REQUEST FOR INFORMATION
FOR
Battery Energy Storage Systems
Bidding Optimization Software

RFI Release Date: Mar 24, 2023
RFI Submittal Deadline: May 12, 2023 at 5:00 PM Pacific Time
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2 Agency Overviews

Silicon Valley Clean Energy

Silicon Valley Clean Energy (SVCE), a Community Choice Energy agency, is redefining the local electricity market and providing our residents and businesses with new clean energy choices—renewable and carbon-free electricity at competitive rates. SVCE was formed as a Joint Powers Authority in 2016, and now serves approximately 270,000 residential and commercial electricity customers across a service area comprised of the following thirteen communities: Campbell, Cupertino, Gilroy, Los Altos, Los Altos Hills, Los Gatos, Milpitas, Monte Sereno, Morgan Hill, Mountain View, Saratoga, Sunnyvale and Unincorporated Santa Clara County. 97% of electricity customers in SVCE’s service area receive their electricity from SVCE. For more information on SVCE, please visit: https://www.svcleanenergy.org/

Central Coast Clean Energy

In spring 2018, Central Coast Community Energy (CCCE) began providing member communities throughout Monterey, San Benito, and Santa Cruz Counties with clean-sourced power. CCCE now serves 440,000 customer accounts reaching over one million people across 30 cities and unincorporated communities in Monterey, Santa Barbara, San Luis Obispo, San Benito, and Santa Cruz Counties. CCCE’s estimated 2023 retail sales are 5,000 GWh with a peak capacity of 925 MW, distributed 65% non-residential and 35% residential. CCCE has a S&P Global credit rating of A. CCCE has contracted to develop 8-hour flow and 8-hour compressed air storage. By the end of 2023 CCCE will have over 100MW of lithium-ion storage in operation. For more information on CCCE, please visit https://3cenergy.org/.

3 RFI Overview

With this request for information (RFI), Silicon Valley Clean Energy (SVCE) and Central Coast Community Energy (CCCE) (together “Joint CCAs”) seek to procure a Battery Energy Storage System (BESS) platform that will enable the Joint CCA’s to optimally manage its fleet of storage assets in the CAISO marketplace. The platform should allow the resources to be optimized considering expected market conditions and limitations of the resource. The solution should be able to transmit bids and resource parameters to SVCE’s Scheduling Coordinator. The optimization should be able to toggle between risk levels in the creation of bids. Finally, the software should be able to adhere to the joint CCA’s cyber security polices where applicable. Please provide information about the experience and qualifications of your organization (Proposer), system implementation, and ongoing support as described in this RFI scope of work. Proposers should provide one proposal in response to this. Proposers are encouraged to apply for all Sections of the scope to which they are qualified. The Joint CCAs reserve the right to award work for different Sections to different Proposers, to not award work for one or more Sections, or to award work to no Proposers.

This RFI:
- Describes the scope of services sought by Joint CCAs
- Outlines key dates and the proposed timeline.
- Provides an opportunity for Proposers to describe their relevant qualifications and assets, and to explain how they could contribute.
• Prequalifies the proposer for the RFP that could follow
• Provides an opportunity for Proposers to identify any areas not identified in the RFI that would add substantial value to SVCE’s BESS Bidding Optimization Software scope of work
4 RFI/RFP Tentative Timeline

This tentative schedule is provided for the convenience of Proposers but may be subject to change at any time by Joint Agencies. Any such changes will be stated in an addendum to this RFI or otherwise communicated to Proposers.

