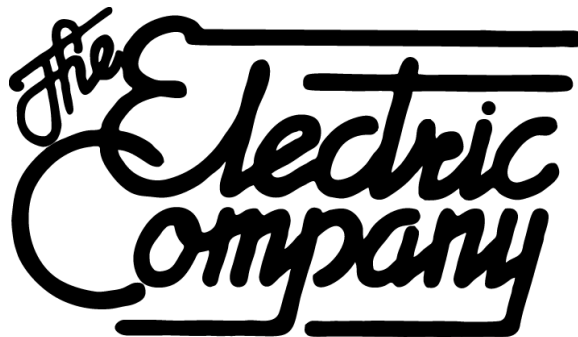


**2021 ALL SOURCE  
REQUEST FOR PROPOSAL  
FOR  
ELECTRIC POWER SUPPLY  
AND  
LOAD MANAGEMENT RESOURCES  
FOR TEXAS**

P.O. Box 982  
El Paso, Texas 79960

**Issue Date: December 3, 2021**



El Paso Electric

**TABLE OF CONTENTS**

**1.0 INTRODUCTION ..... 1**

1.1 Purpose ..... 2

1.2 RFP Document Description ..... 2

1.3 RFP Communications ..... 3

1.4 Confidentiality of Responses ..... 3

**2.0 EL PASO ELECTRIC COMPANY SYSTEM DESCRIPTION ..... 5**

2.1 System Overview ..... 5

2.2 Existing and Planned System Generation Resources ..... 5

2.3 Service Territory ..... 7

2.4 Future Resource Requirements ..... 8

2.5 Timing of Resource Capacity Need ..... 8

**3.0 SCHEDULE ..... 9**

3.1 RFP Issuance ..... 10

3.2 Pre-Bid Meeting ..... 10

3.3 Notice of Intent to Bid Due Date ..... 10

3.4 Final Submission of Questions ..... 10

3.5 Proposal Due Date ..... 10

3.6 Shortlist Notification ..... 11

3.7 Notice of Contract Award ..... 11

3.8 Proposal Validity ..... 11

**4.0 SUBMITTAL OPTIONS AND REQUIREMENTS ..... 12**

4.1 Commercial Transactions ..... 12

4.2 Location and Transmission Requirements ..... 12

4.3 Energy and Capacity Limitations ..... 14

4.4 Communications for Operations ..... 15

4.5 Government Approvals ..... 15

4.6 Purchased Power Agreement ..... 16

4.7	Asset Purchase of Proposed New Facility Requirements .....	17
4.8	Proposal for Purchase of Bidder’s Facility .....	17
<b>5.0</b>	<b>REQUIREMENTS SPECIFIC TO RESOURCE TYPES .....</b>	<b>18</b>
5.1	Conventional Generation .....	18
5.2	Renewable Resources.....	20
5.3	Energy Storage.....	21
5.4	Load Management Resources.....	22
<b>6.0</b>	<b>SUBMITTAL PREPARATION INSTRUCTIONS .....</b>	<b>23</b>
6.1	Section 1 - Completed Proposals .....	23
6.2	Section 2 - Proposal Overview.....	23
6.2.1	Executive Summary .....	23
6.2.2	Type of Proposal.....	24
6.2.3	Technical Information.....	24
6.2.4	Economic Information .....	25
6.2.5	Delivery of Power.....	25
6.3	Section 3 - Operations and Maintenance.....	25
6.4	Section 4 - Fuel Supply and Fuel Transportation.....	25
6.5	Section 5 - Regulatory and Environmental Compliance.....	26
6.6	Section 6 - Project Schedule.....	26
6.7	Section 7 – Financial Capability.....	26
6.8	Section 8 – Capability and Experience of Bidder .....	27
<b>7.0</b>	<b>EVALUATION PROCESS.....</b>	<b>28</b>
7.1	Threshold Evaluation .....	28
7.2	Economic Evaluation .....	28
7.3	Non-Economic Evaluation.....	29
7.4	Load Management Resource Evaluation .....	30
7.5	Environmental Evaluation .....	30
7.6	EPE’s Selection of Proposals and Discussions with Bidders .....	30

**8.0 NOTICE OF DISCLAIMER..... 31**

**9.0 ATTACHMENTS ..... I**

9.1 Notice of Intent to Bid.....ii

9.2 Data for All Projects .....iii

9.3 Additional Data for Purchased Power Agreements..... v

9.4 Additional Data for Equity Purchase (Full or Partial) .....vii

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

9.6 Load Management Required Data..... x

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

## 1.0 INTRODUCTION

El Paso Electric Company (“EPE”) is issuing this All Source Request for Proposal (“RFP”) to obtain short-term and/or long-term cost effective, reliable electric resources that will commence operations before EPE’s 2025 summer peak season. EPE needs short-term and long-term capacity for its Texas customer base. Proposals may be for supply-side and/or demand-side resources (“resources”). Through initial resource planning studies, EPE determined that a short-term capacity need of 100-125 megawatts (“MW”) in the 2022-2024 timeframe and a long-term capacity need of an additional 75-100 MW for a total of 175-225 MW is required for its 2025 summer peak (May-September, 1:00 PM-7:00 PM Mountain Daylight Time). The short-term and long-term capacity need is required to (i) meet existing and increasing Texas load requirements and (ii) replace loss of capacity due to local unit retirements. EPE is open to short-term Purchased Power Agreement (“PPA”) proposals to support capacity needs between the 2022-2024 timeframe. The 175-225-MW capacity resource need is required online no later than May 1, 2025. The proposed project’s capacity will be based on the specific project’s characteristics and project type as bid into this RFP. EPE will consider proposals from persons and/or entities (“Bidders”) responding to this RFP for delivery of renewable energy to EPE, and the transfer of all associated Renewable Energy Certificates or Credits (“RECs”), from supply-side renewable energy sources.

In summary, EPE is issuing this RFP to obtain the following short-term and long-term resources:

- Resource(s) to support short-term capacity need of 100-125 MW between 2022 and 2024. EPE is open to short-term PPA proposals to support the need between 2022-2024 timeframe;
- Long-term capacity resource(s) of an additional 75-100 MW for a total of 175-225 MW online no later than May 1, 2025;

EPE will consider the following proposals: PPA for sale of capacity and/or energy; proposals for EPE purchase or equity participation in the Bidder’s new or existing generation facility; build-transfer agreements; load management programs implemented by the Bidder, including distributed generation (“DG”); as well as other proposals that will help EPE achieve its long-term energy and capacity needs. EPE may also submit a self-bid in response to this RFP.

