# 2017 ALL SOURCE REQUEST FOR PROPOSALS FOR ELECTRIC POWER SUPPLY AND

P.O. Box 982 El Paso, Texas 79960

LOAD MANAGEMENT RESOURCES

Issue Date: June 30, 2017



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#### **1.0** INTRODUCTION

El Paso Electric Company ("EPE") is issuing this All Source Request for Proposals ("RFP") to select additional long-term, cost effective and reliable electric resources that will commence operations by EPE's 2022-2023 summer peak season. Proposals may be for supply-side or demand-side resources ("resources"). Through initial resource planning studies, EPE has determined that it requires approximately 50 MW by 2022 and 320 MW by 2023 for a total of 370 MW of additional resources for summer peak (May-September, 1:00 PM-6:00 PM MST) to (i) meet increasing load requirements on the EPE system, and (ii) replace loss of capacity due to local unit retirements.

Proposals considered from entities ("Bidders") responding to this RFP may include power purchase agreements ("PPA") for sale of capacity and/or energy; proposals for EPE purchase or equity participation in the Bidder's new or existing generation facility; and load management programs implemented by the Bidder, including distributed generation ("DG"). EPE will also submit a self-bid in response to this RFP.

EPE is a fully bundled public utility engaged in the generation, transmission and distribution of electricity in an area of approximately 10,000 square miles in the Rio Grande Valley in west Texas and south central New Mexico. EPE owns or has significant ownership interests in five electrical generating facilities providing it with a total capacity of approximately 2,077 MW net.

EPE serves approximately 410,000 residential, commercial, industrial and wholesale customers. EPE distributes electricity to retail customers principally in El Paso, Texas and in Las Cruces, New Mexico. EPE's retail electric rates and services are regulated by the Public Utility Commission of Texas ("PUCT") and the New Mexico Public Regulation Commission ("NMPRC"). EPE's principal industrial and other large customers include steel production, copper and oil refining, and United States military installations, including the United States Army Air Defense Center at Fort Bliss in Texas and White Sands Missile Range and Holloman Air Force Base in New Mexico.

EPE's preference is firm resources which can provide high availability, guarantee generation output during peak hours in the months of May through September as well as guarantee a minimum annual generation output. EPE will consider acquiring a single resource or a combination of supply-side and/or demand-side resources that are proposed and evaluated in response to this RFP.

EPE will use a two-stage pricing process to evaluate proposals in response to the RFP, i.e. evaluate the initial bid and then evaluate the shortlisted Bidder(s) Best and Final offer. EPE will utilize a third-party independent evaluator ("IE") to oversee the RFP process. The IE will have access to all proposals and will actively participate in the RFP process.

# 1.1 Purpose

Proposals received from Bidders in response to this RFP will be used to aid EPE in its efforts to provide continued reliable and adequate electric service to its customers at the lowest reasonable cost and in an environmentally acceptable manner. Following a review of technical, economic and environmental factors, as more fully described herein, EPE will determine the alternative(s) that best meet its objectives, and may initiate contract negotiations with Bidder(s), as appropriate. Any selected proposals and contracts will be subject to EPE Board of Directors approval, and PUCT and NMPRC regulatory approval requirements.

# 1.2 RFP Document Description

Section 2 provides more detail about the EPE electric system and projected resource needs. Section 3 outlines the anticipated RFP Schedule for the receipt and evaluation of proposals. Section 4 describes the resource alternatives that will be considered. Section 5 identifies the proposal submittal requirements. Section 6 summarizes the proposal evaluation process. Section 7 is a Notice of Disclaimer. Section 8 contains the required proposal submittal forms.

#### 1.3 RFP Communications

All submittals, inquiries, and communications relating in any manner to this RFP should be directed to following EPE point of contact. Communication by e-mail should be submitted to both e-mail addresses listed below:

Omar Gallegos Location #135 100 N. Stanton El Paso, Texas 79901 Phone: (915) 543-5811

E-mails: <a href="mailto:omar.gallegos@epelectric.com">omar.gallegos@epelectric.com</a> epe.resource.planning@epelectric.com

# 1.4 Confidentiality of Responses

EPE will consider proposals and other information submitted by Bidders to be confidential only if such materials are clearly designated as "Confidential." Bidders should be aware that information received in response to the RFP may be subject to review by applicable local, state or federal regulatory agencies. Information submitted in response to the RFP may become subject to federal or state laws pertaining to public access to information as a result of any reviews conducted by the aforementioned agencies. Except as required by regulatory reviews, EPE will use reasonable efforts to avoid disclosure of such confidential information to persons other than those involved with the evaluation, selection and any subsequent negotiations.

# 2.0 EL PASO ELECTRIC COMPANY SYSTEM DESCRIPTION

# 2.1 System Overview

EPE's service territory operates within the Western Electricity Coordinating Council ("WECC") and is located on the most southeast corner of the WECC system. EPE serves load through a mix of natural gas, nuclear and solar generation resources; remote nuclear generation and purchased power is imported via 345kV tie-lines.

# 2.2 Existing Generation Resources

Figure 1 shows the existing generation resources owned or purchased by EPE.

- EPE currently owns 633 MW of capacity at the Palo Verde Nuclear Generating Station from Units 1, 2, and 3. This resource is outside the EPE service area and its output is imported via EPE's 345kV tie-lines.
- EPE currently owns approximately 1,444 MW of local generation for baseload, intermediate and peak service. These local resources are fueled by natural gas. The local EPE generation resources include 64 MW at Copper Generating Station, 276 MW at Rio Grande Generating Station, 752 MW at Newman Generating Station and 352 MW of peaking duty generation at its new Montana Power Station.
- EPE purchases the output of utility-scale solar facilities totaling a gross capacity of approximately 107 MW.
- EPE also owns several small solar facilities.

Also, pursuant to EPE's current Loads and Resources planning document, by 2023 approximately 46 MW of generation is scheduled to be retired at the Rio Grande Generating Station and approximately 150 MW is scheduled to be retired at the Newman Generating Station.

# El Paso Electric Company Summer Peak Balance of Loads and Resources

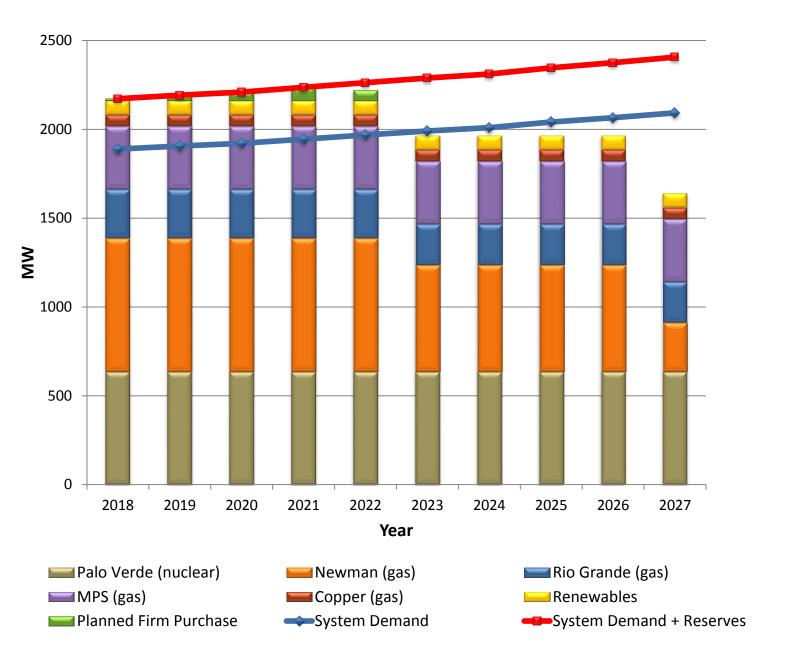


Figure 1 – EPE Summer Balance of Loads and Generation Resources

# 2.3 Service Territory

The EPE service territory extends from west Texas to south-central New Mexico as illustrated in Figure 2. Copper, Rio Grande, Montana and Newman Generating Stations are located in the El Paso area. Palo Verde Nuclear Generating Station is located west of Phoenix, Arizona.



