

# 2024 Long Duration Energy Storage (LDES) Pilot Request for Proposals (RFP)

## I. Introduction and Overview

Salt River Agricultural Improvement and Power District (SRP) is a community-based, not-for-profit organization providing affordable water and power to more than two million people in central Arizona. SRP has been serving the Phoenix area for more than a century to meet the needs of customers and to help develop it into one of the nation's most vibrant regions. As a public not-for-profit water and energy utility company, SRP acts in the best interest of the people it serves and strives to help build a better future for Arizona.

SRP's service territory is experiencing record growth, with SRP's Integrated System Plan predicting the need to double or triple the amount of generating resources by 2035. The majority of SRP's service territory includes large portions of Maricopa County, which is one of the fastest growing counties in the nation according to the U.S. Census Bureau. This significant growth, increasing interest from large customers in serving their energy needs with carbon-free resources, and SRP's commitment to reducing carbon intensity are collectively driving a need to add significant carbon free resources to SRP's generation portfolio. SRP aims to reduce its carbon intensity by 82% by 2035 relative to a 2005 baseline and reach net-zero carbon emissions by 2050. To reach these goals, SRP plans to significantly increase its solar and battery energy storage capacity. SRP is also interested in exploring alternatives to lithium-ion battery storage.

To continue providing reliable and renewable power to customers, and meet 2035 and 2050 goals, SRP is requesting proposals for a long duration energy storage pilot facility with a preferred capacity to discharge continuously at 5 megawatts (MW) for 10 hours. The project is to be located on an SRP-owned site and execution of the final Energy Storage Agreement (ESA) shall be subject to the selected bidder(s) executing a Ground Lease Agreement with SRP governing the location of the project on the SRP-owned site.

## II. Pilot Project Need

SRP's resource plan indicates a need for long-duration energy storage starting in the early 2030s. SRP views energy storage as a crucial component needed to achieve firm renewable capacity and meet SRP's carbon intensity goals. The pilot project selected through this RFP process will help advance SRP's understanding of emerging long duration energy storage technologies to support the utility's sustainability goals and accelerate the maturity of the selected technology.

## III. Requested Proposal

SRP requests proposals for an energy storage facility with the ability to discharge continuously at 5 MW output capacity for 10 hours. The project is to be located on an SRP-owned site at the



Copper Crossing Energy and Research Center in Florence, Arizona. Execution of the final ESA shall be subject to the selected bidder executing a Ground Lease Agreement with SRP governing the location of the project on the SRP-owned site.

All proposals must provide the requested information and descriptions specified within this RFP. SRP reserves the right, for any reason, not to pursue a transaction.

**IV. Schedule**

The RFP process will proceed according to the following schedule:

- 1) RFP Issue Date June 26, 2024
- 2) Pre-Bid Information Due from Bidders July 10, 2024
  - a. Notice of Intent to Respond
  - b. Executed Non-Disclosure Agreement
- 3) On-Site Mandatory Pre-Bid Meeting July 15, 2024
- 4) Bid Proposals Due November 22, 2024
- 5) Short List Selection January 31, 2025
- 6) Interviews with Short List Candidates Weeks of February 3 and 10, 2025
- 7) Notify Selected Bidder to Begin Negotiations April 2025
- 8) Targeted Contract Execution September 2025

**V. Proposal Content**

The 2024 Long Duration Energy Storage RFP consists of the following documents which bidders must review to prepare their proposal:

- 1. 2024 CCERC LDES RFP.docx (this document)
- 2. 2024 CCERC LDES RFP – Proposal Data Sheet.xlsx
- 3. Non-Disclosure Agreement (see **Attachment A**)
- 4. Notice of Intent to Respond (see **Attachment B**)
- 5. Credit Questionnaire (see **Attachment C**)
- 6. Proposal Questionnaire (see **Attachment D**)
- 7. SRP Generator Interconnection Procedures (see **Attachment E**)
- 8. SRP Facility Connection Requirements (see **Attachment F**)

The following documents will be provided to bidders following receipt of the Pre-Bid Information:

- 9. 2024 LDES Form Energy Storage Agreement
- 10. 2024 LDES Form Ground Lease Agreement
- 11. 2024 CCERC LDES Site Plan
- 12. 2010 Geotech Report – Abel Substation.pdf

## VI. Questions

Bidders shall direct all inquiries and questions to the following email address:

[Innovation@srpnet.com](mailto:Innovation@srpnet.com).

