponements. Planned transmission changes typically include capacity upgrades, additions, deletions, location changes, and postponements that are usually driven by the substation-level changes, generation changes, other studies (e.g., those in the LGIP), or routing changes due to regulatory orders or right-of-way issues or other input.

If a newly planned substation is postponed, any transmission changes associated with that substation may also be postponed. This may affect study results since many future projects depend on previously identified improvements. Factors affecting completion dates include, for example, those identified above. Where completion targets are not achieved, or in instances in which EPE experiences more rapid load growth than forecasted, EPE evaluates and identifies short-term corrective measures to mitigate impacts, as necessary.

Table 3 shows expansion projects that were called for and budgeted in the last Plan (2025-2034) but are now re-scheduled to be completed before the peak of 2026. These projects have been modeled in the 2026 Plan cases and beyond to help mitigate potential contingency overloads.

New or modified Plan projects are summarized in Tables 4 & 5 and detailed in each year's project descriptions.

#### 4.9 System Improvement Methodology

After Plan cases were modified as outlined above, contingency analyses are performed for each Plan year to identify reliability criteria violations on EPE facilities within EPE's service area. If violations were identified, mitigating improvements (e.g., Plan projects) were added to EPE's transmission system. Each year's Plan cases carried over the previous year's system improvements. These upgrades will be reflected in the following year's assessment.

Some Plan projects are a result of studies performed outside of System Planning & Interconnections, such as those from the LGIP, third-party generators or Transmission Service Requests while others are incorporated from the latest EPE capital budget. Projects listed in the Plan are specific to the expansion of the EPE internal electrical transmission system. Any projects outside the local electrical system planning area may be evaluated in separate studies.

Additionally, the Plan does not normally include maintenance projects nor external system expansion projects other than those in the WECC-approved base cases. Furthermore, projects associated with non-





EPE large generator interconnections are not included unless a Large Generator Interconnection Agreement (LGIA) has been executed.

#### 4.10 Project's Summary Explained

Tables 4 and 5 identify each year's system improvements. It also includes generic projects as "Additional Future Capital Improvements" added in each year to serve as placeholders in areas of the system where it is difficult, at present, to identify whether and how much specific transmission infrastructure may be necessary. In most cases, System Planning & Interconnections recommends a completion date by May of the given year (unless otherwise noted), to support peak summer load.

The Plan also contains a brief description and justification for each planned system improvement broken down by year (included in Section 7 – Transmission Project Summary). The planned in-service date of the recommended system improvement projects reflects the date the project was modeled to meet planning requirements, and it does not represent the construction completion date of the project.

Table 6 lists reactive devices needed in different locations of EPE's system scheduled for 2026-2035. This is to improve EPE's reactive capability and voltages profiles.

#### 4.11 Acknowledgements

This document was prepared by EPE System Planning & Interconnections in collaboration with contributions from the following EPE departments: Distribution Systems, TSR Engineering, Asset Management Services, Load Research & Data Analytics, Resource Planning, System Operations, and other EPE departments or personnel. Supporting documentation for the numerous studies is not included in this document due to space constraints.





5 TABLES





Table 1. Yearly Peak Energy Efficiency Adjustment	Table 1.	Yearly Peak Energy Efficiency Adjustment
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Calendar Year	Total Energy Efficiency Demand Adjustment (MW)	Calendar Year	Total Energy Efficiency Demand Adjustment (MW)
2024	10	2029	59
2025	20	2030	69
2026	29	2031	79
2027	39	2032	89
2028	49	2033	99

#### Table 2. Projected EPE Local Generation

Generator	Туре	Capacity (MW)	Recent/Planned In-Service Date (Month-YY)	Planned Retirement	Notes
		In-Service			
Airport	Photovoltaic (PV)	12			1
Chaparral	Photovoltaic (PV)	10			1
Patriot	Photovoltaic (PV)	10			1
Hatch	Photovoltaic (PV)	5			1
Santa Teresa	Photovoltaic (PV)	20		Dec.31	1
Macho Springs	Photovoltaic (PV)	50		Dec.34	
Copper	Gas Combustion Turbine	63		Dec.30	
MPS 1	Gas Combustion Turbine	90			
MPS 2	Gas Combustion Turbine	90			
MPS 3	Gas Combustion Turbine	90			
MPS 4	Gas Combustion Turbine	90			
Newman G1	Gas Fired Steam Turbine	74			
Newman G2	Gas Fired Steam Turbine	74		Dec27	
Newman G3	Gas Fired Steam Turbine	93		Dec31	
Newman 4 GT1	Gas Combustion Turbine	70		Dec31	
Newman 4 GT2	Gas Combustion Turbine	70		Dec31	
Newman 4 ST1	Combined Cycle HRSG	80		Dec31	
Newman 5 GT3	Gas Combustion Turbine	70			
Newman 5 GT4	Gas Combustion Turbine	70			
Newman 5 ST2	Combined Cycle HRSG	148			
Newman 6 GT5	Gas Combustion Turbine	228			
Rio Grande G6	Gas Fired Steam Turbine	45			2
Rio Grande G7	Gas Fired Steam Turbine	44			





Generator	Туре	Capacity (MW)	Recent/Planned In-Service Date (Month-YY)	Planned Retirement	Notes
Rio Grande G8	Gas Fired Steam Turbine	139		Dec.33	
Rio Grande G9	Gas Combustion Turbine	88			
Buena Vista	PV/Battery Storage	120 (120 Solar 50 Battery)			
		2025			
Chihuahuan Solar	Photovoltaic (PV)	10	Jan-25		1
Felina	Photovoltaic (PV)	150	Aug-25		3
Milagro	PV/Battery Storage	150 (150 Solar, 75 Battery)	Sep-25		3
Santa Teresa	PV/Battery Storage	150 (150 Solar, 150 Battery)	Dec-25		3
		2026			
Carne	PV/Battery Storage	130 (130 Solar, 65 Battery)	Feb-26		3
		2027			
Renewable Generation Solar & Battery	PV/Battery Storage	100 (100 Solar, 100 Battery)	Feb-27		3,4
Buena Vista III	PV/Battery Storage	100 Solar 100 Battery	Apr-27		3
		2028			
Renewable Generation Solar & Battery	PV/Battery Storage	30 (30 Solar, 30 Battery)	May-28		1,3,4
Renewable Generation Solar & Battery	PV/Battery Storage	50 (50 Solar, 50 Battery)	May-28		1,3,4





Generator	Туре	Capacity (MW)	Recent/Planned In-Service Date (Month-YY)	Planned Retirement	Notes
Renewable Generation Solar & Battery	PV/Battery Storage	150 (150 Solar, 150 Battery)	May-28		3,4
Renewable Generation Solar & Battery	PV/Battery Storage	150 (150 Solar, 75 Battery)	May-28		3,4
Renewable Generation Solar & Battery	PV/Battery Storage	250 (250 Solar, 250 Battery)	Dec-28		3,4
		2029			
Renewable Generation Stand-alone Battery	Battery Storage	150	May-29		3,4
		2031			
Renewable Generation Stand-alone Solar	Photovoltaic (PV)	100	May-31		3,4
Renewable Generation Stand-alone Battery	Battery Storage	25	May-31		3,4
		2032	• •		
Renewable Generation Stand-alone Solar	Photovoltaic (PV)	50	May-32		3,4
Renewable Generation Stand-alone Battery	Battery Storage	50	May-32		3,4
Renewable Generation Stand-alone Wind	Wind	25	May-32		3,4
CTR1	Gas Combustion Turbine	325	May-32		3,4
		2033			
Renewable Generation Stand-alone Solar	Photovoltaic (PV)	100	May-33		3,4





Generator	Туре	Capacity (MW)	Recent/Planned In-Service Date (Month-YY)	Planned Retirement	Notes
Renewable Generation Stand-alone Battery	Battery Storage	50	May-33		3,4
		2034			
Renewable Generation Stand-alone Solar	Photovoltaic (PV)	75	May-34		3,4
Renewable Generation Stand-alone Battery	Battery Storage	25	May-34		3,4
CTR2	Gas Combustion Turbine	150	May-34		3,4
		2035			
Renewable Generation Stand-alone Solar	Photovoltaic (PV)	25	May-35		3,4
Renewable Generation Stand-alone Wind	Wind	125	May-35		3,4

Notes:

- 1. This photovoltaic generation connects into EPE's Distribution System.
- 2. Classified as Inactive Reserve.
- 3. LGIA Ratings.
- 4. Planned Facilities Pending Studies to determine location.





#### 5.1 Project Changes from 2025 EPE Plan

#### 5.1.1 Completed Projects & Projects Nearing Completion

Summarized in Table 3 are EPE's System Expansion Projects scheduled for completion before the peak of year 2026 (in-service date expected prior to or on June 1, 2026, subject to engineering judgement on exceptions).