Figure 2 - EPE Service Territory and Electric System

Electric Power Supply RFP

# 2.5 Future Resource Requirements

EPE requires 370 MW of additional capacity by 2023 (50 MW in 2022 and 320 MW in 2023) to reliably meet EPE's customer load requirements and will consider sourcing a range between 300 to 370 MW. EPE may choose to not consider proposals over the 370 MW range. EPE will consider proposals under 370 MW in combination with other viable proposals submitted which would aggregate to the 370 MW capacity need and provide the optimal resource mix. EPE has a summer peaking load and will evaluate capacity proposals given their summer output profiles. EPE's evaluation will also include a review of expected annual output profiles and dispatch ability to allow for reliability and flexibility for balancing year-round.

EPE presently has an adequate amount of baseload generation with its 633 MW ownership share of nuclear generation at Palo Verde. Additional baseload generation may not be conducive to integration with EPE's existing resource mix. Additionally, EPE has recently commissioned five quick start combustion turbines. A proposal's resource flexibility for dispatch and ramping will also be considered as part of a portfolio mix.

EPE makes no representations regarding the level of dispatch and energy requirements from supply-side and demand-side resources proposed in response to this RFP. Dispatch and energy purchases will be a function of economic dispatch of all EPE resources, including possible economy energy and spot energy purchases from the market.

# 2.4 Timing of Resource Capacity Need

Pursuant to this RFP, EPE is soliciting proposals with commercial operation dates ("COD") no earlier than May 1, 2022, but no later than May 1, 2023. EPE may negotiate COD of any awarded project to be at specified date within that range dependent of size of project versus 2022 and 2023 resource needs.

However, if Bidder's projects are viable with shorter timelines for COD prior to May 1, 2022, EPE is interested in Bidders submitting secondary alternative proposals for the earlier COD date with respective timelines and pricing proposal. EPE, at its sole discretion, will determine if it will act upon any proposals with a COD prior to May 1, 2022.

#### 3.0 SCHEDULE

The following schedule and deadlines apply to this RFP:

RFP Issuance Date	June 30, 2017
Pre-bid Meeting Date	July 19, 2017
Notice of Intent to Bid Due Date	August 4, 2017
Final Submission of Questions Due Date	August 25, 2017
Response to Questions Due Date	September 13, 2017
Proposal and Proposal Fee Due Date	October 4, 2017
Shortlist Notification Date	March 7, 2018
Tentative Individual Meetings (if required) with Shortlisted Bidders Dates	March 19-23, 2018
Best and Final Proposal Due Date	April 4, 2018
Tentative Date for Execution of any Contract(s) *	July 2018

<sup>\*</sup>Any contract will be contingent upon required state regulatory approvals.

EPE reserves the right to modify, cancel or withdraw this RFP and to revise the schedule specified above if, in the sole discretion of EPE, such changes are necessary. To the extent reasonably possible, EPE will inform Bidders that have filed a Notice of Intent to Bid regarding any schedule change.

#### 3.1 RFP Issuance

EPE will extend an invitation to participate in its 2017 All Source Power Supply RFP process via regular mail or e-mail to all potential participants of whom it is aware on the issue date. EPE will issue a press release to notify the media and general public in an effort to reach additional potential participants. EPE will post its 2017 All Source Power Supply RFP on EPE's website (www.epelectric.com) on the RFP issuance date. When on the EPE website, click on "Doing Business with EPE" and then click on "Resource Planning" to access the RFP.

Receipt of the RFP invitation should be confirmed via e-mail as per the RFP Communication Process listed in Section 1.3.

#### 3.2 Notice of Intent to Bid Due Date

The Notice of Intent to Bid ("NOI") is mandatory for proposals to be accepted. Submittal of NOI does not bind Bidders to submit a proposal; however, submittal of a proposal does require that an NOI have been submitted by the NOI due date. Bidders must submit a NOI by midnight, Mountain Standard Time on **August 4, 2017**. The NOI form is included as *Attachment 9.1*, and is to be submitted as per the requirements of Section 1.3 RFP Communications. Receipt of the NOI to Bid will be confirmed via e-mail from EPE to the Bidder(s).

# 3.3 Pre-Bid Meeting

A Pre-Bid Meeting will be held in person and via webcast. The meeting will be held at EPE's home office located at 100 N. Stanton, El Paso, Texas 79901 on July 19, 2017 at 2:00 p.m., Mountain Standard Time. The webcast link and sign-on information will be posted at a later date on EPE's Resource Planning web page. Attendance at the Pre-Bid Meeting is intended to clarify any issues surrounding the RFP in advance of preparation of the Bidders' packages. Attendance at the Pre-bid meeting is highly encouraged.

Questions concerning the RFP are to be submitted in writing via e-mail as per the requirements of Section 1.3 RFP Communications prior to the Pre-Bid Meeting, and EPE representatives will strive to have responses available at the time of the Pre-Bid Meeting.

#### 3.4 Date for Final Submission of Questions

All questions related to the RFP should be submitted in writing via e-mail as per the requirements of Section 1.3 RFP Communications.

EPE will prepare written responses to questions received and periodically distribute the questions and responses. Responses to general questions will be distributed to all Bidders and posted on EPE's Resource Planning webpage. Responses that are project specific will only be provided to the original inquirer. Any questions related to the RFP must be submitted by **August 25**, **2017** to ensure enough time is allotted for Bidders to go through the RFP and responses to be developed and distributed well in advance of the proposal due date.

#### 3.5 Proposal Due Date

All proposals MUST be received at EPE's offices to the attention of Omar Gallegos at Location #135, 100 N. Stanton, El Paso, Texas 79901 by **October 4, 2017**. Any proposals submitted after the due date may be excluded from consideration.

A \$2,500 non-refundable filing fee must be submitted with each proposal. The \$2,500 filing fee will apply to a Bidder's proposal with up to four alternative options. Any additional options from the Bidder will incur an additional fee of \$500 per option. Filing fees should be by check made payable to El Paso Electric Company.

One (1) hard copy of the proposal must be submitted. In addition, submission of two electronic copies of the proposal either on compact discs or flash drives is mandatory. Facsimile submittals will be rejected.

#### 3.6 Shortlist Notification

Following a review of bidder proposals, EPE will make an initial determination of the proposals that best meet its objectives, and may initiate negotiations with those applicable Bidder(s). EPE will notify the shortlisted Bidders by March 7, 2018.

EPE may meet face-to-face with shortlisted bidders during the week of **March 19-23, 2018**, to review their proposals and assess any progress or issues with their proposals that may not be obvious upon initial review.

Additionally, EPE will perform an analysis of the shortlisted proposals to estimate the transmission and network upgrade costs necessary to move energy from the interconnection or delivery point to its load center.

# 3.7 Tentative Date for Best and Final Proposal

EPE may request a Best and Final Proposal from shortlisted Bidders. If Best and Final Proposals are requested, an expected date for submission of Best and Final Proposals is **April 4, 2018**. A schedule and outline of the Best and Final Proposal process will be distributed to the shortlisted Bidders, as applicable.

ANY SHORTLISTED BIDDER WHO INCREASES ITS PRICE BY MORE THAN 10% IN ITS BEST AND FINAL PROPOSAL MAY BE DISQUALIFIED FROM THE RFP PROCESS. IN ADDITION, ANY PERCENT INCREASE TO THE BEST AND FINAL PROPOSAL MUST BE JUSTIFIED.

# 3.8 Tentative Date for Execution of Any Contract(s)

Should EPE choose to initiate negotiations with any Bidder(s), the tentative date for execution of any contract(s) is **July 2018**. Any contract between EPE and a Bidder will be contingent upon required state regulatory approvals. EPE reserves the right to reject any proposed contract(s) that result from this RFP if subsequently issued regulatory approvals or authorizations are subject to conditions, including ratemaking treatments, which are unacceptable in EPE's sole discretion.

