

Arizona Public Service Company

2023 All-Source Request for Proposals

June 30, 2023

Table of Contents

I.	Overview	2
II.	Administrative Information	3
III.	Summary of Resources Needed	5
	Eligible Respondents and Resources	
٧.	Eligible Transaction Structures	11
VI.	Proposal Pricing	13
VII.	Technical Requirements	19
VIII.	Selection Process	20
IX.	Required Documents and Information	22
Χ.	Proposal Fee and Proposal Submittal Guidelines	25
	Miscellaneous	
Appe	endix A – Table of Acronyms Used in this RFP	27
Appe	endix B – Executive Summary	29
Арре	endix C – Technical Exhibits	35
Арре	endix D – Scoring Matrix	53
Арре	endix E – Heat Map	56
Appe	endix F – Deliverability Map	57

I. Overview

Arizona Public Service Company (APS) is a regulated public utility that generates, transmits, and distributes electricity for sale in Arizona. APS is headquartered in Phoenix, Arizona. As Arizona's largest and longest-serving electric company, we generate safe, affordable, and reliable electricity for more than 1.3 million commercial and residential customers in 11 of Arizona's 15 counties.

Through a comprehensive planning process, APS determines how to meet future customer needs for reliable and affordable electricity while achieving regulatory targets and reducing environmental impacts during the planning period. APS has worked with our team of resource experts, energy planners, and cross-sector stakeholders to develop a strategic roadmap on our path to a 100% carbon-free generation mix by 2050.

This All-Source Request for Proposals (RFP) solicits competitive proposals (Proposal or Proposals) for approximately 1,000 MW of reliable capacity, including at least 700 MW of renewable resources to meet the needs identified through the Integrated Resource Plan (IRP), which is filed with the Arizona Corporation Commission (ACC). The IRP provides the strategic direction for APS's acquisition of a clean, diversified, balanced resource portfolio that meets customer needs, maintains reliability, results in reasonable energy supply costs, and mitigates market risks. It includes an interim target of achieving a 65% clean energy mix and a 45% renewable energy mix by 2030. APS is focused on integrating renewable resources, empowering customers with flexible energy options, and incorporating advanced technology to produce clean and affordable energy while providing reliable service and remaining good stewards of Arizona's diverse environment.

APS's IRP indicates a need for additional flexible summer capacity resources to meet reliability requirements and additional renewable energy resources. The identified resources support APS's commitment to clean energy and are necessary to maintain system reliability in an environment of continued customer growth, coal retirements and expiring wholesale contracts. For a proposal to merit full consideration by APS and the pursuit of regulatory approval, it must present the opportunity for exceptional value to APS's customers, in the form of lower energy costs, other economic benefits and support for APS's clean energy commitment.

Resources offered through this RFP will be evaluated on their ability to meet one or both of the reliability and clean energy objectives.

II. Administrative Information

A. PowerAdvocate Platform

Interested parties will be required to register online using the web form provided at http://www.aps.com/rfp. Registration will open on June 30, 2023. Registration enables each Respondent to access the 2023 RFP and the confidentiality agreement (CA). Respondents may submit one or more Proposals per instructions set forth in Section X.

PowerAdvocate is subject to a confidentiality agreement with APS that prohibits the disclosure of confidential information submitted via the platform to unauthorized third parties. APS encourages each Respondent to carefully review the PowerAdvocate Terms of Use before submitting a Proposal. The Terms of Use are located at: https://www.poweradvocate.com/web/terms-of-use.html.

B. Communication

All Respondents will interface with APS for all communications related to this RFP, including questions, RFP clarification issues, and RFP Proposal submittal. All communications from Respondents to APS, including questions regarding this RFP, should be submitted in writing via the PowerAdvocate "Messaging" tab, which will be the sole medium of communication for this RFP. APS will monitor the PowerAdvocate "Messaging" tab and, depending upon the nature and frequency of the questions received, will either respond to individual Respondents directly or post a response to the question to all Respondents in PowerAdvocate (without disclosing Respondent's name). APS will only respond to RFP questions received from Respondents who have submitted an executed CA via the PowerAdvocate platform.

Respondents that experience any difficulty accessing PowerAdvocate should contact:

Email: support@poweradvocate.com Helpdesk: 857-453-5800

APS will NOT respond to any questions about the RFP outside of PowerAdvocate.

C. Role of Independent Monitor

APS has engaged an independent monitor (IM) throughout the RFP process to ensure that it is conducted in a fair and unbiased manner. The IM provides oversight during the shortlist selection process and will have access to all documentation provided by Respondents in response to this RFP. The IM will produce a final report summarizing its observations for use by APS, which may include submission to the ACC in connection with APS's regulatory requirements. The IM is obligated to maintain the confidentiality of all information that it reviews.

D. RFP Schedule

Proposals shall be submitted in strict accordance with the below RFP schedule, which may be subject to change upon notice to all Respondents. APS will not grant any extensions to the RFP schedule and will not accept late Proposals. Any Proposal received after the scheduled date will be rejected, and Respondent will be notified accordingly.

Event	Important Dates
RFP Release	June 30, 2023
Confidentiality agreement DUE	September 6, 2023 by 11:59pm EDT
Sundance site visit	July 18, 2023
Redhawk site visit	July 19, 2023
Bidders' Conference (virtual)	July 26, 2023
Proposal(s) DUE	September 6, 2023 by 11:59pm EDT
Proposal fee(s) DUE	September 6, 2023 by 11:59pm EDT
Shortlist Respondents notified	October - November 2023
Anticipated contract execution	November 2023 - March 2024

- **1. Bidders' Conference**. A bidders' conference will be held virtually on July 26, 2023, to provide information and answer questions that potential Respondents have about the RFP. Instructions on how to participate in the bidders' conference will be made available in PowerAdvocate.
- 2. Site Visits. Site walks will be held at the Sundance and Redhawk APS-owned sites to provide Respondents with the opportunity to review current site conditions to support Proposals for resources detailed in Appendix C. Site walk details will be provided to interested Respondents upon receipt of an executed CA. No technical questions will be allowed during the site walks; technical questions will be addressed at the bidders' conference or through the "Messaging" tab in PowerAdvocate.

III. Summary of Resources Needed

A. General

APS is seeking approximately 1,000 MW of reliable capacity resources, including at least 700 MW of renewable resources. APS is requesting resources that will provide reliable capacity to meet summer peak needs plus reserve margins and provide additional renewable energy as part of our energy mix. A heat map, which is attached as Appendix E, provides guidance about the relative value of capacity and energy to be provided by any proposed resource during specified hours of the year and should be considered by Respondents as they prepare their Proposals.

APS requests competitive Proposals for capacity resources and renewable energy resources providing a minimum of 5 MW with in-service dates in 2026, 2027 or 2028 for Power Purchase Agreements (PPA), Build Transfer Agreements (BTA), Engineering, Procurement, and Construction Agreements (EPC), and Load Management Agreements (LMA). Several variables may impact the specific type and timing of resource additions, such as contribution to peak, higher production levels of renewables, and costs associated with project timing. Projects may achieve in-service in phases over multiple years, beginning as early as 2025, and as late as December 31, 2028. If appropriate to optimize customer value, APS will allow an extension of this phase-in period and will accept Proposals for projects that reach full completion and commercial operation as late as June 1, 2029, provided that construction on any such project must begin no later than 2026 and the project must be partially in service in 2028. (The inservice time period described in this paragraph will be referred to below as the "Targeted In-Service Period.")

In addition to the opportunities above, APS will consider resources that require longer planning, permitting, and construction and can be in service no later than 2031. While all technologies are eligible, APS will carefully review the reasons that a proposed resource is not able to be in service by 2028 and reserves the right to not select resources that will reach commercial operation outside the Targeted In-Service Period. To account for an in-service date that extends beyond the Targeted In-Service Period, APS requires that these Proposals meet the following criteria in addition to all other criteria in this RFP:

- Provide a detailed explanation for why the project cannot be in service during the Targeted In-Service Period.
- Offer firm or open-book pricing that will allow for a transaction to be executed during the time period set forth in <u>Section II(D)</u>.
- If a BTA or EPC, provide an annual spend curve, as referenced in <u>Appendix B.</u>
- Preference will be given to resources no larger than 475 MW, though larger sizes may be considered if they effectively mitigate risks associated with single points of failure.

If a significant number of Proposals are received, APS will prioritize negotiations for resources with earlier in-service dates.

APS expects a resource that provides reliable summer capacity and energy will have significant economic value. Must-take energy will be evaluated in accordance with the scoring matrix provided in <u>Appendix D</u>. Energy that is non-dispatchable by APS and is proposed as must-take energy will generally be viewed and evaluated less favorably than dispatchable resources, particularly if it is not in close alignment with APS's resource needs. In addition, APS needs flexible resources that are shapeable and responsive to changes in actual customer demand. Clean, flexible, dispatchable resources are increasingly important in helping APS meet its clean energy goals and maintain system reliability and will be valued accordingly.

APS must maintain a reliable electric system, which includes having firm capacity plus reserves to meet customer demands and reliability needs during summer system peak load times. APS must be able to respond to changes in customer demands or supply needs in real-time, and APS seeks to develop a portfolio of resources that will enable it to do so. Proposals that include non-dispatchable resources should clearly indicate timing of availability and how these resources will help support APS's system reliability needs.

B. Specific Opportunities

The general information set forth in <u>Section III(A)</u> above applies to all Proposals to be submitted in this RFP. Within these general solicitation parameters, this RFP also identifies specific opportunities that APS believes may be able to cost-effectively meet its needs. Those opportunities are detailed in <u>Appendix C</u>, but can be broadly described as:

- Addition of battery storage to APS's existing Agave solar facility.
- Development of solar generation at APS's existing Ironwood site.
- Renewable generation to be located within the geographic boundaries of the Navaio Nation.
- Addition of clean-capable natural gas-fired generation at APS's existing Sundance and Redhawk facilities.
- Development of one or more resources at APS's existing Cholla generating site, which is planned for retirement.

The evaluation process set forth in <u>Section VIII</u> below will apply to all Proposals, including the above-referenced specific opportunities. APS reserves the right to select or not select one or more Proposals for any of these opportunities in accordance with the terms of this RFP.

IV. Eligible Respondents and Resources

A. Respondent Experience

APS is seeking Respondents that have demonstrated significant previous experience developing resources (or resource options) of a similar nature to those resources included in Respondent Proposal(s). In the event a Respondent does not have the requisite experience specified below, it may partner with another entity that does possess such experience (referred to in this RFP as a "Respondent Partner") and submit a joint Proposal with such entity to satisfy the experience requirement. In such event, both entities must execute the required CA, as described more fully in Section IX(A).

For any Proposal with a project size greater than 25 MW, Respondent must demonstrate that it and its Respondent Partner(s), if applicable, have previously developed a project to the point of commercial operation that is at least fifty percent (50%) of the size of the proposed project and has been operational for electric grid service for at least three (3) years with an average annual availability greater than ninety percent (90%).

In the case of a Proposal with a project size less than or equal to 25 MW, Respondent must demonstrate that it and its Respondent Partner(s), if applicable, have previously developed a project of similar technology to the point of commercial operation that is at least ten percent (10%) of the size of the proposed project.

Information about other characteristics that speak to Respondent experience is solicited in PowerAdvocate, and the Executive Summary detailed in <u>Appendix B(VI)</u> will be considered in the Proposal evaluation process.