#### Table 3. System Expansion Projects Scheduled for Completion Before Peak of 2026

All projects below are modeled in the 2026 Plan Case

System Upgrade Needed	Location of Upgrade	Improvement Identification	Planned/Actual In-Service Date
Rebuild, Reconductor	Lane-Wrangler 115 kV Line	Improve System Reliability by addressing and mitigating N-1 overloads.	May-25/Feb-25
115/69 kV Substation	San Felipe Substation	New Substation to help address expected load growth and improve reliability in the area.	Jun-25
115 kV Switching Station	Wicked Substation	New Switching Station to connect New Generation Addition	Jun-25
115 kV New Circuit	San Felipe-Wicked 115 kV Line	Improve System Reliability by addressing and mitigating N-1 overloads.	Jun-25
Existing 69 kV Capacitor (1x30.0 MVAR)	Ascarate Substation	Increase Reactive Capacitive Support in the Area to support Load Growth and increase Voltage Stability.	Jun-25
115 kV New Circuit	Horizon-Wicked 115 kV Line	Improve System Reliability by addressing and mitigating N-1 overloads.	Aug-25
115 kV Substation & Related 115 kV Line Reconfiguration	Eastlake Substation	New Substation to help address expected load growth.	Dec-25





System Upgrade Needed	Location of Upgrade	Improvement Identification	Planned/Actual In-Service Date
345 kV Switching Station & Related 345 kV Line Reconfiguration	Mesquite Substation	New Switching Station to connect New Generation Addition	Dec-25
Reconductor	Eastlake-Wrangler 115 kV Line	Improve System Reliability by addressing and mitigating N-1 overloads.	Dec-25
115 kV Substation & Related 115 kV Line Reconfiguration	McCloud East Substation	New Substation to serve Large Load.	Jan-26
Rebuild, Reconductor, Voltage Conversion from 69 kV to 115 kV	San Felipe-Sparks 115 kV Line	Improve System Reliability and serve Load Growth in the area.	Jan-26
Reconductor	Pellicano-Montwood 115 kV Line	Improve System Reliability by addressing and mitigating N-1 overloads.	May-26
Reconductor	Lane-Americas 69 kV Line	Improve System Reliability by addressing and mitigating N-1 overloads.	May-26
Rebuild, Reconductor	Rio Grande-Sunset 69 kV Lines (5500/5600)	Improve System Reliability by addressing and mitigating N-1 overloads.	May-26
New 115 kV Capacitors (2x15.9 MVAR)	Eastlake Substation	Increase Reactive Capacitive Support in the Area to support Load Growth and increase Voltage Stability.	May-26
New 115 kV Capacitors (2x15.9 MVAR)	San Felipe Substation	Increase Reactive Capacitive Support in the Area to support Load Growth and increase Voltage Stability.	May-26





#### 5.1.2 Planned EPE Bulk Electric System Transmission Projects:

Planned EPE Bulk Electric System Projects driven by transmission system needs with projected in-service dates between 2026-2035 as needed to support the local EPE transmission system are summarized in Tables 4 & 5 that follow. Transmission Projects in-service dates shown in Section 7 may differ from the completion dates identified in Tables 4 and 5 due to budgetary constraints.

Year	Project Description	Expected/Target Completion Date Month-Year
	McCloud East 115 kV Substation (New) & Related 115 kV Line Reconfigurations	Jan-26
	Sparks-San Felipe Line (Voltage Conversion, Rebuild, Reconductor) 69 kV to 115 kV	Jan-26
	Pellicano-Montwood 115 kV Line (Reconductor)	May-26
	Lane-Americas 69 kV Line (Reconductor)	May-26
	Rio Grande-Sunset 69 kV Lines (5500/5600) (Rebuild, Reconductor)	May-26
2026	Eastlake Substation 115 kV 2x15.9 MVAR Capacitor Bank (New)	May-26
	San Felipe Substation 115 kV 2x15.9 MVAR Capacitor Bank (New)	May-26
	Bovee 115/69 kV Substation (New) & Related 115 kV Line Reconfiguration	Dec-26
	Eastwind 115 kV Substation (New) & Related115 kV Line Reconfiguration	Dec-26
	Bovee Substation 115 kV 2x15.9 MVAR Capacitor Bank (New)	Dec-26
	Eastwind Substation 115 kV 2x15.9 MVAR Capacitor Bank (New)	Dec-26
	Chaparral-Escondido 115 kV Line (Reconductor)	Jan-27
	Marvin (FE-6) Switching Station 115 kV (New) & Related 115 kV Line Reconfiguration	May-27
	Seabeck 115 kV Switching Station (New) & Related 115 kV Line Reconfiguration	May-27
2027	Arroyo-Moongate 115 kV Line (Reconfiguration, Reconductor)	May-27
	Ascarate-Trowbridge 115 kV Line (Reconductor)	May-27
	Marvin-Seabeck 115 kV Line (New)	May-27
	Thorn-Ripley 115 kV Line (Rebuild, Reconductor)	May-27
	Americas-Bovee 69 kV Line (Reconductor)	May-27

#### Table 4. Project Schedule (2026-2030)





Year	Project Description	Expected/Target Completion Date Month-Year
	Rio Bosque-Ascarate 69 kV Line (Reconductor)	May-27
	EA-1 Substation 115 kV 2x15.9 MVAR Capacitor Bank (New)	May-27
	EA-2 Substation 115 kV 2x15.9 MVAR Capacitor Bank (New)	May-27
	FE-7 Substation 115 kV 3x15.9 MVAR Capacitor Bank (New)	May-27
	Rio Bosque 69 kV 1x15.9 MVAR Capacitor Bank (New)	May-27
	WS-3 Substation 115 kV 2x15.9 MVAR Capacitor Bank (New)	May-27
	Afton North 345 kV Switching Station (New)	May-28
	Airport 345/115 kV Substation (New)	May-28
	Dyer Substation (Voltage Conversion) 69 kV to 115 kV	May-28
	Vado 345/115 kV Substation (New)	May-28
	Afton-Newman 345 kV Line Reconfiguration (In-and-Out at Vado 345 kV Substation)	May-28
	Afton North-Airport 345 kV Line (New)	May-28
2028	Afton-Afton North 345 kV Line (New)	May-28
	Afton North-Vado 345 kV Line (New)	May-28
	Eastwind-Seabeck 115 kV Line (New)	May-28
	Jornada-Arroyo 115 kV Line (Reconductor)	May-28
	Airport 345/115 kV Autotransformer (New)	May-28
	McCloud East Substation ±200 MVAR STATCOM (New)	May-28
	Leasburg Substation 115 kV 2x15.9 MVAR Capacitor Bank (New)	May-28
	Marvin Substation 115 kV 2x15.9 MVAR Capacitor Bank (New)	May-28
	WS-4 Substation 115 kV 2x15.9 MVAR Capacitor Bank (New)	May-28
	West Mesa-Arroyo 345 kV Line Shunt Reactor (50-100 MVAR) (New)	May-28
	Anthony-Vado 115 kV Line (Rebuild, Reconductor)	May-29
	Bovee-Eastlake 115 kV Line (New)	May-29
	Bovee-North Loop 115 kV Line (New)	May-29
2029	Eastlake-Sparks 115 kV Line (Reconductor)	May-29
	Salopek-Vado 115 kV Line (Rebuild, Reconductor)	May-29
	Vado 345/115 kV Autotransformers T1 & T2 (New)	May-29
	Thorn Substation 115 kV 2x15.9 MVAR Capacitor Bank (New)	May-29





Year	Project Description	Expected/Target Completion Date Month-Year
	Alamo 345/115/69 kV Switching Station (New)	May-30
	Mirage 345 kV Switching Station (New) & Related 345 kV Line Reconfiguration	May-30
	T_W1 345/115 kV Switching Station (New) & Related 345 kV Line Reconfiguration	May-30
	Airport-Mirage 345 kV Line (New)	May-30
	Luna-Diablo 345 kV Line Reconfiguration (In-and-Out at Afton 345 kV Substation)	May-30
	Alamo-Bovee 115 kV Line (New)	May-30
2030	Alamo-Wicked 115 kV Line (New)	May-30
	Alamo-San Felipe (Voltage Conversion, Rebuild, Reconductor) 69 kV to 115 kV	May-30
	T_W1-WS-3 115 kV Line (New)	May-30
	Alamo 115/69 kV Autotransformer (New)	May-30
	T_W1 345/115 kV Autotransformer (New)	May-30
	Rio Grande Unit 6 Conversion to Synchronous Condenser	May-30
	McCombs Substation 115 kV 2x15.9 MVAR Capacitor Bank (New)	May-30
	WS-1 Substation 115 kV 2x15.9 MVAR Capacitor Bank (New)	May-30

Notes:

1. Table does not include maintenance projects except for transmission line rebuilds and or conductor upgrades.

2. System Planning & Interconnections recommends completion prior to May for the given to aid with the summer peak period.





