



Pre-Application Workshop

Developing A Portfolio of Advanced Efficiency Solutions (Phase II): Plug Load Technologies and Approaches for Buildings

GFO-15-310

Energy Efficiency Research Office
Solicitation Manager: Felix Villanueva
California Energy Commission
October 12, 2015



Agenda

Time	Topic
10:00 a.m.	Welcome and Introductions <ul style="list-style-type: none">• Housekeeping• Background• Solicitation Purpose, Goals, Funding• Eligible Applicants• Key Dates
10:15 a.m.	<ul style="list-style-type: none">• Targeted Areas• Attachment Overview• Match Funding• Proposal Approval Process
10:30 a.m.	Questions and Answers
11:30 a.m.	Meeting Adjourn



Housekeeping

- In case of emergency
- Facilities
- Muting of WebEx during presentation
- Q&A protocol
- Updates on Solicitation Documents and today's presentation can be found at:

<http://www.energy.ca.gov/contracts/GFO-15-310/>



Commitment to Diversity

The Energy Commission adopted a resolution strengthening its commitment to diversity in our funding programs. We continue to encourage disadvantaged and underrepresented businesses and communities to engage in and benefit from our many programs.

To meet this commitment, Energy Commission staff conducts outreach efforts and activities to:

- Engage with disadvantaged and underrepresented groups throughout the state.
- Notify potential new applicants about the Energy Commission's funding opportunities.
- Assist applicants in understanding how to apply for funding from the Energy Commission's programs.
- Survey participants to measure progress in diversity outreach efforts.

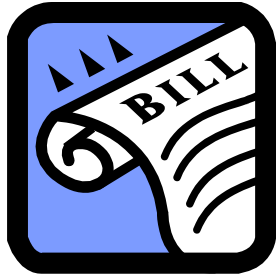


Background

- The Electric Program Investment Charge (EPIC) is funded by an electricity ratepayer surcharge established by the (CPUC) in 2011
- The purpose of EPIC is to benefit electric ratepayers of three electric investor-owned utilities (PG&E, SDG&E, and SCE)
- EPIC projects 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 with 80% administered by the California Energy Commission



California Policy Drivers



- Assembly Bill 32 (Global Warming Solutions Act of 2006).
- AB 758 (Energy Efficiency in Existing Buildings)
 - California's Existing Buildings Energy Efficiency Action Plan
- California Building and Appliances Standards (Title 24 and Title 20)
- CPUC's Energy Efficiency Strategic Plan
- Integrated Energy Policy Report
- SB 350- Increase energy efficiency in existing buildings by 50% by 2030

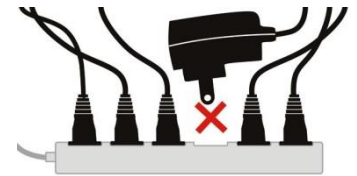


Purpose of Solicitation

To fund applied research and development projects that develop next generation plug load efficiency technologies and strategies for the building sector.

Projects should be:

- New Construction and/or Existing Buildings
- Pre-commercial Technologies
- Improve the energy efficiency in technologies and devices





Definitions

Pre-commercial technology: A technology that has not reached commercial maturity or been deployed at scales sufficiently large and in conditions sufficiently reflective of anticipated actual operating environments to enable the appraisal of operational and performance characteristics, or of financial risks.

Applied Research and Development: Activities that include strategies/analysis or early, pilot-scale testing activities that are necessary to demonstrate the feasibility of pre-commercial technologies.

Plug Load Device: A plug-in device/hardware that draws energy from an electrical outlet



Eligible Applicants

- Open to public and private entities and individuals with exception of publically-owned utilities
- Business Applicants are required to register with the California Secretary of State and be in good standing in order to enter into an agreement with the Energy Commission. <http://www.sos.ca.gov>
- All applicants must agree to the EPIC terms and conditions. <http://www.energy.ca.gov/research/contractors.html>



Funding & Research Groups



Research Groups	Amount Available
Applied Research and Development	\$10,000,000
Group A: Develop Next Generation Plug Load Devices and Technologies	Up to \$7,000,000
Group B: Develop Integrated Plug Load Strategies	Up to \$3,000,000

Minimum Grant Amount: **\$500,000**

Maximum Grant Amount: **\$2,000,000**

Match funding not required but if provided will get additional points during the scoring phase



Group A: Develop Next Generation Plug Load Devices and Technologies

All projects must:

- Focus on improving the energy efficiency of plug load devices (electronic and miscellaneous), with attention to devices that are highly inefficient, operate uncontrolled with long operating hours, and have potential for large energy savings and tested in hardware
- Develop, implement, measure and verify the energy savings potential of the device.

Potential projects can include the following when related to the plug load device:

- Development, testing, and validation of algorithms to support future codes and standards for the developed device.
- Improved understanding of consumer behavior as it relates to the device.
- Identifying and developing common efficiencies that the plug load device must meet, such as through power scaling.