B. Safety

Safety is paramount to APS. Respondents proposing resources that include customer-sited solar and battery energy storage technology should be aware that the design requirements and safety codes applicable to such technologies continually evolve at the state, county, and municipal level, and APS maintains its own set of safety standards as well. APS expects that any proposed resource will comply with all applicable requirements, codes, and standards at all times.

Any Respondent with whom APS enters into a contract as a result of this RFP will be required to submit a current Experience Modification Rating (EMR) and OSHA Total Recordable Injury Rate (TRIR) <u>OR</u> provide an acceptable ISNetworld score.

If Respondent does not provide a current EMR and TRIR, Respondent is required to subscribe to ISNetworld (www.ISNetworld.com), a third-party safety assessment system utilized by APS. Confirmation of Respondent's subscription and an ISNetworld status of "A" or "B" will be required by the time Shortlist

Respondent notification, set forth in <u>Section II(D)</u>, is made. Respondent will be further required to maintain "A" or "B" status for the term of the contract, all at Respondent's expense.

C. Front of the Meter Resources

APS will accept Proposals for existing or new resources for the following supply side, or front of the meter (FTM), technologies (either stand-alone or in combination, such as solar plus storage):

- Solar
- Energy Storage (including pumped hydro)
- Wind
- Biomass/Biogas
- Geothermal
- Landfill Gas
- Reciprocating Units
- Simple cycle combustion turbines
- Combined cycle combustion turbines
- Hybrid resources (alternating current (AC) coupled)

APS will <u>not</u> accept Proposals for transactions not directly backed by a specific generating asset or utility system, such as call options or wholesale market products. In addition, APS is seeking Proposals for FTM resources that operate autonomously and can be controlled remotely with the APS Automatic Generation Controls (AGC), with an interface to APS's Energy Management System (EMS) through APS's Remote Terminal Unit (RTU) to be installed at the Respondent's project site. APS may include the associated capacity and energy sold to APS for use in the California Independent System Operator (CAISO) Energy Imbalance Market (EIM). APS will accept Proposals that offer a minimum of 5 MW per site with a preference for Proposals greater than 200 MW. For Proposals that combine technologies, the aggregate offering must be 5 MW or greater. To safeguard system integrity and mitigate risk, APS prefers proposed resource interconnection configurations that limit any single point of failure to 475 MW.

D.APS Proposal Permitted

APS and/or an affiliate of APS is eligible to submit one or more Proposals in response to this RFP, subject to the requirements set forth in Arizona Administrative Code R14-2-706(I).

E. Behind the Meter Resources

APS will accept Proposals for the following demand-side, or behind the meter (BTM), resources or programs (either singular or in combination):

Demand Response (commercial/industrial)

- Managed Electric Vehicle (EV) Charging
- Energy Storage

- Building Energy Management Systems
- Inverter Ancillary Capabilities (non-real power)
- Commercial Process Loads
- Backup Generators

BTM Energy Storage/Load Shifting (small business and residential)

- Smart Thermostats
- Water Heating Controls
- Pool Pump Controls
- Managed Electric Vehicle (EV) Charging
- Energy Storage

Energy Efficiency (all segments)

 Any Energy Efficiency (EE) technologies that provide measurable, costeffective energy savings

For BTM resources, APS is seeking Proposals that offer a minimum of 5 MW that aggregate APS customer load accordingly. For Proposals that combine resources or programs, the aggregate offering must be 5 MW or greater. Any Respondent that submits a Proposal for a BTM resource should consider whether such resource could be capable of AGC control by APS and potential use in the CAISO EIM. Proposals that include such capability may be more favorably evaluated than those that do not. EE Proposals should indicate how these resources could be bundled with controllable resources for potential use in the EIM. BTM resources must be located on APS customer sites within the APS service territory.

F. Site/Land Control or Program Commitment

Site/Land Control

APS expects each Respondent to demonstrate sufficient site control, effective as of Proposal submission and continuing through the term of the associated agreement with APS. The types of agreements that can be used to demonstrate site control appear as a drop-down selection within each technical data sheet under the "Technical Data" tab in PowerAdvocate and do <u>not</u> include a letter of intent or any other similar non-firm agreement. If a purchase or lease option is selected, Respondent is required to provide a redacted purchase or lease option contract as part of the Proposal.

Additionally, APS expects any Proposal for a resource to be developed wholly or partially on state-owned land to demonstrate that Respondent is scheduled for lease approval on the AZ State Land Board of Appeals Meeting Notice and Agenda on a date before Proposals are shortlisted (Section II(D)) to satisfy APS's site control requirement. APS will NOT consider any Proposal for a facility to be developed on an existing APS-owned site, with the exception of those sites specified in Appendix C herein (Agave, Ironwood, Cholla, Sundance, and Redhawk).

Demand-Side Resource Program Commitment

APS expects Respondent to demonstrate sufficient evidence of its program commitment. Though not required, preference will be given to Proposals that can demonstrate a high percentage of program commitment from APS customers. Respondent should indicate the number of APS customer sites that have already been secured, any national partnerships with customers who have sites in APS territory that may be committed, as well as Respondent's approach for recruiting additional participants.

V. Eligible Transaction Structures

A. General

APS is interested in Proposals for new or existing generation resources or demand-side programs that are connected directly to the APS transmission system or provide transmission costs within the bid to deliver the product to the APS system, and incorporate any one of the transaction structures included in the list below. APS expects Respondents to submit a copy of the relevant term sheet with redlines reflecting Respondent's proposed modifications, if any. Pro formas, if applicable, may be provided for reference. Respondent is required to submit any redlined document in the same format as the document provided in PowerAdvocate (e.g., Microsoft Word), and use track changes with comments explaining the context or reasoning for each redline. APS's term sheets and pro formas, as applicable, for each type of transaction structure can be found in the "Download Documents" tab in PowerAdvocate.

Power Purchase Agreement (PPA):

- Renewable energy tolling
- Renewable energy plus energy storage tolling
- Renewable energy
- Energy storage tolling (including pumped hydro)
- Thermal tolling

Build-Transfer Agreement (BTA):

- Renewable energy
- Renewable energy plus energy storage
- Energy storage (including pumped hydro)

Engineering, Procurement, and Construction (EPC):

- Thermal (Sundance)
- BESS (Agave)
- Solar (Ironwood)

Load Management Agreement (LMA):

- BTM demand response/load shifting/storage programs
- BTM energy efficiency programs

B. Accounting Treatment for PPAs

APS is aware the PPA may qualify for lease accounting treatment in accordance with US Generally Accepted Accounting Principles (GAAP), ASC 842. If lease accounting applies, APS would prefer PPAs that qualify for operating lease treatment. APS desires to avoid consolidation of any PPA pursuant to the rules associated with variable interest entities (VIE) found in GAAP, ASC 810. Accordingly, in connection with any Proposal for a PPA, Respondent must include a detailed description of whether or not the PPA is subject to such VIE consolidation by APS and if not, why not. The Respondent should not assume an operating lease scope exception to VIE consolidation accounting will apply.

APS will ultimately be responsible for making its own determination of the appropriate accounting treatment as it relates to APS, but may view a PPA Proposal more favorably if it is supported by sufficient evidence to suggest that the PPA will qualify as an operating lease, or that VIE consolidation by APS will not otherwise be required.

C. Purchase Options within PPAs

For renewable Proposals offering a PPA or tolling agreement structure, APS prefers that Proposals incorporate an option for APS to ultimately purchase the resource at fair market value.

VI. Proposal Pricing

A. General

APS expects final Proposal pricing to include all costs, including but not limited to interconnection network upgrade costs, financing costs, energy delivery costs, project direct interconnection costs, and provision of required collateral for pre- and post-development security. For all BTM resources being proposed, pricing must be inclusive of all customer marketing, recruitment, enrollment, technology installation, provisioning, O&M, and costs associated with measurement and verification. If specific interconnection costs are not known, Respondents are expected to make reasonable estimates and include those in their Proposal pricing. More specific information about pre- and postdevelopment security is set forth in Section VI(C). Pricing should assume the tax credit strategy applicable to the Proposal, as set forth in Appendix B(XII) and described in Respondent's Executive Summary. Pricing should also assume only such antidumping duty/countervailing duty (AC/CVD) tariffs as applicable to the Proposal at the time of submission and not any tariffs that may result from the current Department of Commerce investigation. The potential impact of any additional AD/CVD tariffs that could be imposed in the future, and Respondents' risk mitigation strategies relating thereto, should be addressed in the Executive Summary as set forth in Appendix B.

Respondents should note that the "Pricing" tab in PowerAdvocate is not used for this RFP, except for Proposals for the Sundance opportunity as set forth in <u>Appendix C</u>. For all other opportunities, APS expects Respondent to provide Proposal pricing with each applicable technical data sheet under the "Technical Data" tab in PowerAdvocate. Failure by a Respondent to include all costs in Proposal pricing could compromise fair comparison of all Proposals and may result in a Respondent's Proposal being eliminated from further evaluation.

B. Pricing Structure

APS expects the Proposal price for a PPA tolling agreement to either be fixed for the duration of the proposed agreement term or to escalate at a fixed annual escalation rate.

APS expects the Proposal price for an EPC to include all costs associated with this RFP and the requirements set forth in the applicable EPC Statement or Scope of Work.

With the exception of LMAs, APS will allow for open book pricing for major equipment during the negotiation period and through equipment selection. No other pricing structure is permitted. Major equipment allowed for open book pricing is as follows:

- Solar Modules
- Trackers

- Inverters
- Wind Turbines
- BESS Equipment: which may include battery cells, modules, racks, enclosures but shall not include any sub-station or high-voltage equipment.

Open book pricing must include a base bid price and a formula for transparent tracking of how final quotes will impact the PPA price. APS also requires the use of price caps to limit exposure of price movement.

Any material changes to Proposal terms, conditions and pricing after Respondent is shortlisted and during the negotiation process may result in APS rejecting the Proposal. All prices must be clearly stated in United States dollars.

C. Collateral

APS requires collateral to be posted, in the form of cash or a letter of credit only, to secure Respondent's obligations in connection with any transaction contracted for as a result of this RFP. For BTAs and EPCs, APS will consider an acceptable performance bond in lieu of cash or letter of credit. In the case of a letter of credit or a performance bond (for BTAs and EPCs), it must be in the form and from an issuing bank acceptable to APS in its sole discretion. As described in Section VI(A), APS requires that all costs of such collateral be included in Proposal pricing. The following information should be used by each Respondent to determine the collateral that will be required in connection with its Proposal(s) and to include the costs of such collateral in Proposal price accordingly.

