Pre-Bid Conference

EPIC
Market Facilitation Program Area
Market Analysis of Trends in California Investor-Owned Utility Electricity Load Shapes
RFP-15-301

Energy Deployment & Market Facilitation Office
Energy Research and Development Division
California Energy Commission
March 17, 2015

Agenda

Time	Topic
10:00 am	Welcome and Introductions • Housekeeping • EPIC Program Background, Policy Drivers, and Energy Goals • Project Introduction, Approach, Purpose, Summary of Scope, and Project Goals • Eligible Bidders • Key Dates
10:15 am	Scope of Work
10:30 am	Proposal Requirements • Formatting and Attachments • Evaluation Process • Grounds for Rejection
11:00 am	Questions and Answers
12:00 pm	Adjourn

Housekeeping

- In case of emergency
- Facilities
- Sign-in sheet
- Updates on solicitation documents and today's presentation will be posted at:

  http://www.energy.ca.gov/contracts/epic.html#RFP-15-301

Background

- The Electric Program Investment Charge (EPIC) is funded by an electricity ratepayer surcharge established by the California Public Utilities Commission (CPUC) in 2011.
- The purpose of EPIC is to benefit the ratepayers of three electric investor-owned utilities.*
- EPIC funds clean energy technology projects that promote greater electricity reliability, lower costs, and increased safety.
- Funded projects must lead to technological advancement and breakthroughs to overcome the barriers that prevent the achievement of the state's statutory energy goals.
- Annual program funds total $162 million per year with 80% administered by the California Energy Commission.

* Pacific Gas and Electric Co., San Diego Gas and Electric Co., and Southern California Edison

Commitment to Diversity

The Energy Commission is committed to encouraging participation in its Research and Development programs to reflect the rich and diverse characteristics of California and its people. To meet this commitment, Energy Commission staff conducts outreach efforts and activities to:

- Alert potential new applicants throughout the state to the Energy Commission's Research and Development programs and the funding opportunities they provide.
- Encourage greater participation by underrepresented groups including disabled veteran-, women-, and minority-owned businesses.
- Assist applicants in understanding how to apply for funding from the Energy Commission's Research and Development programs.

Policy Drivers to meet the State's Energy Goals

- Laws and Regulations
  - AB 32 (Global Warming Solutions Act)
  - AB 758 (Building Efficiency)
  - SB X1-2 (Renewable Portfolio Standard)
  - AB 2514 (Energy Storage)

- Policies/Plans
  - Governor Brown's Clean Energy Jobs Plan
  - CPUC Energy Efficiency Strategic Plan
  - Integrated Energy Policy Report
  - CPUC Decision 13-10-040 (Energy Storage Procurement)

Project Introduction

- Accurate hourly load projections are necessary for informed electricity generation and transmission decisions.
- Currently, the Energy Commission applies hourly load profiles based on historic patterns to the demand forecast to develop projected hourly usage.
- These load profiles do not take into account changes to the mix of end-uses that would be brought on by emerging trends or expected demand-side policies.

Project Purpose

- This contract will fund market analysis to characterize existing and future electricity load in the IOU service territories.
- This information will help provide an accurate assessment of the contributions of clean energy technologies to reducing peak demand, integrating renewable energy, and maintaining electric system reliability.
- This information will also be used to identify and target further opportunities to reduce cost, improve safety, and improve reliability of the electric grid.

Project Goals

- Provide end-use load shape characterization of electricity demand from existing energy technologies and end uses.
- Analyze how changes in technology mix and end-use consumption patterns might impact load shapes over time.
- Assess how rate design and other demand response activities might impact load shapes over time.
- Identify further research opportunities to expand options to integrate renewable generation and energy storage in the California ISO balancing area.

Summary of Scope

- Contractor will use available load data along with weather, energy price, and other data to develop current and project future 8760 electric load profiles by IOU service territory.
  - Typical usage of appliances and equipment
  - Building type
  - Demand-side policy
- Contractor will construct a modeling framework to develop baseline hourly load profiles and then project the impact of demand-side management strategies on these baseline load profiles.

Summary of Scope

- Work performed within the scope may leverage data already available to the Energy Commission.
- Contractor selected is expected to provide expertise in:
  - Project management
  - Data management
  - Electricity consumption and peak load patterns
  - Electricity demand forecasting
  - End-use modeling
  - Demand-side management strategies

Eligible Bidders

- This is an open solicitation for public and private entities, except for publicly owned utilities.
- Bidders must accept the EPIC terms and conditions.
- Bidders are required to register with the California Secretary of State and be in good standing to enter into an agreement with the Energy Commission. http://www.sos.ca.gov
- Bidders must propose a team with proven ability to successfully complete similar projects.