## VII. Submission Instructions

Bidders shall submit all items on the checklist list below:

### Pre-Bid Information

The following information must be submitted to [Innovation@srpnet.com](mailto:Innovation@srpnet.com) before 5:00 PM (Arizona time) on Wednesday, July 10, 2024.

1. Signed Nondisclosure Agreement (see **Attachment A**)
2. Notice of Intent to Respond (see **Attachment B**)

### Request for Proposal Response

Each RFP response must be submitted to [Innovation@srpnet.com](mailto:Innovation@srpnet.com) before 4:00 PM (Arizona time) on Friday, November 22, 2024, and must include the following.

1. Completed Credit Questionnaire (see **Attachment C**)
2. Completed Proposal Questionnaire (see **Attachment D**)
3. Completed Proposal Description with the details requested in **Appendices B-F**
4. Completed *2024 CCERC LDES RFP – Proposal Data.xlsx* spreadsheet

Please note the email attachment has a size limit of 35MB. SRP will make special file transfer arrangements for files that are larger than 35MB.

By submitting a proposal in response to this RFP, the bidder acknowledges and agrees that its final proposal constitutes an offer that shall remain irrevocable until the conclusion of SRP's evaluation process at which time SRP may select a bidder with whom to finalize the terms of a transaction.

Bidders must have reviewed and satisfied all items in the Minimum Requirements section of the applicable RFP appendices, as a condition to submitting a proposal.

Bidders must ensure that all information requested is included with the proposal, as appropriate. Proposals that do not contain all required information or do not fully reflect the specifics of the checklist will be considered nonresponsive and will not be evaluated. In addition to the required information, bidders should include with their proposals any information that may be needed for a thorough understanding or evaluation of their proposals.

ALL CONFIDENTIAL MATERIAL MUST BE CLEARLY MARKED AS CONFIDENTIAL. ANY MATERIAL NOT MARKED CONFIDENTIAL SHALL BE DEEMED TO BE NONCONFIDENTIAL.



All proposals, attachments and exhibits become the property of SRP, and will not be returned.

### **VIII. Confidentiality**

The Nondisclosure Agreement entered into shall govern the confidentiality requirements of the RFP. A Nondisclosure Agreement is included with this RFP (see **Attachment A**). Edits to the Nondisclosure Agreement will not be accepted.

The Nondisclosure Agreement must be signed and submitted with the Notice of Intent to Respond (see **Attachment B**) on or before 5:00 PM (Arizona time) on Wednesday, July 10, 2024.

Upon receipt, SRP will execute the Nondisclosure Agreement and return one copy to the bidder's listed contact information.

### **IX. Mandatory Pre-Bid Meeting**

SRP will conduct an in-person mandatory Pre-Bid Meeting at SRP's Project Administration Building in Tempe, AZ, followed by a site walk-down on July 15, 2024. The time will be provided in advance to parties who have submitted all Pre-Bid Information.

### **X. Changes to RFP, Schedules, and Addenda**

SRP reserves the right to revise, suspend, or terminate this RFP process and to revise any attachment or schedule related to it at its sole discretion without liability to persons or entities receiving or responding to this RFP. Changes regarding the status, schedule, or other communications related to this RFP will be communicated via email.

### **XI. Form Energy Storage Agreement (ESA)**

A draft pro forma ESA will be sent to bidders following receipt of the Nondisclosure Agreement. SRP understands that bidders may desire to modify the pro forma agreement and anticipates negotiating with selected bidders to develop documents acceptable to both parties. Bidders should review the entire agreement to understand the contractual obligations expected if selected.

