



# Sulphur Springs Valley Electric Cooperative, Inc.

A Touchstone Energy® Cooperative 

## Request for Proposals for Solar Energy & Battery Storage Resources

RFP Issued: July 16, 2020

Proposal Deadline: August 25, 2020

Administered By:



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## TABLE OF CONTENTS

<b>1</b>	<b>Scope .....</b>	<b>2</b>
<b>2</b>	<b>Project Description .....</b>	<b>3</b>
<b>A.</b>	<b>Background .....</b>	<b>3</b>
<b>B.</b>	<b>Site and Interconnection Requirements .....</b>	<b>3</b>
<b>3</b>	<b>Pre-Bid Q&amp;A Conference Call .....</b>	<b>4</b>
<b>4</b>	<b>RFP Communications .....</b>	<b>4</b>
<b>5</b>	<b>Schedule .....</b>	<b>5</b>
<b>6</b>	<b>Proposal Content .....</b>	<b>5</b>
<b>7</b>	<b>Evaluation Criteria .....</b>	<b>7</b>
<b>8</b>	<b>Respondent Qualifications and Experience .....</b>	<b>7</b>
<b>9</b>	<b>Confidentiality and Reserved Rights .....</b>	<b>8</b>
<b>10</b>	<b>Incurred Costs .....</b>	<b>8</b>
<b>11</b>	<b>Contract Incorporation .....</b>	<b>8</b>
<b>12</b>	<b>Rejection of Proposals .....</b>	<b>8</b>
<b>13</b>	<b>Supplemental Information .....</b>	<b>8</b>
<b>14</b>	<b>Submittal Instructions .....</b>	<b>9</b>
<b>15</b>	<b>Appendix A .....</b>	<b>10</b>

# 1 Scope

Sulphur Springs Valley Electric Cooperative, Inc. (“SSVEC”) seeks competitive PPA proposals for solar and battery storage project developments. The solar energy and capacity will be used to serve SSVEC member load and increase SSVEC’s percentage of needs supplied by renewable energy. The battery will be cycled on a regular basis and the storage will be primarily used to store mid-day generation for later use, extending the solar energy into the late afternoon and evening hours, and supplying peak demands and reducing market purchases during peak pricing hours. SSVEC or its scheduling agent, currently AEPCO, will direct battery operation. As part of this RFP, SSVEC intends to take advantage of the Federal Investment Tax Credit (“ITC”). SSVEC is interested in exploring buy-out options at certain points during the contract term.

Proposal Criteria	Solar	Storage
<b>Technology</b>	Solar Photovoltaic	DC- or AC-Coupled Battery Energy Storage System (“BESS”)
<b>Project Size</b>	One 20 MWac Project	5 MWac, 10 MWac, or 20 MWac
<b>Duration</b>	N/A	2 and 4 Hours durations based on the project sizing (total of 6 scenarios)
<b>COD</b>	June 2022	
<b>Site</b>	SSVEC owned site - information and map provided	
<b>Delivery Location</b>	Solar & battery storage delivery location is preferred at project busbar	
<b>Contracts</b>	PPA w/ and w/o step-in purchase rights and option to contain PPA and ESSA under one contract	ESSA w/ option to contain PPA and ESSA under one contract
<b>Products</b>	Energy, Capacity, and Environmental Attributes	Solar Peak Shifting, Energy, Capacity and System Regulation
<b>Contract Term</b>	20 and 25 Years	15 – 20 Years with option to augment out to 25 Years
<b>Generation Shape</b>	As-Generated	Shift as-generated solar into the evening peak hours (100% charged by solar per ITC requirements, assume 365 cycles/year)
<b>Price</b>	Fixed rate (\$/MWh) PPA (w/o annual escalator)	Fixed rate (\$/kW-mo) ESSA (w/o annual escalator)

SSVEC requests conforming responses but will consider 'optimized' responses if provided in addition to a conforming response.

## 2 Project Description

### A. Background

Created in 1938, SSVEC is a non-profit, member-owned distribution cooperative providing electricity to more than 59,000 meters over roughly 5,700 square miles of territory and 4,200 miles of energized line in southeastern Arizona. The cooperative's service territory covers parts of the Cochise, Graham, Pima, and Santa Cruz Counties and includes the communities of Sierra Vista, Huachuca City, Patagonia, Elfrida, Benson, St. David, Bowie, San Simon, Willcox, Sonoita, and Pearce-Sunsities.

