# Arizona Electric Power Cooperative, Inc.

# 2021 All-Source Capacity and Energy Request for Proposal

**RFP** Administrator:



#### Arizona Electric Power Cooperative, Inc. Request for Proposals for All-Source Capacity and Energy

1. Gen	eral Information4
1.1.	Introduction
1.2.	Existing Transmission System
1.3.	RFP Administrator
1.4.	Arizona Corporation Commission (ACC)
2. Proj	ect Description
2.1.	Overview of the RFP
2.2.	Basic Requirements for Proposals
2.2.1.	Power Purchase Agreement for Designated Generation Resources
2.2.2.	Build-Transfer Agreements for Designated Generation Resources
2.2.3.	Power Purchase Agreement Proposals for Firm with Liquidated Damages Energy and Capacity 10
2.2.4.	Power Purchase Agreement Proposals for Daily Call Option Products
2.2.5.	Agreements for Load Management from Demand-Side Resources
2.3.	Apache Site Option
2.4.	Multiple Proposals
3. Inst	ructions to Bidders
3.1.	RFP Proposal Process
3.2.	Proposal Contents and Format13
3.3.	RFP Schedule
3.4.	Modification or Cancellation of the All-Source Capacity and Energy RFP15
3.5.	Question Process
3.6.	Bidder Registration
3.7.	Submission of Proposals16
3.8.	Proposal Evaluation
3.9.	Credit and Contract Analysis
3.10.	Confidential Information and Confidentiality Agreements
4. App	provals
5. Res	ervation of Rights19

#### **Appendices:**

<u>Appendix A – Apache Site Plan</u> <u>Appendix B – Apache Station Soils</u> <u>Appendix C-1 – Evaluation Form for Non-Renewable Designated Generation Resources</u> Appendix C-2 – Evaluation Form for Energy Storage and Renewable Designated Generation Resources

<u>Appendix C-3 – Power Purchase Agreement Evaluation Form for Firm Liquidated Damages Energy and</u> <u>Capacity</u>

<u>Appendix C-4 – Power Purchase Agreement Evaluation Form for Call Option Products</u>

<u>Appendix C-5 – Power Purchase Agreement Evaluation Form for Load Management from Demand-Side</u> <u>Resources</u>

Appendix D – Bidder Registration Form

Appendix E – Confidentiality Agreement

# 1. General Information

#### 1.1. Introduction

Arizona Electric Power Cooperative, Inc. (AEPCO) is a not-for-profit generation and transmission (G&T) cooperative serving six distribution cooperatives with electric load in Arizona, California, and New Mexico. Together, these distribution partners serve over 160,000 electric meters and an annual load of roughly 750 MW and 2.6 million MWh. Additionally, AEPCO provides energy scheduling and trading, transmission, and other services to a number of corporate, municipal, and cooperative entities within Arizona, Nevada, and California, and operates its own metered sub-system within the Western Area Lower Colorado (WALC) Balancing Authority.



Figure 1: AEPCO's Members

AEPCO owns and operates Apache Generating Station which has approximately 605 MW of combined gross capacity located near Cochise, east of Benson, Arizona. AEPCO and its Members also purchase power to meet energy needs during peak summer energy use.

AEPCO also owns, operates and maintains 866 miles of transmission line (all or in part) and 36 substations that transmit power from Apache Station to northwestern Arizona.

AEPCO DUNS: 06-839-7876

#### **1.2.** Existing Transmission System

A map of AEPCO's transmission system and Class A Member service territories can be found in Figure 2.