### **XII. Form Ground Lease Agreement**

A draft pro forma Ground Lease agreement will be sent to bidders following receipt of the Nondisclosure Agreement. SRP understands that bidders may desire to modify the pro forma agreement and anticipates negotiating with selected bidders to develop documents acceptable to both parties. Bidders should review the entire agreement to understand the contractual obligations expected if selected.



### **XIII. Evaluation of Proposals**

Bidders' proposals must include sufficient detail to evaluate all costs and performance requested with the proposal. Bidders are advised that proposals from entities that meet minimum credit criteria will be evaluated considering several factors including, but not limited to, price, counterparty credentials, project development risk, technology maturity, sustainability benefits, system performance characteristics, safety, siting considerations and operational experience with the proposed technologies.

The evaluation process will include a review of any anticipated necessary permits or authorizations that will be obtained in sufficient time to meet the desired commercial operation date, and the feasibility of the proposed construction schedule (if applicable).

Bidders must state whether their offers are subject to any internal, governmental, or third-party approvals or any other conditions, specifically identify such approvals and conditions, provide the status of such approvals or conditions, and provide a schedule for receipt of such approvals or satisfaction of such conditions.

Selection and elimination of proposals and subsequent notification of bidders at all stages of the evaluation will remain entirely at SRP's discretion. SRP's intent is to notify bidders of those proposals that are eliminated from further consideration under this solicitation within a reasonable amount of time, which will be determined by SRP at its sole discretion.

### **XIV. Execution of Contracts**

SRP reserves the right to negotiate with one or more bidders. SRP reserves the right to reject any or all offers if SRP determines that such offers are not in the best interests of its customers. SRP's acceptance of any offer is subject to approval by SRP's Board of Directors.

Those bidders that submit proposals do so without legal recourse against SRP, its Board of Directors, management, employees, agents, or contractors. SRP shall not be liable to any bidder or to any other party, in law or equity, for any reason whatsoever relating to SRP's acts or omissions arising out of or in connection with this RFP.

SRP reserves the right to determine the final contract instrument(s) for any transaction, each of which may be subject to approval by SRP's Board of Directors.

### **XV. Additional Reservation of Rights**

SRP RESERVES THE RIGHT AT ANY TIME, IN ITS SOLE DISCRETION, TO ABANDON THIS RFP PROCESS, TO CHANGE THE BASIS FOR EVALUATION OF PROPOSALS, TO TERMINATE FURTHER PARTICIPATION IN THIS PROCESS BY ANY PARTY, TO ACCEPT



ANY OFFER OR TO ENTER INTO ANY DEFINITIVE AGREEMENT, TO EVALUATE THE QUALIFICATIONS OF ANY BIDDER OR THE TERMS AND CONDITIONS OF ANY PROPOSAL, AND TO REJECT ANY OR ALL PROPOSALS, ALL WITHOUT NOTICE, AND WITHOUT LIABILITY OF SRP, TO ANY BIDDER. SRP SHALL HAVE NO OBLIGATION TO CONSIDER ANY OFFER. SRP WILL NOT REIMBURSE BIDDERS FOR THEIR EXPENSES UNDER ANY CIRCUMSTANCES, REGARDLESS OF WHETHER THE RFP PROCESS PROCEEDS TO A SUCCESSFUL CONCLUSION OR IS ABANDONED.

### **XIII. Minimum Proposal Requirements**

In addition to the technology and project requirements described in **Appendices B-F**, unless expressly noted below, proposals must satisfy the following minimum qualifications. Proposals that do not satisfy the minimum proposal requirements will be considered nonresponsive and will not be evaluated.