SSVEC has an annual peak demand of 225 MW and an annual load requirement of roughly 900 GWh. Over the past several years, SSVEC has made significant efforts to evolve their fuel mix to satisfy energy requirements with renewable capacity additions. In 2016, over 80% of SSVEC energy was produced using coal. Now, only a quarter of that supply is met by coal, and roughly 13% is supplied by solar and hydro. With the addition of this solar and battery storage project, SSVEC could expect another 8-10% of their load to be served by green energy.

### B. Site and Interconnection Requirements

SSVEC will supply the site. The 160 acre site is located on W. Ranch House Road between N. Fort Grant Road and N. Outfitter Trail (32°23'42.6"N 109°54'18.5"W). Please see Appendix A for Site Map.

Interconnection to the 69 kV system will be via a new 69 kV switching station. SSVEC's desire is to include the interconnection in the project scope. The interconnection must be constructed in accordance with minimum SSVEC specifications, as required, which will be provided to respondents upon request. The Respondent must provide step up transformation from inverter output voltage to 69 kV, three phase, grounded Wye and provide all DC/AC inversion as well as AC disconnect(s), instrument-rated, substation class metering as approved by SSVEC.

Following commissioning, SSVEC will assume operational control of the interconnection breaker. The interconnection station shall include accommodations for backup metering and communications equipment provided and installed by SSVEC for this purpose. SSVEC requests that bidders assume a total interconnection cost of \$1.5M to normalize bids. Respondents should provide this cost in the form of a separate \$/MWh adder to the PPA rate.

#### *Representative Sample Lease Terms for SSVEC owned site*

SSVEC will lease the property to the successful bidder for the sole purpose of constructing, installing, owning, operating and maintaining the solar system based on contract terms for one dollar (\$1.00) per year. The lease will extend through the end of the PPA term (i.e., until the 20<sup>th</sup> or 25<sup>th</sup> anniversary of the System Operation Date of the Project or the end of any extensions). The successful bidder may have the option to extend the lease (with no other changes to its terms) for an additional period extending until no later than the 35<sup>th</sup> anniversary of the System Operation Date of the Project. However, the term of such lease will terminate in the event that SSVEC exercises any purchase option agreed to by SSVEC and the successful bidder.

### *Alternative Site Options*

SSVEC will consider proposals with existing sites currently under development and controlled by the bidder. The alternative site must meet the interconnection criteria. SSVEC requests bidders do not attempt to procure new sites for this proposal as they will not be considered for this RFP.

## 3 Pre-Bid Q&A Conference Call

A pre-bid conference call is scheduled for July 21, 2020 at 4:00 pm (Eastern) and while respondent participation is not mandatory, it will provide a forum for respondents to ask additional questions regarding this RFP. The call-in number is 469-607-8182 and the conference ID is 268 354 560#. Conference call Q&A and any supplemental information will be provided via the RFP website ([www.gdsassociates.com/requests-for-proposals](http://www.gdsassociates.com/requests-for-proposals)) and all potential respondents are encouraged to participate.

## 4 RFP Communications

All questions or other communications regarding this RFP should be directed to the following RFP email address from SSVEC's power supply consultants, GDS Associates. Should any addenda to the RFP be necessary, such addenda will be issued via the RFP website and potential respondents are expected to monitor the RFP website for updates.

[SSVEC.2020SolarRFP@gdsassociates.com](mailto:SSVEC.2020SolarRFP@gdsassociates.com)

GDS Associates, Inc.	
<b>Attention:</b>	Angela Strickland, P.E.   Managing Director
<b>Direct Phone:</b>	770-799-2422
<b>Attention:</b>	Matt King   Project Manager
<b>Direct Phone:</b>	770-799-2401
<b>Attention:</b>	Sydney Sprague   Engineer
<b>Direct Phone:</b>	770-349-9376

## 5 Schedule

The following schedule and deadlines apply to this solicitation:

RFP Event	Date
Round 1 Indicative Pricing Request Issued:	July 16, 2020
Pre-Bid Q&A Conference Call (Optional):	July 21, 2020 @ 4 PM (Eastern)
Deadline for Questions from Respondents:	July 23, 2020
Responses to Questions Provided By:	July 30, 2020
Notice of Intent to Respond Form Due:	August 4, 2020
Round 1 Proposals Due:	August 25, 2020 @ 4 PM (Eastern)
Round 2 Final Pricing Request (Short-List Only):	September 29, 2020
Round 2 Proposals Due:	October 27, 2020 @ 4 PM (Eastern)
Award Contract:	November 19, 2020
Facility COD:	June 2022

SSVEC anticipates a Facility COD by June 30, 2022. However, COD may be refined during contract negotiations to reflect specific project timelines.