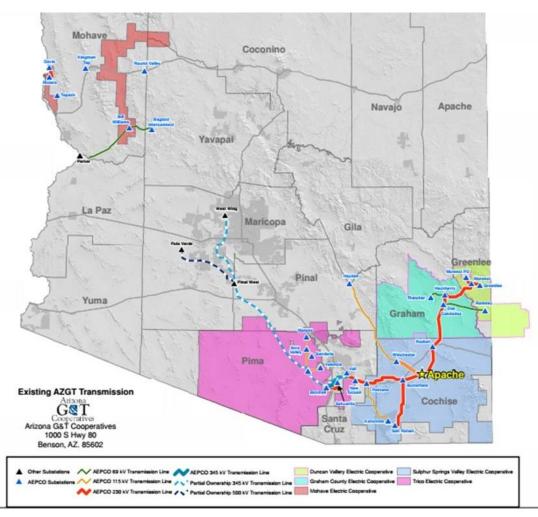


Figure 2: AEPCO's Existing Transmission System Map

The AEPCO Transmission Map is provided as an informative illustrative reference of AEPCO's transmission, sub-transmission, and substations for respondents and is not intended to make any binding or legal representations thereof. Neither AEPCO nor the RFP Administrator make any guarantees as to the accuracy of the map at the time of the RFP issuance. If short listed, bidders must agree to submit an interconnection request for the generation resource to the appropriate transmission provider as part of the next transmission planning phase cycle to ensure feasibility.

#### 1.3. RFP Administrator

The duties of the RFP Administrator for the All-Source Capacity and Energy RFP (All-Source RFP), as further described in Section 3, will be performed by Alliance for Cooperative Energy Services Power Marketing LLC (ACES).

As RFP Administrator, ACES' business model provides an established infrastructure of independent energy management practices that supports the verification of, and compliance with, applicable processes, policies, and procedures. ACES manages a significant amount of confidential data through a combination of specific internal guidelines, the company's independent control group, the company's corporate compliance manager, and periodic reporting to the Board of Directors Risk Oversight and Audit Committee. ACES takes its obligations regarding the maintenance of Confidential Information very seriously and will handle all Confidential Information with the highest professional regard.

#### **1.4.** Arizona Corporation Commission (ACC)

AEPCO is regulated by the ACC. The entire RFP process will be subject to review by the ACC, including outreach to bidders by ACC Utilities Division Staff regarding the fairness and transparency of the RFP process.

# 2. Project Description

#### 2.1. Overview of the RFP

AEPCO is soliciting proposals for reliable and economically competitive power to supply long-term capacity to its Members. This resource, or combination of resources, will be needed to meet projected demand growth of roughly one to two percent over the next decade. Additionally, AEPCO will also consider additional resources if they can provide economic, reliability, or strategic benefits in concert with AEPCO's existing portfolio or in place of a portion of AEPCO's existing portfolio. As a result, AEPCO has increased the range of solicited capacity for those bidders that would like to submit larger projects for consideration.

AEPCO will consider 25 MW to 200 MW of firm capacity based on each resource's ability to effectively meet AEPCO Members' peak demand needs. Firm capacity will be defined as a resource's nominal, or net maximum, alternating current (AC) capacity multiplied by its effective capacity contribution defined in Section 3.8.

AEPCO will accept proposals for terms or commercial operating dates starting before December 31, 2026. For the economic evaluation, resources or products must be available by June 1 of that calendar year to count for peak capacity value.

AEPCO requests proposals from all types of suppliers, including but not limited to: electric utilities, power marketers, exempt wholesale generators, independent power producers, and generation developers (renewable and non-renewable). AEPCO will also consider an acquisition of resources after the first five years of the agreement.

AEPCO is using this RFP to identify viable resources to serve its load and to provide bidders an opportunity to compete in offering those resources to AEPCO. See Section 2.2 for the broad range of solicited resource types. Further detail is also included in Appendices C1 through C5.

Subject to the limitations specified in this RFP, AEPCO will consider proposals for all types of resources as well as firm with liquidated damages products, call option contract proposals, and demand-side resources.