#### **Minimum Qualifications**

1. System must have the ability to discharge continuously at 5 MW for the rated duration.
2. SRP desires a target duration of 10 hours at 5 MW capacity but will consider LDES technologies that can provide between 8 and 12 hours.
3. System must be a non-lithium-ion, inverter based energy storage technology.
4. System must be able to fully charge from a zero state-of-charge in 10 hours or less.
5. System must be able to cycle at least 300 times per year, with the expectation to cycle daily unless offline for maintenance or outages and excluding the initial commissioning period.
6. SRP must have the ability to choose when to charge and discharge the resource at its sole discretion, within the operating limits of the technology.
7. Bidder must indicate if the transacting entity is rated investment grade or higher by S&P or Moody's. If not rated investment grade, transacting entity must be willing to obtain credit support in the form of a guaranty or similar instrument from an investment grade entity, or provide collateral in the form of cash margin, a letter of credit, or similar instrument, to cover its obligations under any such agreement with SRP. For potential security requirements see **Attachment C**.
8. Bidder must agree to allow SRP access to real-time performance and control data from the facility for the duration of the ESA. SRP intends to hire consultants, such as the Electric Power Research Institute (EPRI), to evaluate the performance data and may invite other utilities to participate as a collaboratively funded project, subject to mutually agreed upon confidentiality provisions.
9. Proposals must include all information requested (see Submission Instructions).



## Technical Requirements

A detailed description of the technical requirements of the proposed energy storage system can be found in **Appendices B-F**. Proposals must include a complete description of how the proposed system will achieve the requirements and provide the requested details in **Appendices B-F**.

The *2024 CCERC LDES RFP-Proposal Data.xlsx* spreadsheet includes a detailed list of system performance characteristics that must be filled out for the proposed project. The list details which performance data will serve as guaranteed characteristics that must be demonstrated to SRP to achieve COD. SRP will work with the selected bidder to develop appropriate test procedures for these performance characteristics for their technology.

The list also details which performance measures will have ongoing performance guarantees in the ESA, with financial damage penalties if not met. SRP will work with the selected bidder to adjust the performance test methodology in the ESA if needed based on the selected technology.

## Interconnection Transmission and Distribution

SRP has chosen Copper Crossing Energy and Research Center (CCERC) for this project. SRP will provide a 69 kV transmission interconnection for the site and step this down to 34.5 kV for the energy storage system point of delivery, as described in **Appendix D**. Additional site details are provided in **Appendix F**. SRP will work with the selected bidder to define the exact location of the point of delivery and associated metering requirements. Bidders are responsible for all equipment to the point of delivery.



## Appendix A

### Charging and Delivery Periods

SRP expects to typically charge and discharge the storage system daily in the manner shown in the table below, at the rates needed to fully charge and discharge the system every cycle during these time windows. Note in the proposal if the system will not be able to achieve this schedule and propose an alternate schedule to illustrate the changes needed to fully charge and discharge the system as close as possible to this schedule. The high importance discharge hours noted in the table should not be changed. SRP may elect to change this schedule depending on the system needs and/or for testing different use cases, within the operating limits of the energy storage system.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Jan					Discharge	Discharge	Discharge	x									x	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge
Feb					Discharge	Discharge	Discharge	x											x	Discharge	Discharge	Discharge	Discharge	Discharge
Mar					Discharge	Discharge	Discharge	x											x	Discharge	Discharge	Discharge	Discharge	Discharge
Apr	Discharge					x											Discharge	Discharge		x	Discharge	Discharge	Discharge	Discharge
May	Discharge					x												Discharge	Discharge	x	Discharge	Discharge	Discharge	Discharge
Jun	Discharge					x											Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge
Jul	Discharge					x											Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge
Aug	Discharge					x											Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge
Sep	Discharge					x											Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge
Oct	Discharge	Discharge					x										Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge
Nov					Discharge	Discharge	Discharge	x										Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge
Dec					Discharge	Discharge	Discharge	x										x	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge

	Idle
	Charge
	Discharge
	Discharge - Importance High
x	Sunrise/Sunset



## Appendix B

### Energy Storage Technical Requirements

SRP requests energy storage bids that provide 5 MW of discharge capacity. SRP will consider bids that are at least 5 MW and up to 10 MW depending on the logical size for a pilot for a given technology and the quality of the bid. If proposing a size other than 5 MW, the bidder must provide an explanation as to the reasoning behind a different size.

SRP desires a target of 10 hours discharge at the effective discharge capacity but will consider proposals for between 8 hours and 12 hours. If providing a different discharge duration than 10 hours, the bidder must provide an explanation as to the reasoning behind a different duration.

