

## SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY

# Request for Proposals for Aggregated Demand Side Management and Dispatchable Demand Response Solutions

Response Deadline: 4:00 p.m., September 23, 2011

The Southern California Public Power Authority (SCPPA) is hereby soliciting competitive proposals for Aggregated Demand Side Management and Dispatchable Demand Response Solutions.

### Introduction

SCPPA, a joint powers authority and a public entity organized under the laws of the State of California, was created pursuant to the Government Code of California and a Joint Powers Agreement for the purpose of planning, financing, developing, acquiring, constructing, operating and maintaining projects for the generation or transmission of electric energy.

The Member Agencies of SCPPA include within their electrical system planning forecasts the impacts and potential of demand side solutions such as Energy Efficiency, Demand Side Management programs, Distributed Generation and other programs where end-use customers may change the profile of their consumption either for total energy consumption (kWh) or demand (kW). The vision of the Smart Grid provides that verified changes in the aggregate load profile of a utility may be comingled with the conventional requirement to match generation to demand – a customer's consumption may be managed with information and incentives to offset the need for generating capacity. This request for proposals seeks new and interactive solutions that extend beyond conventional passive programs and allow the Member Agencies to "dispatch" demand response solutions as an aggregated and verified tool to offset generation.

Membership of SCPPA consists of eleven cities and one irrigation district, which supply electric energy within Southern California, including the municipal utilities of the cities of Anaheim, Azusa, Banning, Burbank, Cerritos, Colton, Glendale, Los Angeles, Pasadena, Riverside, and Vernon, and the Imperial Irrigation District (Member Agencies). In addition to these Member Agencies, SCPPA may include other municipal agencies who wish to participate in our projects, with applicable restrictions that may apply and by approval of the Board.

SCPPA is governed by its Board of Directors, which consists of representatives from each of its members. The management of SCPPA is under the direction of an Executive Director who is appointed by the Board. Details may be found at <a href="https://www.scppa.org">www.scppa.org</a>.

## **Areas of Interest**

#### 1. Overview of Proposed Demand Side Solution:

- a. Describe the proposed Demand Side solution within one page (or less) of text.
- b. Describe any additional value propositions beyond Demand Response that your solution enables or provides.

#### 2. Market Potential of Proposed Demand Side Solution:

- a. Describe the basis by which the estimated market potential may be captured within each participating Member Agency. Describe how this potential may be managed incrementally or in conjunction with the roll-out of other potential Smart Grid programs.
- b. Describe how the solution provides for a change in both the total consumption (kWh) and demand (kW) of a customer premise, including provisions for permanent load shift, various forms of energy storage, and/or operational changes that may be affected through the solution, with and without a price signal (such as a time-of-use rate.) If with a price signal, describe how the solution provisions this information to the end-use customer.
- c. Provide any assumptions about rate structures implemented by Member Agencies, and any other limitations on the effectiveness of the solution.
- d. Describe how the proposed solution may be targeted toward or better suited for specific customer segments within the Member Agencies (i.e., commercial, industrial, and residential).
- e. Describe the approximate minimum and maximum deployment rates in MW and MWh for gaining potential market saturation, ideally by customer segment if possible.

## 3. Control Events and Operations:

- a. Describe how, at any point in time, the available and instantaneous capability of the solution may be presented to an operator, and a control event can be issued with a confidence factor of 100% of the desired effect for the aggregate total, or a targeted subset of the total installed infrastructure.
- b. Describe how the dispatch event methodology may operate within existing markets in the State of California, specifically the California Independent System Operator (CAISO) and other applicable balancing authorities. Include the precision capabilities of the solution such as one minute, ten minute, or other response metrics.
- c. Describe any prediction capabilities or solutions which enable a Member Agency to bid into or schedule into a day-ahead market a fixed reduction of demand per hour as a direct offset to generation capacity.
- d. Describe any supplemental software the utility may need to affect the proposed solution; any expected integration effort and all costs associated with the proposed software(s).

