Pre-Application Workshop

Advancing Water and Energy Efficient Strategies and Technologies in California

GFO-15-317

Kevin Mori
California Energy Commission
Energy Efficiency Research Office
December 4, 2015
## Agenda

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
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<tr>
<td>10:00 a.m.</td>
<td>Welcome and Introductions</td>
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<td></td>
<td>• Housekeeping</td>
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<td>• Commitment to Diversity</td>
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<td></td>
<td>• Background</td>
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<td>• Solicitation Purpose, Goals, Funding</td>
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<td>• Eligible Applicants</td>
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<td>• Key Dates</td>
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<tr>
<td>10:15 a.m.</td>
<td>• Targeted Areas</td>
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<td>• Attachment Overview</td>
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<td>• Match Funding</td>
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<td>• Proposal Approval Process</td>
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<tr>
<td>10:30 a.m.</td>
<td>Questions and Answers</td>
</tr>
<tr>
<td>11:30 a.m.</td>
<td>Meeting Adjourn</td>
</tr>
</tbody>
</table>
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:

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

- AB 32 (Global Warming Solutions Act of 2006)
- Integrated Energy Policy Report (Biennial)
- Executive Order B-29-15 (Drought technologies)
- Executive Order B-30-15 (Greenhouse gas emission)
- CPUC’s Energy Efficiency Strategic Plan
- AB 758 Comprehensive Energy Efficiency Program for Existing Buildings
Purpose of Solicitation

• Fund pilot tests and full scale demonstrations of innovative pre-commercial technologies and strategies that will result in both water and energy savings

• Develop innovative and replicable approaches for accelerating the deployment of drought resilient strategies that minimize need for new water related energy infrastructure

See Attachment 13 for more info
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.

Water-Energy Nexus: Water-Energy Nexus means the reduction of energy usage in the delivery and treatment of water.

Drought Resilient Strategy: A strategy created using advanced planning and permitting to facilitate water-related energy savings.
Eligible Applicants

- Open to public and private entities and individuals with exception of publically-owned electric 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

<table>
<thead>
<tr>
<th>Project Group</th>
<th>Available funding</th>
<th>Minimum award amount</th>
<th>Maximum award amount</th>
<th>Minimum match funding amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1:</td>
<td>$4 million</td>
<td></td>
<td>$1 million</td>
<td>$0</td>
</tr>
<tr>
<td>Group 2:</td>
<td>$8 million</td>
<td>$500,000</td>
<td>$2 million</td>
<td>20% of the Energy Commission requested amount</td>
</tr>
<tr>
<td>Group 3A:</td>
<td>$1 million</td>
<td></td>
<td>$1 million</td>
<td>$0</td>
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<tr>
<td>Group 3B:</td>
<td>$1 million</td>
<td></td>
<td>$1 million</td>
<td>$0</td>
</tr>
<tr>
<td>Group 3C:</td>
<td>$1 million</td>
<td></td>
<td>$1 million</td>
<td>$0</td>
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</table>
Group 1: Applied Research and Development: Advancing Energy and Water Savings Technologies and Approaches

All projects must
• Identify and pilot innovative technologies, strategies and/or approaches.
• Locate pilot test sites in IOU service territories.
• Evaluate the performance interactions of energy, behavior, and market impacts with at least 12 months of measurement and verification.
• Consult with multiple market players, such as building/land owners, developers, and others to understand industry challenges and needs to technology or strategy implementation.
• Address consumer behavior and how to ensure sustainable, long term actual energy and water savings.

Potential projects can include the following:
• Advanced on-site energy efficient water recycling or reuse systems or methods.
• Innovative water treatment techniques for re-use.
• Advanced hybrid air/water cooling systems.
• Hot water point of use, on-demand and recirculation systems

See Grant Manual Section II.B.2 for more info
Group 2: Technology Demonstration and Deployment: Large Scale Demonstrations to Achieve Energy and Water Savings

All projects must

- Demonstrate pre-commercial technologies beyond pilot-scale testing and be ready for large-scale/community-wide deployment.
- Evaluate the performance interactions between energy, water behavior and market impacts associated with the technology.
- Investigate and document the benefits and barriers associated with large scale deployment.
- Investigate the role of end-user behavior, and how to ensure sustainable, long term actual energy and water savings in the demonstration facilities.
- Include ongoing monitoring and verification of energy and water savings and benefits and the persistence and sustainability post-EPIC funding.
- Identify the critical market players, including regulatory agencies, water and electric utilities, and the role in commercial deployment of the technology.

See Grant Manual Section II.B.2 for more info
Group 3: Market Facilitation: Planning and Permitting Drought Resilient Strategies

For purposes of this solicitation, Drought Resilient Strategies are strategies that:

• Provide water-related energy savings by advancing planning and permitting to facilitate increased use of non-potable water sources.

• Inform water energy technology deployment and alignment with state water-energy regulatory processes, such as the California Public Utilities Commission’s (CPUC) water-energy nexus process, the Energy Commission Title 24 building standards process, and the Energy Commission Title 20 appliance standards process.

• Support water supply reliability and drought resiliency by making use of advanced water-energy conservation, water-energy saving, and water reuse technologies.

• Align with water-related energy and environmental policy goals identified in Governor Brown’s Executive Order B-29-15 for the drought.