# 3.9 Proposal Validity

Each Bidder must hold its proposal open and valid for a period of 360 days following initial submittal. Additionally, a short-listed Bidder must hold its Best and Final Proposal open for a period of 360 days following the submittal of its Best and Final Proposal. This timing is to allow for contract negotiations and initial filings of regulatory approvals. Upon expiration of the proposal validity period, the shortlisted Bidder(s) must promptly provide any changes to their proposal(s) or agreement that would affect extension of such proposal for the additional period.

# 4.0 SUBMITTAL OPTIONS AND REQUIREMENTS

#### 4.1 Commercial Transactions

Proposals to be considered by EPE will include supply-side and demand-side alternatives including distributed generation. EPE will also include a self-build option. EPE will consider the proposal arrangements to include one or a combination of the proposal types listed below:

- PPAs for sale of capacity and energy (PPA's for renewable energy resources are to include transfer of associated Renewable Energy Credits or Certificates ("RECs") to EPE);
- Build-Transfer for EPE to purchase proposed generation resources for solar, energy storage<sup>1</sup> and conventional generation options;
- Tolling Power Purchase Agreement for conventional, gas-fired thermal generation (proposals for gas fired generation must include pipeline interconnection, if not already existing, within PPA price);
- Proposals for EPE purchase or equity participation in the Bidder's existing generation facility; and
- Agreements for Load Management to supply energy efficiency or demand response programs.

All Bidders must complete and return *Attachment 9.2*. Failure to complete and return all required forms and attachments as instructed, may result in disqualification of the Bidder's proposal at the sole discretion of EPE. Additional requirements for specific resource types are in Section 5.

Proposals are to include and denote anticipated tax amounts. Actual tax treatment will be governed by the final executed contracts.

# 4.2 Location and Transmission Requirements

EPE is requiring bidders to have and provide evidence to EPE of a feasible site(s) selected and at a minimum have a Letter of Intent for site control with land owner(s) and other stakeholders that may impact the execution of the land purchase. For sites on federal land such as the Bureau of Land Management, alternate documentation may be considered.

All capacity and energy that EPE may purchase pursuant to this RFP must be delivered to the EPE transmission system to ultimately serve EPE's load center. Given the amount of planned retirements at EPE's Newman Power Station, future generation resources in the general vicinity of EPE's Balancing Authority Area are preferred. However, EPE is open to all proposals which demonstrate ability to deliver energy to EPE's load area, whether the proposal contemplates a long-term Purchased Power Agreement or a facility build/transfer of ownership structure. If the Bidder's project will not be directly interconnected to the EPE transmission system, the proposal must be accompanied by a demonstration that the Bidder has [or will] secure firm transmission capacity on third-party systems, from the location of the resource to the EPE transmission system. The Bidder should identify in its proposal the total cost to have its resource delivered to the boundary of EPE's transmission system and include interconnection costs.

After EPE identifies the bidder shortlist, comprised of the most economic and reliable resources from each resource type group, based upon each resource's total cost delivered to the boundary of EPE's transmission system, EPE will then evaluate the resources on the short list and estimate any necessary network upgrade costs to have the resource delivered to EPE's native and network load customers and estimate the proposals

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<sup>&</sup>lt;sup>1</sup> EPE may consider energy storage options for "build-transfer ownership" depending on technology state and risk. EPE would welcome options for O&M service agreements and warranty terms that would mitigate technology risk.

total cost inclusive of network upgrades. EPE will re-assess the shortlist and notify identified shortlisted proposals for continuation in the process.

Awarded projects will be required to secure Network Resource Interconnection Service laid out in the EPE Large Generator Interconnection Procedures, and sign a Generator Interconnection Agreement as specified in the EPE's OATT (http://www.epelectric.com/transmission/transmission-tariff).

Any questions related to EPE's transmission system or services must be directed to the following EPE representative:

David Tovar EPE System Planning Fax: (915) 543-4355

E-mail: david.tovar@epelectric.com

# 4.3 Capacity and Energy Limitations

The Bidder must clearly define dispatch capabilities for the power resource proposed. The proposal must outline any and all capacity and energy limitations that may be caused by factors including but not limited to:

- Capacity and associated energy sales to other parties;
- Transmission limitations (e.g., congestion);
- Environmental permit limitations or emissions;
- Weather conditions, including extreme high and low temperatures;
- Hours of operation due to staffing or external constraints;
- Fuel supply interruptions, fuel transport service type (i.e. hourly balancing requirements);
- Potential intra-hour volatility in power output to determine the impact of the project on EPE system control requirements; and
- Potential federal regulation of carbon emissions

If a potential limitation exists, it must be described in detail in the proposal so that EPE can reflect the limitation in its analysis.

EPE is interested in acquiring resources that will provide reliable service under extreme weather conditions, and Bidders should provide specific information on the reliability of the resource under these conditions in the area in which the resource is located. For example, EPE has added additional protection to its local generation units to enable them to meet a design temperature of minus (-) 10°F, with a design coincident wind velocity of 25 mph. The ability of the Bidder's resource to continue operating in extreme high or low ambient temperatures will be an important factor in the non-economic evaluation described in Section 7.3 below, with associated technical information to be provided as specified in Section 5.0 below. EPE reserves the right to request additional information from the Bidder on how the resource is or will be designed for extreme weather operation and, for existing resources, how they have operated under such conditions.

In addition, EPE reserves the right to request additional information from the Bidder regarding limitations or any other details related to its proposal. Automatic Generation Control ("AGC") for EPE control of dispatch levels is highly desirable if an existing or proposed generation resource is the source of the capacity and energy supply. However, if AGC capabilities do not exist, the minimum acceptable standard is that

EPE must be granted dispatch rights and the ability for EPE to establish pre-defined schedules. It is also desirable that ancillary services be provided as part of the proposal. If ancillary services are not provided as part of the proposal, the proposal must specifically state that fact.

# 4.4 Communications for Operations

All supply-side proposals will be required to establish real-time communications with EPE's Energy Management System in order to provide status information and also be able to receive control signals for requirements such as, but not limited to:

- AGC control for conventional generation and any applicable resources
- Curtailment of renewable resources
- Dispatch of energy storage resources

Communications must be NERC Critical Infrastructure Compliant ("CIP") compliant as applicable.

# 4.5 Government Approvals

Bidders are responsible for acquiring and maintaining all present and future federal, state and local approvals, licenses, permits or variances, and the specific requirements to construct and/or operate any generation facilities and associated interconnection facilities. Proposals should include a listing, description and associated timing for required permitting up to the interconnection point/facilities. EPE's Environmental Department will review permitting descriptions. Any build-transfer proposals will require review of permitting plans and approval by EPE. If a build-transfer plan is awarded, EPE may, at its sole discretion, participate in the review and approval of any permit application filings as EPE will be the ultimate owner-operator of the facility.

# 4.6 Purchased Power Agreement

Proposals involving power purchases of firm capacity and energy from an existing or proposed generation resource or a firm system sale are acceptable within the guidelines outlined in this section. Bidders must complete and return *Attachment 9.3*. Bidders may propose to provide up to 370 MW during EPE's on-peak hours between 1:00 PM to 6:00 PM Mountain Standard Time. Additionally, refer to Section 5.0 of this RFP document to review additional resource size requirements and considerations for specific resource types. At EPE's sole discretion, proposals to provide greater than the maximum requested MWs may or may not be considered.

The length of any resulting contract must be for a term of at least 20 years. EPE shall have first dispatch rights to the energy. As previously stated AGC for EPE control of dispatch levels is desired if an existing or proposed generation resource is the source of the capacity and energy supply. Any ancillary services to be provided by the Bidder as part of its proposal will be considered in the assessment by EPE of the economics of the Bidder's proposal.

The Bidder shall provide a predictable, specific formula for contract capacity and energy pricing and include a description of the proposed price formula for each component. The Bidder is responsible for demonstrating the availability and adequacy of all primary and back-up fuel supplies, including fuel transportation and fuel-related services. Bidders are expected to have firm fuel delivery and a firm fuel supply. On-site inventory of back-up fuel is required if the Bidder has non-firm fuel delivery or a non-firm fuel supply. EPE will accept an energy pricing formula based on a fuel cost index and a guaranteed heat rate or heat rate curve, or a fixed energy cost proposal. Pricing indices selected by the Bidder shall be

nationally recognized indices. EPE may consider indexing based on CPI or GDP IPD for O&M costs. Bidders must provide 20 years of historical data for each index, or such history as exists for the index if less than 20 years are available. Should a Bidder wish to use an alternative index it must submit a request to EPE of its interest to use an alternative index. EPE will decide if such an index is allowable at its sole discretion.