#### Minimum Requirements:

##### Technical Characteristics:

1. The resource must be fully dispatchable by SRP via automatic generation control (AGC).
2. The Effective Capacity (MW) of the resource for the ESA means the maximum power value at which the project can continuously discharge energy for 10 hours, measured at the point of delivery to SRP and net of any auxiliary loads.
3. The resource must be capable of operating through a range of ambient temperatures from -10°F to 120°F at 20% relative humidity, while providing 100% of the Effective Capacity.
4. The resource must be designed to meet all local and governmental ordinances and International Building Code standards.
5. The resource must be capable of providing at least 300 full charge and discharge daily cycles per year, including any days needed for planned maintenance or performance testing.
6. If bidders have any exceptions to SRP's requirements, they must submit an explanation as to why the exception does not apply to their situation.

## Appendix C

### SRP Energy Storage Codes, Standards, and Safety

Safe operation of owned or contracted Energy Storage System (ESS) facilities is of critical importance to SRP. To assist in that endeavor, the bidder shall include the following safety related items that SRP will evaluate as part of the proposal evaluation:

1. Bidders must describe what safety measures, such as active gas, heat, and smoke detection and fire suppression, will be incorporated into the system.
2. If selected, the bidder will be required to provide a Hazard Mitigation Analysis (HMA). A copy of the HMA shall be submitted to the SRP Fire Marshal for review. If the bidder already has a HMA from a previous project, please include in the proposal.
3. Bidders shall include the safe disposal or recycling of the energy storage system at end-of-life for all equipment replaced during the terms of the contract.
4. Describe any insured or uninsured property claims or third-party liability claims related to the proposed energy storage technology.
5. Describe if you have run into any issues insuring the technology for either first party property or third-party liability coverage.
6. Codes and Standards - The ESS facility shall comply with all local, state and federal standards, including the latest editions of the following standards:
  - a. NFPA Standards
  - b. International Fire Code
  - c. National Electric Safety Code
  - d. National Electric Code
  - e. International Building Code, Plumbing Code and Mechanical Code
7. Site Requirements - Additional requirements based upon the technology will apply:
  - a. Refer to **Attachment C** for additional site permit requirements.
  - b. Secondary containment may be required for certain technologies.
8. Pre-Incident Planning, if selected:
  - a. A Pre-Incident planning session shall be held with SRP ESS Codes and Safety Working Group prior to commencement of site design documents.
  - b. The Pre-Incident Plan shall be informed by the following:
    - i. NFPA 1620 Standard for Pre-Incident Planning (2020 or later edition)
    - ii. Energy Storage Association Corporate Responsibility Initiative Emergency Response Plan.
    - iii. Hazard Mitigation Analysis
  - c. A Pre-Incident Planning session shall be held with the SRP Fire Marshal and a representative from the local fire department to discuss the site design and Standard Operational Procedures for an incident.
9. Incident Command Center (ICC) - the ICC shall be installed at the location determined in the Pre-Incident Planning session and shall contain at a minimum:



- a. National Electrical Manufacturers Association Exterior Rated Cabinet approximately 3'x3'x8' or alternate size as approved by SRP.
  - b. Convenience Outlets served by at minimum one 240 V/40-amp breaker and two 110 V/20-amp breakers.
  - c. Fire Alarm Control and Indicator Panel.
  - d. Site Plan showing ESS units and identification numbering system.
  - e. Floor Plan if building based system, annotating safety equipment deployed therein.
  - f. Binder with printed copy of Emergency Response Plan, Safety Data Sheets, and additional information determined by the Pre-Incident Planning Session.
10. On-site Training- Facility training on incident response shall be provided for:
- a. SRP Maintenance and Incident Response personnel
  - b. First Responders (minimum of four two-hour sessions)
11. Incident Response Fire Water - Provisions shall be made to contain incident response fire water or appropriate testing information showing the lack of contaminants harmful to ground water.
12. Operational Incidentals - Visibility of operational voltage and temperature ranges shall be provided if requested.