New Resources (PPA)

Resource	Contract Structure	Development Security	Post-Development Security
Energy Storage including BTM	PPA	\$280/kW	\$220/kW
Thermal	PPA	\$280/kW	\$90/kW
Renewable	PPA	\$140/kW	\$40/kW

New Resources (LMA)

Resource	Contract Structure	Development Security	Post-Development Security
Energy Efficiency (EE)	LMA	\$140/kW	\$40/kW
Demand Response (DR)/Load Shifting	LMA	\$140/kW	\$40/kW

Existing Resources (PPA)

Resource	Contract Structure	Development Security	Post-Development Security
Existing Thermal	PPA	\$40/kW	\$40/kW
Existing Energy Storage including BTM	PPA	\$220/kW	\$220/kW
Existing Renewable	PPA	\$40/kW	\$40/kW

BTA & EPC Resources

D17. & 21. 6.1(65041.665			
Resource	Contract Structure	Development Security	Post-Development Security
Energy Storage	ВТА	Performance bond at 100% of contract value OR \$280/kW cash/LC	\$220/kW held until warranty period expires
Renewable	ВТА	Performance bond at 100% of contract value OR \$140/kW cash/LC	\$40/kW held until warranty period expires
EPC (Energy Storage)	EPC	Performance bond at 100% of contract value	\$220/kW held until warranty period expires
EPC (Solar)	EPC	Performance bond at 100% of contract value	\$40/kW held until warranty period expires
EPC (Thermal)	EPC	Performance bond at 100% of contract value	\$40/kW held until warranty period expires

^{*}If a combined technology is being offered (i.e., solar plus battery storage), the higher of the two collateral requirement amounts (in such case, battery storage) is the collateral requirement that must be used

D. Interconnection

The following information is intended to guide Respondents as they consider the interconnection of their proposed resources and include all the associated costs in their Proposal pricing. Note, however, that nothing in this <u>Section VI(D)</u> or elsewhere in this RFP is intended to provide definitive guidance to any potential Respondent regarding the specifics of the interconnection process that may apply to Respondent's proposed facility.

APS is seeking Proposals that interconnect directly to the APS transmission system. Each Respondent must demonstrate that it has or can secure firm transmission for delivery from the facility to the APS transmission system for the entire proposed term of the relevant transaction. Respondents should be aware that connection to an APS substation may not quarantee connection to the APS transmission system as required. A deliverability map, attached herein as Appendix F, provides general availability guidance. Any additional firm transmission service needed to connect a proposed facility to the APS transmission system is Respondent's responsibility and should be included in Respondent's Proposal. Any costs associated with impacts on Affected Systems (as defined in the APS LGIP) are the responsibility of Respondent and not APS. Respondents are responsible for costs associated with any Affected System evaluation (e.g., study costs) and any Affected System upgrades. Additionally, Respondents are responsible for coordinating with any potential Affected System (as identified by APS) and entering into a separate construction agreement with the Affected System operator for any Affected System upgrades as determined by the Affected System operator.

Respondents are responsible for understanding and ensuring compliance with the interconnection requirements that apply to any distributed resources included as part of their Proposals (Interconnection Requirements). Information about APS's distributed resource interconnections can be found by visiting:

https://www.aps.com/dg#Interconnection

and clicking on "Common Requirements." Additional Arizona Corporation Commission interconnect information can be found at:

https://apps.azsos.gov/public_services/Title_14/14-02.pdf

A previously installed non-exporting system may require reclassification to a system capable of export (which may require, among other things, the execution of a new operating agreement) in order to be included as part of a BTM resource Proposal. APS reserves the right, in its sole discretion, to reject any Proposal for a resource that may not comply with applicable requirements.

Respondents are advised to review the most complete and up-to-date information regarding interconnection on APS's Open Access Transmission Tariff (OATT), which can be found at:

http://www.oasis.oati.com/azps/index.html

1. Interconnection Application and Studies: APS recognizes that the timeline for executing an interconnection agreement is critical in the development process. For purposes of this RFP, APS strongly prefers any Respondent to have entered an interconnection queue process and have been assigned an APS queue number or other applicable queue number. Each proposed facility must be constructed and interconnected to meet proposed capacity and energy deliveries by the in-service dates established in this RFP. The interconnection queue at each location is available to Respondents at the APS OASIS site referenced above. Nevertheless, each Respondent is responsible for performing its diligence regarding the interconnection process.

For Agave, Ironwood, and Sundance, APS owns the interconnection positions and is responsible for interconnection related activities in the event that one or more of these projects is selected for contracting. With respect to Redhawk, APS has initiated the interconnection process and intends to transfer the related interconnection rights and associated costs to the selected Respondent, if any.

- 2. Energy Delivery Costs: Pricing included in any Proposal must be based on delivery to the APS system. If Respondent proposes to interconnect directly to the APS system, all losses between the generating station and the demarcation point for equipment ownership and transfer to APS (typically referred to as the Delivery Point in the relevant agreement with APS) are Respondent's responsibility. If Respondent proposes to interconnect to another utility's system, all transmission wheeling costs to transmit project energy to the APS system on a firm basis are also Respondent's responsibility and must be included in the Proposal price.
- **3. Project Interconnection Costs:** Each Respondent must include reasonable interconnection cost estimates as part of its submitted Proposal. Interconnection costs must be provided within the appropriate technical data sheet under the "Technical Data" tab in PowerAdvocate. Respondent understands interconnection costs are to be included in the overall Proposal pricing. Respondents may, at their discretion, utilize third-party consultants to determine accurate interconnection estimates. A detailed description of such interconnection costs must accompany each Proposal and include a breakdown of the significant equipment costs.

Respondents with interconnection applications in suspension are required to provide updated interconnection costs to reflect current market prices. Interconnection costs are to be updated within three (3) months of Proposal submission.

For interconnection related questions or information, please contact:

APS Transmission Contracts and Services e-mail: INTERDEV@apsc.com http://www.oatioasis.com/azps/index.html

VII.Technical Requirements

APS expects Respondents to provide technical information for each resource in the appropriate technical data sheet found in the "Technical Data" tab in PowerAdvocate. Additional datasheets may be required and are available in the "Download Documents" tab in PowerAdvocate. The technical data sheets identify specific criteria used to calculate the expected energy production for the proposed facility. Although APS has provided certain default assumptions based on industry standards, Respondents may use criteria that differ from these assumptions by identifying the difference and reason for this variation. The energy production profile submitted by each Respondent must be calculated based on the same set of technical criteria supplied to APS by Respondent in the technical data form.

All available capacity, energy, and ancillary services are for use exclusively by APS. Ancillary services may include frequency response, spinning reserve, non-spinning reserve, reactive power control, fixed power factor, and automatic voltage regulation. Any Proposal for a generating, energy storage or applicable BTM resource must include pricing for the proposed resource for any preceding ancillary service capabilities included in the Proposal.

The exhibits in <u>Appendix C</u> list additional minimum requirements for each technology type and "APS Preferences" associated with each, if applicable. Satisfaction of any APS Preferences is not required for a Proposal to be deemed conforming. Proposals that contain more of the APS Preferences may be more competitive than those with fewer APS Preferences.

VIII. Selection Process

If at any time during the Proposal evaluation process, APS determines that a Proposal does not meet the requirements, including timely submission of all documents and fees required pursuant to this RFP, or fails to remain competitive with other Proposals through screening or other more detailed analyses, such Proposal will be eliminated from further consideration and Respondent will be notified accordingly.

The Proposal evaluation process includes three (3) primary parts: initial screening, a qualitative/quantitative analysis (shortlist), and a portfolio evaluation, the details of which are provided below. Additionally, APS is requesting a wide range of information that may not all be formally included in the three (3) aforementioned parts of the evaluation. That does not mean that the information will not be factored into APS's shortlist or final selection of Proposals. Rather, that information, in the aggregate, will inform APS selections between otherwise competitive Proposals. APS will also apply an overall risk evaluation that considers diversity of suppliers and technologies in order to appropriately mitigate risks associated with single points of failure in our resource acquisition plan.

A. Initial Screening

APS expects all Proposals to be complete in accordance with the requirements set forth in this RFP. APS will initially screen all Proposals for completeness and APS reserves the right to make a reasonable judgment about the degree to which any Proposal does or does not conform to the requirements. Respondents may be given an opportunity to cure modest deviations from the requirements, but any significant deviations (either in substance or quantity) may result in a Proposal being rejected as non-conforming.

To facilitate the initial screening, each Respondent must complete the "Proposal Checklist" found in the "Commercial" tab in PowerAdvocate.

B. Quantitative/Qualitative Analysis (Shortlist Process)

For Proposals that satisfy the initial screening for completeness, APS will perform an analysis that applies specific quantitative and qualitative criteria. Proposals will be ranked following the application of the scoring matrix set forth in <u>Appendix D</u>. Proposals that score competitively will be selected for shortlisting and will be further evaluated through a portfolio evaluation.

APS will notify shortlisted Respondents, if any, along with those Respondents whose Proposals have been eliminated from further consideration, in accordance with the RFP schedule outlined in Section II(D).

APS may conduct meetings or phone calls with shortlisted Respondents to better understand each Proposal. APS may also require shortlisted Respondents to submit the project and/or Respondent-specific pro forma financial statements by year for the applicable facility development and construction period, including

income statements, balance sheets, and statements of cash flows. APS may then re-evaluate each shortlisted Respondent's Proposal, including any new information provided during or as a result of the shortlist meetings.

C. Portfolio Evaluation

The portfolio evaluation considers the fit of a Proposal relative to APS's existing resources, other Proposals, projected resource needs, and further qualitative evaluation.

APS will utilize resource planning models, and production cost modeling software to evaluate how well a Proposal meets system reliability requirements while minimizing projected APS system costs. Resources will be evaluated within the APS portfolio based on present value revenue requirements (PVRR) for the APS system. For non-supply side resources APS may also perform cost effectiveness tests such as the Utility Cost Test (UCT) and/or Societal Cost Test (SCT).

APS will not disclose to Respondents the generation cost estimates used for Proposal evaluation but will provide that information to the Independent Monitor referenced in <u>Section II(B)</u>. Further, APS's avoided capacity and energy values are proprietary data and will not be disclosed to Respondents.

D. Final Evaluation and Selection

Following the shortlist process and portfolio evaluation described above, APS may make a final selection of one or more Proposals for negotiation of an agreement with provisions that are substantially similar to those set forth in the relevant term sheet. APS will notify shortlisted Respondents whose Proposals are eliminated from further consideration in accordance with the RFP schedule outlined in <u>Section II(D)</u>. APS reserves the right, in its sole discretion, to not select any Proposals for negotiation of an agreement if warranted by its evaluation.

IX. Required Documents and Information

A. Confidentiality Agreement

Each Respondent must sign the CA available in the "Download Documents" tab in PowerAdvocate and upload the signed copy via the "Upload Documents" tab no later than September 6, 2023 by 11:59pm EDT, as outlined in Section II(D). Any Respondent that fails to upload in PowerAdvocate its executed CA by this deadline will be ineligible for further participation in this RFP.

APS requires all Respondents to execute the CA as written without any changes. The Respondent legal name on the CA should mirror the Respondent legal name used for PowerAdvocate registration. Upon receipt, APS will execute and upload a copy of the fully executed CA to each Respondent in PowerAdvocate. Respondents can then download the executed CA from PowerAdvocate at their convenience. Once APS has executed the CA, the Respondent will receive relevant messages and notices through the "Messaging" tab in PowerAdvocate. Once the July 14th due date for CAs from Respondents has passed, Respondent will have access to all RFP-related documents. RFP-related documents include term sheets and data sheets necessary to submit Proposals.

If a Respondent Partner is included for a Proposal (as described in Section IV(A) above), Respondent must include the signature of an authorized representatives of any such Respondent Partner as part of its fully executed CA. In addition, any Respondent that requires a Respondent Partner in order to support a valid Proposal must also demonstrate to APS's reasonable satisfaction that the partner relationship has been legally established, is legally enforceable, and allows Respondent to meet the minimum experience requirements as described in Section IV(A) above.