If a proposal involves capacity and associated energy utilizing different types and combinations of generation facilities, proposals shall clearly identify the pricing, capacity and/or availability variations based on specific characteristics of the generation facilities. Items identified shall include, but not be limited to, variations in heat rate at various load points and ambient conditions.

Firm system sales are acceptable, but Bidder should identify the generating resources available to meet the contract requirements. Bidders must have generation resources under ownership or control from which capacity and energy is sold.

# 4.7 Asset Purchase of Proposed New Facility Requirements

EPE is requiring that ALL Bidders proposing a new project, in which ownership will be transferred to EPE, demonstrate that the project will be constructed through an Engineering, Procurement and Construction ("EPC") contract or other similar arrangement. Please complete Table 1 and Table 2 in *Attachment 9.4*.

EPE is requiring Bidders to have a feasible site(s) selected and at a minimum have and provide evidence to EPE in the form of a Letter of Intent for site control with land owner(s) and other stakeholders that may impact the execution of the land purchase. For sites on federal land such as the Bureau of Land Management, alternate documentation may be considered. At EPE's sole discretion, it may or may not consider proposals based on projects built on leased land.

EPE is not and will not be responsible for site selection, land acquisition, environmental permitting, natural gas or water upgrades/infrastructure fundamental to the project's successful completion.

Proposals must include O&M projections and should include:

- ➤ Recommended plant staffing levels
- Estimates for consumables in \$/MWh
- > Consumables are to include water consumption if purchased from third party

Proposals should all include a description of any performance guarantees or warranties.

# 4.8 Proposal for Purchase of Bidder's Facility

Proposals involving the sale of all or part of an existing or proposed generation facility to EPE are acceptable within the guidelines outlined in this section. Bidders must complete and return *Attachment 9.4*. Bidders may propose to provide up to 370 MW. At EPE's sole discretion, proposals to provide greater than the maximum requested capacity may or may not be considered.

Proposals for partial ownership may include EPE having an undivided ownership interest in and dispatch rights to the facility. Bidders for such options shall provide complete project pro-forma financial projections for the existing or proposed generation facility.

For proposals involving the sale of all of an existing or proposed generation facility to EPE, the Bidder shall provide the acquisition price for the facility and payment terms. Additionally, proposals are to include a specific cost forecast for ongoing O&M and fuel costs. EPE is also interested in receiving purchase proposals for Bidder's facility that includes ongoing O&M performed by the Bidder or a third-party contractor under an O&M contract. Bidder should specify contract terms and operating cost guarantees for this option.

For proposals involving purchase of a portion of the Bidder's facility, Bidders shall provide a predictable, specific methodology for joint operation and cost responsibility of fixed and variable costs. EPE requires dispatch rights to its ownership share of the Bidder's facility. If Bidder will be responsible for ongoing O&M of the facility, the Bidder should specify contract terms and operating cost guarantees for the operating contract.

The Bidder is responsible for demonstrating the availability and adequacy of all primary and back-up fuel supplies, including fuel transportation and fuel-related services. Bidders are expected to have firm fuel delivery and a firm fuel supply. On-site inventory of back-up fuel is required if the Bidder has non-firm fuel delivery or a non-firm fuel supply.

#### 5.0 REQUIREMENTS SPECIFIC TO RESOURCE TYPES

#### 5.1 Conventional Generation

#### **Applicable to All Conventional Generation**

EPE is interested in intermediate generation with the ability for daily on-off cycling. A gas one-on-one combined cycle ("CC") or large, simple combustion turbine(s) ("CT") are conducive to the requirement. However, EPE is not explicitly limiting proposals to only CC or CT proposals. For example, reciprocating engine options may also be considered. Flexibility is also desired in the form of the lowest feasible minimum operating outputs to allow for a wide operating band for operating reserves while meeting environmental emission requirements. EPE is not requiring 10 minute quick-start capability, however EPE will take into consideration start-up time for dispatch flexibility.

Generators should be able to connect to an existing interstate gas pipeline or west Texas intrastate natural gas pipeline. Access to a second pipeline would be deemed favorable. EPE will consider Tolling PPA proposals.

Generators must be duel fuel (ultra-low-sulfur fuel oil) ready and proposals should include all required facilities (i.e. storage tank and/or interconnection to ultra-low-sulfur fuel oil supply) for fuel oil operation at COD.

The proposed facility should have, or be able to secure, an adequate water supply for the term of the PPA or asset life if a build-transfer proposal.

EPE's preference for inlet cooling is evaporative, thus if Bidder's option(s) includes either chillers or foggers, please provide a bid option, as well, reflecting the price for the facility with evaporative cooling.

EPE has an interest in maintaining a high level of reliability and availability (97% or greater availability) during the peak power season, May through September. As such, EPE requires redundancy of critical

systems where feasible and within industry practice such as the air compressor system, Reverse Osmosis Deionization (RO/DI), circulating water and condensate pumps, and fire protection system for example. Therefore, Bidders must identify the specifics of the redundant systems in their bid.

EPE will place value on proposals with a technology (i.e. the specific turbine being proposed) that has attained 10,000 hours of operation in the industry and is no longer deemed prototype technology.

All conventional units should be dispatchable and capable of direct monitoring and AGC control by EPE's Energy Management System ("EMS").

Additionally, all conventional units should provide frequency response in the form of governor response.

Any proposals for Build-Transfer Ownership are required to include O&M requirements defined in Section 4.6.

# **Specific to CC Proposals**

EPE is requiring Bidders proposing a CC option(s) to bid the project with an automatic by-pass damper system to allow for the operating flexibility of running the unit in simple-cycle mode. The automatic by-pass damper system is a mandatory requirement. The proposed CC configuration and design should be such that emissions and environmental permitting be attainable in both simple cycle and combined cycle mode to offer dispatch flexibility.

For CC units, EPE is requesting Bidders submit a bid for each cooling option, i.e., one price for open-loop system ("wet cooling") and the other price for closed-loop system ("dry cooling").

EPE is requesting proposals for CC units to provide an alternative proposal with the combustion turbine and steam generator commissioned with a two year lag; with a combustion turbine COD target of 2023 and the steam generator in 2025. EPE may opt to award solely the first phase of the combustion turbine.

#### **Specific for Combustion Turbine Proposals**

EPE will accept proposals for single CTs with approximate capacities between 80 to 200 MW or a combination of CTs up to the 370 MW amount. If the proposal is for multiple CTs, provide an alternate proposal for a single CT.

There are no additional specific requirements for CT proposals.

All items in the above "Applicable to All Conventional Generation" are applicable to CT proposals.

#### 5.2 Renewable Resources

# **Applicable to All Renewable Resources**

EPE prefers the ability to dispatch/curtail the renewable energy power on an hourly basis. Bidders must complete and return *Attachment 9.5*.

Bidders must submit their proposals by providing the data required for Purchased Power Agreement proposals in *Attachment 9.3*. The Bidder shall provide a predictable, specific methodology for capacity and/or energy pricing on an annual basis. Intermittent renewable resources may only propose capacity

pricing if it includes energy storage or some other method to firm output. Proposals that include capacity pricing must provide the basis for measurement to determine the firm capacity.

All RECs associated with renewable energy proposals must transfer to EPE at no additional cost.

#### **Specific to Non-Intermittent Renewable Resources**

Non-intermittent renewable resource proposals such as geothermal, biogas or biomass should identify and quantify fuel resource availability and ability to secure fuel resources for the life of the project.

Any dispatchability or output limitations should be clearly described, specifically, this includes yearly total output expectations and commitments. Additionally, typical daily output profiles should be provided for each month, and, if applicable, any firm commitment amounts should be conveyed.

