



CALIFORNIA ENERGY COMMISSION

Pre-Application Workshop

**EPIC Clean Energy Generation
Technology Demonstration and Deployment
Grant Solicitation**

**Demonstrating Clean Energy Solutions That Support California's
Industries, the Environment, and the Electrical Grid**

PON-14-307

Energy Generation Research Office
Energy Research and Development Division
California Energy Commission
November 21, 2014



Agenda

Time	Topic
10:00 am	Welcome <ul style="list-style-type: none">• Housekeeping• Background, Policy Drivers, Solicitation Purpose, Project Groups• Eligible Applicants• Key Dates
10:15 am	Research Project
10:30 am	Application Requirements: <ul style="list-style-type: none">• Formatting and Attachments• Evaluation Process• Grounds for Rejection
10:45 pm	Questions and Answers



Housekeeping

- In case of emergency
- Facilities
- Sign-In Sheet
- Updates on Solicitation Documents and today's presentation can be found at:
<http://www.energy.ca.gov/contracts/epic.html#PON-14-307>



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



Policy Drivers for Energy Generation RD&D

- Laws and Regulations:
 - Assembly Bill 32 (Global Warming Solutions Act)
 - Senate Bill X1-2 (Renewable Portfolio Standard)
 - Assembly Bill 2514 (Energy Storage Systems)
 - Senate Bill 96 (EPIC Funding)
 - Assembly Bill 1613 (Waste Heat and Carbon Emissions Reduction Act)
- Policies/Plans
 - Governor Brown's Clean Energy Jobs Plan
 - Integrated Energy Policy Report



Solicitation Purpose

The purpose of this solicitation is to fund technology demonstration and deployment projects that:

- Demonstrate and deploy community scale generators, including combined heat and power (CHP) and renewable generation technologies that are in the pre-commercial stage; and
- Demonstrate and deploy innovative energy management strategies to facilitate the integration of intermittent renewable energy and the reduction of peak power and energy demands.



Solicitation Project Groups

The Energy Commission expects to fund at least seven demonstration projects, with specific funding for the following groups:

- **Group 1:** Proposals with the demonstration community located entirely within a 2010 census tract with the poorest environmental quality as defined by a CalEnviroScreen 2.0 in the 81 or greater percentile range;
- **Group 2:** All Proposals with a demonstration community not located in regions noted above.



Project Groups

- Each group will be evaluated and scored separately
- Each Application must address only one project group
- Applicants may submit more than one Application as long as each is for a distinct scope of work, with no duplication



Project Groups Funding

- Up to \$21 million available in the following groups.
- Available funding amounts may be modified or moved among the groups.

Project Group	Available Funding	Minimum award amount	Maximum award amount
Group 1: Environmental Burdened Quality Communities	\$9,000,000	\$500,000	\$3,000,000
Group 2: All Other Communities	\$12,000,000	\$500,000	\$3,000,000



Key Dates

Activity	Action Date
✓ Solicitation Release	November 4, 2014
Pre-Application	November 21, 2014
<u>DEADLINE FOR WRITTEN QUESTIONS</u>	<u>November 24, 2014 by 5:00 p.m.</u>
Post Questions and Answers to Website	December 3, 2014
<u>DEADLINE TO SUBMIT APPLICATIONS</u>	<u>January 6, 2015 by 3:00 p.m.</u>
Post Notice of Proposed Award (NOPA)	February 27, 2015
Anticipated Energy Commission Business Meeting Date	June 2015
Anticipated Agreement Start Date	July 2015
Agreement Termination Date	July 2018



Eligible Applicants

- This is an open solicitation for public and private entities with the exception of publicly-owned electric utilities.
- Applicants must accept the EPIC terms and conditions
- 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>
- Applicants must propose a team that has demonstrated the ability to successfully complete similar demonstration and deployment projects.



Project Goals

1. Support the demonstration and deployment of pre-commercial technologies using renewable energy resources or CHP technologies.
2. Encourage the enactment of innovative energy management strategies including, but not limited to, thermal energy storage, electric energy storage, targeted energy efficiency, demand management, and other enabling technologies and strategies.
3. Demonstrate how the deployment of community scale generation and innovative strategies can successfully reduce peak energy demands, reduce peak power demand, and demand fluctuations.
4. Produce technical and economic performance data on community scale generation technology and innovative strategies. This includes documentation of installation issues, operational constraints, operational performance, and impact on utility bills within the community.



Project Goals (cont'd)

5. Identify challenges or barriers to deployment of community scale generation and innovative energy management strategies (such as financing, regulatory challenges, aging infrastructure)
6. Determine the optimal generation resource(s) or combination of resources to target peak power and energy demands.
7. Identify the energy management strategies that provide the highest value with minimal negative impact.
8. It is encouraged that all projects be ready to provide, or capable of providing, utility or CA ISO controlled dispatchable power or demand response to minimize the daily demand variations of the community and compensate for local variations outside the community.