EPE’s preference is for capacity resources that 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 for renewable energy resources. 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 the RFP. EPE also has a Texas RPS requirement for renewables to be sited in Texas in order to qualify as Texas RPS energy. EPE may take this into consideration when evaluating renewable resources; however, EPE is open to consider renewable resources sited outside of Texas. EPE will also give a strong preference to resources that are either renewable or capable of meeting the requirement of zero carbon emissions (e.g., hydrogen capable) by 2040.

EPE will use a single-stage pricing process to evaluate proposals in response to this RFP whereby, the evaluation and selection of proposals will be based solely on the proposals submitted on the proposal due date. Therefore, this RFP does not contemplate Best and Final proposals. 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.

### About EPE

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 interest in five electrical generating facilities providing it with a total net capacity of approximately 2,089 MW. In addition, EPE has PPAs with seven companies for an additional net peak capacity of approximately 377 MW (solar) of which 107 MW are existing resources, and 270 MW are planned resources with commercial operation dates (“COD”) in 2022.

EPE serves approximately 444,300 retail 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.

## **1.1 Purpose**

Proposals received from Bidders in response to this RFP will be evaluated to identify resources that could assist EPE in its efforts to provide continued reliable and adequate electric service to its customers at the lowest reasonable cost with due consideration to environmental sustainability. 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 proposal(s) and contract(s) will be subject to EPE’s Board of Directors’ approval, PUCT regulatory approval, and any other applicable regulatory approval requirements.

## **1.2 RFP Document Description**

The RFP includes the following information in the respective sections.

1. Introduction
2. More detail about the EPE electric system and projected resource needs
3. Outlines the anticipated RFP Schedule for receipt and evaluation of proposals
4. Description of the resource alternatives that will be considered
5. Identification of the proposal submittal requirements
6. Summary of the proposal evaluation process
7. Notice of Disclaimer
8. 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 the following EPE points of contact. Also, outside of bid “kick-off” meetings or any meetings scheduled for open attendance by all interested Bidders, all communication will be by email through the RFP process up to the point of short-listing. EPE may choose to have one-on-one meetings with shortlisted Bidders if required.

Communication by email should be submitted to all three email addresses listed below:

Primary email: [epe.resource.planning@epelectric.com](mailto:epe.resource.planning@epelectric.com)

Primary Contact: Damian Lamas  
EPE Resource Planning  
[damian.lamas@epelectric.com](mailto:damian.lamas@epelectric.com)

Secondary Contact: Manuel Gomez  
EPE Resource Planning  
[manuel.gomez@epelectric.com](mailto:manuel.gomez@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.” It is the Bidder’s responsibility to clearly indicate in its proposal what information it deems to be confidential. Bidders may not mark an entire proposal as confidential, but instead must mark specific information on individual pages to be confidential to receive confidential treatment. **EPE will not accept any proposals that simply denote that the entirety of the proposal as confidential.** 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. To the extent that Bidders receive confidential information from EPE, Bidders shall maintain the confidentiality of such information and such information shall not be made available to, distributed to, or otherwise shared with any entity before, during, or after this RFP process unless required by law or regulatory order.

Bidders should be aware that information received in response to this RFP may be subject to review by applicable local, state, and/or federal regulatory agencies and/or courts, specifically including, but not limited to, the PUCT and/or NMPRC, even if marked “Confidential”. All Bidders shall cooperate with EPE, as it deems necessary or appropriate in its sole discretion, in making technological descriptions, pricing, and other contract terms available for review as part of any regulatory approval process. EPE will follow applicable orders and rules of the PUCT and/or other applicable agencies, including any protective orders issued, such as disclosure of price, terms, or other information as required; therefore, EPE cannot promise that information marked as confidential will not be publicly disclosed, and, as such, EPE cannot be held liable for any information that is ordered to be released or that is inadvertently released.

Additionally, as EPE deems necessary and appropriate, Bidders whose proposals are selected agree that key terms of negotiated agreements subject to PUCT and/or NMPRC jurisdictional regulatory review and approval will be publicly disclosed on a nonconfidential basis for review as part of any regulatory process. Key terms include: (1) term and any option to extend the term, (2) the size of the of capacity in MW and

the amount of energy in MWh or kWh per month and any conditions regarding the minimum or maximum amount of energy or capacity made available or required to be purchased, (3) price or pricing formulae including any reopeners and escalation provisions, and (4) any fixed and/or variable costs.

Moreover, information submitted in response to this 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. EPE shall not be liable for the release of any information subject to disclosure under any laws pertaining to public access to information.