#### **Specific to Intermittent Renewable Resources**

Intermittent renewable resource proposals such as solar and wind should provide expected output profiles, expected yearly energy output, and committed yearly energy output amounts.

Projects should be a minimum of 5 MW in size.

If proposals are for facilities with a nameplate capacity greater than 50 MW, Bidders should provide proposals in 50 MW increments.

EPE will evaluate any proposed intermittent resources in combination with other proposals and existing EPE resources to identify the optimal resource portfolio, in consideration of reliability, to provide regulating reserves and firm output capacity during peak hours.

Any projects providing self-regulation for output variability or firm output during peak hours should clearly identify capabilities and commitments. Proposals should identify characteristics of resource which will provide firm output capability (i.e. storage, back-up generation).

Solar and wind proposals are required to utilize inverters and controls capable of output regulation/curtailment for load following, frequency response and voltage support via EPE's EMS control.

# 5.3 Energy Storage

EPE is interested in evaluating energy storage options either to help serve peak capacity requirements or as a compliment to intermittent resources which may provide regulation for intermittent resources, firm capacity output during peak hours, or renewable energy load shifting.

Energy proposals submitted for the purposes of serving during peak load or for load shifting should provide a minimum of 15 MW for 4 hours of output and capable of daily discharge and charge cycle(s). If the proposal is also capable of providing regulating and system support, Bidders should provide operating capabilities and specifications.

Descriptions of operating capabilities and specifications should include items such as:

- > Number of expected cycles
- > Charge and discharge ranges

All proposals should be capable of direct monitoring and control by EPE's EMS system.

EPE will evaluate build-transfer options if the technology is no longer considered "prototype," but rather already has significant deployments in the field to be categorized as "proven" technology.

EPE may consider "prototype" or "unproven" technologies for PPA proposals.

# 5.4 Load Management Resources

Demand-side proposals involving load reduction by utilizing load management resources are encouraged within the guidelines outlined in this section. Proposals must include the data specified in *Attachment 9.6*. While EPE will consider all proposals that encourage customers to conserve energy, EPE has a preference for summer peak shaving. The proposals should be for a minimum of 10 MW no later than May 2023. For load management proposals, the preferred minimum contract term is five (5) years.

The Bidder shall provide a complete description of the program proposed, including the following:

- Estimated load reduction;
- Program cost:
- Plan for measurement and verification;
- Work plan describing the design, implementation, operation and management of the program;
- Program limitations; and
- Specific information on the reliability of the resource under extreme high or low weather in the area in which the resource is located.

If a potential limitation exists, it must be described in detail in the proposal. EPE reserves the right to request additional information from the Bidder regarding limitations or any other details related to the proposal.

The Bidder shall provide a predictable, specific methodology for capacity and/or energy credits proposed and all program costs incurred by EPE.

Load management projects with current customers will be preferred. Bidders are required to identify and provide a description of those customer arrangements.

#### 6.0 SUBMITTAL PREPARATION INSTRUCTIONS

Proposals shall be prepared in accordance with the guidelines set forth in this section. Failure to follow the preparation instructions may result in the exclusion of the proposal from consideration. In addition, Bidders must complete Attachments in Section 9.0 and Excel workbook "EPE 2017 All Source RFP Table and Input Templates".

Additionally, Bidders must complete and submit applicable worksheets of the "EPE 2017 All Source RFP Table and Input Templates". The Excel workbook is posted and available on EPE's Resource Planning website. The intent of the Excel workbook is to facilitate review of the proposals, especially pricing and financial cost estimates.

Each proposal shall be organized by section as described below. Each page of the proposal shall have the following information on the top right corner:

- 2017 All Source RFP for Electric Power Supply and Load Management
- Company Name of Bidder
- Project Name

All of the following sections shall be completed or identified as "Not Applicable".

# 6.1 Section 1 - Completed Proposals

All applicable forms appended to this RFP must be completed and returned with the proposal. Failure to properly fill out and return all required forms may result in disqualification of the proposal.

# 6.2 Section 2 - Proposal Overview

The proposal shall contain a general overview and a summary including the following information, as applicable.

# 6.2.1 Executive Summary

The executive summary must provide an overall description of the proposal. The description must include the type of proposal and resource offered, including technology and fuel type and the key benefits it will provide to EPE. The summary must include the generation technology and location of the facility(ies) that will be the source of the power supplied per the proposal and must discuss the general business arrangement for the proposal. The summary must be limited to three (3) pages. The summary should include a clear listing and short description of proposal options and alternatives included in the submittal.

# 6.2.2 Type of Proposal

Describe the type of proposal being offered (i.e. PPA, EPE purchase, EPE equity participation in Bidder's facility, and/or renewable resource or load management).

#### 6.2.3 Technical Information

The following technical information must be discussed in this section, as applicable for the project proposed.

- Water conservation or efficiency description
- Major equipment manufacturers considered or utilized
- Description of technology and configuration
- Resource Design Life, including a breakout of design life for major system components
- Site layout map and characteristics (such as lease agreements, water resources, waste disposal, etc.)
- Fuel supply and fuel transportation
- Electrical interconnection
- Metering
- Net capacity rating at site conditions and elevation (at 1% summer design case identify those conditions). Provide any partial loading capacity levels that EPE may use for scheduling of the proposed energy and capacity
- Guaranteed availability for the project
- Forced and unforced outage rate

- Heat rates in Higher Heating Value ("HHV") or a heat rate curve and level of efficiency at Net Capacity rating and for any proposed partial loading capacity levels
- Communications, control and instrumentation
- Description of resources associated with RECs and REC characteristics (if applicable)
- Ability to provide ancillary services (voltage support, load following, etc.)
- Facility limitations that may constrain operation or dispatch
- Design criteria for extreme hot and cold weather temperature ranges and other information about the ability of the resource to operate in extreme weather conditions in the area in which it is located
- Applicable to renewable resources, provide typical day hourly profiles for the months of January, March, July and November
- Anticipated volatility in power flows
- Proposed construction period (if new construction)
- Project management plan
- Quality assurance plans
- Performance guarantees and warranties
- Start-up testing
- Factory and performance tests
- Start-up times and load ramping rates
- Design life loading (wind, seismic, etc.)
- Description of pre-operational milestones (i.e., construction financing, commencement, installation, testing and completion dates)
- Description of frequency and duration of scheduled maintenance of facilities
- Site map showing layout and location
- Cyclic on/off operation capability
- CIP compliance, as applicable

#### 6.2.4 Economic Information

The following economic information must be provided in this section, as applicable for the project proposed. Bidders are also to complete the financial templates in native Excel format for their proposals. Excel templates are available for download from EPE's Resource Planning website. Bidders should provide a description of the pricing approach used as well as the price formula proposed, including:

- Capacity offered and capacity charge by year
- Energy cost by year or guaranteed conversion rate and fuel cost index
- Variable and fixed O&M charge and index
- Start-up charge and index
- Limitations on damages and remedies, if applicable
- Potential federal regulation of carbon emissions costs
- Other charges

PRICING MUST BE SUBMITTED IN NOMINAL U.S. DOLLARS AND BIDDER MUST IDENTIFY ESCALATION ASSUMPTIONS USED IN THE PRICE CALCULATIONS. EPE WILL NOT ACCEPT BIDS IN OTHER CURRENCIES.

#### 6.2.5 Delivery of Power

If the Facility is directly interconnected with the EPE system, describe the point of interconnection and current status of any agreements for interconnection and transmission service. Proposal should include plan and timing for the interconnection agreement within the project plan.

If the Facility will be interconnected outside the EPE transmission system, discuss details related to the proposed option for delivering the power to the EPE system and the status of any arrangements. The discussion should include information regarding electrical interconnection, transmission, electric losses, scheduling arrangements, and associated payments, required to deliver the power and energy to EPE's transmission system.

# 6.3 Section 3 - Operations and Maintenance

Discuss the current or expected O&M plan, including staffing, budget, management and control over any facility, authority over the O&M budget, and guarantees on O&M costs. Provide a description of the basic philosophy for performing O&M and include a discussion of contracting for outside services, if applicable. Provide the expected fixed and variable O&M cost per year and assumptions and items included in the calculation.