Without the signature on the CA of any applicable Respondent Partner, a Respondent does not have permission to share confidential information (as defined in the CA) with such Respondent Partner, and such Respondent Partner's experience will not be considered in APS's evaluation of the relevant Proposal.

B. Proposal

The information provided by Respondent in PowerAdvocate constitutes the Proposal. Each Respondent must use the PowerAdvocate platform to upload all information pertaining to its Proposal(s), in accordance with all requirements and instructions set forth in this RFP and in PowerAdvocate. Respondents are encouraged to submit their Proposals as early as possible to avoid filing delays due to heavy use of PowerAdvocate immediately before the Proposal submission deadline as outlined in Section II(D).

For a Respondent's Proposal to be considered conforming, Respondent must complete and/or upload (in the case of documents) the below information and

documentation, within the PowerAdvocate platform and in the format required, no later than September 1, 2023. Non-conforming Proposals may be eliminated from further consideration, as described in Section VIII(A).

1. Conforming Proposal:

- a. A complete response to each question and a legible copy of each document specified in "Download Documents" tab in PowerAdvocate.
 - i. This includes, but is not limited to, the Cybersecurity Controls Sheet, Cybersecurity Third Party Risk Review Questionnaire (TPRR) and the Data Security and Privacy Addendum (DSPA).
- b. Executive Summary, described in Section IX(C).
- c. Executed Proposal certification, described in Section IX(D).
- d. Preliminary one-line diagram and layouts for the project with meter location(s) and specified delivery location, which shall be the Delivery Point as that term is defined in the resulting agreement.
- e. Technical Data form, which identifies specific criteria used to calculate the expected energy production for the proposed facility. Although APS has provided certain default assumptions based on industry standards, Respondents may use criteria that differ from these assumptions by identifying the difference and reason for this variation. The energy production profile submitted by each Respondent must be calculated based on the same set of technical criteria supplied to APS by Respondent in the Technical Data form.
- f. If proposing energy storage, include documentation that supports compliance with "Appendix W" including full 9540A test results, explosion control methodology, design and testing, fire detection and alarm systems, 24/7 emergency management/response details, FMEA/HMAs and any other previously developed studies, tests, designs, or reports related to BESS safety (which specifies APS's safety standards and will be provided to Respondents separately through PowerAdvocate) and demonstrates product and personnel safety.

C. Executive Summary

Respondents are expected to provide an Executive Summary for ease of initial Proposal review by APS. Details and requirements for the Executive Summary are set forth in <u>Appendix B</u> to this RFP.

D. Proposal Certification

APS expects Respondents to provide a Proposal certification form that demonstrates that the signatory has full authority to bind Respondent to all of the terms and conditions contained in its Proposal. The Proposal certification document that all Respondents must use is located in the "Download Documents" tab in PowerAdvocate.

E. Cybersecurity Documents

Cybersecurity is critically important to the APS system and must be evaluated in connection with any resources that will directly or indirectly touch the system. Following the CA deadline, APS will provide to participating Respondents certain documents that allow APS to assess Respondents' cybersecurity maturity and any cybersecurity risks that may be associated with proposed resources.

F. Disputes with APS and/or its Affiliates

Each Respondent shall describe any formal dispute between Respondent or any of its affiliates and APS or any of its affiliates (including actual or threatened litigation, alternative dispute resolution, or any administrative or regulatory proceeding in which the parties have taken opposing positions) in the last five (5) years. The description shall include the nature of the dispute, current status, and resolution, if any, and shall be set forth in the Executive Summary. APS reserves the right to assess the impact of any such dispute or history of disputes between the parties on the parties' ability to successfully transact under this RFP and to make decisions about shortlisting, final selection, and execution of an agreement accordingly.

X. Proposal Fee and Proposal Submittal Guidelines

Respondents may submit one or more Proposals. A Respondent that wishes to submit more than one Proposal must register with additional Proposals on the PowerAdvocate platform. For example, if "Baker Company" wishes to submit three (3) additional Proposals, it must separately register each Proposal as "Baker Company 1", "Baker Company 2", and "Baker Company 3" and directly link each Proposal to the original Respondent registration name in the PowerAdvocate account. An "Instructions for Submitting Additional Accounts" document is available under the "Download Documents" tab in PowerAdvocate.

Each Proposal is subject to a non-refundable RFP submission fee (the "Proposal Fee"), in accordance with the following fee schedule:

Project size less than or equal to 25 MW: \$5,000 Project size greater than 25 MW: \$10,000

A single Proposal fee allows Respondents to offer a PPA, BTA, EPC, or LMA. Further, Respondents are permitted to submit both a flat price and an escalating price within the same single Proposal for a resource bid under a PPA transaction structure. Any other variations to project/Proposal characteristics are required to be submitted via a separate Proposal and additional Proposal fee:

- Pricing variations outside of fixed/escalated PPA pricing described above
- Term of transaction
- In-service date
- Technology
- Site/Location of facility
- Size/Capacity

Wiring instructions for the submittal of the Proposal Fee will be made available to participating Respondents along with other documents following the CA submittal deadline.

XI. Miscellaneous

A. Right to Terminate Negotiations

If APS cannot reach an agreement with the final selected Respondent or Respondents, or if APS determines a new RFP with refreshed bids better serves APS customers, APS reserves the right to terminate negotiations with such Respondents and pursue negotiations with other Respondents, begin a new solicitation, and/or cancel this RFP.

B. Regulatory Approval

Any final agreement resulting from this RFP may be conditioned upon actions and/or approvals by regulatory authorities satisfactory to APS in its sole discretion.

C. Reservation of Rights

APS reserves the right to accept or reject in its sole discretion any or all Proposals for any reason at any time after submittal. APS also reserves the right to select an offer that is not the lowest price if APS determines that, in its judgment, the overall Proposal may result in the greatest value to APS's retail customers.

D. No Liability

Respondents that submit Proposals agree to doing so without legal recourse against APS or its officers, directors, employees, agents, contractors, or the Independent Monitor based on APS's rejection of any Proposal or failure to execute any agreement in connection with this RFP. Neither APS nor any of its affiliates, officers, directors, employees, agents, contractors, or the Independent Monitor shall be liable to any Respondent or to any other party, in law or equity, for any reason whatsoever relating to APS's acts or omissions arising out of or in connection with this RFP.

E. Return of Documents

None of the materials received by APS from Respondents in response to this RFP will be returned. All Proposals and exhibits will become the property of APS, subject to the provisions of the CA described in <u>Section IX(A)</u>.

Appendix A – Table of Acronyms Used in this RFP

Acronym	Definition
AC	alternating current
ACC	Arizona Corporation Commission
AD/CVD	antidumping duty / countervailing duty
AGC	automatic generation controls
AMI	advanced metering infrastructure
APS	Arizona Public Service
ASHRAE	American Society of Heating, Refrigeration,
	and Air-Conditioning Engineers
BESS	battery energy storage system
BTA	Build-transfer agreement or any similar
	agreement that enables the development of
	the resource by Respondent and the
	ownership of the resource by APS
BTM	behind the meter
C&I	commercial and industrial
CA	confidentiality agreement
CAES	compressed air energy storage
CAISO	California Independent System Operator
СО	carbon monoxide
COD	commercial operation date
DC	direct current
DR	demand response
DSPA	Data Security and Privacy Addendum
EE	energy efficiency
EMS	energy management system
EPC	engineering, procurement, and construction
FERC	Federal Energy Regulatory Commission
FMV	fair market value
FTM	front of the meter
IM	independent monitor
IRP	Integrated Resource Plan
ITC	investment tax credit
kW	kilowatt
kWh	kilowatt-hour
LMR	load modifying resource
MST	Mountain Standard Time
MW	megawatt
MWh	Megawatt-hour
NOx	nitrogen oxide(s)
NREL	National Renewable Energy Laboratory
OASIS	Open Access Same Time Information
	System
OATT	Open Access Transmission Tariff
OEM	original equipment manufacturer

Acronym	Definition
PCT	participant cost test
PM	particulate matter
PPA	power purchase agreement
PTC	production tax credit
PVRR	present value revenue requirement
RFP	2023 All-Source Request for Proposal
RTU	remote terminal unit
SCT	societal cost test
SO_2	sulfur dioxide
TA	tolling agreement
TMY	typical meteorological year
TPRR	Third-Party Risk Review
UCT	utility cost test

Appendix B - Executive Summary

APS requires a brief Executive Summary to accompany all Proposals. The Executive Summary should be no more than ten (10) pages and should serve as a general summary of the Proposal, including the information specified below, to the extent it is applicable to the Proposal.

I. Introduction / Overview

- a. Provide a proposed Project/program overview, including company proposing project, and high-level summary of the project.
- b. Describe if Proposal is for a new facility/program, an existing facility, and if Respondent is proposing an asset sale.

II. Capacity

- a. Provide the nameplate capacity in MW.
- b. Provide the nameplate capacity in MWh where applicable.
- c. Provide the maximum delivered capacity MWac.
- d. What is the proposed project's annual capacity factor?
- e. What is the expected delivered annual energy (MWh)?

III. Transaction Structure/Term/Pricing

- a. Provide transaction structure.
- b. Provide PPA term length or, for EPC, the Warranty and/or Performance Guarantee length.
- c. If a PPA, provide detailed explanation of how consolidation of a 'variable interest entity' as described in <u>Section V(B)</u> can be avoided based on the characteristics of the Proposal.
- d. Provide baseline pricing structure.
 - i. BTA price and/or PPA price
 - ii. PPA base escalation rate, if applicable
 - iii. EPC price
 - iv.LMA price
- e. For BTA and EPC, provide an annual spend curve.
- f. For open book pricing, provide a base bid price and a formula for transparent tracking of how final quotes will impact the PPA price.
- g. Provide indicative pricing on PPA for a ten (10)-year term if PPA term in Proposal is something other than ten (10) years. This applies only to renewable, energy storage, and combined renewable and energy storage projects.
- h. Provide a description of any deviation from requirements set forth in the RFP that Respondent believes would result in greater efficiencies or cost-effectiveness of its Proposal. Quantify any price impact that would result from such deviations.

IV. Summary of Technology including Key Equipment

- a. Provide Gas Turbine Generators/reciprocating engines/PV Panels/Inverters/Wind Turbines/Batteries/Thermostats, etc.
- b. Specify any emissions control equipment.
- c. Include OEM, model, and quantity assumed in price. Optionally include OEM alternatives noting price impacts, if any.
- d. Specify the country of origin for all material equipment.
- e. Provide a description of the configuration of equipment.
- f. For customer-sited demand-side resources, summarize all equipment to be installed on-site at customer locations as well as all communications, control, and management infrastructure.

V. Interconnection Status (if applicable)

- a. List the primary interconnection voltage.
- b. What is the Interconnection Point (i.e., substation, developer property)? ("Interconnection Point" means the physical point at which electrical interconnection is made to allow parallel operation of the Facility with the APS electrical distribution system, as more fully described in the Interconnection Agreement).
- c. What is the APS delivery point (i.e., substation)?
- d. Has Respondent submitted an application for generator interconnection?
 - i. If yes, when did Respondent submit the application and what is the status of Respondent's interconnect application?
 - ii.If no, what is Respondent's plan to ensure that the proposed resource will meet the proposed in-service date without any interconnection delay?