Project Criteria

Communities must:

- Be interconnected to the electricity grid under the same distribution feeder;
- Have a historic yearly demand of no less than 65,000 kWh; and
- Undergo, or have undergone, cost effective energy efficiency measures.

Communities do not need to be electrically contiguous and may have numerous electricity meters.



Project Criteria (cont'd)

Generation deployment(s) must:

- Have a capacity of at least 10 percent of the community's peak load;
- Be either a renewable generation technology (meets RPS eligibility requirements for energy resources), or be CHP; and
- Be an advancement compared to standard commercially available products.

The applicant will need to provide information on the interconnection application, if already in process.



Project Criteria (cont'd)

Innovative Strategies deployed to control demand during peak hours or match the generation profile, and could include:

1. Thermal energy storage;
2. Electrical energy storage;
3. Aggressive energy efficiency targeted to peak electricity use;
4. Demand response; and
5. Orientation of solar panels.



Project Criteria (cont'd)

Technology and strategies must be designed to provide at least one of the following:

- A 10 percent reduction in the difference between the average daily peak power demand and the average daily power demand placed on the grid by the community.
- A 10 percent decrease in the daily average energy demand during peak times, as defined by the utility tariff, placed on the grid by the community.



Application Requirements

- Submit Applications with all attachments in the order specified by the due date and time listed.
- Application documents should meet formatting requirements, page limits, and number of copies specified on page 16.
 - **Seven** hard copies and **one** electronic copy
- Evaluation Consists of Two Parts
 - Part 1 – Proposal Screening (Section E, page 24-25)
 - Part 2 – Proposal Scoring (Section F, pages 27-32)



Application Requirements

Every Applicant must complete and include the following:

- | | |
|----------------------|------------------------------------|
| 1. Application Form | 7. Budget |
| 2. Executive Summary | 8. CEQA Compliance Form |
| 3. Fact Sheet | 9. References and Work Product |
| 4. Project Narrative | 10. Contacts List |
| 5. Project Team | 11. Commitment and Support Letters |
| 6. Scope of Work | |



Application Form (Attachment 1)

- Form provides the Energy Commission with basic information about the Applicant and project.
- Must include all information requested
- Must be signed by an authorized representative of the applicant's organization
- Information provided should be consistent with project budget, narrative, and letters of commitment.



Executive Summary Form (Attachment 2)

- Executive Summary should summarize the information included in the project narrative
- Must include:
 - Project description
 - Project goals and objectives
 - Explanation of how the goals and objectives will be achieved, quantified, and measured
 - Description of the project tasks
 - Overall management of the agreement.
- Limited to **two** pages



Fact Sheet Template (Attachment 3)

- Must present project information in a manner suitable for publication (if funded).
- The fact sheet must follow the template provided, including:
 - A summary of project specifics
 - A description of the issue addressed by the project
 - A project description
 - Anticipated benefits for the State of California
- Limited to **two** pages



Project Narrative (Attachment 4)

- Project Narrative form follows the Application Scoring Criteria (page 27-32)
- Include a detailed description of the proposed project(s) and respond to 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. Funds Spent in California
 7. Ratio of Unloaded Labor Rates to Loaded Labor Rates
 8. Match Funding Above the Minimum (optional)
- Provide sufficient detail so that reviewers will be able to evaluate the proposal against each of the scoring criteria.
- Limited to **twenty** pages



Project Team Form (Attachment 5)

- Must identify all key personnel assigned to the project
 - “Key personnel” are individuals that are critical to the project due to experience, knowledge, and/or capabilities.
- Clearly describe their individual areas of responsibility
 - Limited to **one** page per individual
- Include a resume for each individual
 - Limited to **two** pages for each resume



Scope of Work (Attachment 6)

- Ensure that the problem/Solution Statement and Goals and Objectives are consistent with the Project Narrative
- All tasks in black are mandatory; do not revise
 - Task 1: General Project Tasks
 - Task TBD-1 Data Collection and Reporting
 - Task TBD-2 Evaluation of Project Benefits
 - Task TBD-3 Technology/Knowledge Transfer Activities
 - Task TBD-4 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 documents, plans and reports (tangible items that can be submitted to the CAM)
 - “Products” are not equipment and other items that cannot be delivered and stored at the Energy Commission.