# 6.4 Section 4 - Fuel Supply and Fuel Transportation

Identify the fuel supply source(s) and discuss contract arrangements. Identify whether the facility has firm fuel transportation under contract, or back-up fuel supply to ensure no fuel interruptions. Bidders must describe their fuel supply plan and the extent to which energy costs will be determined relative to delivered fuel costs. Indicate whether the Bidder expects to provide fuel and/or other fuel-related services, including fuel supply management, or if the Bidder prefers a tolling PPA structure.

# 6.5 Section 5 - Regulatory and Environmental Compliance

The Bidder is exclusively responsible for meeting all required federal, state and local permits, licenses, approvals and/or variances that are currently, or are required in the future to assure the physical delivery of capacity and associated energy in accordance with their proposal. Projects involving facility purchase, new construction and renewable resources are required to provide a listing of required permits as well as a plan and timing for acquisition of each permit.

Provide information on the following as applicable:

- Environmental management
- Handling and disposal of hazardous and non-hazardous wastes
- Control, monitoring and recording of atmospheric emissions and noise control
- Air permit, including hourly maximum emissions of NOx, SOx, CO, VOC, PM<sub>10</sub>
- Actual emissions rates for the above pollutants at Net Capacity rating and any partial loading capacity levels proposed. Also include the emissions rates for CO2 emissions. Emissions rates should be provided in either lbs/MWh or lbs/MMBtu.
- Water permit, including daily maximum usage
- Discharge permit, including daily maximum discharge
- Landfill permit, including daily maximum volume
- Regulatory permit (siting certificate)
- FERC license, exemption or preliminary permit number (for hydroelectric facilities)
- Local approvals (zoning)
- Other applicable permits

# 6.6 Section 6 - Project Schedule

Proposals involving new construction shall provide the anticipated critical path project schedule associated with permitting, regulatory approvals, engineering design, manufacture, delivery, construction, start-up and commissioning of the facility, and include as applicable, performance incentives and delay damages. Proposals must contain such a project schedule identifying milestones as well as, in PDF compiled from Microsoft Project or other scheduling tool.

# 6.7 Section 7 – Financial Capability

The financial viability of any proposal must be demonstrated to provide assurance that the Bidder, and any other party involved in the proposal, has adequate financial capability. Each proposal must include the following information at a minimum:

- Capital financing partners
- Recent annual report for the Bidder and any other parties involved, or recent copy of audited income statement and balance sheet (financial statements)
- Bond rating of Bidder or its parent company and/or major financing partners by Moody's and/or Standard & Poor's, as applicable
- Description of financing plan for the project. Include any financing commitments; and financial guarantees from affiliates or others, as appropriate
- Identification of the Credit Assurance provider for the project if different from the Bidder or its parent company

# 6.8 Section 8 – Capability and Experience of Bidder

The capability and experience of any Bidder must be demonstrated to provide assurance that the Bidder, and any other party involved in the proposal, has adequate competence, resources and skill. Each proposal must include the following information at a minimum:

- Years in business;
- Description of technical experience;
- Identified staff specific to submitted proposal;
- Description of O&M experience;
- List of projects financed;
- Description of completed projects of a similar scope, e.g., size, commercial operation dates, and customers; and
- Minimum of three references on completed projects of similar size.

#### 7.0 EVALUATION PROCESS

EPE and its consultants will evaluate the proposals to determine which, if any, have the potential to provide the most economical, reliable, and viable alternatives for EPE's customers. EPE will use a two-stage pricing process to evaluate those proposals that have satisfied the threshold evaluation of responsiveness and viability. The viability review includes, but is not limited to, financial risk, technology risk and project execution risk. The two-stage pricing process consists of evaluating (1) initial bids that have met the requirements of the responsiveness and viability reviews and (2) the Shortlisted Bidder(s) Best and Final offer as applicable. Those initial proposals that are found to have satisfied the RFP requirements during the responsiveness and viability reviews will be evaluated based on a levelized cost analysis and will be grouped according to resource type (i.e. conventional/dispatchable, renewable, load management and/or energy storage) and type of proposal being offered (i.e. PPA, EPE purchase or EPE equity participation in Bidder's facility). Once grouped, EPE may select the top ranking bids from each group to shortlist. The shortlisted bidders selected by the results of a levelized cost analysis will be required to submit their Best and Final offers. The Best and Final offers from the shortlisted bidders will be modeled in EPE's optimization model(s) to determine the winning bid(s). Please note that all Best and Final offers that reflect a price increase of more than 10% may, at EPE's sole discretion, be disqualified from the RFP process. In addition, any percent increase to the Best and Final offers must be justified.

#### 7.1 Threshold Evaluation

EPE will initially review each proposal to determine whether it satisfies the threshold criteria of responsiveness, technical viability, and Bidder financial ability and capability. The responsiveness review will ensure that the proposal is complete, follows the guidelines set forth in the RFP, and includes all information required for a more thorough review. The technical viability review will determine whether the proposal meets EPE's requirements in a reliable manner and within the timeframe stated in the RFP. The Bidder financial ability and capability review will judge whether the Bidder has adequate financial capability and adequate competence, resources, and skills to perform its proposal.

At EPE's sole discretion, any proposal deemed materially incomplete or technically deficient may be excluded from further consideration. EPE also reserves the right to seek clarification of proposal information or additional proposal information from Bidders.

#### 7.2 Economic Evaluation

Proposals that pass the threshold evaluation will be analyzed via the two-stage process. The initial proposals will be evaluated on a levelized cost basis and will be compared to proposals within their resource type group from an economic standpoint to determine the proposed resource's relative cost effectiveness in meeting EPE's requirements. These economic analyses will incorporate the following characteristics of the proposed resource:

- Net capacity offer or purchase offer and capacity costs;
- Energy costs, including fuel costs;
- Fixed and variable O&M costs;
- Unit start-up costs;
- Variable costs impacting production cost;
- Transmission and/or distribution system costs;
- Other costs and system impacts;
- Potential federal regulation of carbon emissions costs, and;
- Taxes.

At EPE's sole discretion, any proposal deemed materially deficient relative to EPE's ability to perform a complete economic evaluation may be excluded from further consideration. EPE also reserves the right to seek clarification of proposal information or additional proposal information from Bidders.

#### 7.3 Non-Economic Evaluation

EPE may also consider the following non-economic criteria not incorporated into the economic analyses in evaluating each proposal:

- Development Feasibility and Completion Risk
  - o Resource siting- Letter of Intent for Site Control
  - o Right-of-way acquisition
  - o Environmental and other permitting
  - o Resource financing
  - o Design/procurement/construction status
  - o Firm transmission capacity
  - o Commercial operation date and completion security
  - o Reliability of technology
  - o Ability of the resource to continue operating in extreme hot and cold weather temperatures
  - Project team capabilities
  - o Performance guarantees and limitations on remedies
- Financial and Operational Viability
  - o Bidder's financial strength
  - Operation and maintenance plan
  - o Environmental and regulatory compliance
  - Environmental impact
- Operating Characteristics
  - Dispatching limitations
  - o Cyclic on/off operation capability
  - Automatic generation control
  - o Ancillary services (e.g., voltage support and load following)
  - o Start-up characteristics
  - Maintenance coordination
  - o Transmission impact/voltage control
  - Water efficiency
- Other Factors

- o Resource expansion capability
- Stability of price proposal
- o Economic development benefits
- o Diversity of overall resource portfolio
- EPE Financial Impact
  - Cash flow
  - Debt ratio
  - o Bond ratings
  - o Capital attraction

# 7.4 Load Management Resource Evaluation

Because of load management characteristics, EPE may also consider the following criteria in evaluating demand-side management proposals:

- Measurement and verification plan
- Marketing plan
- Comparable deployments
- Customer adoption rates for existing programs

#### 7.5 Environmental Evaluation

Proposals will be evaluated from an environmental standpoint to determine whether existing resources are in environmental compliance with current regulations and that proposed facilities can be permitted within the timeframe indicated. Overall environmental impact of the facilities will also be assessed.