## Appendix D

### Interconnection and Delivery Requirements

#### Interconnection

SRP has already completed an Interconnection Facility for CCERC, Attaway Substation, that connects to the Abel Substation 69 kV bus. SRP will be the Acting Interconnection Customer for the LDES project. The Point of Delivery (POD) for the LDES project will be the line side of the project's 34.5 kV disconnecting device. Feeder conductor from the SRP-owned 34.5 kV switchgear to the disconnecting device will be provided, owned, and maintained by SRP. The Point of Common Coupling for the LDES project and other generators will be the 34.5 kV bus located in the SRP-owned switchgear.

#### Interconnection Requirements

The selected bidder shall be required to comply with the SRP [Facility Connection Requirements \(FCR\)](#), as may be updated from time to time, and are available on SRP's public [Open Access Same-Time Information System \(OASIS\)](#) website. SRP has provided a list of additional requirements below. Any exceptions to the FCR must be approved by SRP.

Station load for the site loads such as building loads, telemetry, lights, security cameras, etc. not required for the operation of the energy storage system shall be considered separately. Provisions shall be made to electrically separate and meter the station load under the applicable SRP retail customer pricing plan.

Auxiliary loads directly associated with the energy storage system, such as pumps, energy storage cooling systems, compressors, heaters, etc. will be considered part of the charging energy and round trip efficiency losses. Auxiliary loads will be served through the POD.

#### Additional Requirements

1. An agreement to interconnect to the SRP POD will be required. This agreement to interconnect will be similar to the pro forma SRP Standard Generator Interconnection Agreement available on SRP's [Open Access Same-Time Information System \(OASIS\)](#) and attached to this document.
2. A study deposit will not be required. Funding for study work will be borne by SRP. This includes System Impact Study work and Interconnection Facilities Study work on the line side of the POD.
3. The cost and time to build the facilities on the load side of the POD should be provided by the bidders and is covered elsewhere in this document.
4. Evidence of site control will not be required.
5. Revenue metering is not required. However, the selected bidder shall be required to provide exclusive-SRP use, revenue grade instrument transformers (IT) for the aggregated output of the energy storage units and for each individual energy storage unit if composed of multiple



units. The selected bidder will make provisions to provide any necessary physical infrastructure (mounting, conduit, cabling, fiber, etc.) to enable connection of the IT to SRP-specified meters located in an SRP-owned enclosure.

## Appendix E

### Project Permitting Requirements

If selected, the bidder should provide SRP a detailed description of permits and environmental considerations that will be required by the State, Federal, or County agencies in relation to planning, testing, siting, construction, operation & maintenance, and decommissioning of the energy storage project and site. The bidder will need to develop a comprehensive permitting plan to support the acquisition of permits. The bidder will then be required to meet with SRP's Environmental Services group to validate that the permitting plan meets SRP's planning and operational standards prior to beginning any physical work on the project site. A table will be provided to enter required information for each item in the permitting plan. Bidders should note that this request includes all permits that will be required for the site from pre-construction to end-of-life decommissioning.

An example table has been provided below:

Permit Type/Title	Issuing Agency/ Regulatory Authority	Potential Applicable Trigger(s)	Permit Acquisition Timeline
West Pinal PM <sub>10</sub> Non-Attainment Area - Fugitive Dust Control Permit	Pinal County Air Quality Department	The regulated particulate matter, which is not collected by a capture system, which is entrained in the ambient air, and which is caused from human and/or natural activities, such as but not limited to, movement of soils, vehicles, equipment, blasting, and wind.	2-3 weeks
Aquifer Protection Permit	Arizona Department of Environmental Quality (ADEQ)	This state permit is required for owners or operators of facilities that discharge a pollutant directly to the land surface or vadose zone where there is a reasonable probability that the pollutant will reach an aquifer.	
Resource Recovery and Conservation Act (RCRA) – Treatment, Storage, and Disposal Facilities (TSDF) Permit	ADEQ	This permit is required for any facility that treats, stores or disposes of hazardous waste (known as TSDFs). A hazardous waste permit is not required for generators who store hazardous waste or treat waste in on-site tanks or containers for less than specified time periods. RCRA permits are individual and tailored to your unique facility. This means that your RCRA permit may include storage, treatment, or disposal	