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
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<tbody>
<tr>
<td>March 24th, 2023</td>
<td>RFI issued.</td>
</tr>
<tr>
<td>April 7th, 2023</td>
<td>Deadline for questions, clarifications (see below)</td>
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<tr>
<td>April 21st, 2023</td>
<td>Question responses posted online</td>
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<tr>
<td>May 12th, 2023</td>
<td>Deadline for Proposers to submit informational proposals.</td>
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<tr>
<td>May 29th, 2023</td>
<td>Top Proposers notified of prequalification status.</td>
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<tr>
<td>June 2nd, 2023</td>
<td>Final RFP Issued to prequalified proposers.</td>
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<tr>
<td>June 16th, 2023</td>
<td>Anticipated date SVCE will notify awardees.</td>
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<tr>
<td>August 4th, 2023</td>
<td>Anticipated date contract finalized</td>
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<tr>
<td>August 9th, 2023</td>
<td>Anticipated date(s) of Board approval</td>
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<tr>
<td>August 14th, 2023</td>
<td>Work Commences</td>
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**Notes:**
- Questions: Proposers may submit questions concerning the RFP kris.vanvactor@svcleanenergy.org. All questions and answers will be shared with all Proposers and will be posted in the same location as the RFP, at [https://www.svcleanenergy.org/solicitations/](https://www.svcleanenergy.org/solicitations/). Questions must be emailed and received by Joint CCAs no later than April 7th, 2023 at 5:00 PM PT. Joint CCAs shall not be responsible for nor be bound by any oral instructions, interpretations or explanations issued by Joint CCAs or its representatives.
- Proposal Review: Joint CCAs may request clarifications of submitted proposals by email or phone on between May 12th and May 19th, 2023. Prompt responses will be requested.
5 Proposal Submittal

Proposals must be received on or before the above deadline and submitted by email to kris.vanvactor@svcleanenergy.org with the subject "Proposal - <Organization> - BESS Bidding Optimization Software"

Only electronic submittals in PDF format will be accepted.

Proposals must include the following sections (to be submitted in this order only):
1. Administrative Information (1 pg. max)
   - Provide administrative information, and include at a minimum: name, mailing address, phone number, and email of designated point of contact.
2. Proposal summary (2 pg. max)
   - Discuss the highlights, key features and distinguishing points of the proposal.
3. Organization description and qualifications (6 pg. max)
   - Provide an overview of your organization. Include overall organizational structure, number of employees, legal structure and ownership. Provide a current client list.
   - Describe resources and organizational structure with respect to the BESS Bidding Optimization Software RFP. Provide a brief bio for key staff that will work on this project and highlight their credentials. Attach full resumes of key staff.
   - Provide a description of primary business model(s).
   - Provide an overview of your qualifications and previous experience on at least three similar or related projects including providing related services to any Load Serving Entities in California. Include descriptions, costs, timeline and reference contact information.
   - Please describe your specific experience and engagement in California and/or the Joint CCAs territory, Include the type of engagement, with who, for what purpose, and for how long. Include the number of end-customers served.
   - Complete this information for all Proposers (and Sub-Proposers, if applicable) that are included in the proposal.
4. Proposed solution (5 pg. max for each Section (see Section definition below); accompanying power point 10 slides max for each Section)
   - The Scope is defined as the entire solution.
   - Provide an explicit description (via narrative, diagram, flowchart, etc) of the final software solution(s) that will be implemented under the proposal
   - Describe integration requirements or options (with Joint CCAs systems or data). Describe API/integration capability with cloud-based data warehouses such as Google BigQuery. Please indicate other (solution, technology, service, data) providers that you currently work with that your solution is integrated with.
   - Describe the hardware and software requirements of your solution.
   - Describe the inputs and outputs of your solution, including: data requirements, data sources, API integration capabilities, output formatting to support Joint CCAs needs.
   - Describe the user interface of your solution.
   - Describe the level of customization available.
   - Describe the level of ongoing support.
   - Include information about your system and data security plan.
- Describe system service levels that would be part of a service level agreement. Describe system support. Indicate also what customer support options are offered.
- Indicate how the proposed solution could be leveraged by other CCAs.
- Suggest any innovations, additions or modifications to the scope that Joint CCAs prepared, including future modules / expansions.
- Describe the level and types of Joint CCAs support needed to implement the solution.