# 7.6 EPE's Selection of Proposals and Discussions with Bidders

EPE may initiate contract discussions with Bidder(s), as appropriate, following a review of technical, economic, risk and environmental factors. EPE reserves the right to enter into an agreement at any time with a Bidder who, in the opinion of EPE, will provide the greatest value to EPE and its customers. EPE also reserves the right to pursue contracts with other than the lowest price Bidder or with other than the Bidder evidencing the greatest technical ability, if EPE, at its sole discretion, determines that to do so would result in the greatest value or lowest risk to EPE and its customers. EPE reserves the right to enter into discussions with multiple Bidders at any time in order to determine and pursue what EPE believes is in the best interest of EPE and its customers.

EPE, at its sole discretion, may decline to enter discussions with any Bidder, may terminate negotiations with any Bidder, and/or decline to select any Bidder at any time during the RFP process. All communication between Bidders and EPE shall be conducted in writing as per Section 1.3 RFP Communication.

#### 8.0 NOTICE OF DISCLAIMER

EPE has prepared the information provided in this RFP to assist interested persons and entities in making a decision whether to respond with a proposal. EPE reserves the right to modify, change, supplement or withdraw the RFP at its sole discretion. No part of this document or any other correspondence from EPE, its employees, officers or consultants shall be taken as legal, financial or other advice, nor as establishing a contract or any contractual obligations. All communication between Bidders and EPE shall be conducted in writing.

EPE makes no representations or warranties regarding the completeness of the information contained within the RFP and does not purport that this RFP contains all of the information needed for Bidders to determine whether to submit a proposal. Neither EPE nor its employees, officers or consultants will make, or will be deemed to have made, any current or future representation, promise or warranty, expressed or implied, as to the accuracy, reliability or completeness of the information contained within the RFP or any other information provided to Bidders.

Bidders who submit proposals do so without legal recourse against EPE, or EPE's directors, management, employees, agents or contractors, due to EPE's rejection, in whole or in part, of their proposal or for failure to execute any agreement with EPE. EPE shall not be liable to any Bidder or to any other party, in law or equity, for any reason whatsoever related to EPE's acts or omissions arising out of or in connection with the RFP process.

EPE reserves the right to reject, for any reason, any and/or all proposals. EPE further reserves the right to waive any irregularity or technicality in proposals received, or to consider alternatives outside of this solicitation, at its sole discretion, to satisfy its capacity and energy needs. In addition, EPE reserves the right, at its sole discretion, to modify or waive any of the criteria contained herein and/or the process described herein.

No Bidder will have any claim whatsoever against EPE, its employees, officers, or consultants arising from, in connection with, or in any way relating to this RFP. Without limiting the generality of the foregoing, each Bidder agrees, by and through its submission of a proposal, that rejection of a proposal will be without liability on the part of EPE, its employees, officers, or consultants, nor shall a Bidder seek recourse of any kind against any of the foregoing on account of such rejection. The filing of a proposal shall constitute an agreement of the Bidder to each and all of these conditions. Each Bidder and recipient of this RFP is responsible for all costs incurred in evaluating, preparing and responding to this RFP. Any other costs incurred by any Bidder during negotiations are also the responsibility of the Bidder.

# 9.0 ATTACHMENTS

9.1	Notice of In	ent to Bid
Comp	any Name:	
Comp	any Address:	
Conta	ct Person:	
	Nam	
	Title	Position
	Mail	ng Address
		ier Address Eferent)
	Tele	phone Number
	Fax	Number
	E-m	il Address
Antici	pated Power Sup	lly Type:
Locati	on, Size and Inte	connection Point of Project (if available):
Autho	rized Signature:	
Date:		

The Notice of Intent to Bid may be submitted via e-mail to the contacts defined in Section 1.3, or mailed to Omar Gallegos at Location #135, 100 N. Stanton, El Paso, Texas 79901. Receipt of the Notice of Intent to Bid will be confirmed by e-mail from EPE to the Bidder. Please submit a separate Notice of Intent for each proposal that differs in resource type the bidder expects to submit.

This form must be delivered via e-mail or to the above address no later than 5:00 p.m., Mountain Standard Time, on August 4, 2017.

# 9.2 Data for All Projects

. Pr	rojec	t Location			
St	ate:		County:	City:	
Se	ection	1:	Township:	Range:	
Pr	ovide	e a general descripti	on of the resource project:		
pr C( O)	e-def ONS UTPU llowi Ne	ined schedules – Al TRAINTS PREVEN UT PROFILE DEN ng items, if applical t summer capacity of	offer and capacity charge by ye	S THAT ARE INTERMITT AMEPLATE MUST FILL (DRKBOOK). At a minimeter. The information shall	TENT OR HAVE OUT THE 12X24 num, include the
			V and \$/kW/mo. Additional su		
	1.		fire generation provide MW ou		ature
			le proposals provide for both o y shall be based on 20-year ave		
	ii.	For the MW rating temperature (°F), a	s above, identify the wet bulb and altitude above sea level (ft.	temperature ( <sup>0</sup> F), mean coir ):	ncident dry bulb
b.	Pri	mary fuel type:	Seco	ondary fuel type:	
c.	Oth	ner unit operating pa	urameters		
	j	i. Minimum net uni	t output (MW) under normal op	perating conditions:	
		In combined-cycl	e mode:		
		In simple-cycle m	node:		
	i	i. Maximum numb	er of starts (requests) per day:		<del>-</del>
	iii	i. Time to bring or	-line, i.e., synchronize to grid (	(minutes):	

	N	Maximum net summer capacity (MW) within 10 minutes:				
	Time to bring unit to full load (MW):					
	iv.	Minimum on-line time (hours):				
	v.	Minimum off-line time (hours):				
	vi. Starting reliability (percentage of time the unit will successfully start):					
	vii. Forced outage rate (%):					
	viii.	Annual overhaul requirements (days/year):				
	ix.	Minimum-maximum operating temperature range (F°):				
d.	that p	hauls follow a periodic pattern such as 10 days each year with 20 days every fourth year, pattern.  ribe AGC capabilities and, if applicable, any constraints:				
e.	e. Describe all expected permitted emissions levels:					

4. Provide all information requested in Section 5.0.

# 9.3 Additional Data for Purchased Power Agreements

- 1. The additional data below applies to resources that generate power whose output can be dispatched (via AGC or pre-defined schedules). BIDDER IS RESPONSIBLE FOR ALL TAXES AND TRANSMISSION COSTS. ALL DATA SHALL BE NET OF ANY LOSSES REQUIRED TO DELIVER BIDDER'S POWER TO THE EPE CONTROL AREA. At a minimum, include the following items, if applicable:
  - a. Provide either fuel cost (\$/MWh) by year OR the following:
    - i. A guaranteed input/output table showing MMBtu fuel input versus MW output at summer unit conditions. Input/output tables shall be based upon 20-year average unit conditions (not 'new and clean') and shall show input (HHV MMBtu/hr based upon the primary fuel type) versus net output (MW) over the full range of the unit's capability under normal operating conditions at capacity increments of 1 MW (between the maximum and minimum capacity levels), AND
    - ii. Either a guaranteed year-by-year price forecast or a fuel price index. If available, Bidder should provide a forecast of the index. Any fuel price index shall include a discussion of the proposed index and 20 years of the index history.
  - b. Provide either a fixed O&M charge (\$/kW-year) by year, <u>OR</u> a fixed O&M charge for a Bidder-specified year and fixed O&M index. If available, Bidder should provide a forecast of the index. Any fixed O&M cost index shall include a discussion of the proposed index and 20 years of the index history.
  - c. Provide either a variable O&M charge (\$/MWh) by year <u>OR</u> a variable O&M charge for a Bidder-specified year and variable O&M index. If available, Bidder should provide a forecast of the index. Any variable O&M cost index shall include a discussion of the proposed index and 20 years of the index history.
  - d. Provide either unit start-up charge (\$/start) by year <u>OR</u> a unit start-up charge for a Bidder-specified year and a start-up charge index. If available, Bidder should provide a forecast of the index. Any start-up cost index shall include a discussion of the proposed index and 20 years of the index history.
- 2. The additional data below applies to renewable energy projects. At a minimum, include the following items, if applicable:
  - a. **Pricing**: Provide ONE of the following, provided that the pricing schedule submitted has to be consistent with the type of renewable resource proposed (i.e. intermittent renewables are allowed to submit a base price and a fixed annual escalation rate):
    - i. A schedule of year-by-year annual prices (\$/MWh) required.
    - ii. An annual price (\$/MWh) for a Bidder-specified year and a payment index to be applied. If available, Bidder should provide a forecast of the index. Any payment index shall include a discussion of the proposed index and 20 years of the index history. EPE at its sole discretion will determine if the index is viable.