## **2.0 EL PASO ELECTRIC COMPANY SYSTEM DESCRIPTION**

### **2.1 System Overview**

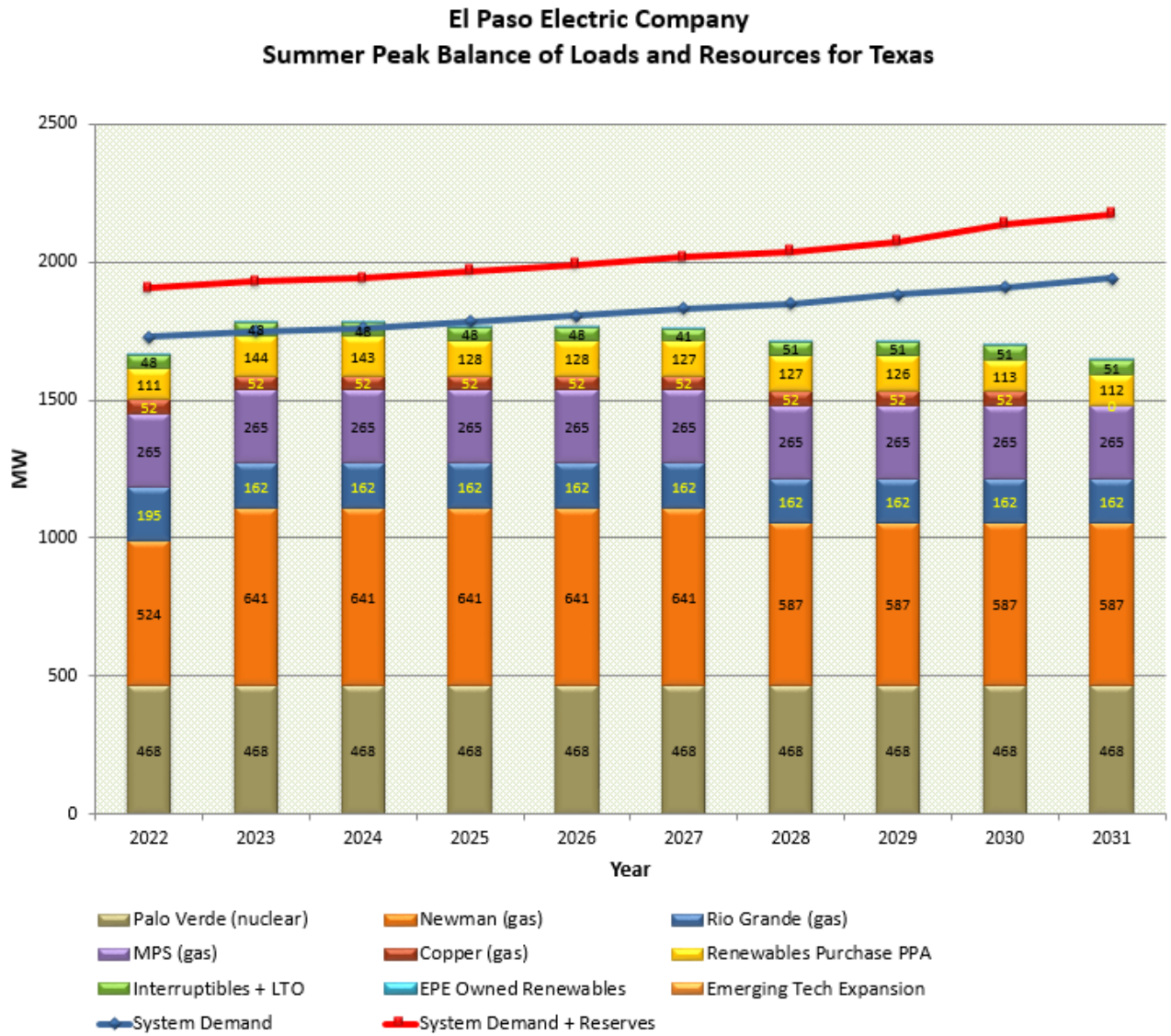
EPE's service territory operates within the Western Electricity Coordinating Council ("WECC") and is located on the most southeast corner of the WECC system. EPE serves load through a mix of natural gas, nuclear, and solar generation resources. Remote nuclear generation and purchased power is imported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

### **2.2 Existing and Planned System Generation Resources**

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

- EPE currently owns 622 MW of capacity at the Palo Verde Generating Station from Units 1, 2, and 3 that are fueled by uranium. This resource is outside the EPE service area and its output is imported via EPE 345-kV tie-lines.
- EPE currently owns approximately 1,468 MW of local generation for baseload, intermediate, and peak service. These local resources are fueled by natural gas. The local EPE generation resources include 69 MW at Copper Power Station, 729 MW at Newman Power Station, 273 MW at Rio Grande Power Station, and 352 MW of peaking duty generation at its 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, by 2023, approximately 45 MW of generation is scheduled to be retired at the Rio Grande Power Station and approximately 74 MW at the Newman Power Station is scheduled to be retired. EPE filed for NMPRC approval of the abandonment of Rio Grande Power Station Unit 6 (RG6) on October 10, 2020. EPE is seeking all necessary regulatory approvals for EPE to abandon RG6.



**Figure 1** – EPE Summer Balance of Loads and Generation Resources for Texas

### 2.3 Service Territory

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



Figure 2 - EPE Service Territory and Electric System

## 2.4 Future Resource Requirements

EPE has a short-term capacity need of 100-125 MW in the 2022-2024 timeframe and a long-term resource need of an additional 75-100 MW for a total of 175-225 MW of capacity resources for its 2025 summer peak (project capacity/size is dependent on project characteristics and type) to reliably meet its Texas customer load requirements. It is understood that proposals may not explicitly match the 175-225-MW range, and EPE will evaluate proposals to identify the most cost-effective resources or combination of resources that meet the requirements. EPE may choose to not consider proposals that are significantly greater than the current capacity needs depending on whether the proposals offer benefit to customers. EPE will consider proposals under 175 MW in combination with other viable proposals submitted that aggregate to the 175-MW capacity need and provide the optimal resource mix. EPE has a summer peaking load and will evaluate energy or energy and capacity proposals based on their summer output profiles. EPE's evaluation will include a review of expected annual output profiles and dispatchability of the proposals to determine their ability to maintain reliability and provide flexibility for balancing year-round. Resources with the flexibility to be used in multiple applications including, but not limited to, providing capacity for peak-usage times, economic dispatch in real-time markets, intra-hour balancing, and contingency reserves are anticipated to demonstrate higher values in EPE modeling. While short-term availability must be satisfied by the proposals, competitive resources with the ability to also support EPE's long-term portfolio needs will be evaluated more favorably. Additionally, EPE anticipates a higher value for resources that will help integrate and firm its increasing portfolio of variable energy resources. Furthermore, to quantify the capacity contribution of different energy resource types, EPE will also evaluate proposals based on the effective load carrying capability ("ELCC") of the resource(s). The ELCC of each resource type will feed into EPE's resource portfolio analyses and help serve as a basis for ensuring resource adequacy. EPE's goal of having an appropriate level of resource adequacy is important to provide both reliable and affordable service for its Texas customers.

EPE presently has an adequate amount of baseload generation with its 633-MW ownership share of nuclear generation at the Palo Verde Generating Station. Additional baseload generation may not be conducive to integration with EPE's existing resource mix. EPE also currently has five existing quick-start combustion turbines. A proposal's resource flexibility for dispatch and ramping will also be considered to determine the necessary 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 the RFP. Dispatch and energy purchases will be a function of economic dispatch of all EPE's resources, including potential economy energy and spot energy purchases from the market.

## 2.5 Timing of Capacity and RPS Resource Need

Pursuant to this RFP, EPE is soliciting capacity proposals with CODs on or before May 1, 2025. Proposals must include plans for project execution inclusive of long-lead equipment acquisition, land acquisition, permitting, securing interconnection service and its associated identification of necessary upgrades to the EPE transmission system or adjacent transmission systems, facility construction, and other critical timeline activities to demonstrate viability to meet proposed COD. EPE also has a Texas RPS requirement for renewables to be sited in Texas in order to qualify as Texas RPS energy. EPE may take this into consideration when evaluating renewable resources; however, EPE is open to consider renewable resources sited outside of Texas.