Project Schedule (Attachment 6a)

- Provide meeting and product titles and the due dates
- All of the products must match as shown in the Scope of Work (Attachment 6)



Budget (Attachment 7)

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

- ✓ Task Summary - Att B-1
- ✓ Category Summary - Att B-2
- ✓ Prime Labor Rates - Att B-3
- ✓ Labor Rates for each Subcontractor - Att B-3a-z
- ✓ Prime Non-Labor Rates - Att B-4
- ✓ Non-Labor Rates for each Subcontractor - Att B-4 a-z
- ✓ Direct Operating Expenses – Att B-5
- ✓ Match Funding – Att B-6 (Required)
- ✓ Rates Summary - Att B-7 (for evaluation purposes - info automatically transferred from Attachment B-2)

Don't delete sheets or rows;
use the hide/expand function
The colored cells are
automatically filled with
information from other
pages in the workbook

The Applicant must submit information on **all** of the attached budget forms, and in the format required.



California Environmental Quality Act (CEQA) Compliance Form (Attachment 8)

- The information provided will help facilitate Energy Commission's environmental evaluation of the proposed project under CEQA.
- All sections of the form must be completed.
- Failure to complete CEQA process in a timely manner may result in cancellation of the award.



Reference and Work Product Form (Attachment 9)

- This form contains two sections.
- Section 1: References
 - Provide applicant and subcontractor references as instructed
 - Include three references for Applicant and two for each subcontractor
- Section 2: Work Products
 - Provide a list of up to three past projects detailing technical and business experience of the applicant or team member (two pages maximum per project)
 - Include copies of up to three recent relevant technical publications



Contact List Template (Attachment 10)

- Identifies the names and contact information of the project manager, administrator, and accounting officer.
- Applicant should complete the information in the “Recipient” column shown in blue text
- Energy Commission staff will complete the information in the “California Energy Commission” column



Commitment and Support Letter Form (Attachment 11)

- This form provides guidelines for the submission of letters of support or commitment that are submitted with the application.
 - Commitment letter commits an entity to providing the service or funding described
 - Support letter details an entity or individual's support for the project
- All Applicants are required to supply a commitment for the demonstration and deployment site(s) that is the community.
- All Applicants are required to submit at least one support letter from a project stakeholder.
- Any project partners that will make other contributions to the project must submit a commitment letter.
- Any match funding provided must be supported by a match fund commitment letter.
- Limited to **two pages** per letter, excluding the cover page



References for Calculations (Attachment 12)

- The information on this form provides a basis for applicants to estimate the potential impact associated with successful completion of their proposals. Applicants must provide an estimate of the proposed project's cost and benefits according to the measurement areas listed in this form. All calculations should be supported with a documented explanation and the citation of sources for assumed input values.
- To address uncertainties, applicants are invited to provide a set of hypothetical estimates of key figures of merit such that ultimate performance goals are met.



Energy Consumption Reporting Form (Attachment 13)

- This form is provided for informational purposes. Applications need not contain a completed version of this form, however, this form will need to be completed during the project term.
- The purpose of this form is to collect information on the electricity use of the community before the start of the demonstration and during the project term. This data will be used to evaluate the impact of the community scale generation and innovative strategies implemented in the community.

This form is not a required part of the application



How will my Proposal be Evaluated?

→ Application Screening

Application Screening Process (page 21)

1. Energy Commission staff screens applications per criteria in the solicitation (pages 24-25).
2. Criteria is evaluated on a pass/fail basis.
 - ✓ Applicants must pass all screening criteria or the applicant will be disqualified
 - ✓ Applicants must review the Evaluation and Award Process section of the solicitation and ensure that the Project Narrative provides a clear and complete response to each screening criteria.

Some Reasons for Failing Screening

- ✓ Application not submitted by the specified due date and time
- ✓ Applicant did not address one of the eligible project groups
- ✓ Requested funding is outside of the specified minimum/maximum range
- ✓ Project completion date beyond the specified agreement end date
- ✓ Application contains confidential material
- ✓ Application does not include one or more support letters, as described in Attachment 11



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 defects()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.



How will my application be evaluated?

- Evaluation Committee applies the scoring scale to the scoring criteria
- For criteria 1 to 4—a minimum score of 49.00 is required for an Application 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 27-32)	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. 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 Above 20%	5



Technical Merit and Need (Criterion 1)

- Describes the goals, objectives, technological or scientific knowledge advancement, and innovation in proposed project.
 - Are all project goals addressed?
- Lead to technological advancement and breakthroughs that overcome barriers to achieving the state's energy goals.
- Summarizes and explains how the project will advance, supplement, and/or replace relevant technology and/or scientific knowledge, technology.
- Demonstrates that all the project criteria, are met, or are planned to be met by the project during the project term.



Technical Merit and Need (Criterion 1) (cont'd)

- Justifies need for EPIC funding, explains why work is not adequately supported by competitive or regulated markets.
- Discusses how proposed work is technically feasible and achievable.
 - Describes the electrical layout of the community.
 - Identifies progress and the timeline for the interconnection process.
- Provides a clear and plausible measurement and verification plan.



Technical Approach (Criterion 2)

- Describes the technique, approach, and methods to be used in providing performing the work described in the Scope of Work. Highlights any outstanding features.
- 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.