#### 4. Event Measurement and Verification:

- a. Describe the pre-, during-, and post-event measurement on each end-use device to verify operation and desired impacts.
- b. Describe how a system operator who dispatches an event can monitor and validate the event execution as a whole or site-by-site.
- c. Describe the capture and recording of any pattern use change of a customer premise with and without a price signal, control event, or other external driver.

#### 5. System Security:

- a. Detail the physical security of the equipment as installed on the customer premise including intrusion alarms, fail-over and fail-safe operations.
- b. Detail the logical security to prevent intrusion into any processing capability or decision sequences of the end-use devices within the customer premise.
- c. Detail the logical security of command or event requests, including situations where the end-use customer may desire to opt out of an event.
- d. Detail the data security of any communication media either across public or private networks.
- e. Detail the physical and cyber security of any Network Operation Center, and any other Control Center or call center including customer data that may be accessible by the operators.
- f. Detail the means for customers to gain access to data for their own premises and no other premises.
- g. Detail the integrity and controlled access of any Member Agency aggregate data where the solution includes a host communication or data processing environment, either with partitioned databases or other potential co-mingling of information.
- h. Detail any energy and cyber security standards, processes, procedures or certifications to which the proposed solution adheres.
- i. Detail your process to review and upgrade any necessary processes, procedures, hardware, software, or other solution components to maintain physical and cyber security to the highest standards.

#### 6. Communication Infrastructure Assumptions:

- a. Provide a summary of architectural design and interface considerations, including options as may be available for multiple RF infrastructures and protocols to the electric meter on a premise.
- b. Detail where private or public communication channels are assumed within the proposed solution and how data and operational integrity are maintained at all times.
- c. Provide sufficient information to evaluate the potential integration of the solution into existing or "legacy" systems including Meter Data Management Systems (MDMS), Customer Information Systems (CIS), Billing Systems, SCADA Systems, Energy Management Systems (EMS), Automatic Generation Control Systems (AGC), Operations Management Systems (OMS), or Automated Dispatch Systems, pre-schedule, dispatch, other Smart Grid systems.
- d. Describe the two-way communication capability of the solution for control, monitoring and verification of events.
- e. Describe the throughput, latency, or other communication requirements needed to fulfill the performance expectations of the proposed solution.

#### 7. Customer Engagement:

- a. Detail the strategy for public outreach, deployment and plan to engage the end-use customers and solicit enrollment into a program.
- b. Detail any expectations of the end-use customer to make investments in supplemental equipment on their premise to affect a solution.
- c. Detail any behavioral changes (e.g., voluntary changes in consumption) expected or required by the proposed solution, and the basis for incorporating such changes into the expected performance of the proposed solution.
- d. Detail the proposed customer portal or the means for the end-use customer to interact with the new solution.
- e. Detail the "brand recognition" of any customer interaction, equipment, or systems which the enduse customer may encounter

- f. Describe any call center interactions and ongoing support.
- g. Describe the relationship of the solution to other Smart Grid technologies the Member Agencies may be deploying.
- h. Describe any assumed customer incentive mechanism if applicable to a control event.

## **Proposal Submission Required Elements**

1. Transmittal Letter: A brief statement of the Respondent's understanding of the work to be done and commitment to perform the work as scheduled including a summary of exceptions taken to the request for proposal requirements, statement of work, specifications, and reference to any proposed contractual terms and conditions required by the proposer. An officer authorized to bind must sign the proposal on behalf of the proposer and must include the following declarations on the Transmittal Letter:

"This proposal is genuine, and not sham or collusive, nor made in the interest or in behalf of any person not herein named; the proposer has not directly or indirectly induced or solicited any other proposer to put in a sham bid, or any other person, firm or corporation to refrain from submitting a proposal; and the proposer has not in any manner sought by collusion to secure for themselves an advantage over any other proposer."