# b. Minimum Guaranteed Energy Production

i. **On-Peak Energy Production**: Specify the minimum guaranteed On-Peak MWh from 1:00 p.m. through 6:00 p.m. Mountain Standard Time (5 hours) from May 1 through September 30:

This data will be used to determine the capacity value of each resource for economic evaluation purposes. In addition, the PPA will contain penalty provisions for not meeting this minimum.

ii.	<b>Total Annual Energy Production:</b>	Specify the guaranteed annual MWh January 1 through
	December 31:	

This data will be used to determine the MWh contribution of the resource. In addition, the PPA will contain penalty provisions for not meeting this minimum.

# 9.4 Additional Data for Equity Purchase (Full or Partial)

1.	For wind resources,	provide historical	wind data to	aid in EPE's evaluation.
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	2.	Lump-sum	purchase pri	ce (\$) and	date for payment:	
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Alternatively, a schedule of progress payments may be substituted for the lump-sum purchase price. Provide a schedule of such payments (dollars and date of payment).

- 3. Bidders must provide, in a Microsoft Excel spreadsheet format, a detailed pro forma financial projection of all operating costs on a year-by-year basis for a period of five (5) years. Such statements shall identify the following applicable cost components:
  - a. Fixed O&M costs (identify what is included)
  - b. Variable O&M costs (identify what is included)
  - c. Unit start-up costs
  - d. Major/Minor maintenance, inspections and overhaul annual cycles and costs
- 4. Bidders must provide contractual terms for any long-term agreements that would be transferred with the facility purchase to EPE such as fuel supply, fuel transportation, water supply or discharge, long-term service agreements on equipment, etc. which define and support the operating cost projections.
- 5. EPE is also interested in receiving purchase proposals for Bidder's facility that includes ongoing operations and maintenance performed by the Bidder or a third-party contractor under an operations and maintenance contract. Bidder should specify contract terms and operating cost guarantees for this option, if applicable.

**TABLE 1: CAPITAL COST BREAKOUT** 

COST CATEGORY	COST (\$000)
Total Capital Cost	
Total EPC Costs	
Major Equipment	
Sales Tax	
Other EPC	
Fixed Costs	
Variable Costs	
Total Owners Cost	
Permitting and Development	
Owners Project Contingency	
Major Equipment Cost Contingency	
Terms and Conditions Cost Contingency	
Financing Costs (if applicable)	
Other Owners Costs	

**TABLE 2: CAPITAL COST BREAKOUT SUB-CATEGORIES** 

COST SUB-CATEGORIES	INDICATE WHETHER INCLUDED, NOT INCLUDED OR NOT APPLICABLE	COST CATEGORY IT FALLS UNDER	COST (\$000)
Land Cost			
Performance Bond or LOC			
Builder's Risk Insurance			
Water Interconnection and Metering			
Natural Gas Interconnection, Compression Station, Cleaning and Metering			
Transmission Allowance (Project to Substation)			
DCS Cost			
CEMS Cost			
RO/DI Cost (if applicable)			
Evaporation Pond and/or ZLD (if applicable)			
Deluge System/Fire Control System Cost (Transformers)			
LDs			

Bidders are responsible for acquiring and maintaining all applicable present and future federal, state and local approvals, licenses, permits or variances, and the specific requirements to construct and/or operate any generation facility and associated connection facilities.

# 9.5 Additional Data for Renewable Energy or Any Intermittent, Non-Dispatchable Resources

Bidders must provide sufficient data and information that will allow EPE to meet certification requirements imposed by the NMPRC, New Mexico Legislature, PUCT or Texas Legislature.

track the sale, transfer or disposition of renewable energy produced to ensure energy is not used for or counted toward, the New Mexico renewable energy portfolio standard or requirements, or voluntary tariff program, by or on behalf of another utility:
Provide a description of delivery points and transmission and/or interconnection facilities:

Proposals must also provide an available energy profile (MWh or kWh) on an hourly basis for a typical day in each month (12X24 Matrix) using the Microsoft Excel spreadsheet located in EPE's website (www.epelectric.com). An example of a typical energy profile is also available in that workbook. EPE reserves the right to request additional information from the Bidder regarding limitations or any other details related to the proposal.

Bidders are responsible for acquiring and maintaining all applicable present and future federal, state and local approvals, licenses, permits or variances, and the specific requirements to construct and/or operate any generation facility and associated connection facilities.

# 9.6 Load Management Required Data

Provide a description of the load management methods that will be used and, at a minimum, discuss the following as applicable:

- Potential peak reduction
- Restrictions on number of times it may be utilized
- Annual effects
- Load shape
- Direct load control
- Energy efficiency
- Interruptible load
- Other load management
- Program cost

Attach additional sheets that provide a specific pricing proposal for the Capacity and/or Energy Reduction Offered by year and Capacity and Energy Pricing and Payment Terms.

# 9.7 Additional Data for Purchase or Equity Participation in the Bidder's New or Existing Conventional Generation Facility (e.g., Turnkey Projects)

The additional data below applies to resources that generate power whose output can be dispatched (via AGC or pre-defined schedules). ALL DATA SHALL BE NET OF ANY LOSSES REQUIRED TO DELIVER BIDDER'S POWER TO THE EPE CONTROL AREA. At a minimum, include the following information based on the type of unit(s) being proposed in this RFP, if applicable:

- Number of units in service and years in service (e.g., fired hours, energy storage charge/discharge hours)
- Starting reliability and contributing issues
- Unit availability
- Inspection cycles completed (i.e. service hours, type of inspection, inspection duration)
- Gas turbine maintenance issues identified during scheduled maintenance top five
- Gas turbine and steam turbine maintenance issues driving forced outage rates
- Combined-cycle availability and reliability
- Combined-cycle balance of plant, including steam turbine, top five issues identified
- Emission control systems' issues and non-compliance
- Combustor related operational issues, load range stability characteristics

For proposed project, please provide the following information if applicable:

- Fuel delivery requirements, e.g., pressure and other specifications, at proposed location
- Loading curves in simple and combined-cycle modes, if applicable
- Provide a summer and a winter heat balance estimates at 45%, 60%, 80% and base load, and identify associated design conditions at proposed location
- Detail on critical monitoring systems, e.g., compressor stall, vibration, firing temperature, pressures, lubrication, cooling, flows, history and data capture
- Identify EPE required redundancy to critical components, e.g., pumps
- Identify compressor wash system
- Identify the type of inlet air cooling, i.e., evaporative, fogging or chiller
- Identify NOx control, i.e., LN, DLN combustors, water injection or SCR
- Identify auxiliary equipment options and performance requirements
- Identify HRSG design options impacting operating flexibility, maintenance and accessibility, e.g., equipment layout, pressures and controls
- Identify gas-bypass system and design utilized for simple cycle operation, if applicable and related issues
- Identify critical support system equipment reliability and redundancy
- Identify combined-cycle sink cooling, i.e., wet, dry or hybrid
- Identify engine fuel options
- Identify the overall control system options
- Identify critical spares' inventory requirements
- Identify compressor and turbine nozzle and blade coatings extent and type
- Identify combustor and transition coating requirements extent and type
- Identify materials utilized in "hot zone" components, i.e., combustors, liners, transitions, vanes and blades
- Identify combustor design for emission formation control

Bidders are responsible for acquiring and maintaining all applicable present and future federal, state and local approvals, licenses, permits or variances, and the specific requirements to construct and/or operate any generation facility and associated connection facilities.