Key Dates

Activity	Action Date
✓Solicitation Release	March 6, 2015
Pre-Bid Workshop	March 17, 2015
DEADLINE FOR WRITTEN QUESTIONS	**March 19, 2015 by 5:00 p.m.**
Post Questions and Answers to Website	Week of April 6, 2015
DEADLINE TO SUBMIT APPLICATIONS	**April 23, 2015 by 3:00 p.m.**
Anticipated Notice of Proposed Award (NOPA)	May 21, 2015
Anticipated Energy Commission Business Meeting Date	July 8, 2015
Anticipated Agreement Start Date	August 2015
Agreement Termination Date	August 2017

Scope of Work

Task	Title	Estimated Completion Date
1	Agreement Management	11/30/2018
2	Analytic Framework Development	6 weeks after Kickoff
3	Data Gathering	3/3/2016
4	Baseline Load Profile Development	5/26/2016
5	Energy Efficiency Load Impact Profiles	9/9/2016
6	Scenario Analysis	10/24/2016
7	Identification of Research Opportunities	2/16/2017
8	Training	As requested
9	Documentation	12/12/2016
10	Evaluation of Benefits of Load Shape Analysis	TBD
11	Technology/Knowledge Transfer Activities	TBD
12	Project Support	If applicable

Agreement Management

- The Contractor will closely manage staff and subcontractors to ensure all deliverables set out in the Scope of Work are on time and complete. Task 1 specifically includes:
  - Kick-off Meeting
  - Invoicing details
  - Quarterly Progress Reports
  - Work Authorization details
  - Subcontractor management details
  - Project Meetings and Briefings
  - Technical Advisory Committee and meeting
  - Final report and meeting
  - Match funding information

Analytic Framework Development

- Work with Energy Commission staff to develop components of analytic work that will serve as guidelines and benchmarks for subsequent tasks.
  - Create data plan that identifies data requirements and means to collect the data.
- Propose method by which collected data can be used to:
  - Develop hourly end-use load profiles: 1) for each end use employed by the Energy Commission's peak demand model; and 2) that reflect technology and end-use consumption patterns in place during the base year.
  - Project future hourly load profiles by, at a minimum, utility and customer sector for each year through 2030.
  - Develop detailed hourly load impact profiles for categories of energy efficiency measures considered in the CPUC's most recent energy efficiency potential and goals study.
- Detail hardware and software requirements to support the implementation of hourly load shape development.

Data Gathering

- Task goal is to acquire the data necessary to successfully implement subsequent tasks consistent with the analytic framework developed in previous task.

- To the extent that preliminary data sources cannot be obtained, secondary sources may be pursued.

- This RFP requires the collection of confidential data. The terms and conditions have been modified to limit the use of information collected pursuant to any contract resulting from this RFP. Please see Attachment 6 for additional information.

Baseline Load Profile Development

- Develop hourly load profiles for electric end uses.
- Builds upon work from tasks 2 and 3 described earlier.
- Load profiles developed under this task will serve as input into the Energy Commission's peak load forecasting model.

Energy Efficiency Load Impact Profiles

- Develop hourly load impact profiles for categories of energy efficiency measures considered in CPUC's most recent Energy Efficiency Potential and Goals Study.

- Profiles will allow the Energy Commission to estimate reductions to the Energy Commission's demand forecast at every hour of the year for any given additional achievable energy efficiency (AAEE) scenario.

Scenario Analysis

- Project hourly load profiles, taking into account changes to end-use consumption patterns that may occur as the result of demand side management (DSM) activities.

- Identify DSM activities, trends in technology development, and existing or anticipated policy or regulation changes.

Identification of Research Opportunities

- Using the results of previous tasks, identify benchmarks for ramp rates and other energy product characteristics that preferred resources, such as energy efficiency, demand response, distributed and utility-scale renewable generation and energy storage, should strive to meet to address anticipated changes in loadshapes.

- This may involve identifying strategies to expand the range of low-cost, low-emission options to integrate wind energy, solar energy, and wide-scale electric vehicle charging in the California ISO balancing area, including strategies and technologies to lower the risk of mid-day overgeneration, balance rapid swings in generation, and lower the late afternoon peak, especially in spring.