#### 2.2. Basic Requirements for Proposals

AEPCO will consider supply-side and demand-side resources and may select a combination of proposals. The following resource types will be considered and are detailed further in Section 2.2.1 through 2.2.5:

- Long-term Power Purchase Agreement (PPA) for capacity and energy from a new or existing designated generation resource
- Build-transfer agreements for capacity and energy from a new or existing designated generation resource
- Long-term PPA proposals for firm with liquidated damages energy and capacity
- Long-term PPA proposals for daily call option products
- Agreements for load management from demand-side resources

Where the bidder's resource is interconnected to a third-party transmission system and not to the AEPCO 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 AEPCO transmission system and (b) the point on the AEPCO transmission system at which the bidder's energy is to be tendered by the bidder to AEPCO.

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. Any build-transfer proposals will require review of permitting plans and approval by AEPCO. If a build-transfer plan is awarded, AEPCO may participate in the review and approval of any filings as AEPCO will be the ultimate owner of the facility.

AEPCO will install an RTU and communication equipment that uses DNP or Modbus protocols at project's control center.

All proposals must be submitted in Mountain Standard Time (MST), unless specified otherwise in Sections 2.2.1 through 2.2.5.

# 2.2.1. Power Purchase Agreement for Designated Generation Resources

AEPCO is requesting proposals from bidders for a variety of generation resources including, but not limited to: baseload generation, intermediate generation, peaking

generation, energy storage resources, and renewable generation. Proposals for designated generation resources may be for a new resource or an existing resource.

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 backup fuel is required if the bidder has non-firm fuel delivery or a non-firm fuel supply.

AEPCO expects battery energy storage to be used primarily for full depth peak shaving capacity unless additional benefits that can be realized in tandem are specified by bidders. This does not necessarily require daily full cycle use, however the economic modeling will also consider the value of energy arbitrage if additional cycles are included in the pricing.

Proposals for non-renewable designated generation resources shall provide the information required in the Evaluation Form in Appendix C-1 main section and Power Purchase Agreement section.

Proposals for renewable designated generation resources, including energy storage resources, shall provide the information required in the Evaluation Form in Appendix C-2 main section and Power Purchase Agreement section.

AEPCO will accept proposals from all types of generation resources. In order to be evaluated, proposals for designated generation resources must meet the following minimum qualifications:

- Minimum capacity quantity of 10 MW
- Generation resource and physical location must be specified
  - **If short listed**, bidders must agree to submit an interconnection request from the generation resource to the appropriate transmission provider as part of the next transmission planning cycle
  - AEPCO is requiring bidders to have and provide evidence of a feasible site(s) selected and at a minimum have a firm option to purchase or lease to demonstrate site control with the land owner(s) and other stakeholders that may impact the execution of the land purchase
- Stand-Alone battery energy storage must have a minimum of 4-hour duration
- Battery energy storage must have a minimum of 120 full cycles per year
- Solar paired with 4-hour battery storage that charges only from solar energy must be a minimum of 100% solar capacity to battery capacity to ensure adequate charging energy to maintain reliable state of charge for peak shaving
- Wind paired with 4-hour battery storage that charges only from wind energy must be a minimum of 200% wind capacity to battery capacity to ensure adequate charging energy to maintain reliable state of charge for peak shaving
- Renewable designated resources must include transfer of all environmental attributes, including the Renewable Energy Certificates (REC), to AEPCO

- Must use the Western Renewable Energy Generation Information System (WREGIS) to track and transfer the RECs
- Must be able to register the resource with the California Energy Commission (CEC) for California Renewable Portfolio Standard eligibility

#### 2.2.2. Build-Transfer Agreements for Designated Generation Resources

AEPCO is requesting proposals from bidders for build-transfer agreements for designated generation resources. AEPCO is requiring that all bidders proposing a new project, in which ownership will be transferred to AEPCO, demonstrate that the project will be constructed through an Engineering, Procurement, and Construction (EPC) contract or other similar arrangement.

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

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 backup fuel is required if the bidder has non-firm fuel delivery or a non-firm fuel supply.