#### Table 5. Project Schedule (2031-2035)

Year	Project Description	Expected/Target Completion Date Month-Year
	Americas Substation (Voltage Conversion) 69 kV to 115 kV	May-31
	Pine 345/115 kV Switching Station (New)	May-31
	Caliente-Pine 345 kV Line (New)	May-31
	Americas-Lane (Voltage Conversion, Rebuild, Reconductor) 69 kV to 115 kV	May-31
	Airport-Arroyo 115 kV Line (New)	May-31
2031	Apollo-Moongate 115 kV Line (Reconductor)	May-31
	Escondido-Oro Grande 115 kV Line (Reconductor)	May-31
	Oro Grande-Amrad 115 kV Line (Reconductor)	May-31
	HVDC Tie Replacement (New)	May-31
	Amrad 345/115 kV Autotransformer (New)	May-31
	Pine 345/115 kV Autotransformer (New)	May-31
	Pine Substation 115kV 2x15.9 MVAR Capacitor Bank (New)	May-31
	Marlow-Trowbridge 115 kV Line (Rebuild, Reconductor)	May-32
2032	Newman - McCombs 115 kV Line Circuit 1 (Reconductor)	May-32
2032	Newman - McCombs 115 kV Line Circuit 2 (Reconductor)	May-32
	Newman - Roberts 115 kV Line Circuit 1 (Reconductor)	May-32
2033	No Plan Projects Identified	
	Caliente-MPS 115 kV Circuit 1 (Partial Reconductor)	May-34
	Caliente-MPS 115 kV Circuits 2&3 Common Structure Separation	May-34
2034	Rio Grande-Executive-Sunset North 115 kV Path (Rebuild, Reconductor)	May-34
	WS-2 Substation 115 kV 2x15.9 MVAR Capacitor Bank (New)	May-34
2035	Alamo-Pine 345 kV Line (New)	May-35
2000	Alamo 345/115 kV Autotransformer (New)	May-35

Notes:

1. Table above does not include maintenance projects except for transmission line rebuilds and or conductor upgrades.

2. System Planning & Interconnections recommends completion prior to May for the given to aid with the summer peak period.





#### 5.2 Planned EPE Reactive Device Projects

Planned EPE reactive device projects with projected in-service dates between 2026-2035 needed to support the local EPE transmission system are summarized in Table 5 below. The in-service dates shown in Section 7 may differ from the completion dates identified in Table 5 due to budgetary or procurement constraints.

Year	Project Description	System Upgrade Needed	Expected/Target Completion Date Month-Year				
2025	Ascarate	Existing 69 kV Capacitor (1x30.0 MVAR)	May-25				
	Eastlake	New 115 kV Capacitors (2x15.9 MVAR)	May-26				
2026	San Felipe	New 115 kV Capacitors (2x15.9 MVAR)	May-26				
2020	Bovee	New 115 kV Capacitors (2x15.9 MVAR)	Dec-26				
	Eastwind	New 115 kV Capacitors (2x15.9 MVAR)	Dec-26				
	EA-1 Substation	New 115 kV Capacitors (2x15.9 MVAR)	May-27				
	EA-2 Substation	New 115 kV Capacitors (2x15.9 MVAR)	May-27				
2027	FE-7 Substation	New 115 kV Capacitors (3x15.9 MVAR)	May-27				
	Rio Bosque	New 69 kV Capacitor (1x15.9 MVAR)	May-27				
	WS-3 Substation	New 115 kV Capacitors (2x15.9 MVAR)	May-27				
2028	McCloud East	New STATCOM (±200 MVAR)	May-28				
2028	Leasburg	New 115 kV Capacitors (2x15.9 MVAR)	May-28				

#### Table 6. Reactive Project Schedule





	System Upgrade Needed	Completion Date Month-Year
Marvin	New 115 kV Capacitors (2x15.9 MVAR)	May-28
WS-4 Substation	New 115 kV Capacitors (2x15.9 MVAR)	May-28
Thorn	New 115 kV Capacitors (2x15.9 MVAR)	May-29
Rio Grande Unit 6	Conversion to Synchronous Condenser	May-30
McCombs Substation	New 115 kV Capacitors (2x15.9 MVAR)	May-30
WS-1 Substation	New 115 kV Capacitors (2x15.9 MVAR)	May-30
Pine Substation	New 115 kV Capacitors (2x15.9 MVAR)	May-31
	·	
WS-2 Substation	New 115 kV Capacitors (2x15.9 MVAR)	May-33
	WS-4 Substation Thorn Rio Grande Unit 6 McCombs Substation WS-1 Substation Pine Substation	Marvin(2x15.9 MVAR)WS-4 SubstationNew 115 kV Capacitors (2x15.9 MVAR)ThornNew 115 kV Capacitors (2x15.9 MVAR)Rio Grande Unit 6Conversion to Synchronous CondenserMcCombs SubstationNew 115 kV Capacitors (2x15.9 MVAR)WS-1 SubstationNew 115 kV Capacitors (2x15.9 MVAR)Pine SubstationNew 115 kV Capacitors (2x15.9 MVAR)WS-2 SubstationNew 115 kV Capacitors (2x15.9 MVAR)





# 6 EPE TRANSMISSION PLANNED PROJECTS MAPS





#### 6.1 NEW TRANSMISSION PROJECTS MAP

MAP 1. EAST & FAR EAST AREA (2026-2030)









#### MAP 2. EAST & FAR EAST REGION (2031-2035)

















#### MAP 4. NORTHEAST AREA (2026-2035)



















# 7 TRANSMISSION PROJECT SUMMARY





#### 7.1 Transmission Project Summary Template

#### TRANSMISSION PROJECT SUMMARY

Transmission Projects will be identified with the following format.

#### PLANNED PROJECTS YEAR XXXX

- **Project Name:** Commonly used name by El Paso Electric Company for a transmission or substation system expansion capital project. Projects of a normal maintenance nature and those located external to the EPE's transmission network are normally not included here.
- **<u>Operating Voltage:</u>** The operational voltage level(s) of the system element(s).
- **In-Service Date:** This is recommended project completion date. In general, it is recommended that projects be completed by May of the installation year, so that the anticipated system peak load demand is met.

**Project Description:** A general description of the project.

**Project Justification:** Project need is identified.





7.2 Transmission Projects in 2026




Project Name:	McCloud East 115 kV Substation (New) & Related 115 kV Line Reconfigurations
<b>Operating Voltage:</b>	115 kV
In-Service Date:	January 2026
Project Description:	This project involves the construction of a new McCloud East 115 kV Substation. The 115 kV Line Reconfigurations consists of splitting the following existing 115 kV circuits to introduce the McCloud East Substation: Roberts to Pipeline, Roberts to Picante, and Chaparral to Escondido. The Reconfiguration also includes the reconductoring of the Roberts to Pipeline & Roberts to Picante with a conductor that provides a minimum normal and emergency capacity rating of 380 MVA.
Project Justification:	This project has been identified as part of a facilities upgrade required to address expected load growth in the Northeast El Paso Area. Additionally, the project will allow EPE to mitigate contingency overloads.





Project Name:	Sparks-San Felipe Line (Voltage Conversion, Rebuild, Reconductor) 69 kV to 115 kV
Operating Voltage:	115 kV
In-Service Date:	January 2026
Project Description:	This project will involve the conversion and reconductoring of the Sparks to San Felipe transmission line from 69 kV to 115 kV with a minimum normal and emergency capacity rating of 380 MVA.
Project Justification:	This project is part of the East Side Loop Expansion Project and will enable EPE to address expected development and load growth in the Far East El Paso Area. Additionally, the project will allow EPE to mitigate contingency overloads.





**Project Name:** Pellicano-Montwood 115 kV Line (Reconductor)

Operating Voltage: 115 kV

- In-Service Date: May 2026
- **Project Description:** The project consists of reconductoring the Pellicano to Montwood 115 kV transmission line with conductor that provides a minimum normal and emergency capacity rating of 380 MVA.
- **Project Justification:** This project has been identified as part of a facilities upgrade required to address expected load growth in the Far East El Paso Area. Additionally, the project will allow EPE to mitigate contingency overloads.