VI. Past Experience

- a. Provide the number of projects larger than 25 MW in the past five (5) years.
- b. Provide the types/technologies for projects listed above.
- c. Provide the project locations for projects listed above.
- d. Include the aggregate capacity installed by Respondent over time (MW).
- e. Include the highest single project capacity installed (MW).
- f. Provide the total capacity of projects in pipeline (under contract) (MW).
- g. Demonstrate Respondent Partner experience, if applicable.

VII.Fuel and Water Supply Arrangements (if applicable)

- a. Describe the fuel transportation and supply arrangements for the project. Describe the proposed Interconnection Point for Fuel, including distance needed for interconnection.
- b. Indicate if Respondent has applied for a Request for Gas Service.

c. Indicate if Respondent has firm water rights for the life of the proposed project, including a breakout of groundwater rights. Furthermore, provide an estimate for the acre-feet per year of water used by the project, specifically after commercial operations.

VIII. Project Development Schedule

- a. Provide a summary of the project schedule for the project, shown in weeks, based on an assumed date for contract execution (which shall be stated in the schedule). Include a brief description of the key milestone dates for the project, including financing and construction milestones and execution of contracts for major equipment.
- b. Describe the process of recruiting and enrolling customers for non-supply side Proposals.

IX. Project Siting Strategy (if applicable)

- a. Provide proposed site location (including map), coordinates and parcel size.
- b. Include description of site's current and previous use.
- c. Describe the status of site control including what type of site control has been exercised (e.g., ownership, option, Right of Way grant).
- d. Any resource to be developed wholly or partially on state-owned land must demonstrate that Respondent is scheduled for lease approval on the AZ State Land Board of Appeals Meeting Notice and Agenda on a date prior to shortlisting.
- e. For non-supply side resources, specify proposed customer segments and types of sites that will be targeted for locating these resources. In addition, indicate the number of APS customer sites that are currently committed to participate, any national partnerships with customer sites in APS territory, and Respondent's approach for recruiting customer sites.
- f. If proposed project is a renewable energy resource to be sited within the geographic boundaries of the Navajo Nation, provide the following additional information:
 - Number of jobs created by the project (both during development and through operation and maintenance of the facility).
 - ii. Job training to be offered in connection with the development, operation, and maintenance of the facility.
 - iii. Any improvements or benefits that may inure to community infrastructure (such as through water systems, electrical systems, etc.).
 - iv.Direct and indirect revenue that will be created for the surrounding community and the Navajo Nation as a whole as a result of the project, including land lease payments.

- v. Whether or not Respondent will require a waiver of sovereign immunity by the Navajo Nation in connection with the project.
- vi.A description of the Proposal's adherence (as applicable) to the vetting process outlined in Navajo Nation Executive Order No. 02-2023 available at https://opvp.navajonsn.gov/executive-order-no-02-2023/.

X. Project Permitting Plan

- a. Identify the permits required, status of approvals, and plans with schedules to finalize all required permits for construction and operation of the facility, including all certification and land use approvals, as well as any applicable permitting requirements for customer-sited non-supply side resources.
- b. If the project is permitted and in operation, list the following:
 - i. Permit source and expiration date (include all sub-conditions)
 - ii. Operating hours
 - iii. Emissions limitations
 - iv. Start/stop limitations
 - v. Minimum run times
 - vi. Other embedded permit limitations, e.g., zero discharge requirement, air-cooled condenser requirement, recycled cooling water requirement, etc.

XI. Financial Strategy

- a. Provide a description of the financing plan for the project including sources of debt and equity financing and recent experience financing similar projects.
- b. For non-supply side resource Proposals, also indicate the financial strategy for recruiting participants, providing incentives to encourage participation, and how any costs for equipment installation are being covered.

XII. Tax Strategy

- a. Provide a detailed description of Respondent's holistic strategy regarding the investment tax credit (ITC)/production tax credit (PTC) capture for the project, including any "bonus credits" for domestic content and energy communities, as well as any plans to leverage other potential tax benefits from the Inflation Reduction Act, Bipartisan Infrastructure Law, or other opportunities.
- b. For BTA and EPC Proposals, outline all materials, manufactured products, subcontractors, and labor to be utilized and how each one is part of the overall strategy regarding the tax credits to ensure maximum tax credit capture and/or value to APS customers while also ensuring on-time project delivery. Please

include a summary of whether the Respondent intends to comply with prevailing wage and apprenticeship rules under the Inflation Reduction Act and whether the EPC proposal may qualify for any "bonus credits" under the Inflation Reduction Act, including but not limited to the domestic content bonus credit, or the energy communities bonus credit, and in each instance provide APS documentation and comfort necessary to support claiming the tax credits.

XIII. Antidumping/Countervailing Duty (AD/CVD) Mitigation Strategy

- a. Provide Respondent's view of expected outcome of current Department of Commerce tariff investigation and impacts on proposed project (including price, availability of equipment, and schedule).
- b. Provide a detailed description of Respondent's strategy to mitigate the impacts described above.

XIV. Uyghur Forced Labor Prevention Act (UFLPA)

a. Provide a brief description of Respondent's plan for compliance with UFLPA when building the proposed facility/program and acquiring equipment for the proposed facility/program.

XV. Safety

a. Provide a brief description of Respondent's strategy for ensuring safety at its project sites and in connection with any of its proposed programs. Discuss Respondent's safety record (EMR/TRIR) or ISNetworld grade.

For battery storage projects, include a summary of Respondent's battery safety strategy for each acceptable battery vendor, with supporting documentation, reports, studies, etc. showing ability to comply with Appendix W (PPA/BTA) or the Scope of Work (EPC). For PPAs, summarize details about Respondent's organization structure and process for emergency response/incident command. For PPAs, include any history of conversations or documented decisions with the fire permitting authority and strategy for successfully permitting the project with the particular jurisdiction for each project location.

XVI. Disputes/Litigations

a. APS requires Respondents to identify and describe any disputes in which Respondent or any of its affiliates has previously been involved with APS or any of its affiliates (including all direct and indirect parent or subsidiaries of APS). This list should identify any disputes that that were formally or informally resolved, as

well as disputes that have previously been, or which currently are, the subject of a mediation, arbitration or dispute resolution proceeding, or any other litigated proceeding before a court or other governmental/regulatory authority.

Appendix C – Technical Exhibits

EXHIBIT 1: Energy Storage

- **1. Requirements:** Any energy storage Proposal must conform to the requirements for all Proposals set forth in <u>Section IX</u> and the following requirements:
 - a. <u>Transaction Structure.</u> PPA or tolling agreement term of at least five (5) years. If the proposed term is something other than ten (10) years, Respondent must provide indicative ten (10)-year pricing in its Executive Summary, as described in <u>Appendix B</u>.
 - b. <u>Technology</u>. Proposals may include only the following technologies:
 - i. Battery energy storage system (BESS)
 - ii. Compressed air energy storage system (CAES)
 - iii. Pumped hydro
 - iv. Other energy storage technologies that meet the minimum requirements of this RFP

c. Technical Characteristics

- i. Any proposed facility must meet all BESS safety requirements specified in Appendix W, which specifies APS's safety standards and can be found in the "Download Documents" tab in PowerAdvocate. Proposal pricing shall include all testing, equipment, and design necessary to satisfy such safety requirements. Respondents are required to review Appendix W and provide any proposed redlines and comments.
- ii. Any proposed facility must be capable of operating within the 50-year Extreme Annual Design Conditions, as detailed in the American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE) Handbook, using a weather station nearest to the project location, at 100% of the proposed contract capacity discharging for a minimum of four (4) consecutive hours.
- iii. Proposed BESS projects must allow for 365 equivalent cycles per year with an average annual state of charge of 50%. To maximize the flexibility that APS seeks, the 365 annual cycles can assume days where the resource is cycled more than once and days where the resource is not cycled at all. Respondents are encouraged to propose other technical or commercial methods that will enable APS flexibility to adjust the number of annual cycles over the term of the agreement (i.e., adjustments/credits, cycle banking, etc.).
- iv. Any proposed facility must be capable of satisfying a monthly availability requirement (as that term is defined in the applicable agreement with APS) of at least 97% for non-summer periods and 98% for summer periods during the term of the agreement.
- v. BTA and PPA agreements must be AC coupled.

- **2. Preferences:** Though not required, APS prefers the following characteristics in Proposals for energy storage resources:
 - a. APS prefers a technology that has already undergone safety testing, safety evaluations, and safety designs, as evidenced by test results and other supporting documentation included in the Proposal in accordance with Appendix W. Proposals that plan to undergo safety testing, safety evaluations, or safety designs for the proposed technology after contract execution will be viewed less favorably.
 - b. If it would be similarly cost competitive to a four-hour storage facility, APS prefers a facility able to deliver the full proposed contract capacity for a duration of longer than four (4) consecutive hours to meet peak needs.
 - c. APS prefers any energy storage project that is paired with a renewable resource be designed to maximize the associated interconnection.
 - d. APS prefers a facility located in APS's service territory and interconnected to APS's transmission or sub-transmission system (69kV or higher), as applicable.
 - e. APS prefers a facility that charges in a time frame as close to matching the amount of time it takes to discharge and does not derate the power capacity of the facility as it reaches the high or low end of the state of charge. A facility with the ability to have more than one equivalent cycle per day will be viewed favorably.
 - f. APS prefers land owned by the developer or purchase option. For land lease agreements, APS prefers at least 42 years.
 - g. APS prefers a facility that can provide reactive capabilities in excess of the minimum Interconnection Requirements and can also provide reactive capabilities without the need to be producing real power (i.e., grid-sourced reactive power).
 - h. APS prefers a twenty (20) year, or shorter, term for a PPA.

EXHIBIT 2: Agave Energy Storage (EPC)

- **1. Requirements:** The Agave energy storage Proposal must conform to the requirements for all Proposals set forth in <u>Section IX</u> and the following requirements:
 - a. <u>Transaction Structure.</u> The required transaction structure is an EPC. Respondent can select to bid for either, or both, of the following options:
 - i. Structure 1 Respondent procures all equipment and designs and constructs the entire Facility.
 - ii. Structure 2 APS procures the BESS units and power conversion system (inverters and transformers) for Respondent to offload and install. Respondent also designs, procures, and constructs the remainder of the Facility in accordance with the BESS Scope of Work. Only for the purpose of aligning bids, assume BESS enclosures are 8'Wx6'Dx9'H, 20,000 lbs., 750 kWh-DC each, with 6" side-to-side and back-to-back spacing, 10' aisle spacing, and no underground DC connections or cabling (DC cable in tray or DC bus). Assume inverters are 3.5 MVA at 50°C with direct-throat connection to a 34.5kV oil-filled inverter transformer. Respondent can include additional bids for specific BESS and PCS make and model combinations (assumed to be procured by APS). Note all other assumptions used in pricing the Proposal not included in the BESS Scope of Work.
 - b. <u>Sizing.</u> Respondent can select to bid for either, or both, of the following options:
 - i. Size 1 150 MW, 600 MWh AC (660 MWh DC minimum) operational in 2025.
 - ii. Size 2 400 MW, 1600 MWh AC (1,760 MWh DC minimum) with phased operation dates of 150 MW in 2025, 150 MW in 2026, and 100 MW in 2027.
 - c. <u>Technology</u>. Battery energy storage system (BESS).
 - d. <u>Commercial Readiness.</u> The proposed BESS cells, modules, racks, and enclosures must have at least 300 MWh in current operation.
 - e. <u>Safety.</u> Proposed BESS units must have undergone safety testing and evaluations, in accordance with the BESS Scope of Work, as evidenced by test results and other supporting documentation to be provided with the Proposal.
 - f. <u>Technical Characteristics.</u> See BESS Scope of Work and Data Input Sheet in PowerAdvocate.
 - 2. Warranty and/or Performance Guarantees: Each Proposal must include a full wrap standard parts and labor (i.e., workmanship) warranty (Warranty) offering for a minimum of one (1) year (Warranty Period) or a period covering any Performance Guarantees. Proposals, that include a cost-effective Warranty Period greater than one (1) year and/or include Performance Guarantees will be evaluated highly favorably. Such Warranty must include full coverage of site construction including all labor, materials, and equipment procured by Respondent. Respondent

management of supplier warranties during the Warranty Period will be evaluated more favorably. Respondents can propose various Warranty and/or Performance Guarantee options with noted price impacts, if any.