Proposals for non-renewable designated generation resources shall provide the information required in the Evaluation Form in Appendix C-1 main section and Build-Transfer Agreement section.

Proposals for renewable designated generation resources, including energy storage resources, shall provide the information required in the Evaluation Form in Appendix C-2 main section and Build Transfer Agreement section.

In order to be evaluated, proposals for build-transfer resources must meet the following minimum qualifications:

- Minimum quantity of 10 MW
- Must specify generation resource and physical location
  - **If short listed,** bidders must agree to submit an interconnection request from the generation resource to the appropriate transmission provider as part of the next transmission planning cycle
  - AEPCO is requiring bidders to have and provide evidence of a feasible site(s) selected and at a minimum have a firm option to purchase or lease to demonstrate site control with the land owner(s) and other stakeholders that may impact the execution of the land purchase
- Must provide a specific cost forecast for ongoing operating and maintenance (O&M) costs, including recommended plant staffing levels

- Renewable energy and energy storage systems must use Tier 1 PV panels, battery components and inverters and meet the robust standards typical of the Utility Industry
- The control, operating and communication systems will utilize current industry standards and state-of-the-art hardware, software, and networking technology for a robust, fully integrated system of open architecture
- Must include a description of any performance guarantees or warranties

#### 2.2.3. Power Purchase Agreement Proposals for Firm with Liquidated Damages Energy and Capacity

AEPCO is requesting proposals from bidders for Firm with Liquidated Damages blocks to meet all or a portion of its power supply need.

PPA proposals for Firm with Liquidated Damage blocks shall provide the information required in the Power Purchase Agreement Evaluation Form in Appendix C-3.

In order to be evaluated, proposals for Firm with Liquidated Damages blocks must meet the following minimum qualifications:

- Minimum quantity of 10 MW
- Proposals must be provided as either 6x16, 7x16, 7x24, or super peak
  - All submissions must be in Pacific Prevailing Time (PPT) to align with the appropriate transmission provider and Intercontinental Exchange (ICE) standard products
  - o 16-hour period defined as hour ending (HE) 07 through HE 22 PPT
  - Super peak period defined as HE 13 through HE 20 PPT
  - Proposals can be provided as seasonal (summer being June through September, winter being all other months) or annual
- Proposals for Firm with Liquidated Damages
  - Proposals for physical energy must be Firm with Liquidated Damages, as defined in Schedule P: Products and Related Definitions of the Edison Electric Institute (EEI) Master Power Purchase & Sale Agreement; or
  - WSPP Agreement Schedule C
- Proposals delivered directly to AEPCO's transmission system or at one of the following Points of Delivery may be given preference:
  - PALOVERDE500
  - WESTWING500
  - o MEAD230
  - PINALWEST500
- Preference will be given for proposals under which the contract does not permit the seller to interrupt deliveries to the buyer except for reliability reasons

#### 2.2.4. Power Purchase Agreement Proposals for Daily Call Option Products

AEPCO is requesting proposals from bidders for physical daily call options to meet all or a portion of its power supply needs. Daily call options can be a heat rate or fixed strike price. AEPCO will consider strike prices for baseload, intermediate, or peaking needs.

PPA proposals for the daily call option product shall provide the information required in the Power Purchase Agreement Evaluation Form in Appendix C-4.

In order to be evaluated, proposals for daily call options must meet the following minimum qualifications:

- Minimum quantity of 10 MW
- Proposals must be provided as either 6x16, 7x16, 7x24, or super peak
  - All submissions must be in PPT to align with the appropriate transmission provider and ICE standard market specifications
  - Proposals can be provided as seasonal (summer being June through September, winter being all other months) or annual
- Proposals must be for physical energy
  - Proposals for physical energy must be Firm with Liquidated Damages as defined in Schedule P: Products and Related Definitions of the EEI Master Power Purchase & Sale Agreement; or
  - o WSPP Agreement Schedule C
- Proposals must specify either:
  - Fixed strike price
  - Heat rate, in terms of MMBtu/MWh
    - Heat rate proposals must identify a published natural gas price index
- Proposals delivered directly to AEPCO's transmission system or at one of the following Points of Delivery may be given preference:
  - o PALOVERDE500
  - WESTWING500
  - o MEAD230
  - PINALWEST500
- Preference will be given for proposals under which the contract does not permit the seller to interrupt deliveries to the buyer except for reliability reasons