**EPE is not obligated to accept proposals for projects with CODs after May 2025 in this RFP.**

### 3.0 SCHEDULE

The following schedule and deadlines apply to the RFP:

RFP Issuance	December 3, 2021
Pre-bid Meeting (Webcast)	<b>December 10, 2021</b>
<b>Notice of Intent to Bid</b>	<b>December 23, 2021</b>
Final Submission of Questions	January 10, 2022
Response to Questions	January 21, 2022
<b>Proposal and Proposal Fee Due</b>	<b>Feb 25, 2022</b>
Shortlist Notification	March 18, 2022
Tentative Individual Meetings (if required) with Shortlisted Bidders	March 21 – March 25, 2022
Notice of Contract Award *	March 28, 2022
Submittal to Spring Study Cluster for LGIA projects**. (SGIA projects need to also submit application)	March 31, 2022
Contract Execution	April 15, 2022

\*Any contract will be contingent upon required EPE Board of Directors and non-appealable state regulatory approvals.

\*\*Awarded resources are required to submit Interconnection Requests by March 31, 2022 into the Spring 2022 study cluster.

**EPE reserves the right to modify, cancel, or withdraw the RFP and to revise the schedule specified above if, in its sole discretion, such changes are necessary. The IE will be notified of any modifications, revisions, and/or changes pertaining to the RFP documents and/or RFP process.** 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 this the RFP process via regular mail or email to all potential participants, of whom it is aware of, on the issue date. EPE will issue a press release to notify the media, energy industry trade publications, and general public in an effort to reach additional potential participants. EPE will post the RFP on its website ([www.epelectric.com](http://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” located on the left margin in orange to access the RFP.

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

### 3.2 Pre-Bid Meeting

A Pre-Bid Meeting will be held via webcast on **December 10, 2021, at 2:00 p.m.**, Mountain Daylight Time. The webcast link and sign-on information will be posted at a later date on EPE’s Resource Planning web page (access to web page is in Section 3.1). Attendance at the Pre-Bid Meeting is intended to clarify any issues surrounding the RFP in advance of preparation of the Bidders’ package. Attendance at the Pre-Bid Meeting is not mandatory but is highly encouraged.

Questions concerning the RFP are to be submitted in writing via email 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.

### 3.3 Notice of Intent to Bid Due Date

The Notice of Intent to Bid (“NOI”) is mandatory for proposals to be accepted. Bidders must submit a NOI by midnight, Mountain Daylight Time on **December 23, 2021**. 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 will be confirmed via email from EPE to the Bidders.

### 3.4 Final Submission of Questions

All questions related to the RFP should be submitted in writing via email 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 web page. Responses that are project specific will only be provided to the original inquirer. Any questions related to the RFP must be submitted by **January 10, 2022**, to ensure enough time is allotted for (1) Bidders to go through the RFP and (2) responses to be developed and distributed prior to the proposal due date.

### 3.5 Proposal Due Date

All proposals **MUST** be received at EPE’s office to the attention of Manuel Gomez and Damian Lamas at Location #135, 100 N. Stanton, El Paso, Texas 79901, by **February 25, 2022**. 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 and an additional two options. A proposal is defined by proposal site/location and

resource technology type<sup>1</sup>. An option is defined as same “proposal” (i.e., same site/location and resource technology type) with varying options for nameplate, pricing, COD, inclusion of battery storage, or inclusion of a Right of First Offer and Right of First Refusal provision for PPAs. Any additional options from the Bidder will incur an additional fee of \$1,500 per option. Filing fees can be paid by either wire transfer, ACH transfer, or by check made payable to El Paso Electric Company. EPE will provide payment instructions for the bidders that choose to pay electronically. If there are any bidders that have submitted proposals into EPE’s current New Mexico RFP that closed on November 10, 2021, the bidder may submit the same proposals for this Texas RFP.

One hard copy of the proposal must be submitted. In addition, submission of two electronic copies of the proposal on 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 proposal or proposals that best meet its objectives and may initiate negotiations with the applicable Bidder or Bidders. EPE will notify the shortlisted Bidders by **March 18, 2022**.

EPE may meet virtually or face-to-face and individually with the shortlisted Bidders during the week of **March 21-25, 2022**, to review their proposals and assess any progress or issues with their proposals that may not be obvious upon initial review.

### **3.7 Notice of Contract Award**

Following a review of the proposals, EPE will determine which proposal(s) best meets its objectives and will notify all Bidders of the status of their bid. EPE’s objectives include securing low-cost resources, resources that can move energy to EPE’s load center without substantial transmission infrastructure costs, and resources that can demonstrate their commitment to being ready to serve EPE timely. EPE may initiate discussions and negotiations with selected Bidder(s), as applicable, to assess the winning proposal(s). Should EPE choose to initiate negotiations with any Bidder(s), the Notice of Contract Award date for execution of any contract(s) is **March 28, 2022**. Any contract between EPE and a Bidder will be contingent upon approvals by EPE’s Board of Directors and required state or federal regulators. EPE reserves the right to reject any proposed contract(s) that results from the RFP if subsequently issued regulatory approvals or authorizations are subject to conditions, including but not limited to ratemaking treatments, that are in EPE’s sole discretion unacceptable.

### **3.8 Proposal Validity**

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

---

<sup>1</sup> The inclusion of battery storage in addition to the primary resource type does not constitute a new proposal. The inclusion of battery storage to a proposal will be treated as an “option”.

## 4.0 SUBMITTAL OPTIONS AND REQUIREMENTS

### 4.1 Commercial Transactions

Proposals to be considered by EPE will include supply-side and demand-side energy alternatives including distributed generation (i.e., interconnection at the distribution grid voltage level). EPE may also include a self-build option. EPE will consider the proposal arrangements of the following types listed below:

- short-term PPAs (one to four years) or Long-term PPAs (five years or greater) for sale of energy or energy and capacity from new or existing resources (PPAs for renewable energy resources are to include transfer of associated RECs to EPE);
- build-transfer agreements for standalone solar, solar paired with battery storage, energy storage<sup>2</sup>, and conventional generation options;
- proposals for solar that are initially PPA, to provide a build-transfer option at year five (provide PPA cost and transfer price with projected O&M);
- tolling Power Purchase Agreement for conventional, gas-fired thermal generation (proposals for gas-fired generation must include pipeline interconnection within PPA price, if applicable);
- proposals for EPE purchase or equity participation in the Bidder's new or existing generation facility and;
- agreements for Load Management to participate in energy efficiency and/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 5.0.