**Project Name:** Lane-Americas 69 kV Line (Reconductor)

Operating Voltage: 69 kV

#### In-Service Date: May 2026

- **Project Description:** The project consists of reconductoring the Lane to Americas 69 kV transmission line with conductor that provides a minimum normal and emergency capacity rating of 230 MVA.
- **Project Justification:** This project has been identified as part of a facilities upgrade required to address expected load growth in the East & Far East El Paso Area. Additionally, the project will allow EPE to mitigate contingency overloads. This transmission circuit will be converted to 115 kV in later years. It is suggested that the reconductoring and/or rebuild of the Lane to Americas 69 kV Line considers this future voltage conversion.





Project Name:	Rio Grande-Sunset 69 kV Circuit 1 (5500) (Rebuild, Reconductor)
<b>Operating Voltage:</b>	69 kV
In-Service Date:	May 2026
Project Description:	This project involves the reconductoring of the 5500 Rio Grande to Sunset 69 kV line with a conductor that provides a minimum normal and emergency capacity rating of 230 MVA.
Project Justification:	This line experiences increased loading during the summer peak months, a condition that is difficult to mitigate. The increase in line capacity will relieve operational mitigation measures and mitigate contingency overloads. Due to the complexity of the terrain, the final in-service date may be impacted.





Project Name:	Rio Grande-Sunset 69 kV Circuit 2 (5600) (Rebuild, Reconductor)
Operating Voltage:	69 kV
In-Service Date:	May 2026
Project Description:	This project involves the reconductoring of the 5500 Rio Grande to Sunset 69 kV line with a conductor that provides a minimum normal and emergency capacity rating of 230 MVA.
Project Justification:	This line experiences increased loading during the summer peak months, a condition that is difficult to mitigate. The increase in line capacity will relieve operational mitigation measures and mitigate contingency overloads. Due to the complexity of the terrain, the final in-service date may be impacted.





Project Name: Eastlake Substation 115 kV Capacitor Ba
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- Operating Voltage: 115 kV
- In-Service Date: May 2026

# **Project Description:** The project consists of the addition of two 15.9 MVAR bus shunt capacitor banks connected to the 115 kV bus.

**Project Justification:** This project has been identified to improve reactive capability and voltage profiles in the Far East El Paso Area during high load conditions.





Project Name: San Felipe Substation 115 kV Capacitor Bank Addition (New)

- Operating Voltage: 115 kV
- In-Service Date: May 2026
- **Project Description:** The project consists of the addition of two 15.9 MVAR bus shunt capacitor banks connected to the 115 kV bus.
- **Project Justification:** This project has been identified to improve reactive capability and voltage profiles in the Far East El Paso Area during high load conditions.





Project Name: Bovee 115/69 kV Substation (New) & Related 69 kV Line Reconfiguration

Operating Voltage: 115/69 kV

#### In-Service Date: December 2026

- **Project Description:** This project involves the construction of a new Bovee 115/69 kV Substation. The 69 kV Line Reconfiguration consists of splitting the Americas to Valley 69 kV circuit to introduce the Bovee 115/69 kV Substation. The new path will consist of Americas to Bovee to Valley 69 kV Circuits. Although this substation will be built with 115 kV & 69 kV Buses, it will initially only be served through the 69 kV System. This will be the case until the 115 kV circuits out of Bovee get constructed in later years.
- **Project Justification:** This project has been identified as part of a facilities upgrade required to address expected load growth in the Far East El Paso Area. Additionally, the project will allow EPE to mitigate contingency overloads.





TEAR 2020	
Project Name:	Eastwind 115 Substation (New) & Related 115 kV Line Reconfiguration
Operating Voltage:	115 kV
In-Service Date:	December 2026
Project Description:	This project involves the construction of a new Eastwind 115 kV Substation. The 115 kV Line Reconfiguration consists of splitting the Sparks to San Felipe 115 kV circuit to introduce the Eastwind 115 kV Substation. The new path will consist of Sparks to Eastwind to San Felipe 115 kV Circuits.
Project Justification:	This project has been identified as part of a facilities upgrade required to address expected load growth in the Far East El Paso Area. Additionally, the project will allow EPE to mitigate contingency overloads.





Project Name: Bovee Substation 115 kV Capacitor Bank Addition (New)

- Operating Voltage: 115 kV
- In-Service Date: December 2026

## **Project Description:** The project consists of the addition of two 15.9 MVAR bus shunt capacitor banks connected to the 115 kV Bus.

**Project Justification:** This project has been identified to improve reactive capability and voltage profiles in the Far East El Paso Area during high load conditions.





Project Name: Eastwind Substation 115 kV Capacitor Bank Addition (New)

- Operating Voltage: 115 kV
- In-Service Date: December 2026

## **Project Description:** The project consists of the addition of two 15.9 MVAR bus shunt capacitor banks connected to the 115 kV Bus.

**Project Justification:** This project has been identified to improve reactive capability and voltage profiles in the Far East El Paso Area during high load conditions.





7.3 Transmission Projects in 2027





**Project Name:** Chaparral-Escondido 115 kV Line (Reconductor)

Operating Voltage: 115 kV

In-Service Date: January 2027

- **Project Description:** This project consists of the reconductoring of a 115 kV transmission line from Chaparral to Escondido with a minimum normal and emergency capacity rating of 760 MVA. With the introduction of McCloud East 115 kV Substation, the new 115 kV path is Chaparral to McCloud East to Escondido.
- **Project Justification:** This project has been identified as part of a facilities upgrade required to address and mitigate contingency overloads.





Project Name: Marvin (FE6) Substation 115 kV (New) & Related 115 kV Line Reco
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- Operating Voltage: 115 kV
- In-Service Date: May 2027
- **Project Description:** This project involves the construction of a new Marvin (FE6) 115 kV Substation, which will be replacing the Coyote Temp Substation. The 115 kV Line Reconfiguration consists of splitting the Montwood to MPS 115 kV Line to introduce Marvin (FE6) Substation. The new Path will consist of Montwood to Marvin to MPS 115 kV circuits. This substation will be part of the East Side Loop Expansion Project.
- **Project Justification:** This project is a part of the East Side Loop Expansion Project and is needed to address expected development and load growth in the East and Far East El Paso Area. Additionally, the project will allow EPE to mitigate contingency overloads.





- Project Name:Seabeck Switching Station 115 kV (New) and Related 115 kV Line<br/>Reconfiguration
- Operating Voltage: 115 kV
- In-Service Date: May 2027
- **Project Description:** This project involves the construction of a new Seabeck 115 kV Switching Station that will be part of the East Side Loop Expansion Project. The 115 kV Line Reconfiguration will consist of splitting the Horizon to Wicked 115 kV Line to introduce Seabeck Substation. The new Path will consist of Horizon to Seabeck to Wicked 115 kV Circuits.
- **Project Justification:** This project is a part of the East Side Loop Expansion Project and is needed to address expected development and load growth in the East and Far East El Paso Area. Additionally, the project will allow EPE to mitigate contingency overloads.





Project Name:	Arroyo-Moongate 115 kV Line (Reconfiguration, Reconductor)
Operating Voltage:	115 kV
In-Service Date:	May 2027
Project Description:	This 115 kV Line Reconfiguration involves the splitting of the Arroyo to Apollo 115 kV circuit to introduce Moongate Substation. The new Path will consist of the Arroyo to Moongate to Apollo 115 kV Circuits. This reconfiguration also consists of the reconductoring of the 115 kV Line from Arroyo to Moongate with a minimum normal and emergency capacity rating of 380 MVA.
Project Justification:	This project has been identified as part of a facilities upgrade required to address and mitigate contingency overloads.





**Project Name:** Ascarate-Trowbridge 115 kV Line (Reconductor)

Operating Voltage: 115 kV

In-Service Date: May 2027

- **Project Description:** The project consists of reconductoring the Ascarate to Trowbridge 115 kV transmission line with conductor that provides a minimum normal and emergency capacity rating of 380 MVA.
- **Project Justification:** This project has been identified as part of a facilities upgrade required to address and mitigate contingency overloads.





Project Name: Marvin-Seabeck 115 kV Line (New)

- Operating Voltage: 115 kV
- In-Service Date: May 2027

# **Project Description:** This project consists of constructing a new 115 kV transmission line from Marvin to Seabeck with a minimum normal and emergency capacity rating of 380 MVA.

**Project Justification:** This project is a part of the East Side Loop Expansion Project and is needed to address expected development and load growth in the East and Far East El Paso Area. Additionally, the project will allow EPE to mitigate contingency overloads.





**Project Name:** Thorn-Ripley 115 kV Line (Reconductor)

- Operating Voltage: 115 kV
- In-Service Date: May 2027
- **Project Description:** This project consists of reconductoring the Thorn to Ripley 115 kV transmission line with conductor that provides a minimum normal and emergency capacity rating of 380 MVA.
- **Project Justification:** This project has been identified as part of a facilities upgrade required to address and mitigate contingency overloads.