#### 2.2.5. Agreements for Load Management from Demand-Side Resources

AEPCO is requesting proposals from bidders for load management from demand-side resources for a portion of its power supply need. AEPCO will consider any type of end use control technology, delivery mechanism, or combination of technologies and delivery mechanisms, provided the proposed solution reliably reduces peak demand during events.

Proposals for the load management product shall provide the information required in the Power Purchase Agreement Evaluation Form in Appendix C-5.

In order to be evaluated, proposals for load management from demand-side resources must meet the following minimum qualifications:

- Minimum quantity of 1 MW
- Must be available during weekday and weekend peak hours, typically from 3 p.m. to 9 p.m. MST during June through September
- Must provide load response with one of the following notification options: (1) hour ahead notification of calling events, (2) day ahead notification of calling events, or (3) a combination of hour ahead and day ahead notification of calling events.
- Must be able to provide measurement and verification for after the fact reporting and analysis of events

#### 2.3. Apache Site Option

AEPCO owns land in Cochise County that bidders can optionally propose to use for their project. The land would be provided via a lease or license to the project developer for the term of the contract at a rate of \$68/acre/year which should be included in the bid price.

A site map is included with this RFP as Appendix A and the general location information of the existing Apache generating facility is below:

Street Address	City	State	Zip	County	Latitude	Longitude
3525 N US Hwy 191	Cochise	AZ	85606	Cochise	32.060300	-109.893100

A portion of this site is dedicated to an existing coal, gas-fired, and solar facility, however the remaining undeveloped portions of the site can be used for new projects for this RFP. Site elevation is approximately 4,200 feet and experiences both hot and cold weather extremes throughout the year.

For the purpose of demonstrating site control, bidders that propose using the Apache site within the AEPCO property boundaries will meet the requirement. However, all other requirements of Section 2.2 must still be met including the responsibility of the bidder to obtain permits, interconnection, and identify fuel supply (if applicable).

The bidder shall perform its own geotechnical study prior to designing its foundations. For the purpose of providing a proposal, a similar soils study is provided as Appendix B to this RFP—Drawing number D-611100-06-0100-X001-A.

# 2.4. Multiple Proposals

AEPCO will accept and encourages multiple proposals from a bidder. In the event the same bidder provides multiple proposals, the bidder must indicate whether the proposals are mutually exclusive.

# **3. Instructions to Bidders**

#### **3.1. RFP Proposal Process**

AEPCO has posted the All-Source RFP document and all related appendices on the RFP website:

#### www.acespower.com/AEPCO2021RFP

To participate in the All-Source RFP, bidders must submit a Bidder Registration Form, Appendix D. Upon receipt of the Bidder Registration Forms, the RFP Administrator will acknowledge their receipt via email.

Bidders should note that, AEPCO will only accept electronically submitted notices and proposals. Bidders are required to submit all completed forms by the specified deadlines to the All-Source RFP submission e-mail address:

#### AEPCO2021RFP@acespower.com

All proposals must be signed by an officer or agent of the bidder who is duly authorized by the bidder's authorizing governance body to sign and submit such proposals.

All proposals must be registered and submitted electronically via email to:

#### AEPCO2021RFP@acespower.com

Proposal pricing will be considered binding, until otherwise notified by the RFP Administrator, for a period not to exceed 180 days from December 17, 2021.