5. Proposed work plan and schedule (4 pg. max; table or chart for the schedule)
- Present a well-conceived work plan. Indicate which Sections the work plan covers. Include a full description of each task. Show how the work plan would meet Joint Agencies’ schedule.
- Illustrate how the work plan would proceed and what the key milestones or benchmarks would be, along with required levels of Joint CCAs staff and stakeholder engagement.

6. Cost proposal (3 pg. max)
- BESS Bidding Optimization Software
  o Include all costs such set up fees, license fees, etc.; and direct labor rates and estimated hours for named project resources if applicable; and subcontractor rates if applicable.
  o Include the costs for the customizations described in the proposed solution.
  o Include the costs for ongoing support as described in the proposed solution.
  o Include cloud hosting and setup costs, if any
  o Estimate other direct costs and reimbursable expenses, if any, and associated mark-up percentages, if any.
  o Include a breakdown of costs by deliverable.
  o Include any revenue share or cost reduction elements.
  o Indicate any additional costs associated with customer engagement.
  o Be sure to separate costs associated with optional integration with Joint CCAs systems and data.
  o If responding to both sections, please provide any cost advantage / economy of scale realized by implementing solutions to both Sections together.

7. Confirmation of acceptance of contract terms or explanation of proposed contract modifications (see Section 7 of this RFI)
- List all exceptions or requested changes that Proposer has to Joint CCAs standard contract. Items not excepted will not be open to later negotiation.

8. Inclusion of non-participating CCAs (see Section 8 of this RFI)
- Indicate Proposer’s willingness to extend the terms of resulting contracts to other similar entities.
6 Review and Selection Process

In addition to, or in reiteration of, the aforementioned minimum proposal requirements, all of which are mandatory, proposals will be evaluated based on the following non-exclusive list of criteria:

- Qualifications and experience of the Proposer providing similar products and services, including the capability and experience of key personnel as well as experience with other public and/or private CCAs in similar capacities
- History of successfully providing battery optimization software to CPUC jurisdictional load serving entities including services for public and/or private CCAs and other CCAs and Energy Service Providers
- Financial viability of the Proposer
- Cost to Joint CCAs for the products and services identified in this RFI/RFP
- Proposed approach, including a clearly-demonstrated understanding of the intended scope of services to be provided demonstrated as:
  - Quality and coverage of system capabilities against high-level functional requirements for each Section
  - Availability of consultative work for future system configuration, updates, and training
  - Sophistication of models/tools to be used
  - Approach for interacting with Joint CCAs staff, scheduling coordinators, and consultants
- Ability to meet any required timelines or other requirements
- Existence of and circumstances surrounding any claims or violations of law or governmental regulations against the Proposer, its representatives and/or partners
- Pertinent references
- Acceptance of Joint CCAs standard contract terms and conditions

Joint CCAs reserves the right to consider factors other than those specified above and to request additional information from any/all Proposers as a part of the selection process.

7 Inclusion of Non-Participating Agencies

Joint CCAs is asking all responding Proposers to indicate their willingness to extend the terms of resulting contracts, inclusive of price, to other interested California-based municipalities, municipally-owned utilities and community choice energy programs. While this clause in no way commits these CCAs to contract with Joint CCAs awarded consultant, nor does it guarantee any additional orders will result, it does allow other agencies, at their discretion, to make use of Joint CCAs competitive process (provided said process satisfies their own procurement guidelines) and enter into a contract directly with the awarded consultant. All contracts entered into by other CCAs shall be understood to be transactions between that agency and the awarded consultant; Joint CCAs shall not be responsible or liable in any manner for any such contracts.
8 California Public Records Act

All parties acknowledge that Joint CCAs is a public agency subject to the requirements of the California Public Records Act, Cal. Gov. Code section 6250 et seq. ("CPRA"). Joint CCAs will not disclose any part of any proposal before it announces a recommendation for an award, on the ground that there is a substantial public interest in not disclosing proposals during the evaluation process. After the announcement of a recommended award, all proposals received in response to this RFP will be subject to public disclosure, with the exception of those elements in each proposal which are exempt from disclosure pursuant to the CPRA.