**Project Name:** Americas-Bovee 69 kV Line (Reconductor)

- **Operating Voltage:** 69 kV
- In-Service Date: May 2027
- **Project Description:** The project consists of reconductoring the future Americas to Bovee 69 kV transmission line with conductor that provides a minimum normal and emergency capacity rating of 230 MVA.
- **Project Justification:** This project has been identified as part of a facilities upgrade required to address and mitigate contingency overloads.





**Project Name:** Rio Bosque-Ascarate 69 kV Line (Reconductor)

- **Operating Voltage:** 69 kV
- In-Service Date: May 2027
- **Project Description:** The project consists of reconductoring the Rio Bosque to Ascarate 69 kV transmission line with conductor that provides a minimum normal and emergency capacity rating of 230 MVA.
- **Project Justification:** This project has been identified as part of a facilities upgrade required to address and mitigate contingency overloads.





**Project Name:** EA-1 Substation 115 kV Capacitor Bank Addition (New)

- Operating Voltage: 115 kV
- In-Service Date: May 2027

# **Project Description:** The project consists of the addition of two 15.9 MVAR bus shunt capacitor banks connected to the 115 kV Bus.

**Project Justification:** This project has been identified to improve reactive capability and voltage profiles in the East El Paso Area during high load conditions.





**Project Name:** EA-2 Substation 115 kV Capacitor Bank Addition (New)

- Operating Voltage: 115 kV
- In-Service Date: May 2027

# **Project Description:** The project consists of the addition of two 15.9 MVAR bus shunt capacitor banks connected to the 115 kV Bus.

**Project Justification:** This project has been identified to improve reactive capability and voltage profiles in the East El Paso Area during high load conditions.





**Project Name:** FE-7 Substation 115 kV Capacitor Bank Addition (New)

- Operating Voltage: 115 kV
- In-Service Date: May 2027
- **Project Description:** The project consists of the addition of two 15.9 MVAR bus shunt capacitor banks connected to the 115 kV Bus.
- **Project Justification:** This project has been identified to improve reactive capability and voltage profiles in the Far East El Paso Area during high load conditions.





Project Name:	Rio Bosque Substation Additional 69 kV Capacitor Bank Addition
<b>Operating Voltage:</b>	69 kV
In-Service Date:	May 2027
Project Description:	The project consists of an additional stage with a capacity of 15.9 MVAR to the existing 69 kV Capacitor Bank. The capacitor bank will be a three-stage bank with the following configuration: Stage 1 – 15.6 MVAR, Stage 2 – 15.6 MVAR, Stage 3 – New 15.9 MVAR.
Project Justification:	This project has been identified to improve reactive capability and voltage profiles in the Far East El Paso Area during high load conditions.





Project Name: WS-3 Substation 115 kV Capacitor Bank Addition (New)

- Operating Voltage: 115 kV
- In-Service Date: May 2027
- **Project Description:** The project consists of the addition of two 15.9 MVAR bus shunt capacitor banks connected to the 115 kV Bus.
- **Project Justification:** This project has been identified to improve reactive capability and voltage profiles in the West El Paso Area during high load conditions.





7.4 Transmission Projects in 2028





**Project Name:** Afton North 345 kV Switching Station (New)

- Operating Voltage: 345 kV
- In-Service Date: May 2028
- **Project Description:** This project involves the construction of a new Afton North 345 kV Switching Station. The Afton North 345 kV Bus will be used to connect multiple 345 kV Circuits in an effort to increase the reliability and strength of EPE's Transmission System.
- Project Justification:This project has been identified as part of the Afton to Afton North to Vado 345 kV<br/>Path that will increase the El Paso Import Capability (EPIC) as well as the reliability<br/>of the 345 kV System. The additional 345 kV circuits out of Afton North will assist<br/>with addressing contingency overloads.





Project Name: Airport 345/115/24 kV Substation

Operating Voltage: 345/115/24 kV

In-Service Date: May 2028

- Project Description:This project involves the construction of a new Airport 345/115/24 KV Substation.<br/>The Airport 345 & 115 kV Buses will be used to connect multiple circuits at these<br/>voltage levels as an effort to increase the reliability of EPE's Transmission System.<br/>This substation will also be replacing the existing Airport 115/24 kV Substation.
- **Project Justification:** This project, along with the 345 kV & 115 kV in the area, has been identified to increase the El Paso Import Capability (EPIC) as well as the reliability of the Transmission System. The additional 345 & 115 kV circuits out of Airport will help assist with contingency overloads.





Project Name: Dyer Substation (Voltage Conversion) 69 kV to 115 kV

- Operating Voltage: 115 kV
- In-Service Date: May 2028
- **Project Description:** This project involves the conversion of the Dyer 69kV Bus to 115 kV. This involves the conversion of the following from 69 kV to 115 kV: Dyer to Austin Transmission Line, Distribution Transformers T1 & T2.
- **Project Justification:** The conversion from 69 kV to 115 kV results in increased reliability by addressing and mitigating existing contingency overloads.





Project Name: Vado Substation 345/115 kV (New)

- Operating Voltage: 345/115 kV
- In-Service Date: May 2028
- **Project Description:** The addition of Vado 345/115 kV Substation involves several elements. The project involves an in-and-out connection on the Afton to Newman 345 kV transmission line with terminations into Vado 345 kV resulting in the Afton to Vado 345 kV Line and the Vado to Newman 345 kV Line. It is also planned to add an additional Airport to Vado 345 kV Line and two new Vado 345/115 kV Autotransformers to connect the Vado 115 kV/345 kV system. With the addition of Vado Substation in 2028, there will also be an in-and-out connection on the Anthony to Salopek 115 kV Line resulting in the Anthony to Vado 115 kV and Vado to Salopek 115 kV Lines thereafter.
- **Project Justification:** This project is part of the Afton, Airport, and Vado projects that will increase El Paso Import Capability (EPIC) as well as the reliability of EPE's Transmission System. The additional 345 & 115 kV circuits out of Vado will assist with addressing contingency overloads.





Project Name:	Afton-Newman 345 kV In and Out into Vado 345 kV Substation Line Reconfiguration
<b>Operating Voltage:</b>	345 kV
In-Service Date:	May 2028
Project Description:	The Afton to Newman 345 kV Line Reconfiguration consists of several elements. The reconfiguration will consist of cutting into the Afton to Newman 345 kV Line to connect to Vado 345 kV Bus. The new Path will consist of Afton to Vado to Newman 345 kV Circuits.
Project Justification:	This project has been identified as part of the Afton to Vado to Newman 345 kV Path that will increase the El Paso Import Capability (EPIC) as well as the reliability of the 345 kV System. This project will increase the El Paso Import Capability (EPIC) and improve the reliability of the transmission system. The additional 345 kV circuits will assist with addressing contingency overloads.





**Project Name:** Afton North-Airport 345 kV Line (New)

- Operating Voltage: 345 kV
- In-Service Date: May 2028
- **Project Description:** A new 345 kV transmission line is planned to be built from Afton North Substation to Airport Substation with a minimum normal and emergency capacity rating of 2320 MVA. The Afton North to Airport connection will become one of the main serving points for the Airport Substation.
- **Project Justification:** This transmission line in conjunction with a projected project consisting of a 345/115 kV Autotransformer at Airport Substation, will serve the load at Airport. This transmission line will enhance the system reliability and strengthen the 345 kV transmission system.





Project Name: Afton-Afton North 345 kV Line (New)

- Operating Voltage: 345 kV
- In-Service Date: May 2028
- **Project Description:** A new 345 kV transmission line is planned to be built from Afton Substation to Afton North Substation with a minimum normal and emergency capacity rating of 2320 MVA. This 345 kV Circuit is part of a 345 kV Path that will increase the reliability and strength of EPE's Transmission System.
- Project Justification:This project has been identified as part of the Afton to Afton North to Vado 345 kV<br/>Path that will increase the El Paso Import Capability (EPIC) as well as the reliability<br/>of the 345 kV System. The additional 345 kV circuits out of Afton North will assist<br/>with addressing contingency overloads.





Project Name: Afton North-Vado 345 kV Line (New)

Operating Voltage: 345 kV

In-Service Date: May 2028

- **Project Description:** A new 345 kV transmission line is planned to be built from Afton North Substation to Vado Substation with a minimum normal and emergency capacity rating of 2320 MVA. This 345 kV Circuit is part of a 345 kV Path that will increase the reliability and strength of EPE's Transmission System.
- Project Justification:This project has been identified as part of the Afton to Afton North to Vado 345 kV<br/>Path that will increase the El Paso Import Capability (EPIC) as well as the reliability<br/>of the 345 kV System. The additional 345 kV circuits out of Afton North will assist<br/>with addressing contingency overloads.