Training, Documentation, Evaluation, and Technology Transfer

- Transfer knowledge to Energy Commission staff responsible for ongoing load profile analysis.
- Prepare technical documentation of the methodology, data sources, and analytic tools in sufficient detail as to allow a third party to replicate the analysis, given similar resources.
- Report the estimated benefits resulting from the final deliverables from this contract.
- Develop a plan to make the knowledge gained and lessons learned available to the public and key decision makers.

Proposal Requirements

- Submit proposals with all sections and attachments in the order specified by the due date and time listed.
- Proposal documents should meet formatting requirements, page limits, and number of copies specified in Section III of the solicitation.
  - **Five** hard copies and **one** electronic copy.
- Organize your proposal as follows:
  - Section 1 – Administrative Response (Section III, p. 42).
  - Section 2 – Technical and Cost Proposal (Section III, pp. 42-45, and Section IV, pp. 50-54).

Section 1: Administrative Response Requirements

Each Bidder must complete and include the following:	
1. Cover Letter	6. Small Business Certification (if applicable)
2. Table of Contents	7. Completed DVBE Form (Attachment 3.3)
3. Contractor Status Form (Attachment 1)	8. Bidder Declaration Form GSPD-05-105 (Attachment 3.4)
4. Darfur Contracting Act Form (Attachment 2)	9. Contractor Certification Clauses (Attachment 4)
5. Iran Contracting Act Form (Attachment 9)	

Small/Non-Small Business Preference

- Small Business Preference – Certified Small Businesses or microbusinesses will receive five percent preference points based on the highest responsible bidder's total score, if the highest scored proposal is submitted by a business other than a certified small business.
- Non-Small Business Preference – Each Bidder who commits to small or micro business subcontractor participation of 25% of net bid price will receive five percent preference points.

Disabled Veteran Business Enterprise (DVBE) Requirements

- This RFP is subject to a mandatory participation goal of three percent certified California DVBE.
- Bidder commits to meet or exceed the DVBE participation requirements by either of the following methods:
  - Bidder is a Certified DVBE.
  - Subcontractor is a certified DVBE and will receive at least 3% of the Agreement amount.

DVBE Incentive Program

- The DVBE Incentive Program gives a contractor an opportunity to improve its bid status based on the efforts attained from the DVBE Participation Program. See RFP, page 57 and Attachment 3.1 for more information.
  - The incentive computation is only applied during the evaluation process and only to responsible Bidders.
  - The incentive points for awards based on high score are as follows:
    - Participation of 3.01% - 4.99% = 1 point
    - Participation of 5% or more = 2 points

Section 2:
Technical Proposal Requirements

Each Bidder must complete and include the following:	
1. Technical Need and Merit	7. Labor Hour by Personnel and Task for Regular Task
2. Technical Approach	8. Client References (Attachment 5)
3. Team Qualifications, Capabilities, and Resources	9. Budget Forms (Attachment 7)
4. Previous Work Products	10. Match Funding (Attachment 7, if applicable)
5. EPIC Funds Spent in California	11. Commitment and Support Letters (Attachment 8, if applicable)
6. Budget and Cost Effectiveness	

Technical Merit and Need

- Provide a clear and concise description of the goals, objectives, technological or scientific knowledge advancement, and innovation for the project.
- Summarize the current status of the relevant technology and/or scientific knowledge, and explain how the project will advance, supplement, and/or replace current technology and/or scientific knowledge.

Technical Approach

- Describes the technique, approach, and methods to be used in providing the services listed in the Scope of Work, highlighting any outstanding features, qualifications, and experience.
- Describes how tasks will be executed and coordinated with various participants and team members.
- Identifies and discusses factors critical for success, in addition to risks, barriers, and limitations. Provides a plan to address them.
- Describes how the knowledge gained, experimental results, and lessons learned will be made available to the public and key decision-makers.

Team Qualifications, Capabilities, and Resources

- Describe the organizational structure of the Bidder and the project team. Include an organizational chart that illustrates the structure.
- Identify key team members, including the project manager and principal investigator.
- Summarize qualifications, experience, capabilities, and credentials of the key team members.
- Provide detailed estimates of hours for each task for each team member.
- Explain how the various tasks will be managed and coordinated, and how the project manager's technical expertise will support the effective management and coordination of all activities described in the Scope of Work.
- Describe the facilities, infrastructure, and resources available to the team.