## 6 Proposal Content

SSVEC is seeking proposals and pricing based on the terms outlined below. SSVEC expects the respondent would take advantage of the Federal ITC and the allowance for Modified Accelerated Cost Recovery System ("MACRS") on both the solar and storage project. As a non-taxable entity, SSVEC would expect the tax benefits accruing to the respondent to be reflected in the price offered by the respondent. It is preferred that the proposals for PPA/ESSA be submitted on a flat price for the full term with no escalation. The respondent will be responsible for procuring all equipment, materials, permitting, civil engineering, interconnection agreement, and other services required for a complete operating facility.

In addition to the project-specific content requested in subsections below, respondents should include the following information as part of the proposal:

1. Key team members for the respondent, relevant project management experience and capability, and related project experience
2. Respondent's history of providing similarly sized projects including a list of references
3. Financial viability of the respondent, including its parent or any other guarantor of services under the respondent's proposal
4. Possible conflicts of interest and any legal claims

SSVEC will review and may utilize information, if any, submitted by a respondent, which is not specifically requested as a part of the RFP, and reserves the right to request additional information from respondents during the proposal evaluation process.

Project-specific content should include but is not limited to:

1. Flat PPA/ESSA rates (\$/MWh & \$/kW-mo) inclusive of all benefits (e.g. energy, capacity, etc.) and costs (e.g. civil, environmental, site/stormwater prep/planning, etc.)
2. Construction schedule to meet ITC requirements, expected COD, and proposed delay damages (\$/MW-day)
3. Sizing (and expected DC and AC MW capacity for solar component)
4. Expected, hourly year-1 solar output (MWh)
5. Annual degradation percentages for solar & battery storage components
6. Cost to augment battery storage component through life of solar, provided as a separate option
7. Solar technical specification sheets for modules, inverters, racking, trackers, and transformers
8. Storage technical specification sheets for storage components (e.g. batteries, inverters), including data such as the following:
  - o Cell, module and rack specification sheets
  - o Degradation rate, augmentation schedules, and useful life estimates
  - o Maximum and minimum charge rates
  - o AC/DC Roundtrip efficiency
  - o Expected Axillary load (MV Transformer and HVAC)
  - o AC/DC architecture and ease of augmentation strategy in that system
  - o Thermal management requirements of battery rack
9. Descriptions of equipment (battery energy storage ready/capable, tier 1 equipment, panel density, polycrystalline, monocrystalline, bi-facial, central or string inverters, etc.)
10. Expected annual generation profiles (8,760 hourly generation curves and P50 and P90 production assumptions included with PVsyst reports or equivalent)
11. Project site layouts and technical diagrams with land requirements
12. ITC-related information including:
  - o Operational restrictions of storage to meet ITC requirements and any possible conflict with the SSVECs use case,
  - o Estimated PPA price reduction due to ITC,
  - o Post-ITC monetization buy-out options
13. Storage useful life information including:
  - o Description of useful life beyond term, if any, including component upgrade / replacement costs, degradation, recycling / disposal cost estimate
  - o Post-term buy-out or PPA extension options
  - o General description of usefulness of storage asset after PPA term and how SSVEC might extract that value
14. Storage degradation information including:
  - o Flexible warranty options including description and input parameters
  - o Guaranteed degradation curve limits assuming SSVEC is committing to daily cycling
  - o Actual expected degradation curve considering SSVECs use case
  - o Although not requesting it, SSVEC will consider means of guaranteeing the initial capability of the battery for its life (augmentation, oversizing, or capacity guarantees), but the pricing for this must be provided incrementally above and beyond the requested PPA pricing.
15. Interconnection requirements
16. All applicable storage operating limitations (any in addition to those listed above)
17. Description of respondent's scheduling, operation, and maintenance responsibilities

18. Communications and control infrastructure to communicate with SSVEC (full remote access, data transfer and collection, cloud storage, Wi-Fi connectivity, real-time data monitoring, performance measuring, virtual private network)
19. Local utility and jurisdictional safety requirements (such as fire protection and alarm protocols)
20. Cybersecurity requirements (based on the National Institute of Standards and Technology “Framework for Improving Critical Infrastructure Cybersecurity”, Version 1.1, April 16, 2018)
21. Guaranteed performance security and standards over the term of the PPA.