Permit Type/Title	Issuing Agency/ Regulatory Authority	Potential Applicable Trigger(s)	Permit Acquisition Timeline
		requirements depending on the planned operations.	
National Pollutant Discharge Elimination System (NPDES) /AZPDES – Construction General Permit (CGP)	ADEQ – Water Quality Division	CGP - Stormwater discharges associated with construction activities, such as clearing, grading, or excavating, that disturb one acre or more must obtain permit coverage. Permit coverage also is required for construction activities that will disturb less than one acre of land, but the project is part of a larger common plan of development or sale, and the entire project will ultimately disturb one or more acres. As part of permit coverage, a Stormwater Pollution Prevention Plan (SWPPP) must be prepared and implemented before ground disturbance begins.	
*Cultural Review	SRP	If unanticipated archaeological or historical objects, pottery, grinding stones, arrowheads, bottles, features, sites, structures, cremated human remains, human skeletal remains, or other archaeological remains are encountered during construction, all activity within 200 feet of the discovery will immediately cease, the Bidder will contact SRP, and steps will be taken to ensure the preservation of the discovery at the direction of SRP’s Archaeologist and/or their consultant. No further work shall be done within 200 feet of the archaeological find until a written release is issued to the Bidder by SRP.	

\*This is not a permit but is part of SRP’s internal evaluation process.

Note: There will be no available wastewater discharge for bidder technologies. All liquid discharge will need to be removed from the site.

No additional equipment such as the following shall be allowed without prior approval and review by SRP:

- Combustion engine
- Gasoline storage tank
- Storage of significant solvent as part of the maintenance and cleaning
- Any federally regulated materials as part of construction, O&M, or decommissioning of this project



## Appendix F

### Site Description

The Copper Crossing Energy & Research Center (CCERC) is located near Florence, AZ on property that is owned by SRP. The existing site is partially occupied by the Abel Substation and the Copper Crossing Solar Ranch. SRP owns and operates the Abel substation. Avangrid Renewables owns and operates the Copper Crossing Solar Ranch and sells the energy to SRP via a power purchase agreement. The land occupied by the solar ranch is owned by SRP and leased to Avangrid Renewables.

The CCERC will be constructed in three (3) phases to complement the existing solar ranch and substation. Phases 1 and 2 are separate and not included as part of the scope of this LDES RFP. Phase 1 pertains to the addition of two (2) natural gas fired combustion turbine-generators (CTG) with a combined gross output of less than 100 MW and began operation during June 2024. SRP will own and operate the CTG facility. Phase 2 pertains to the addition of a new photovoltaic solar facility which is expected to be in operation during late 2025. SRP plans to own and operate the solar facility.

Phase 3 of CCERC pertains to LDES demonstration projects. The site is configured with space and interconnection capacity for up to 30 MW of LDES demonstration projects. As a result of SRP's 2022 LDES RFP, SRP selected and executed agreements for the 5MW/10-hour Desert Blume energy storage demonstration project. The Desert Blume project is anticipated to be in operation by the end of 2025. SRP has reserved a portion of the Phase 3 area approximately 300' x 500' for the project resulting from this 2024 LDES RFP.

Upon receipt of the Pre-bid Information SRP will supply a CCERC site plan with additional details showing the location and configuration of the area available for the bidder's project.

SRP will maintain ownership of the property and lease the LDES area(s) to the selected bidder for development. In the event a LDES technology requires more or less space than the planned area has available, SRP will consider adjusting the sizes of the area to best fit a proposal's space requirements.

The selected bidder shall provide a complete, reliable, and fully functional LDES facility that meets the requirements of this RFP. The bidder's scope of work shall include, but not be limited to, the design supply, construction, commissioning, testing, operation, and maintenance of an SRP approved LDES system and all supporting systems and infrastructure. The bidder shall also be responsible for obtaining all required permits, establishing service agreements for process waste disposal, providing access roads inside the LDES area, installing security cameras, and fencing around the LDES area, and extending utilities and/or connecting to all SRP terminal points.