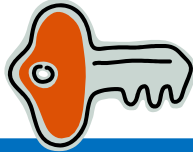
Group B: Develop Integrated Plug Load Strategies

All projects must:

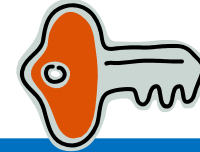
- Improve energy efficiency by integrating plug load devices (electronic and miscellaneous), such as integration with building energy management systems to minimize energy use.
- Develop, implement, measure and verify the energy savings potential of the integrated devices.

Potential projects can include the following when related to the integrated device :

- Control integration and displays to inform consumers to make energy efficient choices.
- Testing and validation to support future energy codes and standards
- Improved understanding of consumer behavior



Key Dates



Activity	Action Date
✓ Solicitation Release	September 28, 2015
Pre-Application Workshop	October 12, 2015
<u>DEADLINE FOR WRITTEN QUESTIONS</u>	<u>October 13, 2015 5 p.m.</u>
Anticipated Post Answers to Questions to Website	November 3, 2015
<u>DEADLINE TO SUBMIT PROPOSALS</u>	<u>November 23, 2015 at 3:00 pm</u>
Anticipated Post Notice of Proposed Award	January 18, 2016
Anticipated Energy Commission Business Meeting Date	April 2016
Anticipated Agreement Start Date	May 2016
Agreement Termination Date	March 31, 2020



Attachment Overview

Every Applicant must complete and include the following Attachments:

1. Application Form	6A. Project Schedule
2. Executive Summary (limit 2 pages)	7. Budget
3. Fact Sheet (limit two pages)	8. CEQA Compliance Form
4. Project Narrative (limit 20 pages)	9. References and Work Product (two pages per project)
5. Project Team (one page for each form and two pages each resume)	10. Contact List
6. Scope of Work	11. Commitment & Support Letters



Project Narrative (Attachment 4)

- Project Narrative form follows proposal Scoring Criteria beginning on page 26 of the Grant Manual.
- Complete the form by providing a detailed description of the proposed project(s) and provide the information requested in each of the following areas:
 1. **Technical Merit and Need**
 2. **Technical Approach**
 3. **Impacts and Benefits for California IOU Ratepayers**
 4. **Team Qualifications, Capabilities and Resources**
 5. **Budget and Cost Effectiveness**
 6. **EPIC Funds Spent in California (Attachment 7- Budget)**
 7. **Ratio of Unloaded Labor Rates to Loaded Labor Rates**
 8. **Match Funding (optional)**
- Provide enough detail so that reviewers will be able to evaluate the proposal against each of the scoring criteria.



Scope of Work (Attachment 6)

- All task 1 items are mandatory; please do not revise
 - **Task 1: General Project Tasks**
 - **Task TBD-1 Evaluation of Project Benefits**
 - **Task TBD-2 Technology/Knowledge, Transfer Activities**
 - **Task TBD-3 Production Readiness Plan-only applicable to agreements that fund the development of products that may be commercialized**
- Task 2 are the technical tasks
 - **Indicate specific tasks in the “Recipient Shall” section (these should be major items)**
 - **“Products” are major documents, plans and reports (tangible items that can be submitted to the Energy Commission)**
 - **“Products” are not equipment and other items that cannot be delivered and stored at the Energy Commission.**



Budget (Attachment 7)

Every Applicant and Major Subcontractor must complete and include the budget forms for its team

- Category Budget (Funds spent in CA)
- Task Budget
- Direct Labor
- Fringe Benefits
- Travel, Equipment, Materials & Misc., and Subcontractors
- Indirect Costs and Profit (Applicant excluded from Profit)
- Rates Summary

**Don't delete sheets or rows;
use the hide/expand function**

The Applicant must submit information on all of the attached budget forms, and this will be deemed the equivalent of a formal Cost Application. Note: these forms have been revised.



Funds Spent in California

- Funds Spent in California compared to Funds Requested.
- Funds spent in CA are:
 - Individuals who pay State income taxes.
 - Business Transactions with businesses located in California.

Percentage of EPIC funds spent in CA (derived from budget attachment "Category Budget")	Percentage of Possible Points (Out of 15 Points)
≥ 60%	20%
≥ 70%	40%
≥ 80%	60%
≥ 90%	80%
=100%	100%



CEQA Compliance Form (Attachment 8)

- This form **MUST** be completed regardless of whether the proposed activity is considered a “project” as defined in Attachment 8.
- Here are some things to consider:
 - Physical aspects of the project (i.e. trenching).
 - Location of project sites.
 - Potential environmental impacts.
 - Discretionary permits.
- All CEQA documents must be completed prior to Energy Commission Business Meeting approval.