- **2. Applicant Information**: Provide legal name of Company, Physical Street Address, e-mail address, Telephone, Name and Title of individuals authorized to represent the Respondent.
- **3. Proposal:** Provide a description of the proposed project, how it meets each of the objectives of this request for proposals, a detailed description addressing all of the Areas of Interest, as well as any functions which are not fulfilled by the Respondent's solution.
- 4. Fees: SCPPA is interested in discovering the Respondent's capabilities and pricing to make an informed decision and proceed to more specific negotiations. Pricing should be made based on good faith estimates of the requirements defined in this request for proposals. Detail specific examples or estimates of the fees. Describe how the fees will be determined. Prior to contract award, the successful bidder shall supply a detailed breakdown of the applicable overheads and fringe benefit costs that are part of the labor rates and other direct costs associated with the services to be performed.
- **5. Experience:** Respondent will clearly identify project participants and management team.
  - a. Describe your firm's experience within the engineering and delivery of Aggregated Demand Side Management and Dispatchable Demand Response Solutions as may be applicable to this request for proposals, your organizational structure, management qualifications, and other contract related qualifications, including number of years firm has been in business.
  - b. Specify key employees and describe their qualifications, experience and duties related to this request for proposals, including the office location(s) where work will be performed.
  - c. Provide a commitment statement for the retention and use of key employees as proposed, their availability to initiate and sustain the proposal, as well as planned supplement if not available to assure project delivery.
  - d. State whether proposer will use subcontractors to perform services pursuant to the contract. Should the use of subcontractors be offered, the proposer shall provide the same assurances of competence for the subcontractor, plus the demonstrated ability to manage and supervise the

- subcontracted work. Subcontractors shall not be allowed to further subcontract with others for work which is integral to the proposed solution. The provisions of this contract shall apply to all subcontractors in the same manner as to the proposer.
- e. Respondent shall indicate any and all pending litigation that could affect the viability of respondent's proposal, continuance of existing contracts, operation or financial stability.
- f. Describe whether the proposer has, within the last three years, rendered any service to SCPPA or to any of SCPPA's Member Agencies, either as a contractor or subcontractor, either under the current proposer's name or any other name or organization. If so, please provide details (status as prime or subcontractor, brief description of the contract, contract start and end dates, the contract administrator name, and total actual contract expenditures).

## **Proposal Submission Delivery Requirements**

There will be no initial proposer's conference associated with this request for proposals. Clarification questions may be addressed to Julie Felipe at <a href="mailto:jfelipe@scppa.org">jfelipe@scppa.org</a>.

One (1) hard copy of your response, including a transmittal letter of authentic offer with wet-ink authority signature, and any supporting documentation should be delivered prior to 4:00 p.m. on September 23, 2011, to:

Southern California Public Power Authority 225 S. Lake Avenue, Suite 1250 Pasadena, California 91101

One electronic copy of your proposal should also be delivered to the address above, preferably on a CD or USB flash drive, or alternately e-mailed to <a href="maileoutremodeling-geographics"><u>ifelipe@scppa.org</u></a>.

No contact should be made with the Board of Directors, committee or working group representatives, or SCPPA Participating Member Agencies concerning this request for proposals.

All information received by SCPPA in response to this request for proposals is subject to the California Public Records Act and all submissions may be subject to review in the event of an Audit.

## **Proposal Terms and Conditions**

- 1. SCPPA desires to enter exclusive negotiations with the proposer once selected as may be defined through a signed letter of intent and defined term.
- 2. SCPPA shall determine at its sole discretion the value of any and/or all proposals including price and non-price attributes.
- 3. Proposals may be sub-divided or combined with other proposals, at SCPPA's sole discretion.
- 4. SCPPA shall perform an initial screening evaluation to identify and eliminate any proposals that are not responsive to the request for proposals, do not meet the minimum requirements set forth in the request for proposals, are clearly not economically competitive with other proposals, or are submitted by respondents that lack appropriate creditworthiness, sufficient financial resources, or qualifications to provide dependable and reliable services.