Project Name: Eastwind-Seabeck 115 kV Line (New)

- Operating Voltage: 115 kV
- In-Service Date: May 2028
- **Project Description:** This project consists of the construction of a new 115 kV transmission line from Eastwind to Seabeck with a minimum normal and emergency capacity rating of 380 MVA.
- **Project Justification:** This project has been identified as part of a facilities upgrade required to address expected load growth in the Far East El Paso Area. Additionally, the project will allow EPE to mitigate contingency overloads.





Project Name:	Jornada-Arroyo 115 kV Line (Rebuild, Reconductor)
<b>Operating Voltage:</b>	115 kV
In-Service Date:	May 2028
Project Description:	This project consists of rebuilding/reconductoring the Jornada to Arroyo 115 kV Line to increase the capacity of the line with a minimum normal and emergency capacity rating of 380 MVA.
Project Justification:	The line experiences an increase in loading under heavy summer conditions. The increase in line rating with a minimum normal and emergency capacity rating of 380 MVA will relieve identified contingency overloads.





**Project Name:** Airport 345/115 kV Autotransformer (New)

Operating Voltage: 345/115 kV

In-Service Date: May 2028

- **Project Description:** A new Airport 345/115 kV autotransformer will enhance system reliability. This autotransformer will serve as the connection point from the load at Airport to its serving point through the 345 kV Line from Airport to Afton North.
- **Project Justification:** This transmission line in conjunction with a projected project consisting of a 345/115 kV Autotransformer at Airport Substation, will serve the load at Airport. This transmission line will enhance the system reliability and strengthen the 345 kV transmission system.





Project Name:	McCloud East Substation   ±200 MVAR STATCOM (New)
Operating Voltage:	115 kV
In-Service Date:	May 2028
Project Description:	The project consists of the addition of a new ± 200 MVAR STATCOM at McCloud East Substation. It has been identified that the STATCOM or an alternate dynamic reactive support device will provide transient stability to EPE's Transmission System.
Project Justification:	This project has been identified to improve the dynamic reactive capability and voltage profiles in EPE's Transmission System. This project also provides stability to EPE's system during transient times by providing reactive support to prevent large voltage swings that can cause instability in EPE's Transmission System.





Project Name:	Leasburg Substation 115 kV Capacitor Bank Addition (New)
<b>Operating Voltage:</b>	115 kV
In-Service Date:	May 2028
Project Description:	The project consists of the addition of two 15.9 MVAR bus shunt capacitor banks connected to the 115 kV Bus.
Project Justification:	This project has been identified to improve reactive capability and voltage profiles in the Las Cruces Area during high load conditions.





Project Name: Marvin Substation 115 kV Capacitor Bank Addition (New)

- Operating Voltage: 115 kV
- In-Service Date: May 2028
- **Project Description:** The project consists of the addition of two 15.9 MVAR bus shunt capacitor banks connected to the 115 kV Bus.
- **Project Justification:** This project has been identified to improve reactive capability and voltage profiles in the Far East El Paso Area during high load conditions.





Project Name:	West Mesa - Arroyo 345 kV Line Shunt Reactor 50-100 MVAR (New)
<b>Operating Voltage:</b>	345 kV
In-Service Date:	December 2028
Project Description:	The project consists of the addition of a new 50 to 100 MVAR in-line reactor on the West Mesa to Arroyo 345 kV line.
Project Justification:	This project has been identified to improve reactive capability and voltage profiles

in the Southern New Mexico area of EPE's System.





Project Name: WS-4 Substation 115 kV Capacitor Bank Addition (New)

- Operating Voltage: 115 kV
- In-Service Date: May 2028
- **Project Description:** The project consists of the addition of two 15.9 MVAR bus shunt capacitor banks connected to the 115 kV Bus.
- **Project Justification:** This project has been identified to improve reactive capability and voltage profiles in the West El Paso Area during high load conditions.





7.5 Transmission Projects in 2029





Project Name:	Anthony-Vado 115 kV Line (Rebuild, Reconductor)
<b>Operating Voltage:</b>	115 kV
In-Service Date:	May 2029
Project Description:	With the addition of Vado Substation in 2028, there will be an in-and- out connection on the Anthony to Salopek 115 kV Line resulting in the Anthony to Vado 115 kV and Vado to Salopek 115 kV Lines thereafter. By this year, with the addition of Vado Substation and these connections additional capacity will be needed on the 115 kV lines out of Vado Substation. The new capacity of the Anthony to Vado 115 kV Line must have a minimum of 380 MVA under normal and emergency conditions.
Project Justification:	The increased capacity of this line will allow EPE to serve West El Paso load from the Afton and Vado area increasing reliability and adding system flexibility under contingency and maintenance situations.





Project Name: Bovee-Eastlake 115 kV Line (New)

- Operating Voltage: 115 kV
- In-Service Date: May 2029
- **Project Description:** This project consists of the construction of a new 115 kV transmission line from Bovee to Eastlake with a minimum normal and emergency capacity rating of 380 MVA. With the completion of this circuit, the load at Bovee can now be served through the 115 kV Bus at Bovee.
- **Project Justification:** This project has been identified as part of a facilities upgrade required to address expected load growth in the Far East El Paso Area. Additionally, the project will allow EPE to mitigate contingency overloads.





Project Name:	Bovee-Northloop 115 kV Line (Reconductor)
Operating Voltage:	115 kV
In-Service Date:	May 2029
Project Description:	This project consists of the construction of a new 115 kV transmission line from Bovee to Northloop with a minimum normal and emergency capacity rating of 380 MVA. With the completion of this circuit, the load at Bovee can now be served through the 115 kV Bus at Bovee.
Project Justification:	This project has been identified as part of a facilities upgrade required to address expected load growth in the Far East El Paso Area. Additionally, the project will allow EPE to mitigate contingency overloads.





**Project Name:** Eastlake-Sparks 115 kV Line (Reconductor)

- Operating Voltage: 115 kV
- In-Service Date: May 2029
- **Project Description:** This project consists of reconductoring the Eastlake to Sparks 115 kV transmission line with a conductor that provides a minimum normal and emergency capacity rating of 380 MVA.
- **Project Justification:** This project has been identified as part of a facilities upgrade required to address expected load growth in the Far East El Paso Area. Additionally, the project will allow EPE to mitigate contingency overloads.





Project Name:	Vado-Salopek 115 kV Line (Rebuild, Reconductor)
<b>Operating Voltage:</b>	115 kV
In-Service Date:	May 2029
Project Description:	With the addition of Vado Substation in 2028, there will be an in-and- out connection on the Anthony to Salopek 115 kV Line resulting in the Anthony to Vado 115 kV and Vado to Salopek 115 kV Lines thereafter. By this year with the addition of Vado Substation and these connections, additional capacity will be needed on the 115 kV lines out of Vado Substation. The new capacity of the Vado to Salopek 115 kV Line must have a minimum of 380 MVA under normal and emergency conditions.
Project Justification:	The increased capacity of this line will allow EPE to serve West El Paso load from the Afton and Vado area increasing reliability and adding system flexibility under contingency and maintenance situations.





Project Name:	Vado 345/115 kV Autotransformers T1 & T2 (New)
Operating Voltage:	345/115 kV
In-Service Date:	May 2029
Project Description:	It is planned to add two new Vado 345/115 kV Autotransformers to connect the Vado 345/115 kV system.
Project Justification:	This project has been identified as part of a facilities addition required to address and mitigate contingency overloads as well as enhance system reliability. The two autotransformers are approximately matched capacity-wise with the rating of the two 115 kV lines. In addition, each of these autotransformers will be a backup for each other under planned or unplanned out-of-service conditions of one of them.





Project Name: Thorn Substation 115 kV Capacitor Bank Addition (New)

- Operating Voltage: 115 kV
- In-Service Date: May 2029
- **Project Description:** The project consists of the addition of two 15.9 MVAR bus shunt capacitor banks connected to the 115 kV Bus.
- **Project Justification:** This project has been identified to improve reactive capability and voltage profiles in the West El Paso Area during high load conditions.





7.6 Transmission Projects in 2030





**Project Name:** Alamo 345/115/69 kV Switching Station (New)

- **Operating Voltage:** 345 kV
- In-Service Date: May 2030
- **Project Description:** This project involves the construction of a new Alamo 345/115/69 kV Switching Station. The Alamo 345 & 115 kV Buses will be used to connect multiple circuits at these voltage levels as an effort to increase the reliability of EPE's Transmission System. This substation will also be replacing the existing Alamo 69 kV Substation.
- **Project Justification:** This project, along with the 345 kV & 115 kV in the area, has been identified to increase the reliability of the Transmission System. The additional 345 & 115 kV circuits out of Alamo will help assist with contingency overloads.