If a Proposer believes there are portion(s) of the proposal which are exempt from disclosure, the Proposer must plainly mark it as “Confidential”, “Proprietary”, or “Trade Secret.” Joint CCAs may also request that the Proposer state the specific provision of the CPRA which provides the exemption, and the factual basis for claiming the exemption. Any proposal which contains language purporting to render all or significant portions of the proposal as “Confidential,” “Trade Secret,” or “Proprietary,” will be considered non-responsive and a public record in its entirety.

Although the CPRA recognizes that certain confidential trade secret information may be protected from disclosure, Joint CCAs may not be in a position to establish that the information a Proposer submits is a trade secret. If a public records request is made for information marked “Confidential,” “Proprietary,” or “Trade Secret,” Joint CCAs will provide the Proposer(s) who submitted the information with reasonable notice to seek protection from disclosure by a court of competent jurisdiction. The Proposer shall be solely responsible for taking such legal steps; if the Proposer takes no such action after receiving notice of the public records request, Joint CCAs will disclose all records it deems subject to disclosure, even if marked “Confidential,” “Trade Secret,” or “Proprietary.”

9 Ex Parte Communication

Please note that to insure the proper and fair evaluation of a proposal, Joint CCAs prohibits ex parte communication (i.e., unsolicited) initiated by the Proposer to a Joint CCAs Official or Employee evaluating or considering the proposals prior to the time a bid decision has been made. Communication between Proposer and Joint CCAs will be initiated by the appropriate Agency Official or Employee in order to obtain information or clarification needed to develop a proper and accurate evaluation of the proposal. Ex parte communication may be grounds for disqualifying the offending Proposer from consideration or award of the proposal, then in evaluation, or any future proposal.

10 Insurance Requirements

All insurance shall be secured from or countersigned by an agent or surety company recognized in good standing and authorized to do business in the State of California.

The Proposer shall, within thirty (30) days of notification of award and prior to commencement of work, take out and maintain in full force and effect minimum insurance coverage as specified in the attached requirements. This insurance shall remain in force and effect throughout the duration of the contract.
A certificate of existing insurance coverage should be submitted with the proposal as proof of insurability. If the current coverage does not meet the RFP requirements, then the Proposer should request an affidavit of insurability from the Proposer’s insurance agent that certifies the requirements can and will be met. Failure to provide adequate insurance coverage may be cause for disqualification as non-responsive to the RFP requirements.

11 Conflict of Interest/Statement of Non-Collusion

All Proposers must disclose with their proposal the name of any officer, director, or agent who is also an employee of Joint Agencies. Further, all Proposers must disclose the name of any Joint CCAs employee who owns, directly or indirectly, an interest of five percent (5%) or more of the Proposer’s firm or any of its branches.

The Proposer shall certify that he/she has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with the proposal and that the Proposer is not financially interested in, or otherwise affiliated in a business way with any other Proposer on the same land or improvements.

12 Addenda

It is the Proposer’s responsibility to contact Joint CCAs prior to submitting a proposal to ascertain if any addenda have been issued, to obtain all such addenda and return executed addenda with the proposal.

The failure of a Proposer to submit acknowledgement of any addenda that affects the proposal price(s) may be considered an irregularity and may be cause for rejection of the proposal.

13 Certifications

The submission of a proposal shall be deemed a representation and certification by the Proposer that:

- Has read, understands and agrees to the information and requirements set forth in this RFI/RFP.
- Has the capability to complete the responsibilities and obligations of the proposal being submitted
- Represents that all information contained in the proposal is true and correct
- Acknowledge that Joint CCAs has the right to make any inquiry it deems appropriate to substantiate or supplement information supplied by Proposer, and Proposer hereby grants Joint CCAs permission to make these inquiries
- Will provide any and all documentation related to the proposal in a timely manner
- Is eligible to submit a proposal because he/she is not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in a transaction by any Federal, State, or local department or agency
14 Rights of Joint CCAs