Commitment & Support Letters (Attachment 11)

- **If match funding is provided:** Commitment letter to be signed by each representative of the entity or individual that is committing to providing match funding. Letter must: (1) identify the source(s) of the funds; and (2) guarantee the availability of the funds for the project
- **Pilot test site.** Commitment letters to be signed by an authorized representative of each proposed site.
- **Project partner.** Commitment letters for those making contributions other than match funding or test site. Letter must be signed by an authorized representative and: (1) identifies how the partner will contribute to the project; and (2) commits to making the contribution.
- **Support Letter:** All applicants must include at least **one support letter** from a project stakeholder (an entity that will benefit from or be involved with the project) Letter must: (1) describe their interest or involvement; (2) indicates the relevant industry and/or organization; (3) support it intends to provide



Proposal Approval Process

Consists of Two Stages

- Stage 1 – Proposal Screening Section IV.E
- Stage 2 – Proposal Scoring Section IV.F



Proposal Screening

Proposal Screening Process

1. Energy Commission staff screens applications per criteria listed in the Manual section IV.E
2. Criteria is evaluated on a pass/fail basis.
 - Applicants must pass all screening criteria or the applicant will be disqualified.



Reasons for Failing Screening

- Application not signed.
- Applicant does not address an eligible target funding area.
- Applicant submits more than one application for the same project group.
- Applicant fails to request funds within the minimum and maximum range.
- Applicant has not included a statement or otherwise indicated that it will not accept the terms and conditions.
- Applicant does not provide at least one support letter.
- Proposal contains confidential material.



What is the technical scoring scale?

% of Possible Points	Interpretation	Explanation for Percentage Points
0%	Not Responsive	<ul style="list-style-type: none"> The response does not include or fails to address the criteria. The omission(s), flaw(s), or defect(s) are significant and unacceptable.
10-30%	Minimally Responsive	<ul style="list-style-type: none"> The response minimally addresses the criteria. The omission(s), flaw(s), or defect(s) are significant and unacceptable.
40-60%	Inadequate	<ul style="list-style-type: none"> The response addresses the criteria. There are one or more omissions, flaws, or defects or the criteria are addressed in a limited way that results in a low degree of confidence in the proposed solution.
70%	Adequate	<ul style="list-style-type: none"> The response adequately addresses the criteria. Any omission(s), flaw(s), or defect(s) are inconsequential and acceptable.
80%	Good	<ul style="list-style-type: none"> The response fully addresses the requirements being scored with a good degree of confidence in the applicant's response or proposed solution. There are no identified omission(s), flaw(s), or defect(s). Any identified weaknesses are minimal, inconsequential, and acceptable.
90%	Excellent	<ul style="list-style-type: none"> The response fully addresses the criteria with a high degree of confidence in the applicant's response or proposed solution. The applicant offers one or more enhancing features, methods, or approaches that exceed basic expectations.
100%	Exceptional	<ul style="list-style-type: none"> All requirements are addressed with the highest degree of confidence in the applicant's response or proposed solution. The response exceeds the requirements in providing multiple enhancing features, a creative approach, or an exceptional solution.

See Section IV.E in the Grant Manual for table



How will my application 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—equivalent to a score of 49 points in order to be considered for funding, and**
- **A total minimum passing score of 70 out of 100 points is needed for all criteria (1 to 7)**
- Applicants must review the Evaluation and Award Process section of the solicitation and ensure that their application provides a clear and complete response to each scoring criteria in the project narrative.

Scoring Criteria (page 23-29)	Maximum Points
1. Technical Merit and Need	20
2. Technical Approach	20
3. Impacts and Benefits to California IOU Ratepayers	20
4. Team Qualifications, Capabilities & Resources	10
5. Budget Cost Effectiveness	10
6. EPIC Funds Spent in California	15
7. Ratio of Direct Labor and Fringe Benefit Rates to Loaded Labor Rates	5
Total	100
Minimum points to pass	70



Match Funding

- Match Funding is not required for this solicitation.
- If provided, applications will receive additional points during the scoring phase.
- “Match Funds” include:
 - “Cash in hand” funds
 - Equipment
 - Materials
 - Information technology Services
 - Travel
 - Subcontractor costs
 - Contractor/project costs
 - “Advance practice” costs

5 points for this criterion will be awarded based on the percentage of match funds relative to the EPIC funds requested. The remaining 5 points for this criterion will be based on the level of commitment



Grounds for Rejection

The Energy Commission reserves **the right to disqualify** an application for the following reasons:

- Application contains false or misleading statements
- Application is intended to mislead the State in its evaluation
- Application does not comply with the solicitation requirements
- Application contains confidential information
- Applicant is not in compliance with royalty provisions from previous Energy Commission awards
- Applicant has received unsatisfactory evaluations from the Energy Commission or another California state agency
- Applicant has not demonstrated financial capability to complete the project
- Applicant is a business that is not in good standing with the California Secretary of State



Questions and Answers

Please send all GFO related questions in written form to:

Angela Hockaday
Commission Agreement Officer
Angela.Hockaday@energy.ca.gov

**Deadline to submit questions is
5:00 PM PDT, October 13, 2015!**