- 5. SCPPA may entertain or eliminate proposals immediately upon receipt or at any future time if not clearly defined in the proposal as the end of the period of offer.
- 6. SCPPA reserves the right, without qualification and in its sole discretion, to accept or reject any or all proposals for any reason without explanation to the respondent, or to make the award to that respondent, who, in the opinion of SCPPA, will provide the most value to SCPPA and its customers.
- 7. SCPPA may decline to enter into any potential engagement agreement or contract with any respondent, terminate negotiations with any respondent, or to abandon the request for proposal process in its entirety.
- 8. SCPPA reserves the right to make an award to the other than the lowest price offer or the proposal evidencing the greatest technical ability or other measure if SCPPA determines that to do so would result in the greatest value to SCPPA and its Member Agencies.
- 9. Those respondents who submit proposals agree to do so without legal recourse against SCPPA, its Member Agencies, their directors, officers, employees and agents for rejection of their proposal(s) or for failure to execute or act on their proposal for any reason.
- 10. SCPPA shall not be liable to any respondent or party in law or equity for any reason whatsoever for any acts or omissions arising out of or in connection with this request for proposals.
- 11. Respondent shall be liable for all its costs and SCPPA shall not be responsible for any respondent's costs incurred to prepare, submit, or negotiate its proposal, a contract or for any other activity related thereto.
- 12. SCPPA may require certain performance assurances from proposers prior to entering into detailed negotiations for a proposed project. Such assurances may potentially include a requirement that proposers provide some form of performance security.
- 13. Either SCPPA collectively or Member Agencies individually may respond to, or enter into negotiations for a proposal. SCPPA is not responsible or liable for individual Member Agency interactions with the respondent which are not entirely contained within SCPPA's option or election to engage the respondent as defined within the Terms and Conditions herein.

# Additional Requirements for Proposal

- 1. Consideration of Responses: Submitted proposals should be prepared simply and economically, without the inclusion of unnecessary promotional materials. Proposals should be submitted on recycled paper that has a minimum of thirty percent (30%) post-consumer recycled content and duplex copied (double-sided pages) where applicable.
- 2. Insurance, Licensing, or other Certification: If selected, the proposer will be required to maintain sufficient insurance, licenses, or other required certifications for the type of work being performed. SCPPA or its Member Agencies may require specific insurance coverage to be established and maintained during the course of work and as a condition of award or continuation of contract.

- 3. Non-Discrimination/Equal Employment Practices/Affirmative Action Plan: If selected, the proposer and each of its known subcontractors may be required to complete and file an acceptable Affirmative Action Plan. The Affirmative Action Plan may be set forth in the form required as a business practice by the Department of Water and Power of the City of Los Angeles which is SCPPA's largest Member Agency.
- 4. Living Wage Ordinance: If selected, the proposer may be required to comply with the applicable provisions of the City of Los Angles Living Wage Ordinance and the City of Los Angeles Service Contract Workers Retention Ordinance. The Living Wage Ordinance provisions are found in Section 10.36 of the Los Angeles City Administrative Code; and the Service Contract Workers Retention Ordinance are found in Section 10.37 of the Los Angeles Administrative Code (SCWRO/LW0).
- **5. Child Support Policy:** If selected, proposer may be required to comply with City of Los Angeles Ordinance No. 172401, which requires all contractors and subcontractors performing work to comply with all reporting requirements and wage earning assignments and wage earning assignments relative to court ordered child support.
- 6. Supplier Diversity: Proposers shall take reasonable steps to ensure that all available business enterprises, including Women Business Enterprises (WBEs) and Minority Business Enterprises (MBEs) have an equal opportunity to compete for and participate in the work being requested by this request for proposals. Efforts to obtain participation of MBEs, WBEs, and other business enterprises could reasonably be expected to produce a level of participation by interested subcontractors including 15 percent MBE and 7 percent WBE. SCPPA's Supplier Diversity program is modeled after that of the Los Angeles Department of Water and Power. Further information concerning the Supplier Diversity Program may be obtained from the Purchasing Division of the Los Angeles Department of Water and Power.