Impacts and Benefits for California IOU Ratepayers (Criterion 3)

- Explains benefits to California Investor-Owned Utility (IOU) ratepayers with respect to EPIC goals: greater reliability, lower costs, and/or increased safety.
- Provides **quantitative** estimates of potential benefits for IOU ratepayers.
- States timeframe, assumptions, & calculations for estimated benefits & explains reasonableness.
- Identifies CA impacted market segments & underlying assumptions.
- Discusses **qualitative** or intangible benefits to IOU ratepayers, including timeframe & assumptions.
- Provides cost-benefit analysis - compares project costs to anticipated benefits & includes how costs & benefits will be calculated & quantified, & identifies assumptions (*Attachment 12.*)



Team Qualifications, Capabilities, and Resources (Criterion 4)

- Organizational structure of applicant & project team & chart.
- Identifies key team members (*Attachment 5*).
- Summarizes team members qualifications, experience, capabilities, & credentials (*Attachment 5*).
- Explains management & coordination of tasks, & how project manager's experience supports management & coordination .
- Describes facilities, infrastructure & resources available to team.
- Describes team's history of completing projects (e.g., RD&D projects) & commercializing &/or deploying results/products.
- Identifies projects that resulted in market-ready technology (*Attachment 9*).
- References, within past three years (*Attachment 9*).



Team Qualifications, Capabilities, and Resources (Criterion 4) (cont'd)

- Identifies & explains collaborations with utilities, industries, or others.
- Demonstrates financial ability to complete project, as indicated in responses to the following questions:
 - Has your organization been involved in a lawsuit or government investigation in past ten years?
 - If yes, what was the final disposition of the case, including any settlement/judgment amount?
 - Does your organization have overdue taxes?
 - Has your organization ever filed for or does it plan to file for bankruptcy?
 - Has any party that entered into an agreement with your organization terminated it, and if so for what reason?
 - For Energy Commission executed agreements listed in application within past five years, has organization failed to provide final report by due date?



Team Qualifications, Capabilities, and Resources (Criterion 4) (cont'd)

- Support or commitment letters (for match funding, test sites, demonstration/deployment sites, or project partners) indicate strong support or commitment & value associated with match funding amounts is supported & reasonable.
- Describe progress in CEQA process.



Budget and Cost-Effectiveness (Criterion 5)

- Justifies the reasonableness of the requested funds relative to the project goals, objectives, and tasks.
- Justifies the reasonableness of costs for direct labor, non-labor (e.g., indirect overhead, general and administrative costs, and subcontractor profit), and operating expenses by task.
- Explains why hours proposed for personnel & subcontractors are reasonable to accomplish Scope of Work activities (Attachment 6).
- Explains how the applicant will maximize funds for technical tasks & minimize expenditure of funds for program administration & overhead.



EPIC Funds Spent in California (Criterion 6)

- Projects that spend EPIC funds in California will receive 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 B-4 budget attachments (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 (derived from budget attachment B-2)	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.”



Ratio of Direct Labor and Fringe Benefit Rates to Loaded Labor Rates (Criterion 7)

- The score for this criterion will derive from the Rates Summary worksheet (Tab B-7) in the budget forms, which compares the weighted direct labor and fringe benefits rate to the weighted loaded rate. This ratio, as a percentage, is multiplied by the possible points for this criterion.



Project Match Funds (Criterion 8)

- Match funding of **20%** of requested EPIC funds is required. Scoring criteria and points only apply to match funding commitments **above minimum required**.
- Points applied only for those that achieve a minimum score of 70.
- To qualify for consideration, match funding contributors must submit match funding commitment letters & follow Attachment 11 requirements.



Project Match Funds (Criterion 8) (cont'd)

- 3 points for this criterion will be awarded based on the percentage of match funds above the minimum required relative to the EPIC funds requested. This ratio will be multiplied by 3 to yield the points and rounded to the nearest whole number.
- The remaining 2 points for this criterion will be based on the level of commitment, dollar value justification, and funding replacement strategy



Grounds for Rejection

- An application may be rejected by the Energy Commission for the following reasons:
 - ✓ Application contains false or misleading statements
 - ✓ Application is intended to mislead the State in its evaluation
 - ✓ The application does not comply with the solicitation requirements
 - ✓ The 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
 - ✓ The application is not submitted in the format specified



Key Dates

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Other Information

- **Updates on Solicitation Documents and today's presentation:**
<http://www.energy.ca.gov/contracts/epic.html#PON-14-307>
- **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 PON related questions in written form to:

Cory Irish
Commission Agreement Officer
Cory.Irish@energy.ca.gov

Please add “PON-14-307 Question” in Subject Line

**Deadline to submit questions is
5:00 PM PDT, November 24, 2014!**