#### 3.2. Proposal Contents and Format

In addition to completing the required Appendices C and D, bidders should structure their main proposal to including the following in order:

- 1. Executive Summary
  - a. Short description of proposed project(s)
  - b. Pricing summary table
- 2. Relevant Experience
  - a. Key team members
  - b. History of providing similarly sized projects over past three years
  - c. Three client references including contact name and phone numbers.
  - d. Possible conflicts of interest and any legal claims
- 3. Project Description
  - a. Type of proposal as defined in Section 2.2
  - b. Project schedule (if new construction)
  - c. Site description and status of site control
  - d. Listing, description, and associated timing for required permitting up to the interconnection point/facilities

- e. Ability to provide ancillary services (voltage support, load following, etc.)
- f. Facility limitations that may constrain operation or dispatch
- g. Fuel supply and fuel transportation (if applicable)
- h. Electrical interconnection description and status
- 4. Technical Specifications
  - a. Description and original equipment manufacturer (OEM) data sheets for major components
  - b. Control system specification including interface data requirements, network parameters, and required communication protocols
  - c. Resource design life including any expected and guarantied capacity for the term of the agreement
- 5. Preliminary (to scale or with dimensions) general arrangement drawings and electrical schematics
- 6. Financial information for credit analysis (see subsection 3.9 for more detail)
- 7. If short listed, Sample PPA or Energy Storage Services Agreement

#### 3.3. **RFP Schedule**

The schedule for the All-Source RFP is shown in Figure 3 below. As circumstances warrant, AEPCO, in its sole judgment and discretion may change this schedule, and in that event, the RFP Administrator will inform all potential bidders as far in advance as reasonably possible by posting any change on the RFP website:

#### www.acespower.com/AEPCO2021RFP

#### Figure 3: RFP Schedule

RFP Schedule (Updates will be posted on the All-Source RFP Website)				
Issue Final Version of All-Source RFP	11/05/2021			
Q&A on Substantive RFP Issues (email)	11/05/2021- 12/03/2021			
Open Period for Submission of Bidder Registration Forms	11/05/2021- 11/19/2021			
Deadline for Submission of Bidder Registration Forms ( <b>Appendix D</b> ) at 5:00 p.m. MST	11/19/2021			
Open Period for Submission of Proposals	11/20/2021- 12/17/2021			
Proposals (Appendices) Deadline at 5:00 p.m. MST	12/17/2021			
Bid Screening and Analysis Period	12/20/2021- 4/29/2022			
Notification of All-Source RFP Short List	5/2/2022			

Open Period for Submission of Best and Final Offers	5/2/2022- 5/13/2022
Final Bid Analysis Period	5/16/2022- 7/29/2022
Notification to Bidders of Recommendation of Award(s)	8/1/2022
Finalize mutually agreeable Term Sheet (subject to AEPCO and participating members' Board of Directors approval)	12/31/2022

# 3.4. Modification or Cancellation of the All-Source Capacity and Energy RFP

AEPCO reserves the right, in its sole judgment and discretion, to modify or cancel the All-Source RFP. In such event, AEPCO, via the RFP Administrator, will post a notice on the RFP website, and make a reasonable attempt to notify directly all participants who have filed a timely Bidder Registration Form of any such modifications or cancellation. AEPCO, or the RFP Administrator, shall have no liability or responsibility for failing to make such direct notification to participants.

#### **3.5.** Question Process

AEPCO encourages questions and comments from potential bidders about the All-Source RFP. Questions or requests for clarifying information must be directed through the designated RFP email address:

#### AEPCO2021RFP@acespower.com

The RFP Administrator will post all questions submitted by bidders, as well as AEPCO's responses to such questions, on the RFP website:

#### www.acespower.com/AEPCO2021RFP

AEPCO's objective in posting these questions and responses is to ensure that all bidders have equal access to non-confidential information that may be potentially relevant to their proposals.