## 7 Evaluation Criteria

Proposals will be evaluated based on their ability to reliably and economically meet SSVEC’s needs. Respondents to this solicitation should provide all relevant information necessary to conduct a thorough analysis of their proposal(s). The respondent should clearly explain the pricing to be able to evaluate the total price under the terms of the proposal(s). Proposals will be analyzed over a range of scenarios defined by price and non-price variables.

Prospective respondents are advised that price will be important in the evaluation, however, proposals will also be compared and evaluated on non-price or qualitative criteria. Therefore, the lowest price submittal may not be selected. The proposal should include sufficient detail to evaluate all fixed and variable charges associated with the proposal.

The principal criteria to be used in evaluating Proposals include, but are not limited to:

1. PPA/ESSA rate for the project
2. Construction schedule and COD
3. Financial viability of the respondent, including its parent or any other guarantor of services under the respondent’s proposal
4. Contractual terms and conditions
5. Key team members for the respondent, relevant project management experience and capability, and related project experience
6. Possible conflicts of interest and any legal claims
7. Operational viability of the respondent and equipment warranties
8. Respondent’s history of relevant projects / list of references

Each of these factors is critical to the successful integration of a solar and/or a storage resource into SSVEC’s overall power supply arrangements. SSVEC reserves the right to consider any other factors deemed to be relevant to the successful integration and operation of the storage.

## 8 Respondent Qualifications and Experience

Respondents shall have successfully completed other projects similar in size and scope to the service that they are proposing in this RFP. Respondents must demonstrate that they have the financial and technical wherewithal to meet all obligations in their proposals. Unaudited financials may be accepted in the case that audited financials are not available.



## 9 Confidentiality and Reserved Rights

All proposals shall become the property of SSVEC. SSVEC will not disclose to third parties any information contained in a proposal that is clearly labeled “CONFIDENTIAL” unless such disclosures are required by law or by order of a court or government agency having appropriate jurisdiction, or to secure the approval of lenders. SSVEC reserves the right to disclose proposals to legal or engineering consultants for the purpose of assistance in evaluating proposals but will require the consultants to maintain the confidentiality of the document. This RFP is solely an invitation to submit proposals.

SSVEC reserves the right to:

- reject any and all proposals received in response to this RFP for any reason or no reason;
- waive any requirement in this RFP;
- negotiate solar and/or storage arrangements with more than one respondent simultaneously;
- terminate negotiations;
- not select the proposal with the lowest price; and
- request clarifications from respondents at any time.

## 10 Incurred Costs

All costs directly or indirectly related to the preparation of a proposal in response to this RFP shall be the sole responsibility of, and shall be borne by, the respondent(s) incurring such costs. SSVEC shall not reimburse any respondent for any costs incurred in the preparation or submission of a proposal and/or in negotiating an agreement as a result of a proposal.

## 11 Contract Incorporation

Respondents should be aware that the contents of a selected proposal might become a part of any subsequent contractual agreements. If SSVEC decides to move forward with a respondent, they will negotiate a contract with such respondent that will embody the general principles and concepts established in the respondent’s proposal. In the event negotiations with a respondent do not, within a reasonable period of time, produce satisfactory contracts to SSVEC, they reserve the right to terminate those negotiations and pursue other options available to it including, without limitation, entering into negotiations with another party. Any final contracts that result from the proposal evaluation and negotiation processes will be subject to approval by SSVEC and its Board of Directors.

## 12 Rejection of Proposals

SSVEC reserves the right to accept any proposal, or to reject any and all proposals and to re-issue this RFP in the event that all proposals are rejected or they deem it otherwise necessary. SSVEC reserves the right to revise this RFP, including the desired size (solar and storage) and duration specifications, at any time. Additionally, SSVEC reserves the right to accept proposals other than the lowest cost proposal. Factors other than cost, as described above, will be considered in the proposal evaluation process.

## 13 Supplemental Information

SSVEC reserves the right to request additional information from respondents or to request respondents to submit supplemental materials in fulfillment of the content requirements of this RFP or to meet

additional information needs. SSVEC also reserves the right to waive any technical or format requirements contained in the RFP.

## 14 Submittal Instructions

Notice of Intent to Respond Form (Attachment B) should be completed and emailed to [SSVEC.2020SolarRFP@gdsassociates.com](mailto:SSVEC.2020SolarRFP@gdsassociates.com), no later than August 4, 2020.