Joint CCAs are not obligated to respond to any proposal submitted as part of the RFI. Joint CCAs at its sole discretion reserves the right to waive technicalities or irregularities, to reject any or all proposals, and/or to accept that proposal which is in the best interest of Joint Agencies. The award of this proposal, if made, may be based on considerations other than total cost and may be awarded based on various considerations, including without limitation; Proposer’s experience and/or qualifications, past experience, administrative cost, standardization, technical evaluation and oral and/or written presentations as required. Joint CCAs reserves the right to accept all or part, or to decline the whole, and to award this RFI to one (1) or more Proposers. There is no obligation to buy. The RFI, if awarded, will be in the judgement of Joint CCAs as the most responsive to the agency’s needs.

15 Background

Joint CCAs seeks a qualified organization to provide BESS Optimization results. The results should provide optimal set of bids that will maximize the value of each resource to Joint Agencies. The software should be scalable so that as futures BESS resource come online Joint CCAs can integrate those resource into CAISO’s marketplace. The software should include sufficient ongoing support to ensure full engagement and competency across Joint CCAs staff.

SVCE has ~180 MWs of lithium-ion battery resources that are online or coming online in the next few years.

CCCE has contracted for 425MW of storage resources over the past two years. This consists of 193MW of lithium-ion, 200MW of compressed air, and 32MW of flow storage.

These are resources are expected to be instrumental in helping the Joint CCAs achieve their carbon free goals for its customers. This software will be instrumental in managing the generation of electricity as it is scheduled into California Independent Systems Operator (CAISO) marketplace.

16 High Level Scope of Work

The following section details the scope of work and requirements Joint CCAs seeks and is meant as an initial guide for the submitted proposal. Joint CCAs is looking for a product to optimize its utility scale battery systems. The successful proposal submission must demonstrate that the provider has the appropriate professional and technical background and can fulfill the stated scope of work. The scope of work below is provided as a high-level overview of the desired system capabilities and is not intended to be an exhaustive list of detailed technical requirements. Specific system capabilities and features will be considered during the evaluation process.
Section 1: BESS Optimization

- **Price Forecast**
  - Have an expectation a forward price over the next few days and months for both Day-ahead and Real-time markets (all products).
  - Real-time prices deviations can be in the form of a probability and not necessarily prices.

- **BESS Optimization**
  - Support all required products for both the Day-ahead and Real-time Market
    - Energy
    - Spin/Non-Spin
    - Regulation Up and Down
    - Residual Unit Commitment
  - Define the objective function that is used to develop the bids for each of those products.
  - Define the risk metric used to help build the bids created.
  - Ability to implement to product fields and characteristics as CAISOs market evolves.
  - Support for changes to current or future market products as needed.
  - Track contractual limits as they factor into the opportunity cost of optimizing these resources.
    - Minimum/Maximum State of Charge
    - Throughput Limits
    - Cycle Limits
    - Depth of charge Limits

- **Technical Capability**
  - Structure bid in requirements to meet Must Offer Obligations for a resource as they are placed in RA/Supply Plans.
  - Structure bid in requirements to meet CAISOs SIBR interface for an energy storage (NGR) resource.

- **Reporting**
  - Standard reports along with ability to create on-the-fly custom reports
  - Reports should allow for the monitoring of various resource specific characteristics including but not limited to
    - Minimum/Maximum State of Charge
    - Throughput Limits
    - Cycle Limits
    - Depth of charge Limits

**Functional Requirements**

- Graphic User Interface that shows a forward-looking expectation of the resource use over hourly, daily, weekly, and monthly time horizons.
- Ability of increase usage of battery (reduce spread) to increase reward or decrease the usage of the battery (increase spread) in to decrease risk.

**System Integration Requirements (apply to each Section)**

- Ability to connect to SVCEs Scheduling Coordinator to facilitate timely submittal or bids.
- Ability to connect to CAISO Market Participant Portal in order gather data, resource characteristics and situational awareness to better manage the resource.
- Ability to connect to SVCE to facilitate timely transfer of information (data)