- **3. Preferences:** Though not required, APS prefers the following characteristics in Proposals for energy storage resources:
 - a. APS prefers Proposals that offer three (3) year Performance Guarantees for availability (98% summer, 97% non-summer), power, energy, and round-trip efficiency.
 - b. APS prefers a facility that charges in a time frame as close to matching the amount of time it takes to discharge and does not derate the power capacity of the facility as it reaches the high or low end of the state of charge. A facility with the ability to have more than one (1) equivalent cycle per day will be viewed favorably.
 - c. APS prefers a facility that can provide reactive capabilities in excess of the minimum Interconnection Requirements and can also provide reactive capabilities without the need to be producing real power (i.e., grid-sourced reactive power).

EXHIBIT 3: Renewable Energy Technologies

- **1. Requirements:** Any renewable energy technology Proposal must conform to the requirements for all Proposals outlined in <u>Section IX</u> and the following requirements:
 - a. <u>Transaction Structure</u>. PPA or tolling agreement term of at least five (5) years, or BTA. If the proposed term is something other than ten (10) years, Respondent must provide indicative ten (10)-year pricing in its Executive Summary, as described in <u>Appendix B</u>. The PPA or tolling agreement must give APS ownership of all environmental attributes, as that term will be defined therein.
 - b. <u>Technology</u>. Eligible renewable energy resources are those defined in A.A.C. R14-2-1802(B): Eligible Renewable Energy Resources are applications of the following defined technologies that would otherwise be used to provide electricity to APS customers:
 - i. Biogas Electricity Generator
 - ii. Biomass Electricity Generator
 - iii. Eligible Hydro Facilities
 - iv. Fuel Cells that Use Only Renewable Fuels
 - v. Geothermal Generator
 - vi. Hybrid Wind and Solar Electric Generator
 - vii. Landfill Gas Generator
 - viii. Solar Electricity Resources
 - ix. Wind Generator
 - c. Technical Characteristics.
 - i. Renewable energy projects must offer operational flexibility, which can be achieved through a tolling agreement structure or a PPA that includes curtailment rights. Proposals should be clear about the operational flexibility being offered and how that flexibility can be maximized to achieve the greatest value for APS.
 - ii. Any proposed facility must be capable of operating within the fifty-year Extreme Annual Design Conditions, as detailed in the ASHRAE Handbook, using a weather station nearest to the project location at 100% of the proposed contract capacity.
 - iii. Any Proposal for a solar photovoltaic facility shall include four (4) hourly production profiles (i.e., 8760 profiles), which represent the hourly output of the project at the APS Delivery Point in Mountain Standard Time (MST) for years 2006, 2007, 2009 and Typical Meteorological Year (TMY). The TMY, 2006, 2007, and 2009 profiles shall be based on site-specific data derived from National Renewable Energy Laboratory (NREL) Solar Prospector in .tmz and .csv file formats.
 - iv. Any Proposal for a wind facility shall provide on-site wind data used in preparing 8760 production profiles as well as the method(s) for collecting on-site wind data in the spreadsheet found in the "Download Documents" tab in PowerAdvocate.

- **2. Preferences:** Though not required, APS prefers the following characteristics in Proposals for renewable energy resources:
 - a. APS prefers a facility that maximizes the amount of energy production that it will generate and deliver during the months of June through September between the hours of 4:00 pm and 10:00 pm Arizona time.
 - b. APS prefers a facility that can provide reactive capabilities in excess of the minimum Interconnection Requirements and can also provide reactive capabilities without the need to be producing real power (i.e., grid-sourced reactive power).
 - c. APS prefers at least 250 MW of renewable resources located within the geographical boundaries of the Navajo Nation in Arizona, with further preference given to resources located in proximity to the Navajo Generating Facility and the APS Four Corners Power Plant. APS will take into consideration the characteristics of any such resource, including those described by Respondent in response to the Executive Summary as specified in Appendix B, Section IX(f)(vi).
 - d. APS prefers a twenty (20) year, or shorter, term for a PPA.

EXHIBIT 4: Ironwood Solar (EPC)

- **1. Requirements:** APS seeks competitive Proposals for EPC services for a 168 MWac Photovoltaic Solar Resource as described. The Ironwood Solar Proposal must conform to <u>Section IX</u> and the following requirements:
 - a. <u>Transaction Structure</u>. The required transaction structure is an EPC. Respondent can select to bid for either, or both, of the following options:
 - i. Structure 1 Respondent procures all equipment and designs and constructs the entire facility, including design considerations to add 168 MW, 672 MWh AC of battery storage at a later time.
 - ii. Structure 2 APS procures solar modules for Respondent to offload and install. Respondent also designs, procures, and constructs the remainder of the facility in accordance with the Solar Scope of Work including design considerations to add 168 MW, 672 MWh AC of battery storage at a later time. Only for the purposes of aligning bids, assume the use of 570W ZNShine ZXM7-UHLDD144 or equivalent. Respondent can include additional bids for other specific modules assumed to be procured by APS. Note all other assumptions used in pricing the Proposal not included in the Solar Scope of Work.
 - b. <u>Commercial Readiness.</u> In order to be considered, the proposed inverters and trackers (if applicable) must have a minimum of twelve (12) months of established production history at a scale of one hundred (100) MW or larger at a single plant located in North America. Module OEMs must be "Tier 1" as determined by the latest BNEF reports.
 - c. <u>Technical Characteristics</u>. See the Solar Scope of Work and Data Input Sheet in PowerAdvocate
 - 2. Warranty: Each Proposal must include a full wrap standard parts and labor (i.e., workmanship) warranty ("Warranty") offering for a minimum of one (1) year (the "Warranty Period"). Proposals with a Warranty Period greater than one (1) year will be evaluated more favorably. Such Warranty must include full coverage of site construction including all labor, materials, and equipment procured by Respondent. Respondent management of supplier warranties during the Warranty Period will be evaluated more favorably.
 - **3. Preferences:** Though not required, APS prefers the following characteristics in Proposals for renewable energy resources:
 - a. APS prefers a facility that can provide reactive capabilities in excess of the minimum Interconnection Requirements and can also provide reactive capabilities without the need to be producing real power (i.e., grid-sourced reactive power).
 - b. Proposals that are capable of providing access to the full reactive capabilities of the inverters, including grid-sourced reactive power (a.k.a. "Q at night"), will be evaluated more favorably than Proposals that do not include this capability.

EXHIBIT 5: Energy Efficiency

1. Requirements:

Any Proposal for energy efficiency or other BTM, non-dispatchable resource (referred to herein as "Energy Efficiency") must conform to the minimum requirements for all Proposals outlined in <u>Section IX</u> and the following requirements:

All proposals should include the specific Energy Efficiency technologies being deployed, methods used to verify the Energy Efficiency resources delivered over the contract term, the anticipated savings impacts per customer site, an hourly (8760 hours/year) load shape of total project savings impacts, and the number and type of customers who will be recruited to participate.

All proposed Energy Efficiency resources must be incremental to APS' existing Energy Efficiency programs, and proposal pricing must be all-inclusive without assuming access to any current or future APS Energy Efficiency program incentives. Note that nothing in this RFP shall limit APS's ability to offer its own Energy Efficiency programs in the future, regardless of whether or not it enters into a Load Management Agreement for an Energy Efficiency resource as a result of this RFP. Respondents assume the risk and impact of any future changes when submitting a Proposal for an Energy Efficiency resource.

a. <u>Transaction Structure</u>. Respondent must offer an Energy Efficiency resource pursuant to an LMA that satisfies the terms specified in the term sheet found on the PowerAdvocate "Download Documents" tab for a term of at least five (5) years but not more than ten (10) years. The agreement must permit APS to count any energy savings resulting from the proposed resource toward any established ACC Energy Efficiency goal and/or any other future regulatory requirements.

b. Technical Characteristics.

- i. Any proposed Energy Efficiency resource must pass the Societal Cost Test (SCT) as defined by the ACC Energy Efficiency Standards defined in Arizona Administrative Code R14-2-2401(36). APS will screen all Energy Efficiency Proposals using the Utility Cost Test (UCT) and the SCT as prescribed by the ACC. All Respondents must provide input assumptions and calculations to pass the SCT.
- ii. Any proposed customer-facing program to deliver non-supply side resources must be APS-branded (or potentially cobranded). APS must review and pre-approve all program marketing materials before use.
- iii. Any proposed resource may only include participating APS customer sites. Respondents must provide a Measurement and Verification (M&V) Plan to verify actual MWh and MW savings delivered, including estimated costs for implementing the M&V

Plan. Load reductions must also be verifiable by APS using thenavailable APS metering. Resources that are educational in nature only (i.e., do not include tangible Energy Efficiency products) and do not result in direct MWh and MW savings delivered are not eligible.

- **2. Preferences:** Though not required, APS prefers the following characteristics in Proposals for Energy Efficiency programs:
 - a. APS requires programs and technologies must pass the SCT and prefers that resources also demonstrate cost-effectiveness through other tests such as the UCT and the Participant Cost Test (PCT).
 - b. APS prefers programs and technologies capable of operating at 118° F and twenty percent (20%) humidity, at one hundred percent (100%) displaced capacity for a minimum of four (4) consecutive hours.
 - c. APS prefers programs and technologies that are focused on reducing energy use during the months of June through September and between the hours of 4:00 pm and 10:00 pm Arizona time. Reference Appendix E (Heat Map).
 - d. APS prefers programs and technologies that provide dispatch flexibility and do not include significant must-take energy reductions during non-peak times in non-summer months. Respondent should indicate any approaches its proposed project will use to incorporate flexibility and reduce must-take energy requirements.

EXHIBIT 6: Demand Response, Load Shifting, and BTM Energy Storage

1. Requirements: Any Proposal for Demand Response, Load Shifting, BTM Energy Storage or other BTM dispatchable resource (referred to herein as "Demand Response") must conform to the minimum requirements for all Proposals outlined in Section IX and the following requirements:

Respondents assume the risk and impact of any future APS rate design changes when submitting a Proposal to APS. In addition, nothing in this RFP is intended to limit APS's ability to offer its own demand response, load shifting and BTM energy storage programs of any type in the future, regardless of whether or not it enters into a load management agreement as a result of this RFP.