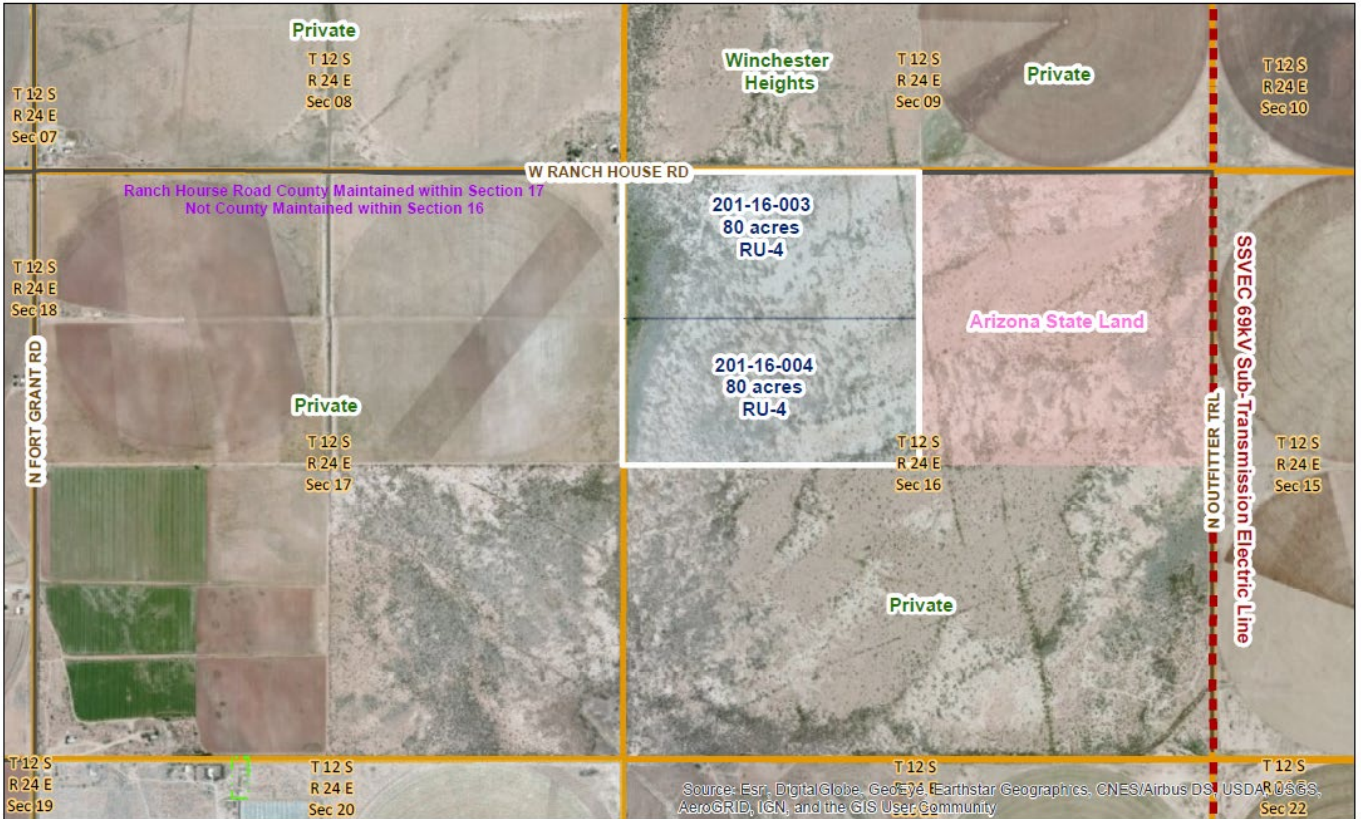
One electronic copy of the proposal should be emailed to [SSVEC.2020SolarRFP@gdsassociates.com](mailto:SSVEC.2020SolarRFP@gdsassociates.com), and must be delivered no later than 4:00 PM (Eastern) on August 25, 2020. All proposal submissions must include a completed Technical Proposal Form (Attachment C).

Each respondent is expected to carefully review the information provided in this RFP as it contains important instructions which should be followed in preparing the proposal(s). Modifications to proposals already received by SSVEC will only be accepted if submitted by the respondent prior to the Proposal Due Date.

Copies of each proposal will be forwarded to SSVEC and their legal counsel.

# 15 Appendix A

## A. SSVEC SITE



**SSVEC Solar Project  
 Area Map**



Date: 7/9/2020





Ranch House Solar Site

 Sulphur Springs Valley  
Electric Cooperative, Inc.  
A Touchstone Energy® Partner

N  
1 inch = 452 feet  
0 105 210 Feet