Team Qualifications, Capabilities, and Resources (cont'd)

- Describe the team's history of successfully completing projects.
- Provide current references from work completed within the past three years *(include this information in the Client References Form Attachment 5)*. References will be checked and scored accordingly.
  - Complete a new Client Reference Form for each reference.
- Identify any collaboration with utilities, industries, or others. Explain the nature of the collaboration and what each collaborator will contribute.
- The Bidder must demonstrate financial ability to complete the project, as indicated by responses to the financial ability questions on page 51.

Previous Work Products

- Each Bidder shall provide at least one example of a similar work or academic research product, for the services to be provided as described in the RFP. If subcontractors will be providing technical support in a task area, each subcontractor shall also submit one example of a work or academic product that demonstrates experience in potential work assignments described in this RFP.
- Where appropriate, work or academic products should describe in detail and highlight the Bidder's ability to support tasks identified in this RFP including equations, data analysis methods and strategies, data schema, and diagrams.
- It is not necessary to provide more than one copy of each work product example. Web links are acceptable.

EPIC Funds Spent in California

- Projects that spend EPIC funds in California will receive up to seven points as indicated in the table below. "Spent in California" means that: (1) Funds under the "Direct Labor" category and all categories calculated based on direct labor in the budget attachment (Prime and Subcontractor Labor Rates) are paid to individuals who pay California state income taxes on wages received for work performed under the agreement; and (2) Business transactions (e.g., material and equipment purchases, leases, rentals, and contractual work) are entered into with a business located in California.

Percentage of EPIC funds spent in CA	Percentage of Possible Points
>60%	20%
>70%	40%
>80%	60%
>90%	80%
>100%	100%

- Airline ticket purchases and payments made to out-of-state workers are not considered funds "spent in California." However, funds spent by out-of-state workers in California (e.g., hotel and food) are considered funds "spent in California."

Budget and Cost-Effectiveness

- Justifies the reasonableness of costs for direct labor, non-labor (e.g., indirect overhead, general and administrative costs, and profit), and operating expenses by task.
- Justifies why the hours proposed for personnel and subcontractors are reasonable to accomplish the activities in the Scope of Work.
- Explains how the bidder will maximize funds for the technical tasks in the Scope of Work and minimize expenditure of funds for program administration and overhead.
- Demonstrates the ratio of direct labor and fringe benefits to loaded rates is reasonable.

Average Loaded Hourly Rate

- The score for this criterion will be derived from the mathematical cost formula described on pp. 53-54, which compares the cumulative average loaded hourly rate of all loaded hourly rates listed in the subject Bidder's Cost Bid, with the cumulative average loaded hourly rate of all loaded hourly rates listed in the Lowest Bidder's cost bid.

Budget Forms (Attachment 7)

Each Bidder must complete and include the following budget forms found in Attachment 7 of the solicitation:	
1. Category Budget	6. Equipment
2. Task Budget	7. Materials & Miscellaneous
3. Direct Labor	8. Subcontracts
4. Fringe Benefits	9. Indirect Costs and Profit
5. Travel	

The Bidder must submit information on all of the attached budget forms and this will be deemed the equivalent of a formal Cost Proposal.

Match Funding

- Bidders will receive up to 10 preference points based on the criteria below:
  - Each match funding contributor must submit a commitment letter that meets the requirements of Attachment 8. Failure to meet these requirements will disqualify the proposal from consideration for match funding points.
  - Up to 5 points will be awarded based on the percentage of match funds relative to the EPIC funds requested. This ratio will be multiplied by 5 to yield the points, and rounded to the nearest whole number. For example: If requested EPIC funds are $1,000,000 and match funds are $500,000, the match funding ratio is 0.50. The proposal will be awarded 3 points.
  - The remaining 5 points will be based on the level of commitment, dollar value justification, and funding replacement strategy described in the match funding commitment letter (see Attachment 8). The proposal scoring scale in this solicitation will be used to rate these criteria.

Commitment and Support Letter Form
(Attachment 8)

- This form provides guidelines for the submission of letters of support or commitment that are submitted with the proposal.
  - Commitment letter commits an entity to providing the service or funding described.
  - Support letter details an entity or individual's support for the project.
- Any match funding provided must be supported by a match fund commitment letter.
- Any project partners that will make other contributions to the project must submit a commitment letter.
- Limited to **2 pages** per letter, excluding the cover page.