Consistent with the premise that APS does not intend to provide multiple compensation streams for the same demand-side management services, Proposals may not include capacity already participating in existing APS demand-side incentive programs. In other words, the capacity included in the Proposal must be distinct from capacity that APS has already secured through existing APS demand response programs, including, but not limited to, the residential Cool Rewards, the Commercial/Industrial Peak Solutions program, and the Residential Energy Storage Pilot. Note that the term of the current contract for the Peak Solutions C&I demand response program expires at the end of the 2025 summer DR season, so there is no C&I DR capacity reserved after this time.

Similarly, although APS does not prohibit distributed demand-side management technologies that have received a rebate or been counted towards Energy Efficiency, demand-side management, or renewable mandates from participating in this RFP, Proposals shall only include customer-sited programs and technologies that are incremental to and not in conflict with their participation in current APS programs. For example, a smart thermostat that received an APS rebate for Energy Efficiency at the time of installation would be eligible to participate in a Proposal for demand response services. However, if this same thermostat is currently enrolled in the APS Cool Rewards demand response program, it would be ineligible to offer demand response peak capacity value in a Proposal. Any Proposals that include dual participation resources should clearly identify these resources in Proposals and clearly demonstrate how they provide incremental grid value. Note that the basis of valuation for these dual participation resources will be limited to their incremental value only after accounting for grid services that APS has already paid for through other mechanisms (i.e., incentives or retail rates). Respondents must also indicate how any grid services they propose for dual participation resources will not conflict with any current grid services that APS has already obtained from these resources while considering potential customer experience issues that could occur related to dual

participation (e.g., fatigue from too many demand response and load shifting events).

Proposals may also not include residential, commercial, or industrial customers enrolled on a rate schedule/tariff where third-party providers provide the generation component. These programs/rates currently include Alternative Generation-X, Interruptible Rate Rider, and Critical Peak Pricing-General Service.

a. <u>Transaction Structure.</u> Respondent must offer a demand response program pursuant to an LMA that satisfies the terms specified in the term sheet found on the "Download Documents" tab in PowerAdvocate with a term of at least five (5) years but not more than ten (10) years. The agreement must permit APS to count any energy and/or capacity savings that result from the proposed program toward any ACC Energy Efficiency goal and/or any other future regulatory requirements.

b. Technical Characteristics.

- i. Any Proposals must provide for commercial operation and delivery of capacity beginning on June 1, 2026. At a minimum, all Proposals must provide capacity during the months of June through September during each year of the term of the LMA (the "Control Season").
- ii. Proposals must offer a minimum of five (5) MW of (incremental or additional) capacity per year, aggregated from eligible APS commercial and industrial (C&I) or residential customer load.
- iii. The resource must be dispatchable a minimum of five (5) times during each Control Season, June 1 through September 30, during any Program Availability Hour, 4:00 pm to 10:00 pm, Arizona Time (APS prefers resources with a greater amount of dispatch capability). Reference Appendix E (Heat Map).
- iv. At least a portion of the resource capacity must respond within a two (2) hour notice, and all of the capacity must respond with day ahead prior notice. APS prefers and places greater value on resources that can respond with shorter notice. Respondents must clearly specify how much of the total proposed capacity is available within two (2) hours prior notice or less.
- v. The resource must be capable of delivering guaranteed load reduction for at least three (3) consecutive hours.
- vi. The resource must be capable of performing for a minimum of three (3) consecutive days.
- vii. The resource must provide one hundred percent (100%) of the contracted load reduction each Monday through Friday and eighty percent (80%) of the contracted load reduction each Saturday, Sunday, July 4th, and Labor Day during the Control Season.
- viii. Load reductions must be verifiable by APS using APS-owned Advanced Metering Infrastructure (AMI) metering.

- ix. The resource may only include eligible customer participants within the APS service territory.
- x. The resource must be APS-branded (or potentially co-branded). APS must review and pre-approve all program marketing materials before use.
- **2. Preferences:** Though not required, APS prefers the following characteristics in Proposals for demand response programs:
 - a. APS prefers a resource capable of more than the minimum required dispatches per Control Season.
 - b. APS prefers a resource that responds with one (1) hour prior notice. Respondents should explain (in the Executive Summary) if responding with one (1) hour prior notice will result in any cost increase to APS, as compared to a two (2) hour prior notice requirement.
 - c. APS prefers a resource that can reduce the load for longer than three (3) hours (up to six (6) hours or longer is preferable).
 - d. APS prefers a resource that can reduce the load if called upon by APS for five (5) consecutive days or more.
 - e. APS prefers a resource that can provide one hundred percent (100%) of the DR Capacity during all seven (7) days of the week, including July 4th and Labor Day, during the Control Season.
 - f. APS prefers a resource that can be contracted with APS for a shorter term rather than a longer term to enable APS to be responsive to future load changes.
 - g. APS prefers innovative Proposals that seek to maximize customer participation by offering customers options for their level of demand response participation rather than a one-size-fits-all program design.

EXHIBIT 7: Thermal Generation

- **1. Requirements:** Any Proposal for a thermal generation resource (other than for Sundance or Redhawk, the requirements of which are set forth in Exhibits 8 and 9, respectively) must conform to the minimum requirements for all Proposals outlined in <u>Section IX</u> and the following requirements:
 - a. <u>Transaction Structure.</u> The transaction must be in the form of a tolling PPA with a delivery term of at least three (3) years. APS will accept Proposals for a year-round or partial-year toll. Proposals must also include Respondent's plan, if any, to reduce carbon emissions over the term of the proposed transaction, including through the use of clean hydrogen or by other means. APS considers "clean hydrogen" to be hydrogen produced through means that release few to no carbon emissions during the reaction period.
 - b. Technical Characteristics.
 - i. Proposed gas-fired generation resources must be able to connect to a viable interstate natural gas pipeline. APS will evaluate the proposed point of connection to see if any constraints are specific to that location.
 - ii. Proposed resource must have adequate water rights to support performance for the full contract capacity and the proposed term of the tolling agreement.
 - iii. Proposed resource shall be capable of operating at one hundred percent (100%) contract capacity for a minimum of six (6) consecutive hours.
 - iv. Proposed resource must be fully dispatchable by APS using AGC.
 - v. To the extent that carbon allowances are allocated to the proposed resource or part thereof, those allowances must be provided to APS for the term of the associated tolling agreement at no additional charge. APS may allocate them toward its requirements pursuant to any applicable regulatory requirements.
 - vi. APS evaluates gas turbine performance on the following parameters:
 - 1. Assumed elevation of 1,000 ft.
 - 2. June-September temperatures at 105°F and Relative Humidity of nineteen percent (19%)
 - a. Equivalent to 115°F and Relative Humidity of nine and a half percent (9.5%)
 - b. Assumes inlet cooling
 - 3. October, March-May temperature 73°F and Relative Humidity of thirty-seven percent (37%)
 - a. Assumes inlet cooling
 - 4. November-February temperature 41°F and Relative Humidity of fifty-one percent (51%)
 - a. Inlet Cooling is assumed off

- **2. Preferences:** Though not required, APS prefers the following characteristics in Proposals for thermal resources:
 - a. APS prefers a resource capable of stable operation at a minimum operating level of twenty-five percent (25%) loading or lower without exceeding the legal limits for emissions (CO, CO2, NOx, SO2, VOC, PM10, PM2.5) pursuant to an applicable air permit or otherwise.
 - b. APS prefers a resource capable of at least two (2) starts per day.
 - c. APS prefers a resource with a minimum ramp rate of ten percent (10%) per minute of summer capacity rating.
 - d. APS prefers a resource capable of full contract capacity at 118°F and Relative Humidity of twenty percent (20%).
 - e. APS prefers a transaction that allows APS the option to supply any fuel and related gas transportation for delivery to the lateral pipeline interconnection for the facility.
 - f. APS prefers a connection to both the El Paso and Transwestern pipelines for a natural gas resource.
 - g. APS prefers a twenty (20) year, or shorter, term for a PPA.

EXHIBIT 8: Thermal Generation (Sundance EPC)

- **1. Requirements:** Any Proposal for development of a thermal generation resource to be located at APS's existing Sundance generating station must conform to the minimum requirements for all Proposals outlined in Section IX and the following requirements:
 - a. Project Summary & Transaction Structure. If the evaluation process in this RFP supports such a decision, APS desires to build two (2) new natural gas units at the existing Sundance Power Plant located near Coolidge, Arizona. The original plan for the site included twelve General Electric LM6000PC generating units (GE LM6000s), but only ten (10) were constructed. This project would add the final two (2) units, adding 90 MW incremental generation. Accordingly, APS is soliciting a firm price offering from qualified entities to engineer, procure and construct (EPC) two (2) GE LM6000s to be in service no later than March 1, 2026. Major equipment and long lead material items have been or will be procured by APS to facilitate the timely completion of the proposed project. Eligible Respondents will be granted access to the "Sundance EPC Package" zip file that contains the Sundance **EPC** commercial template, statement work/specification with an extensive division of responsibilities, and related agreement appendices (together, the "EPC SOW") following the deadline for submission of the required Confidentiality Agreement for this RFP. In connection with its Proposal for this offering, Respondent must timely complete the general commercial datasheets, including the four (4) "Sundance" project specific commercial and pricing data sheets in PowerAdvocate.
 - b. Technical Characteristics.
 - i. GE LM6000s have performance guarantees from the manufacturer (OEM), and any successful EPC contractor must ensure equipment is constructed in a manner to maintain the OEM performance guarantees.
 - ii. Remaining technical characteristics are detailed in the EPC SOW.

EXHIBIT 9: Thermal Generation (Redhawk)

- 1. Requirements: Any Proposal for a thermal generation resource must conform to the minimum requirements for all Proposals outlined in Section IX, Appendix C, Exhibit 7, and the following requirements. In the event of any conflict between the requirements of Appendix C, Exhibit 7 and this Appendix C, Exhibit 9, the requirements of this Appendix C, Exhibit 9 will prevail.
 - a. <u>Project Summary & Transaction Structure.</u> If the evaluation process in this RFP supports such a decision, APS desires to develop approximately 300 MW of incremental natural gas fired power generation at its existing APS Redhawk Power Plant. This resource is expected to include quick starting, fast ramping simple cycle unit or units, with a combined output of 300 MW (net) in summer months. Respondent can select to bid for either, or both, of the following options:
 - i. Structure 1 Tolling power purchase agreement for delivery year-round, not to exceed fifteen percent (15%) capacity factor.
 - ii. Structure 2 BTA with a firm price offer where APS takes ownership after final acceptance.

Eligible Respondents will be granted access to the "Redhawk Proposal Package" zip file that contains the commercial template and statement of work/specification (as applicable) following the deadline for submission of the required Confidentiality Agreement for this RFP. In connection with its Proposal for this offering, Respondent must timely complete all required datasheets in PowerAdvocate.

- b. Technical Characteristics.
 - i. Proposed gas-fired generation resources must be able to connect to a viable interstate natural gas pipeline. APS will evaluate the proposed point of connection to see if any constraints are specific to that location.
 - ii. Proposed resource must have adequate water rights to support performance for the full contract capacity and the proposed term of the tolling agreement.
 - iii. Resource must be capable of reducing carbon emissions in the future through hydrogen blending.
 - iv. Proposed resource shall be capable of operating at one hundred percent (100%) contract capacity for a minimum of six (6) consecutive hours.
 - v. Proposed resource must be fully dispatchable by APS using AGC.
 - vi. To the extent that carbon allowances are allocated to the proposed resource or part thereof, those allowances must be provided to APS for the term of the associated tolling agreement at no additional charge. APS may allocate them toward its requirements pursuant to any applicable regulatory requirements.