See Grant Manual Section II.B.2 for more info
<table>
<thead>
<tr>
<th>Activity</th>
<th>Action Date</th>
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<tbody>
<tr>
<td>✓ Solicitation Release</td>
<td>November 20, 2015</td>
</tr>
<tr>
<td>Pre-Application Workshop</td>
<td>December 4, 2015</td>
</tr>
<tr>
<td><strong>DEADLINE FOR WRITTEN QUESTIONS</strong></td>
<td>December 7, 2015 5 p.m.</td>
</tr>
<tr>
<td>Anticipated Post Answers to Questions to Website</td>
<td>Week of December 21, 2015</td>
</tr>
<tr>
<td><strong>DEADLINE TO SUBMIT PROPOSALS</strong></td>
<td>January 19, 2016 at 3:00 pm</td>
</tr>
<tr>
<td>Anticipated Post Notice of Proposed Award</td>
<td>March 2016</td>
</tr>
<tr>
<td>Anticipated Energy Commission Business Meeting Date</td>
<td>June 2016</td>
</tr>
<tr>
<td>Anticipated Agreement Start Date</td>
<td>July 2016</td>
</tr>
<tr>
<td>Agreement Termination Date – Group 2</td>
<td>December 2020</td>
</tr>
<tr>
<td>Agreement Termination Date – Group 1 &amp; 3</td>
<td>December 2021</td>
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## Attachment Overview

Every Applicant must complete and include the following Attachments:

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>1. Application Form</strong></td>
<td><strong>6A. Project Schedule</strong></td>
</tr>
<tr>
<td><strong>2. Executive Summary (limit 2 pages)</strong></td>
<td><strong>7. Budget</strong></td>
</tr>
<tr>
<td><strong>3. Fact Sheet (limit two pages)</strong></td>
<td><strong>8. CEQA Compliance Form</strong></td>
</tr>
<tr>
<td><strong>4. Project Narrative (limit 20 pages)</strong></td>
<td><strong>9. References and Work Product (two pages per project)</strong></td>
</tr>
<tr>
<td><strong>5. Project Team (one page for each form and two pages each resume)</strong></td>
<td><strong>10. Contact List</strong></td>
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Project Narrative (Attachment 4)

- Project Narrative form follows proposal Scoring Criteria as defined in Section IV 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
- 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 of the following tasks 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)
- Direct Labor
- Fringe Benefits
- Travel, Equipment, Materials & Misc., and Subcontractors
- Indirect Costs and Profit (Applicant excluded from Profit)

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.

<table>
<thead>
<tr>
<th>Percentage of EPIC funds spent in CA (derived from budget attachment “Category Budget”)</th>
<th>Percentage of Possible Points (Out of 15 Points)</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥ 60%</td>
<td>20%</td>
</tr>
<tr>
<td>≥ 70%</td>
<td>40%</td>
</tr>
<tr>
<td>≥ 80%</td>
<td>60%</td>
</tr>
<tr>
<td>≥ 90%</td>
<td>80%</td>
</tr>
<tr>
<td>=100%</td>
<td>100%</td>
</tr>
</tbody>
</table>
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 within sufficient time for the Energy Commission to meet its encumbrance deadline of June 31, 2016.
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(s)**. 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.

See Section IV.E in the Grant Manual
Reasons for Failing Screening

- Application not signed.
- Applicant does not address an eligible target funding area.
- Applicant submits duplicate applications for the same project.
- 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?

<table>
<thead>
<tr>
<th>% of Possible Points</th>
<th>Interpretation</th>
<th>Explanation for Percentage Points</th>
</tr>
</thead>
</table>
| 0%                   | Not Responsive       | • 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 | • The response minimally addresses the criteria.  
                      |                                                                                                         | • The omission(s), flaw(s), or defect(s) are significant and unacceptable.                     |
| 40-60%               | Inadequate           | • 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             | • The response adequately addresses the criteria.  
                      |                                                                                                         | • Any omission(s), flaw(s), or defect(s) are inconsequential and acceptable.                   |
| 80%                  | Good                 | • 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            | • 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          | • 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.

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

- Groups 1, 3A, 3B, 3C:
  - Match Funding is **not required** for this solicitation. Additional points awarded for match funds

- Group 2:
  - Match Funding is **required** for this solicitation. Additional points awarded for match funds exceeded the minimum requirement

- “Match Funds” include:
  - “Cash in hand” funds
  - Equipment
  - Materials
  - Information technology Services
  - Travel
  - Subcontractor costs
  - Contractor/project costs
  - “Advance practice” costs

The remaining **5 points for this criterion will be based on the level of commitment**

See Section I.E.2 in the Grant Manual for more information
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
- Applicant fails to meet CEQA compliance within sufficient time for the Energy Commission to meet the encumbrance deadline.

See Section IV.C in the Grant Manual
Find Partners via LinkedIn

The Energy Commission has created a user-driven LinkedIn group page to help potential applicants **connect, collaborate** and **partner** on proposals for funding opportunities.

• Participants can join the “California Energy Commission Networking Hub” by:
  • Searching for the “California Energy Commission Networking Hub” group; or
  • Entering this link into your browser: (bit.ly/CalEnergyNetwork)

• Once there, find and join the desired solicitation subgroup.
Other Information

- Solicitation documents and today’s presentation: http://www.energy.ca.gov/contracts/epic.html

- 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 GFO related questions in written form to:

Phil Dyer  
Commission Agreement Officer  
Phil.Dyer@energy.ca.gov

Deadline to submit questions is  
5:00 PM PDT, December 7, 2015!