Project Name:	Mirage 345 kV Switching Station (New) & Related 345 kV Line Reconfiguration
Operating Voltage:	345 kV
In-Service Date:	May 2030
Project Description:	This project involves the construction of a new Mirage 345 kV Switching Station. The 345 kV Line Reconfiguration consists of splitting the Macho Springs to Luna 345 kV circuit to introduce the Mirage 345 kV Substation. The new Path will consist of Luna to Mirage to Macho Springs 345 kV Circuits.
Project Justification:	Mirage 345 kV Switching Station will be in Luna County, New Mexico and will intercept the Macho Springs to Luna 345 kV Line, as mentioned above. The addition of this substation along with the additional 345 kV Circuit will provide supported reliability, system flexibility, and will reduce system contingency overloads.





Project Name: T\_W1 345/115 kV Switching Station (New) & Related 345 kV Line Reconfiguration

- Operating Voltage: 345/115 kV
- In-Service Date: May 2030
- **Project Description:** This project involves the construction of a new T\_W1 345/115 kV Switching Station. The 345 kV Line Reconfiguration consists of splitting the Afton to Diablo 345 kV circuit to introduce the T\_W1 345/115 kV Substation. The new Path will consist of Afton to T\_W1 to Diablo 345 kV Circuits.
- **Project Justification:** This project, along with the 345 kV & 115 kV in the area, has been identified to increase the El Paso Import Capability (EPIC) as well as the reliability of the Transmission System. The 345 & 115 kV circuits out of T\_W1 will help assist with contingency overloads.





Project Name:	Airport-Mirage 345 kV Line (New)
<b>Operating Voltage:</b>	345 kV
In-Service Date:	May 2030
Project Description:	A new 345 kV transmission line is planned to be built from Airport Substation to Mirage Substation with a minimum normal and emergency capacity rating of 2320 MVA. The Airport to Mirage connection will become one of the main serving points for the Airport Substation.
Project Justification:	This transmission line in conjunction with the substation will provide supported reliability, system flexibility, and will mitigate contingency overloads.





Project Name:	Luna-Diablo 345 kV Line Reconfiguration (In-and-Out at Afton 345 kV Substation)
<b>Operating Voltage:</b>	345 kV
In-Service Date:	May 2030
Project Description:	The Luna to Diablo 345 kV Line Reconfiguration consists of cutting into this line to connect to the Afton 345 kV Substation. This transmission line reconfiguration will improve system reliability and increase the El Paso Import Capability (EPIC).
Project Justification:	This project has been identified as a need to address and mitigate contingency overloads. This project will strengthen the 345 kV transmission system and help increase EPIC.





Project Name: Alamo-Bovee 115 kV Line (New)

- Operating Voltage: 115 kV
- In-Service Date: May 2030
- **Project Description:** A new 345 kV transmission line is planned to be built from Alamo Substation to Bovee Substation with a minimum normal and emergency capacity rating of 380 MVA.
- **Project Justification:** This project has been identified as part of a facilities upgrade required to address expected load growth in the Far East El Paso Area. Additionally, the project will allow EPE to mitigate contingency overloads.





Project Name: Alamo-Wicked 115 kV Line (New)

- Operating Voltage: 115 kV
- In-Service Date: May 2030
- **Project Description:** A new 115 kV transmission line is planned to be built from Alamo Substation to Wicked Substation with a minimum normal and emergency capacity rating of 380 MVA.
- **Project Justification:** This project has been identified as part of a facilities upgrade required to address expected load growth in the Far East El Paso Area. Additionally, the project will allow EPE to mitigate contingency overloads.





Project Name:	Alamo-San Felipe (Voltage Conversion, Rebuild, Reconductor) 69 kV to 115 kV
<b>Operating Voltage:</b>	115 kV
In-Service Date:	May 2030
Project Description:	This project will involve the conversion and reconductoring of the Alamo to San Felipe transmission line from 69 kV to 115 kV with a minimum normal and emergency capacity rating of 380 MVA.
Project Justification:	This project has been identified as part of a facilities upgrade required to address expected load growth in the Far East El Paso Area. Additionally, the project will allow EPE to mitigate contingency overloads.





Project Name: T\_W1-WS-3 115 kV Line (New)

- Operating Voltage: 115 kV
- In-Service Date: May 2030
- **Project Description:** A new 115 kV transmission line is planned to be built from T\_W1 Substation to WS-3 Substation with a minimum normal and emergency capacity rating of 380 MVA.
- **Project Justification:** This project, along with the 345 kV & 115 kV in the area, has been identified to increase the El Paso Import Capability (EPIC) as well as the reliability of the Transmission System. The 345 & 115 kV circuits out of T\_W1 will help assist with contingency overloads.





Project Name: Alamo 115/69 kV Autotransformer (New)

- Operating Voltage: 115/69 kV
- In-Service Date: May 2030

# **Project Description:** This project identifies a new Alamo 115/69 kV autotransformer to connect the 115 kV & 69 kV Buses at Alamo Substation.

**Project Justification:** This project has been identified as part of a facilities upgrade required to address expected load growth in the Far East El Paso Area. Additionally, the project will allow EPE to mitigate contingency overloads.





**Project Name:** T\_W1 345/115 kV Autotransformer (New)

- Operating Voltage: 345/115 kV
- In-Service Date: May 2030
- Project Description:This project identifies a new T\_W1 345/115 kV autotransformer to connect the 345<br/>kV & 115 kV Buses at T\_W1 Substation.
- **Project Justification:** This project has been identified as part of a facilities upgrade required to address expected load growth in the West El Paso Area. Additionally, the project will allow EPE to mitigate contingency overloads.





- Project Name: Synchronous Condenser Conversion
- Operating Voltage: 69 kV
- In-Service Date: May 2030
- **Project Description:** Conversion of the thermal Rio Grande 6 Unit to a synchronous condenser.
- **Project Justification:** This project has been identified to improve reactive capability and voltage profiles in the West El Paso Area during high load conditions.





Project Name:	McCombs Substation 115 kV Capacitor Bank Addition (New)
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- Operating Voltage: 115 kV
- In-Service Date: May 2030
- **Project Description:** The project consists of the addition of two 15.9 MVAR bus shunt capacitor banks connected to the 115 kV Bus.
- **Project Justification:** This project has been identified to improve reactive capability and voltage profiles in the Northeast El Paso Area during high load conditions.





Project Name: WS-1 Substation 115 kV Capacitor Bank Addition (New)

- Operating Voltage: 115 kV
- In-Service Date: May 2030

# **Project Description:** The project consists of the addition of two 15.9 MVAR bus shunt capacitor banks connected to the 115 kV Bus.

**Project Justification:** This project has been identified to improve reactive capability and voltage profiles in the West El Paso Area during high load conditions.





7.7 Transmission Projects in 2031





Project Name:	Americas Substation (Voltage Conversion) 69 kV to 115 kV
Operating Voltage:	115 kV
In-Service Date:	May 2031
Project Description:	This project involves the conversion of the Americas 69kV Bus to 115 kV. This involves the conversion of the following from 69 kV to 115 kV: Americas to Lane & Americas to Bovee Transmission Line, and Distribution Transformer T1.
Project Justification:	This project will allow EPE to address expected development and load growth in the Far East El Paso Area. The conversion from 69 kV to 115 kV results in increased reliability by addressing and mitigating existing contingency overloads.





**Project Name:** Pine 345/115 kV Switching Station (New)

- Operating Voltage: 345 kV/115 kV
- In-Service Date: May 2031
- Project Description:This project involves the construction of a new Pine 345/115 kV Switching Station<br/>that will be part of the East Side Loop Expansion Project. The Pine 345 & 115 kV<br/>Buses will be used to connect multiple circuits at these voltage levels as an effort<br/>to increase the reliability of EPE's Transmission System.
- **Project Justification:** This project addresses any expected load growth in the Far East El Paso Area. It has been identified to increase the reliability of the Transmission System. The additional 345 & 115 kV circuits out of Pine will help assist with any contingency overloads.





Project Name: Caliente-Pine 345 kV Line (New)

- **Operating Voltage:** 345 kV
- In-Service Date: May 2031
- **Project Description:** A new 345 kV transmission line is planned to be built from Caliente Substation to Pine Substation with a minimum normal and emergency capacity rating of 2320 MVA.
- **Project Justification:** This transmission line in conjunction with the substation will provide supported reliability, system flexibility, and will reduce potential contingency overloads.





Project Name:	Americas-Lane (Voltage Conversion, Rebuild, Reconductor) 69 kV to 115 kV
Operating Voltage:	115 kV
In-Service Date:	May 2031
Project Description:	This project will involve the conversion of the Sparks to San Felipe transmission line from 69 kV to 115 kV with a minimum normal and emergency capacity rating of 380 MVA.
Project Justification:	This project will allow EPE to address expected development and load growth in the Far East El Paso Area. The conversion from 69 kV to 115 kV results in increased reliability by addressing and mitigating existing contingency overloads.