#### **3.6. Bidder Registration**

AEPCO and the RFP Administrator will accept bidder registrations during the open submittal period beginning November 3, 2021 and concluding 5:00 p.m. MST on November 19, 2021. Potential bidders are required to submit a properly completed Bidder Registration Form, Appendix D, to the RFP email address:

#### AEPCO2021RFP@acespower.com

Upon receipt of the electronic Bidder Registration Forms, the RFP Administrator will acknowledge receipt of these registrations via email.

#### **3.7.** Submission of Proposals

Through the RFP Administrator, AEPCO will accept proposals during the open submittal period of November 20, 2021 through 5:00 p.m. MST on December 17, 2021. Only electronically submitted proposals will be accepted.

Bidders are required to submit all completed forms by the specified deadlines to the RFP email address:

#### AEPCO2021RFP@acespower.com

All proposals must be submitted in accordance with the instructions and on the form provided in Appendix C.

Proposals must be signed by an officer or agent of the bidder duly authorized to make such proposals by the bidder's Board of Directors or comparable governing body for an unincorporated bidder.

All proposals will be treated as confidential and will be subject to all governing regulatory requirements.

Any proposal(s) identified as non-conforming will be segregated for discussions with the bidder and the bidder will be allowed the opportunity to correct any nonconforming aspect of its proposal.

#### **3.8.** Proposal Evaluation

AEPCO and its RFP Administrator will conduct an initial review of all proposals for responsiveness and viability. Proposals that satisfy the initial review will be evaluated using an objective assessment mechanism incorporating multiple criteria including, though not necessarily in order, the following:

- 1. Cost of firm capacity and net economic value to portfolio
- 2. Developer experience
- 3. Creditworthiness
- 4. Ability to reduce exposure to commodity price volatility
- 5. Ability to support system reliability (e.g. does it provide regulating and/or contingency reserves, primary frequency response, ramp/flex support, voltage support, etc.)
- 6. Adaptability of proposals to future market structures and design, and potential future regulatory requirements
- 7. Ability to provide environmental benefits such as reducing the portfolio's total emission output or provide RECs
- 8. Optionality to purchase the resource or expand the resource capacity later

Proposals may also be subject to the independent review of AEPCO's Class A Members.

AEPCO will evaluate intermittent resources proposed in combination with other proposals and existing AEPCO resources to identify the optimal portfolio resource mix considering reliability to provide regulating reserves and firm output capacity during peak hours. Some resources may include an additional regulating reserve cost if the size exceeds AEPCO's current ability to integrate intermittent resources.

Resource types will be evaluated with the effective capacity contribution percentages in Figure 4. Nominal, or net maximum capacity, will be subject to degradation as applicable.

Paired resources, e.g. solar and battery storage or wind and battery storage will be calculated using the "Paired Resource ELCC Heuristic" detailed in the *Incremental ELCC Study for Mid-Term Reliability Procurement* prepared for the California Public Utilities Commission published on August 31, 2021. This calculation will allow AEPCO to consider varying paired storage sized relative to the generating resource capacity. The formula is as follows:

Paired Resource Effective Capacity = Generator Effective Capacity Contribution \* Generator MW + Storage Effective Capacity Contribution \* Storage MW

		Stand-Alone			Calculated
		4-Hr Battery			Paired Solar +
<b>Cumulative Nominal Capacity</b>	Solar	Storage	Gas	Wind	4-Hr Storage*
50 MW	50%	95%	95%	20%	100%**
100 MW	38%	73%	95%	20%	100%**
150 MW	28%	63%	95%	20%	92%
200 MW	24%	58%	95%	20%	81%
250 MW	20%	52%	95%	20%	72%

#### Figure 4: Effective Capacity Contribution by Resource Type

\*Sample paired resource ELCC heuristic calculation for a one to one solar plus 4-hour battery storage \*\* Subject to a cap based on interconnection sizing

For paired solar plus storage resources that have durations of less than 4 hours, AEPCO will take the total MWh of the proposed resource and convert it to an equivalent 4-hour capacity for evaluation purposes.