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 firm option to purchase or lease to demonstrate 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 energy or energy and capacity that EPE may purchase pursuant to the RFP must be delivered to EPE's local transmission system (transmission system within the EPE Balancing Authority Area) to ultimately serve EPE's Texas retail customers. It may be possible for proposals between 5 to 20 MW to interconnect to EPE's distribution system (dependent on location and feeder/system characteristics), which may facilitate shorter project lead-times. 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 the ability to deliver energy to EPE's load area, whether the proposal contemplates a PPA or a facility build-transfer agreement.

---

<sup>2</sup> EPE may consider energy storage options for "build-transfer ownership" depending on the type of technology and risk. EPE would welcome options for O&M service agreements and warranty terms that would mitigate technology risk.



Where the Bidder's resource is interconnected to a third-party transmission system and not to the EPE local transmission or distribution system, the Bidder should identify in its proposal (a) the charges assessed by the third-party transmission service provider, including applicable ancillary services, to reach the EPE transmission system and (b) the point on the EPE transmission system at which the Bidder's energy is to be tendered by the Bidder to EPE. In addition, the proposal must be accompanied by a demonstration that the Bidder has (or will) secure firm transmission capacity on such third-party systems from the location of the resource to EPE's local transmission system. To be clear, the Bidder must identify the total cost to have its resource delivered to a substation on EPE's local transmission system and must include those third-party transmission system costs in its proposal.

It is further noted that the delivery of power to EPE's local transmission system into Springerville, Greenlee, and West Mesa is subject to WECC Path 47 operating limits and this factor will be taken into consideration during bid evaluation. Similarly, the Eddy-Amrad transmission line is a line that is fully subscribed on a firm basis by third parties from Empire to Amrad, leaving only the Eddy 345 to Empire 345 portion available at present, a location without any proximate EPE load, and this factor will be taken into consideration. Furthermore, if the resource is located outside of EPE's Balancing Area and is intermittent/non-dispatchable (e.g., solar or wind), the bid must also include the proposed method of dealing with regulating and balancing requirements, and any associated costs (i.e., battery storage regulation and regulating services by the host Balancing Authority Area Operator).

For PPA arrangements of existing or new renewable energy resources located outside of EPE's Balancing Authority Area, the following requirements must be met.

1. The renewable energy must be delivered to EPE's system at either Springerville, Greenlee, or West Mesa or any other substation owned and operated by EPE in EPE's local transmission system.
2. The proposal must include a method for providing set hourly schedules/profiles for delivery of energy or proposed means of scheduling an intermittent resource, if located outside of EPE's Balancing Authority Area, by either
  - a. firming up output by regulating with additional/excess renewable generation at the same site,
  - b. regulating via battery storage,
  - c. regulating services provided by the host Balancing Authority Area Operator,
  - d. other options of firming up energy profiles to hourly forecasted energy, or
  - e. other options for addressing balancing of output such as metering of output to EPE's Balancing Authority.
3. If delivered via the West Mesa to Arroyo transmission line, providing firm hourly schedules are of greater importance due to the electrical power flow limitations imposed by the phase-shifting transformer at Arroyo.

Where the Bidder's resource is directly interconnected to the EPE transmission system, the Bidder should identify in its proposal (a) the point on the EPE transmission system at which the Bidder's energy is to be tendered by the Bidder to EPE, (b) whether the Bidder's resource is currently interconnected to the EPE transmission system and receiving interconnection service from EPE or whether the Bidder has requested interconnection service from EPE (and the type of interconnection service requested), (c) the current status of the Bidder's generator interconnection request, and (d) the estimated Network Upgrade costs, if any, identified in the generator interconnection process as necessary to permit the Bidder's generating facility to interconnect to the EPE transmission system.

EPE will select the winning proposal(s) after EPE identifies and evaluates the proposals that best meet its objectives and that are 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. Final selection of winning proposal(s) will include consideration of whether the resource(s) as proposed requires

network upgrades in order for EPE to receive the energy into the EPE local transmission system and/or in order to deliver the energy to EPE's Texas retail customers by including those estimated costs. Final selection of winning proposal(s) also will include consideration of whether the resource(s) and the Bidder have demonstrated a commitment and ability to be ready to serve EPE load timely.

The winning Bidder(s) will be required to have in place or to secure Interconnection Service as specified in the EPE Large Generator Interconnection Procedures (Network Resource Interconnection Service or Energy Resource Interconnection Service) or as specified in the EPE Small Generator Interconnection Procedures, as applicable, and sign a Generator Interconnection Agreement as specified in the EPE's Open Access Transmission Tariff ("OATT") (<http://www.epelectric.com/transmission/transmission-tariff>). In addition, Bidder(s) pursuing Network Resource Interconnection Service under EPE's Large Generator Interconnection Procedures, **MUST** submit an Interconnection Request under EPE's OATT in the next open cluster window, for any Bidder that is not already in EPE's interconnection queue. Regardless of the interconnection procedures used, the resource must be eligible to be designated by EPE as a Network Resource under EPE's OATT. However, any resource seeking to interconnect to EPE's distribution system may not need to proceed under EPE's OATT.

As described in the timeline, awarded proposals **MUST** submit into the Spring 2022 cluster study. If any unforeseen circumstances arise that delay the RFP award process, EPE may request that shortlisted proposals submit into the Spring study cluster pending award.

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

Primary Contact: Roberto Favela  
EPE System Interconnections  
[roberto.favela@epelectric.com](mailto:roberto.favela@epelectric.com)

Secondary Contact: Donna Enriquez  
EPE System Interconnections  
[donna.alhakeem@epelectric.com](mailto:donna.alhakeem@epelectric.com)

### 4.3 Energy and Capacity 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:

- Renewable energy or energy and capacity 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 generating units to enable them to meet a design temperature of minus (-) 10°F, with a design coincident wind velocity of 25 miles per hour. 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 6.3 below, with associated technical information to be provided as specified in Section 6.2.3 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. Bidders should be aware of and reasonably anticipate any changes to weatherization requirements for generating facilities that are applicable to EPE's service territory.