- vii. APS evaluates gas turbine performance on the following parameters:
 - 1. Assumed elevation of 1,000 ft.
 - 2. June-September temperatures at 105°F and Relative Humidity of nineteen percent (19%)
 - a. Equivalent to 115°F and Relative Humidity of nine and a half percent (9.5%)
 - b. Assumes inlet cooling
 - 3. October, March-May temperature 73°F and Relative Humidity of thirty-seven percent (37%)
 - a. Assumes inlet cooling
 - 4. November-February temperature 41°F and Relative Humidity of fifty-one percent (51%)
 - a. Inlet Cooling is assumed off
- **3. Preferences:** Though not required, APS prefers the following characteristics in Proposals for the thermal resource at Redhawk:
 - a. APS prefers a resource capable of stable operation at a minimum operating level of twenty-five percent (25%) loading or lower without exceeding the legal limits for emissions (CO, CO2, NOx, SO2, VOC, PM10, PM2.5) pursuant to an applicable air permit or otherwise.
 - b. APS prefers a resource capable of at least two (2) starts per day.
 - c. APS prefers a resource with a minimum ramp rate of ten percent (10%) per minute of summer capacity rating.
 - d. APS prefers a resource capable of full contract capacity at 118°F and Relative Humidity of twenty percent (20%).
 - e. APS prefers a transaction that allows APS the option to supply any fuel and related gas transportation for delivery to the lateral pipeline interconnection for the facility.
 - f. APS prefers a connection to both the El Paso and Transwestern pipelines for a natural gas resource.
 - g. APS prefers a twenty (20) year, or shorter, term for a PPA.

EXHIBIT 10: Resource to be located at APS's Cholla Site

1. Project Summary. APS-owned Cholla Generating Station will be retiring, and APS seeks Proposals for generating resources at the existing location following such retirement. All resources otherwise eligible to bid into this RFP are eligible to be bid at this Cholla location. APS expects that Proposals for projects that can optimize existing land and infrastructure may compare favorably.

Appendix D – Scoring Matrix

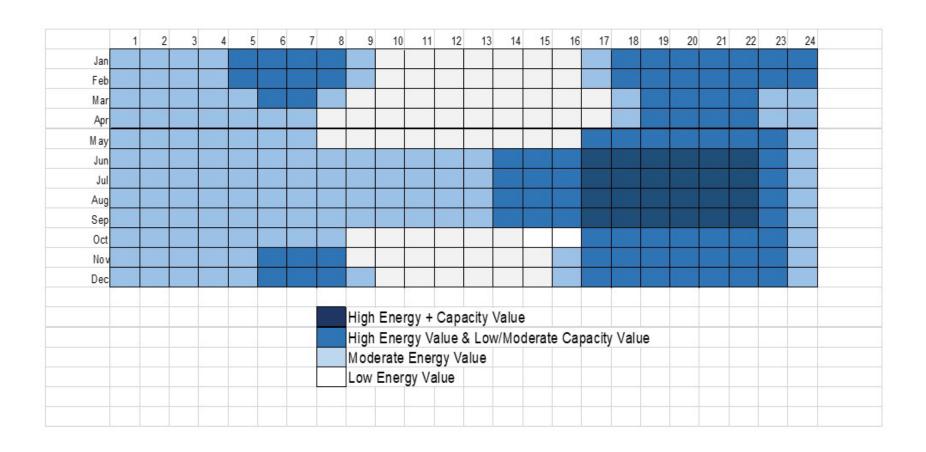
Categories	Criteria	Weightage	Total Points	Points	Proposed Scoring
Resource Alignment	Dispatchability	25%	500	100	100- APS has full dispatchability
					25 - APS has limited dispatchability
					0 - APS has no dispatchability
Resource Alignment	Carbon Emissions Profile			200	200- zero emissions
					50 - Greater than zero but less than average APS emissions rate (lbs/MWh)
					0 - Greater than average APS emissions rate (lbs/MWh)
Resource Alignment	Load Factor Impacts			100	This category will only give bonus points for being available fully or partially during the High Energy and Capacity Value hours.
					100 - Available all hours from HE17 to HE22 from June to September at full capacity (100% capacity factor)
					Points will be reduced by a formula to capture actual capacity factor of the project during those hours only.
					HE = Hour ending; (4 pm-10 pm).
Resource Alignment	Flexibility			100	100- Ramp rates of 10% per minute of nameplate capacity or higher
					25- Ramp rates of at least 3% per minute of nameplate capacity
					0 - Ramp rates less than 3% per minute of nameplate capacity
					50 - Respondent possess direct ownership of the site, free and clear with no encumbrances OR Respondent is a lessee on an existing lease of the site with no encumbrances or, in the case of demand-side resources, Respondent provides sufficient evidence that 25% or more of its projects or programs are committed at the time of Proposal submittal.
Technology/ Project Risk	Site Control	12.50%	250		0 - Respondent possess direct ownership of the site, with encumbrances OR Respondent is a lessee on an existing lease of the site, with encumbrances OR Respondent possesses an exclusive and non-contingent option to purchase or lease the site or, in the case of demand-side resources, Respondent provides sufficient evidence that less than 25% of its projects or programs are committed at the time of Proposal submittal.

Categories	Criteria	Weightage	Total Points	Points	Proposed Scoring
Technology/ Project Risk	Interconnection Status			100	100- Executed IA/Negotiations or no interconnection required
					75 - FIS completed or, in the case of demand-side resources, 50% of participants in the project or program portfolio are interconnected or do not require interconnection
					25 - SIS completed or, in the case of demand-side resources, 25% of participants in the project or program portfolio are interconnected or do not require interconnection
					0 - Has not yet applied for interconnection or, in the case of demand- side resources, less than 25% of participants in the project or program portfolio are interconnected or do not require interconnection
Technology/ Project Risk	Supply Chain			100	100- Proposal is for an existing project or program; or, in the case of a new project or program, no major equipment is needed OR Respondent has less than 50% of major equipment of system sourced from countries subject to Antidumping Duty and Countervailing Duty (AD/CVD) orders AND is in compliance with the Uyghur Forced Labor Prevention Act (UFLPA) AND Respondent has a preferred supplier agreement for Proposal OR has procured or ordered at least 50% of major equipment for the project or program 50- Less than 50% of major equipment of system sourced from countries subject to AD/CVD orders OR Respondent is not in compliance with UFLPA AND Respondent has a preferred supplier agreement for Proposal OR has procured or ordered at least 50% of major equipment for the project or program 0- More than 50% of major equipment sourced from countries subject to AD/CVD orders OR Respondent is not in compliance with
					UFLPA OR. Respondent does not have a preferred supplier agreement for proposal OR has procured or ordered less than 50% of major equipment for the project or program

Categories	Criteria	Weightage	Total Points	Points	Proposed Scoring
Respondent Risk	Respondent Commercial Experience	12.50%	250	100	For existing or new/to-be constructed projects
					100 - Respondent has previously developed a project or program with a capacity over 75% of proposed project or program size AND has previously contracted for the proposed contract structure
					50 - Respondent has previously developed a project or program with a capacity at least 50%-75% of proposed project or program size AND has previously contracted for the proposed contract structure
					25 - Respondent has previously developed a project or program with a capacity of less than 50% of proposed project or program size AND has previously contracted for the proposed contract structure
					0 : Respondent has only previously developed a project with a capacity between of less than 50% of proposed project or program size AND has not contracted for the proposed contract structure
Respondent	Respondent Safety			50	50 - Respondent has NONE of the following: Worker's Experience Modification Rating (EMR) > 1.0, and OSHA Total Recordable Injury Rate (TRIR) - TRIR >2.0, or, if no EMR or TRIR rating, ISNetworld grade of "A" or "B"
Risk					25- Respondent has ONE of the following: EMR > 1.0 OR TRIR > 2.0
					$oldsymbol{0}$ - Respondent has both of the following: EMR > 1.0 AND TRIR > 2.0 or, if no EMR or TRIR rating, ISNetworld grade of less than "B" OR no ISNetworld subscription
Respondent Risk	Financial Strength			100	100 - The Bidder has obtained financing for at least 3 projects of similar technology and size; has proven financial capability with a favorable bond rating; and provided 3 years of financial statements demonstrating it is financially capable; is not in bankruptcy proceedings; or any current or threatened formal dispute with APS.
					50 - The Bidder has financed at least 1 project of similar technology and size; has demonstrated reasonable financial capability based on financials and/or has a favorable bond rating; is not in bankruptcy proceedings or any current or threatened formal dispute with APS.
					0 - None of the above
Cost	Reliable LCOC	40%	800		800 points for top decile. 100-point reduction for each subsequent decile in LCOC value. Minimum score 100 points.
Cost	LCOE	10%	200	200	200 points for lowest LCOE. 1% reduction in point for every 1% increase in LCOE value. Minimum score 50 points.

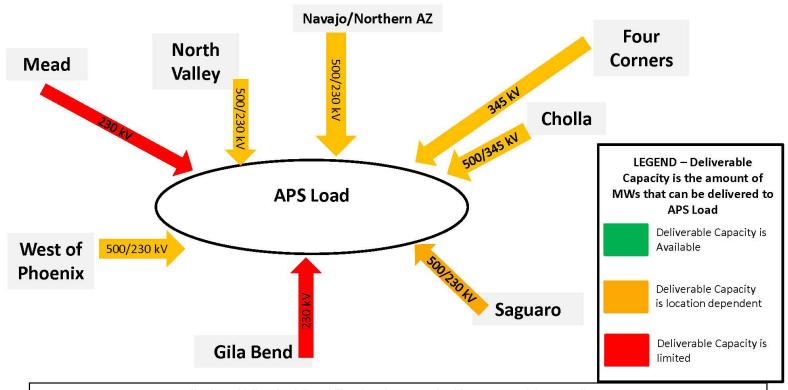
Appendix E – Heat Map

(Columns contain Hour of the Day in Hour Ending format)



Appendix F - Deliverability Map

2023 All Source RFP: Extra High Voltage Deliverability Map



2026 Indicative guidelines for deliverability of product to APS load for purposes of the 2023 All Source RFP:

- 1. Information represented here has been prepared by APS as an indicative guideline for 2026 recent estimated deliverability to APS load for purposes of the 2023 All Source RFP.
- 2. Deliverability is the capability to serve APS load from a resource at a specific location, without causing congestion on the APS system. Deliverable Capacity is the amount of MWs that can be delivered to APS load from a specific location or resource.
- 3. Information here does not represent official deliverability to the APS load.
- 4. Recent estimated deliverability can be found on OASIS (http://www.oasis.oati.com/azps/index.html). This information is as of the date posted to Oasis.
- 5. Information in these figures is not intended to provide definitive guidance to any potential bidder regarding the specifics of the transmission system that may be applicable to bidder's proposed facility. All bidders are responsible for performing their own independent evaluation of the transmission system as it may affect their proposed facilities.
- 6. Projects should be inclusive of all costs to deliver to the APS system.