How will my Proposal be Evaluated? → Administrative Screening

Proposal Admin Screening Process

1. **Energy Commission staff screens proposals per criteria in the solicitation (page 47).**
2. **Criteria is evaluated on a pass/fail basis.**
   - ✓ **Bidders must pass all screening criteria or the Bidder will be disqualified.**

Some Reasons for Failing Screening

- ✓ **Proposal not submitted by the specified due date and time.**
- ✓ **Project completion date beyond the specified agreement end date.**
- ✓ **Proposal contains confidential material.**

How will my proposal be evaluated?

- **Evaluation Committee applies the scoring scale to the scoring criteria**
- **A minimum passing score of 70% is required for criteria 1 to 4, 1 to 6, and all criteria (1 to 7) — equivalent to a score of 42, 49, and 70, respectively, in order for an Proposal to be considered for funding**
- **Each Bidder must review Section IV - Evaluation Process and Criteria section of the solicitation and ensure that its proposal provides a clear and complete response to each scoring criterion.**

Scoring Criteria (page 50-53)	Maximum Points
1. Technical Merit and Need	5
2. Technical Approach	40
3. Team Qualifications, Capabilities & Resources	10
4. Previous Work Products	5
5. Funds Spent in California	7
6. Budget Cost Effectiveness	3
7. Average Loaded Hourly Rate (Cost Points)	30
Total	100
Minimum points to pass	**70**

What is the technical scoring scale?

% of Possible Points	Interpretation	Explanation for Percentage Points
0%	Not Responsive	Response does not include or fails to address the requirements being scored. The omission(s), flaw(s), or defect(s) are significant and unacceptable.
10-30%	Minimally Responsive	Response minimally addresses the requirements being scored. The omission(s), flaw(s), or defect(s) are significant and unacceptable.
40-60%	Inadequate	Response addresses the requirements being scored, but there are one or more omissions, flaws, or defects or the requirements are addressed in such a limited way that it results in a low degree of confidence in the proposed solution.
70%	Adequate	Response adequately addresses the requirements being scored. Any omission(s), flaw(s), or defect(s) are inconsequential and acceptable.
80%	Good	Response fully addresses the requirements being scored with a good degree of confidence in the Bidder's response or proposed solution. No identified omission(s), flaw(s), or defect(s). Any identified weaknesses are minimal, inconsequential, and acceptable.
90%	Excellent	Response fully addresses the requirements being scored with a high degree of confidence in the Bidder's response or proposed solution. Bidder offers one or more enhancing features, methods or approaches exceeding basic expectations.
100%	Exceptional	All requirements are addressed with the highest degree of confidence in the Bidder's response or proposed solution. The response exceeds the requirements in providing multiple enhancing features, a creative approach, or an exceptional solution.

Grounds for Rejection

- A proposal shall be rejected by the Energy Commission for the reasons stated on pp 58-59, including:
  - ✓ It is received after the exact time and date set for receipt.
  - ✓ It is considered non-responsive to the California Disabled Veteran Business Enterprise participation requirements.
  - ✓ It is lacking a properly executed Certification Clauses Form.
  - ✓ It is lacking a properly executed Darfur Contracting Act Form.
  - ✓ It is lacking a properly executed Iran Contracting Act Form.
  - ✓ It contains false or intentionally misleading statements or references which do not support an attribute or condition contended by the Bidder.
  - ✓ The Proposal is intended to erroneously and fallaciously mislead the State in its evaluation of the Proposal and the attribute, condition, or capability is a requirement of this RFP.
  - ✓ There is a conflict of interest as contained in Public Contract Code Sections 10410-10412 and/or 10365.5.
  - ✓ It contains confidential information, or it contains any portion marked confidential.
  - ✓ The Bidder does not agree to the terms and conditions as attached to the solicitation either by not signing the Contractor Status Form or by stating anywhere in the bid that acceptance is based on modifications to those terms and conditions or separate terms and conditions.

Other Information

- **Solicitation documents and today's presentation:**
  www.energy.ca.gov/contracts/epic.html#RFP-15-301
- **Sign up for the Listserver by selecting "Opportunity:"**
  www.energy.ca.gov/listservers/
- **Information on EPIC:**
  www.energy.ca.gov/research/epic/index.html
- **Information on other EPIC solicitations:**
  www.energy.ca.gov/contracts/epic.html

Questions and Answers

Please send all RFP related questions in written form to:

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Deadline to submit questions is March 19, 2015

5:00 PM PDT!