For resource types not listed in Figure 4, AEPCO will evaluate dispatchable resources at their expected output during peak periods minus an equivalent forced outage rate and non-dispatchable resources based on the expected hourly output's correlation with AEPCO's demand profile.

#### **3.9.** Credit and Contract Analysis

The RFP Administrator will evaluate the creditworthiness of bidder(s) (or their parent organizations) through a credit assessment, which, at a minimum and in line with industry standards, may include the following factors:

- Tangible net worth evaluation
- Historical and projected measures of cash flow and liquidity
- Historical and projected leverage
- Calculation of credit ratios

Other credit risk issues may also be evaluated, including, but not limited to: earnings volatility, risk management practices, the status of ongoing legal, regulatory, or other governmental processes or proceedings or significant contract negotiations, or other pertinent factors that impact ongoing operations.

As part of this process, the RFP Administrator may request further financial information from bidders (or their parent organizations) and may consider additional confidentiality agreements with such bidders (or their parent organizations) to protect such information, as appropriate.

The credit evaluation process may also include, but is not limited to, reviewing the unsecured or issuer credit ratings issued by Standard & Poor's, Moody's, and/or Fitch, if applicable, and ratings issued by Dun & Bradstreet. AEPCO and the RFP Administrator may require any successful bidder (or its parent organization) to post a form of credit support to ensure the bidder's performance under the proposed transaction. The amount of credit support will be determined by the RFP Administrator's credit evaluation of the bidder's (or its parent organization's) credit condition and determination of financial obligations of the bidders and the potential costs to replace the proposed transaction.

Credit support must be in a form acceptable to AEPCO and the RFP Administrator and may include a parental guarantee from a creditworthy entity, a letter of credit from an investment grade financial institution, cash on deposit in escrow, or equivalent credit support. In addition to the considerations above, AEPCO and the RFP Administrator will consider the credit support customarily and ordinarily required in similar transactions compared to the proposed transaction.

The RFP Administrator will evaluate the PPAs provided by bidders to determine the appropriateness of the terms and conditions in addressing the needs of AEPCO. The RFP Administrator will consist of a multi-disciplinary team and will support AEPCO in order to make the final assessment of the reasonableness and appropriateness of the proposed terms and conditions.

# 3.10. Confidential Information and Confidentiality Agreements

AEPCO, the RFP Administrator, and AEPCO's Board of Directors will treat all proposals submitted by bidders as confidential.

In the event that AEPCO and the RFP Administrator, in their judgment and discretion, determines that information contained in any question, response, or other communication between it and a bidder, which is not contained in the bidder's proposal, requires confidential treatment, an appropriate Confidentiality Agreement, Appendix E, will be submitted to the bidder. Otherwise, AEPCO will ensure that all bidders have access to the same information from AEPCO, and that no bidder will have selective or otherwise preferential access to non-public market sensitive information from AEPCO through the All-Source RFP.

# 4. Approvals

A bidder whose proposal is selected by AEPCO and approved by AEPCO's Board of Directors will be solely responsible, financially, legally, and otherwise, as applicable, for acquiring and maintaining all necessary creditor and other third party authorizations and consents necessary or appropriate to effectuate the selected proposal, including all authorizations, permits, licenses, consents, and approvals associated with a selected proposal, as well as compliance with any and all governmental rules and regulations for the construction and operation of the assets or project identified in the proposal. A bidder whose proposal is selected will be solely responsible for obtaining and maintaining financing for its project.

# 5. Reservation of Rights

AEPCO reserves the right, in its sole discretion, to reject any and all Proposals submitted as part of this All-Source RFP process for any reason. AEPCO may request additional information to complete its evaluations. Respondents who submit proposals do so without recourse against AEPCO for rejection or failure to execute an agreement for any reason. AEPCO will not reimburse any cost incurred in the preparation or submission of a proposal or any subsequent negotiations regarding a proposal. AEPCO reserves the right to terminate this All-Source RFP process at any time, without notice and with no obligation to purchase or continue negotiations.