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 ("EMS") to provide status information and 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, and
- dispatch control for applicable proposals, e.g. solar with battery storage or biomass.

Communications must be NERC CIP (Critical Infrastructure Protection) 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 will participate in the review and approval of any 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 generating 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 175-225 MW of capacity resources, preferably during EPE's on-peak hours between 1:00 PM to 7:00 PM Mountain Prevailing 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, EPE may choose to not consider proposals that are significantly greater than the current capacity needs depending if the proposal offers benefits to customers.

In order for EPE to fulfill its system needs, EPE may negotiate short-term and/or long-term contract(s). The length of any resulting short-term contract can be for a term of one to four years and long-term contracts for a term of up to 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.

EPE prefers fixed PPA pricing options for energy (\$/MWh) and/or capacity (\$/kW-month). The Bidder shall provide a specific formula for contract energy and capacity pricing and include a description of the proposed price formula for each component (e.g., if a project has solar and battery, what is the fixed price for solar energy and what is the fixed capacity charge for the battery storage). Again, EPE's preference is for fixed pricing. If the Bidder proposes energy or capacity pricing with escalation, the escalation factors must be defined as a fixed rate.

For biomass and biogas proposals, 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 (if applicable). 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 GDPIPD 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 renewable energy utilizing different types and combinations of generation facilities, the proposal shall clearly identify the exact pricing, capacity, and/or availability variations based on the 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.

EPE requires Bidders include a Right of First Offer and Right of First Refusal option in conjunction with any PPA proposal. 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 are sold. Bidder must demonstrate the ability to secure firm transmission paths to EPE's local transmission system.

## 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 of site control with the land owner(s) and other stakeholders that may impact the execution of the land purchase or lease in the form of an option to purchase or lease. For sites on federal land such as the Bureau of Land Management, alternate documentation may be considered. EPE has a preference for projects on land owned by the Bidder, but EPE may or may not, at its sole discretion, consider proposals based on projects built on leased land.

EPE is not and will not be responsible for site selection, land acquisition, environmental permitting, and 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, and
- consumables are to include water consumption if purchased from third party.

Bidder must provide a specific cost forecast for ongoing O&M. An O&M manual must be provided to EPE that details the maintenance schedule for the facility. EPE is also interested in receiving a proposal that includes ongoing O&M performed by Bidder or a third-party contractor under an O&M contract. Bidder should specify contract terms and operating cost guarantees for this option. 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 175-225 MW of capacity resources. At EPE’s sole discretion, proposals that 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 include 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

Resources with the flexibility to be used in multiple applications, including but not limited to providing capacity for peak-usage times, economic dispatch in real-time markets, intra-hour balancing, and contingency reserves are anticipated to demonstrate higher values in EPE modeling. Also, EPE anticipates a higher value for projects using better technology that enhances operational, reliability and capacity needs for the long run and for resources that will help integrate and firm its increasing portfolio of variable energy resources.

For inverter-based resources, preference will be given to those resources that utilize grid forming inverters and/or supplemental technology capable of supplying a Power Factor of 0.90 at the POI during peak hours.

Projects shall adhere to the following metering specifications and requirements:

- CT: +/-0.3% accuracy at burden of 0.1 – 1.8 ohms, 10% - 100% rated current
- PT: +/-0.3% accuracy through burden rating ZZ (400 Volt-Amperes secondary at 0.85 power factor) at 90% through 110% of nominal voltage
- Meter:
  - 0.2 Accuracy
  - Minimum 60 days storage of meter data
  - 5- minute interval granularity for energy production
- Communications to access daily data programmatically (e.g. MV90)

### 5.1 Conventional Generation

#### Applicable to All Conventional Generation

EPE is interested in peaking generation with flexibility for cycling, ramping, and wide operating band. A gas one-on-one combined cycle (“CC”), reciprocating engine(s) (“RECIP”), or large, simple combustion turbine(s) (“CT”) are conducive to the requirement. However, EPE is not explicitly limiting proposals to only CC, RECIP, or CT proposals. Flexibility in lower feasible minimum operating outputs is desired to allow for a wide operating band for operating reserves while meeting environmental emissions’ requirements. EPE is not requiring 10 minute quick-start capability, however EPE will take into consideration start-up time for dispatch flexibility.

A generator 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 if the facility is able to connect to an interstate pipeline.

EPE had recently announced its clean energy goals of 80% carbon free by 2035 and pursuit of 100% carbon free clean energy by 2045. However, this is an all source RFP open to natural gas generation as part of the evaluation to identify the lowest cost resource additions that will reliably serve EPE Texas jurisdictional

energy needs. Among fossil fueled, conventional generation bidders, preference will be given to generators that are or will be hydrogen-ready to allow for future conversion to burn 100% hydrogen or a hydrogen fuel blend by 2040 or 2045. If proposed natural gas generators are not hydrogen fuel capable nor convertible to hydrogen fuel in the future, EPE requests an alternative proposal be provided for a hydrogen capable or convertible option. Proposals must include all required costs for hydrogen conversion. Bidders may want to consider a 20-year life or include options for carbon free conversion either as hydrogen fuel or other options if the life of the unit(s) is beyond 2040.

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 its 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, circulating water and condensate pumps, and fire protection system. 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 or engine being proposed) that has attained 10,000 hours of operation in the industry and is no longer deemed a prototype technology.

All conventional units should be dispatchable and capable of direct monitoring and AGC control by EPE's 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 requiring 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 2025 and the steam generator in 2026. The proposal must provide a separate costing for the two phases as part of the initial submittal. EPE may opt to award solely the first phase of the project, i.e. the combustion turbine in simple cycle mode.

---

## **Specific to Combustion Turbine and Reciprocating Engine Proposals**

EPE will accept proposals for single CT units or a combination of units to best approximate the 175-225 MW capacity range in year 2025. If the proposal is for multiple units, provide an alternate proposal for a single unit.

## **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 PPA proposals in *Attachment 9.3*. Proposals may only propose capacity pricing if they include battery storage or some other method to firm up the energy output. Proposals that include capacity pricing must provide the basis for measurement to determine the firm capacity. Bidders shall provide a predictable, specific methodology for energy pricing or energy and capacity pricing on an annual basis.

Bidders may, but are not required to, provide Positive Sequence Load Flow power flow models and one-line diagrams identifying apparent power (MVA), reactive power (MVAR), and power factor capability of the facility at the POI”).