Project Name: Airport-Arroyo 115 kV Line (New)

- **Operating Voltage:** 115 kV
- In-Service Date: May 2031
- **Project Description:** This project consists of constructing a new 115 kV transmission line from Airport to Arroyo with a minimum normal and emergency capacity rating of 760 MVA.
- **Project Justification:** This project, along with the 345 kV circuits in the area, has been identified to increase the El Paso Import Capability (EPIC) as well as the reliability of the Transmission System. This new circuit will assist with the mitigations of contingency overloads in the area.





Project Name:	Apollo-Moongate 115 kV Line (Reconfiguration, Reconductor)
<b>Operating Voltage:</b>	115 kV
In-Service Date:	May 2031
Project Description:	The 115 kV Line Reconfiguration involves the splitting of the Arroyo to Apollo 115 kV circuit to introduce Moongate Substation. The new Path will consist of the Arroyo to Moongate to Apollo 115 kV Circuits. The reconfiguration is scheduled for 2027. This project has identified the reconductoring of the 115 kV Line from Apollo to Moongate with a minimum normal and emergency capacity rating of 380 MVA. This has been identified for a target completion date of May 2031.
Project Justification:	This project has been identified as part of a facilities upgrade required to address and mitigate contingency overloads.





**Project Name:** Escondido-Oro Grande 115 kV Line (Reconductor)

- Operating Voltage: 115 kV
- In-Service Date: May 2031
- **Project Description:** This project will involve the reconductoring of a 115 kV transmission line from Escondido to Oro Grande with a minimum normal and emergency capacity rating of 380 MVA.
- **Project Justification:** This project has been identified as part of a facilities upgrade required to address and mitigate contingency overloads.





Project Name: Oro Grande-Amrad 115 kV Line (Reconductor)

- Operating Voltage: 115 kV
- In-Service Date: May 2031
- **Project Description:** This project will involve the reconductoring of a 115 kV transmission line from Escondido to Oro Grande with a minimum normal and emergency capacity rating of 380 MVA.
- **Project Justification:** This project has been identified as part of a facilities upgrade required to address and mitigate contingency overloads.





- Project Name: HVDC Tie Replacement (New)
- **Operating Voltage:** 345 kV
- In-Service Date: May 2031
- **<u>Project Description:</u>** This project involves options for the replacement of the existing Eddy HVDC Tie.
- **Project Justification:** This existing HVDC Tie is at the end of its lifespan with limited to no availability of replacement of components and equipment. Because of this, options for a new Eddy HVDC Tie replacement are being considered. Actual replacement schedule will be dictated by lead times for equipment and facilities, including engineering integration efforts.





Project Name: Amrad 345/115 kV Autotransformer (New)

Operating Voltage: 345/115 kV

In-Service Date: May 2031

# **Project Description:** A new additional Amrad 345/115 kV autotransformer has been identified to enhance system reliability.

**Project Justification:** This project has been identified as part of a facilities addition required to address and mitigate contingency overloads. Additionally, this project has been identified to strengthen the reliability of EPE's transmission system.





Project Name: Pine 345/115 kV Autotransformer (New)

- Operating Voltage: 345/115 kV
- In-Service Date: May 2031

# Project Description:This project identifies a new Pine 345/115 kV autotransformer to connect the 345<br/>kV & 115 kV Buses at Pine Substation.

**Project Justification:** This project has been identified as part of a facilities addition required to address and mitigate contingency overloads. Additionally, this project has been identified to strengthen the reliability of EPE's transmission system.





Project Name:	Pine Substation 115 kV Capacitor Bank Addition (New)
<b>Operating Voltage:</b>	115 kV
In-Service Date:	May 2031
Project Description:	The project consists of the addition of two 15.9 MVAR bus shunt capacitor banks connected to the 115 kV bus.
Project Justification:	This project has been identified to improve reactive capability and voltage profiles in the Far East El Paso Area during high load conditions.





7.8 Transmission Projects in 2032





**Project Name:** Marlow-Trowbridge 115 kV Line (Rebuild, Reconductor)

- Operating Voltage: 115 kV
- In-Service Date: May 2032
- **Project Description:** The project consists of reconductoring the Marlow to Trowbridge 115 kV transmission line with a conductor that provides a minimum normal and emergency capacity rating of 380 MVA.
- **Project Justification:** This project has been identified as part of a facilities upgrade required to address and mitigate contingency overloads.





Project Name:	Newman-McCombs 115 kV Line Circuit 1 (Reconductor)
Operating Voltage:	115 kV
In-Service Date:	May 2032
Project Description:	This project consists of reconductoring the Newman to McCombs 115 kV Lines to increase the capacity of the lines with a conductor that provides a minimum normal and emergency capacity rating of 380 MVA.
Project Justification:	This project has been identified as part of a facilities upgrade required to address and mitigate contingency overloads.





Project Name:	Newman-McCombs 115 kV Line Circuit 2 (Reconductor)
Operating Voltage:	115 kV
In-Service Date:	May 2032
Project Description:	This project consists of reconductoring the Newman to McCombs 115 kV Lines to increase the capacity of the lines with a conductor that provides a minimum normal and emergency capacity rating of 380 MVA.
Project Justification:	This project has been identified as part of a facilities upgrade required to address and mitigate contingency overloads.





Project Name:	Newman-Roberts 115 kV Line Circuit 1 (Reconductor)
<b>Operating Voltage:</b>	115 kV
In-Service Date:	May 2032
Project Description:	The project consists of reconductoring the Newman to Roberts 115 kV Line Circuit 1 with conductor that provides a minimum normal and emergency capacity rating of 380 MVA.
Project Justification:	This project has been identified as part of a facilities upgrade required to address and mitigate contingency overloads.





### 7.9 Transmission Projects in 2033

- No Plan Projects Identified -





7.10 Transmission Projects in 2034





#### PLANNED PROJECTS

#### YEAR 2034

Project Name: Caliente-MPS 115 kV Line Circuits 1 (Partial Reconductor)

- Operating Voltage: 115 kV
- In-Service Date: May 2034
- **Project Description:** The project consists of partially reconductoring the Caliente to MPS 115 kV Line Circuit 1 with conductor that provides a minimum normal and emergency capacity rating of 380 MVA.
- **Project Justification:** This project has been identified as part of a facilities upgrade required to address and mitigate contingency overloads.





Project Name:	Caliente-MPS 115 kV Lines Circuits 2 & 3 Common Structure Separation
<b>Operating Voltage:</b>	115 kV
In-Service Date:	May 2034
Project Description:	The project consists of separating the Caliente to MPS 115 kV transmission lines, Circuits 2 & 3, from their existing common structure.
Project Justification:	This project will enhance system reliability and mitigate contingency overloads.





Project Name:	Rio Grande-Executive-Sunset North 115 kV Path (Rebuild, Reconductor)
<b>Operating Voltage:</b>	115 kV
In-Service Date:	May 2034
Project Description:	This project involves the reconductoring of a portion of the Rio Grande to Executive to Sunset North 115 kV Path. The rebuilding and reconductoring of this 115 kV Path should be done with a conductor that provides a minimum normal and emergency capacity rating of 760 MVA.
Project Justification:	This project has been identified as part of a facilities upgrade required to address and mitigate contingency overloads.





Project Name: WS-2 Substation 115 kV Capacitor Bank Addition (New)

- Operating Voltage: 115 kV
- In-Service Date: May 2034

## **Project Description:** The project consists of the addition of two 15.9 MVAR bus shunt capacitor banks connected to the 115 kV bus.

**Project Justification:** This project has been identified to improve reactive capability and voltage profiles in the West El Paso Area during high load conditions.





7.11 Transmission Projects in 2035





Project Name:	Alamo – Pine 345 kV Line (New)
Operating Voltage:	345 kV
In-Service Date:	May 2035
Project Description:	A new 345 kV transmission line is planned to be built from Alamo Substation to Pine Substation with a minimum normal and emergency capacity rating of 2320 MVA.
Project Justification:	This transmission line in conjunction with the substation will provide supported reliability, system flexibility, and will address contingency overloads. Additionally, this project has been identified to strengthen the reliability of EPE's transmission system.





Project Name: Alamo 345/115 kV Autotransformer (New)

- Operating Voltage: 345 kV/ 115 kV
- In-Service Date: May 2035

# **Project Description:** This project identifies a new Alamo 345/115 kV autotransformer to connect the 345 kV & 115 kV Buses at Alamo Substation.

**Project Justification:** This project has been identified as part of a facilities addition required to address and mitigate contingency overloads. Additionally, this project has been identified to strengthen the reliability of EPE's transmission system.