For dispatch-limited resources, EPE will evaluate the ELCC metric to quantify the capacity contribution. The capacity contribution of dispatch-limited resources towards a utility’s resource adequacy needs is usually lower than their full operating capacity. For example, variable renewable resources like wind and solar have a variable output, for which their capability to generate at the times needed for resource adequacy is typically less than their rated 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 source availability and ability to secure fuel sources for the life of the project.

Any dispatchability or output limitations should be clearly described. Specifically, 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**

EPE will evaluate new wind and solar resource Proposals with respect to their capabilities for operational flexibility and system reliability capability such as AGC, Fast Frequency Response, curtailment optionality, capacity firming optionality, or other reliability technologies.

Additionally, given the significant increase in implementation of solar and battery resources, EPE will place value on projects offering an ability to better match generation to EPE’s load in conjunction with these resources. The above advantages may offset pricing differentials between bids.



EPE is interested in evaluating renewable energy resources paired with battery storage to mitigate and regulate intermittency of the renewable energy resource and firm up the renewable energy to make EPE whole in any year, and which may provide regulation, firm capacity output during peak hours, or renewable energy load shifting.

EPE requests that solar and wind proposals provide an option with battery storage at 50% of the renewable energy resource's nameplate capacity (AC).

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 five MW in size.

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

EPE will evaluate intermittent resources proposed in combination with other proposals and existing EPE resources to identify the optimal portfolio resource mix considering 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 the characteristics of the renewable resource that will provide firm output capability (e.g. storage or back-up generation).

Inverter based renewable resource 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.

Variable Energy Resources ("VERs") resources are to be AGC control capable for management of curtailment commands directly from EPE's EMS. This implies dispatchability of curtailment or release of curtailment within six-second AGC command cycles. If technology does not allow for this, please provide an explanation to limitations of your proposal. EPE prefers full AGC capability but may consider options with AGC intervals not to exceed 30 seconds.

For energy curtailment measurement, the bidder shall consent to using the five-minute VER forecast that is used in the market to establish the baseline for any measurement of curtailed energy (MWh). Further, the bidder shall consent to an unbiased forecast of EPE's choosing to set the market awards and dispatches. For example, this may be coordinated with the OATT changes since they mandate the Energy Imbalance Market Entity and have a five-minute forecast.

### **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 renewable resource proposals, which may provide regulation for intermittent renewable resources, firm capacity output during peak hours, or renewable energy load shifting.

All energy storage system Proposals will be evaluated considering the following requirements:

- provide active and reactive capability at a power factor of 0.9 at the POI or as instructed by System Operation during peak load periods and for providing ancillary services;
- assist with ensuring grid reliability, including transmission and distribution system stability, while integrating VERs into the grid; and

- support diversification of energy resources and enhance grid security.

Projects involving energy storage shall comply with the following requirements:

- be fully dispatchable by EPE (applies to both, stand-alone battery and battery paired with solar or wind;
- battery energy storage systems shall have a system latency of one second or less, a ramp rate (in both charging and discharging) of full capacity (in MW) within one second, and shall be provided with grid-forming inverters;
- have the control systems in place with the ability to respond to dispatch and disconnection signals that originate remotely from EPE; and
- have a minimum rate of charge equivalent to its rate of discharge.

Energy storage proposals submitted for the purposes of serving load during the peak hours or for load shifting should provide a minimum of 15 MW for four, six or eight hours of output and should be capable of multiple discharge and charge cycles per day. 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 the following types of items:

- Number of expected cycles
- Charge and discharge ranges
- Round trip efficiency
- Degradation schedules

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 have significant deployments in the field to be categorized as a "proven" technology.

EPE may consider "prototype" or "unproven" technologies for PPA proposals. EPE will also consider energy storage proposals that incorporate solar.

#### **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 2025 and may continue to increase in capacity beyond 2025. EPE may or may not consider amounts lower than 10 MW in part depending on cost effectiveness and potential year over year growth for the proposals submitted. For load management proposals, the preferred minimum contract term is five years.

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

- Estimated load reduction – to include calculations and assumptions
- Program cost
- Plan for measurement and verification
- Work plan describing the design, implementation, operation, and management of the program
- Program limitations

- Specific information on the reliability of the resource under extreme high or low weather in the area in which the resource is located
- Type of platform that will be utilized along with a detailed list of all the IT specifications

If a potential limitation exists, it must be described in detail in the proposal. EPE reserves the right to request additional information from the Bidders regarding limitations or any other details related to the proposal. The Bidders 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, the Attachments provided in Section 9.0 of the RFP must be completed and submitted as part of the Bidder's proposal as required.

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:

- 2021 All Source RFP for Electric Power Supply and Load Management for Texas,
- Company Name of Bidder, and
- 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 the RFP must be completed and returned with the proposal. Failure to properly fill in 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 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, Build-Transfer Agreement, 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
- Generation Equipment availability and supply chain status
- Resource design life, including a breakout of design life for major system components
- Status of site control consistent with minimum requirements
- 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 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 8760 hourly generation profiles
- 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 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, to include:

- energy offered and energy price per year;
- capacity offered and capacity charge per 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; and
- 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. Proposals 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 and 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 NO<sub>x</sub>, SO<sub>x</sub>, 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 CO<sub>2</sub> emissions. Emission 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. The project schedule shall include identifying milestones 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, Fitch, 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
- Identification of 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
- With reference to the above question, describe bidder experience developing, financing and operating similar projects
- 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 single-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 single-stage pricing process consists of evaluating initial bids that have met the requirements of the responsiveness and viability reviews. The evaluation and selection of proposals will be based solely on the proposals submitted on the proposal due date. Therefore, there will be no opportunity to submit Best and Final proposals. 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 (e.g., conventional/dispatchable, renewable, load management, and/or energy storage) and type of proposal being offered (e.g., 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 will be modeled in EPE's optimization model(s) to determine the winning bid(s).

### 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 determine 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 a single-stage process. The proposals will be evaluated from a levelized cost basis and will be compared to proposals within their resource type group and 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
  - Evidence of site control
  - Right-of-way acquisition
  - Environmental and other permitting
  - Resource financing
  - Design/procurement/construction status
  - Firm transmission capacity
  - Commercial operation date and completion security
  - Reliability of technology
  - Ability of the resource to continue operating in extreme hot and cold weather temperatures
  - Project team capabilities
  - Performance guarantees and limitations on remedies
- Financial and Operational Viability
  - Bidder's financial strength
  - Operation and maintenance plan
  - Environmental and regulatory compliance
  - Environmental impact
- Operating Characteristics
  - Dispatching limitations
  - Cyclic on/off operation capability
  - Automatic generation control
  - Ancillary services (e.g., voltage support and load following)
  - Start-up characteristics
  - Maintenance coordination
  - Transmission impact/voltage control
  - Water efficiency
- Other Factors
  - Resource expansion capability
  - Stability of price proposal
  - Economic development benefits
  - Diversity of overall resource portfolio
  - Chance of regulatory approval
- EPE Financial Impact
  - Cash flow

- Debt ratio
- Bond ratings
- 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.

- Cost-Effectiveness
  - Total Resource Cost Test
  - Rate Impact Measure Test
- Economic and Financial Risk
  - Measurement and Verification Plan
  - Resource Financing
  - Marketing Plan

#### **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 Bidders other than the lowest price Bidder or with Bidders other than the Bidder evidencing the greatest technical ability, if EPE, at its sole discretion, determines that doing so would result in the greatest value or lowest risk to EPE and its customers. EPE reserves the right to enter discussions with multiple Bidders at any time 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 the 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 the 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 the 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 the RFP is responsible for all costs incurred in evaluating, preparing, and responding to the RFP. Any other costs incurred by any Bidder during negotiations are also the responsibility of the Bidder.

---

## 9.0 ATTACHMENTS

---

## 9.1 Notice of Intent to Bid

Company Name: \_\_\_\_\_

Company Address: \_\_\_\_\_

\_\_\_\_\_

Contact Person:

Name	
Title/Position	
Mailing Address	
Courier Address (if different)	
Telephone Number	
Fax Number	
Email Address	

Anticipated Power Supply Type: \_\_\_\_\_

Location, Size and Interconnection Point of Project (if available): \_\_\_\_\_

\_\_\_\_\_

Authorized Signature: \_\_\_\_\_

Date: \_\_\_\_\_

The Notice of Intent to Bid may be submitted via email to the contacts defined in section 1.3, or mailed to Manuel Gomez and Damian Lamas at Location #135, 100 N. Stanton, El Paso, Texas 79901. Receipt of the Notice of Intent to Bid will be confirmed by email 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 email or to the above address no later than 5:00 p.m., Mountain Standard Time, on December 23, 2021.**

---

## 9.2 Data for All Projects

### 1. Project Location

State: \_\_\_\_\_ County: \_\_\_\_\_ City: \_\_\_\_\_

Section: \_\_\_\_\_ Township: \_\_\_\_\_ Range: \_\_\_\_\_

### 2. Provide a general description of the resource project:

---

---

---

---

---

### 3. The data below applies to resources that generate power whose output can be dispatched (via AGC or pre-defined schedules – ANY RESOURCE PROPOSALS THAT ARE INTERMITTENT OR HAVE CONSTRAINTS PREVENTING FULL OUTPUT TO NAMEPLATE MUST FILL OUT THE 12X24 OUTPUT PROFILE DENOTED IN SECTION 9.5). At a minimum, include the following items, if applicable:

a. Net summer capacity offer and capacity charge by year for each alternative option proposed. The information shall be presented in a table that shows net kW and \$/kW/mo. Additional support information:

i. Net summer MW \_\_\_\_\_

For conventional fire generation provide MW output at 1% wet bulb temperature occurrence. \_\_\_\_\_

For combined-cycle proposals provide for both operating states of combined and simple-cycle. Net capacity shall be based on 20-year average unit conditions, not 'new and clean'.

ii. For the MW ratings above, identify the wet bulb temperature (<sup>0</sup>F), mean coincident dry bulb temperature (<sup>0</sup>F), and altitude above sea level (ft.): \_\_\_\_\_

---

b. Primary fuel type: \_\_\_\_\_ Secondary fuel type: \_\_\_\_\_

### c. Other unit operating parameters

i. Minimum net unit output (MW) under normal operating conditions: \_\_\_\_\_ --

In combined-cycle mode: \_\_\_\_\_

In simple-cycle mode: \_\_\_\_\_

ii. Maximum number of starts (requests) per day: \_\_\_\_\_ -

- 
- iii. Time to bring on-line, i.e., synchronize to grid (minutes): \_\_\_\_\_-----  
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°): \_\_\_\_\_-----

**Note:** If overhauls follow a periodic pattern such as 10 days each year with 20 days every fourth year, provide that pattern.

d. Describe AGC capabilities and, if applicable, any constraints: \_\_\_\_\_

\_\_\_\_\_

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 one 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, OR 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 OR 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 OR 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 initial year price escalating at a fixed annual rate for the contract term
    - iii. 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 Daylight 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. **Total Annual Energy Production:** 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.
2. Lump-sum purchase price (\$) and date for payment: \_\_\_\_\_

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 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., that 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**

<b>COST CATEGORY</b>	<b>COST (\$000)</b>
<b><i>Total Capital Cost</i></b>	
<b><i>Total EPC Costs</i></b>	
Major Equipment	
Sales Tax	
Other EPC	
Fixed Costs	
Variable Costs	
<b><i>Total Owners Cost</i></b>	
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**

<b>COST SUB-CATEGORIES</b>	<b>INDICATE WHETHER INCLUDED, NOT INCLUDED OR NOT APPLICABLE</b>	<b>COST CATEGORY IT FALLS UNDER</b>	<b>COST (\$000)</b>
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 PUCT, Texas Legislature, NMPRC or New Mexico Legislature,.

1. Provide a detailed description of the generating facilities and provide a verification methodology to track the sale, transfer or disposition of renewable energy produced to ensure energy is not used for or counted toward, the Texas or New Mexico renewable energy portfolio standard or requirements, or voluntary tariff program, by or on behalf of another utility:

---

---

---

2. 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 the Resource Planning web page in EPE's website ([www.epelectric.com](http://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 the 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.

---

## **10.0 ADDITIONAL TABLES AND INFORMATION INPUT TEMPLATES**

Bidder is required to fill in all the information requested in the Excel workbook that applies to its particular project. The Excel workbook containing the additional information requests is posted in the Resource Planning web page located in EPE's website ([www.epelectric.com](http://www.epelectric.com)) and is named "2021 ALL SOURCE TABLES AND INPUT TEMPLATES". Please fill in all tables and information that apply in Excel format.