

Pre-proposal Workshop



California Energy Commission (CEC) Public Interest Energy Research (PIER) Renewable Energy and Advanced Generation Programs

Hybrid Generation and Fuel-flexible Distributed Generation/Combined Heat and Power/Combined Cooling, Heat and Power (DG/CHP/CCHP) Systems

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January 17, 2012

Presentation Outline



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Administrative Items



- In case of an emergency
- Local facilities - restrooms, snack bar
- Sign-in sheet
- Muting of web attendees during workshop presentation
 - WebEx participants will be able to post comments or questions on-line and participate during the discussion
- Workshop will be recorded and will be made available at the CEC Website
- Question & Answer protocol
 - Questions may be asked after staff presentation
 - When speaking into a microphone identify yourself, speak succinctly, clearly and loud enough so that those attending by WebEx can hear your question(s)

Solicitation - Documents



Documents for this Solicitation are found at:
<http://www.energy.ca.gov/contracts/index.html>

Also, check website for updates, Workshop recording, and answers to questions asked.

Pre-Solicitation Workshop Purpose



- 1. Disseminate information on the DG/CHP/CCHP Solicitation released on January 6, 2012 and answer any questions that may arise related to Solicitation requirements**
- 2. Inform potential applicants of Solicitation objectives and technical emphasis that address State policies and PIER Program goals and objectives**
- 3. Seek innovative solutions from potential applicants on the problems and issues defined by this Solicitation**

CEC Energy Policies



1. **SB 1250**
 - **Advanced electricity generation technologies that exceed standards to increase reductions in GHG emissions from electricity generation, and that benefit electric utility customers**
 - **Advanced electricity technologies that reduce/eliminate consumption of water or other finite resources, increase use of renewable resources**
2. **Assembly Bill 32, Global Warming Solutions Act of 2006**
3. **AB 1613 Waste Heat and Carbon Emissions Reduction Act**
4. **Governor Brown's Clean Energy Jobs Plan**
 - **6,500 MW of additional CHP capacity within 20 years**
5. **Senate Bill X1-2, requires that all publicly owned utilities (POUs), investor-owned utilities (IOUs), electricity service providers, and community choice aggregators adopt the new RPS goals of:**
 - **20 % by 2013**
 - **25 % by 2016**
 - **33 % by 2020**

PIER Program - Background



1. PIER is a ratepayer funded program started in 1996 and is administered by the CEC
2. Purpose: Fund “public interest” energy RD&D efforts not adequately provided by competitive and regulated markets
3. 2010/2011 PIER appropriation
 - \$62.5 million from investor-owned electric utility (IOU) ratepayers
 - \$24 million from natural gas ratepayers

Solicitation - Purpose



The intent of this competitive Solicitation is to improve the performance and advance the market penetration of DG/CHP/CCHP systems in California with the following broad objectives:

1. Increasing efficiency
2. Reducing cost
3. Reducing emissions (including greenhouse gases)
4. Increasing use of renewable and alternative fuels
5. Improving the reliability, load factors, and operational flexibility of integrated systems used in residential, commercial, and industrial applications for electricity generation, space conditioning, and process heating and/or cooling; and,
6. Integrating emerging multiple DG/CHP/CCHP technologies, including energy storage and fuel flexibility, in diversified applications

Solicitation - Eligibility



1. Most organizations are eligible to apply for funding
2. Public Resources Code Section 25620.5 (h&i), requires the CEC to give priority to “California-based Entities” (CBEs) when making awards. (See Attachments G and H of Solicitation)
3. A CBE is a corporation or other business entity organized for the transaction of business that:
 - Either has its headquarters or an office in California
 - Substantially manufactures the product or performs the research within California
4. The proposal must include a CBE as either the prime contractor/recipient or a subcontractor

Solicitation - Eligibility



5. Demonstration projects must be located in an investor owned utility (IOU) service areas:
 - Pacific Gas and Electric Company
 - Southern California Edison
 - San Diego Gas and Electric Company
 - Southern California Gas Company
6. Researchers can be located in public owned utilities (POUs) service areas
7. All applicants and subcontractors must agree to use only the PIER Grant Terms and Conditions
8. California business entities as well as non-California business entities conducting intrastate business in California are required to register and be in good standing with the California Secretary of State [www.sos.ca.gov]

Solicitation - Eligibility



10. Studies, modeling and tools, and data collection must identify California ratepayer benefits
11. Applicants must present a team with demonstrated capabilities
12. Proposals submitted under this Solicitation may request funding only for new projects
13. Funds may not be used to augment activities currently funded under existing CEC Agreements
14. All work must end by March 31, 2015, and all invoices must be submitted before June 30, 2015

Solicitation - Eligibility



15. Examples of projects topics that are eligible for funding, may include, but not limited to:

- Evaluating, developing, or demonstrating hybrid combined cycle system, such as fuel cell-gas turbine hybrid system
- Cost-competitive approaches for integrating renewable resources for hybrid cycle application
- Demonstrating the viability of integrating renewable resources into combined cycle plant operation
- Determining the appropriate range of fuel flexibility for commercial and industrial CHP/CCHP systems, including evaluation of different alternative fuel options

Solicitation - Eligibility



15. Examples of projects topics that are eligible....

- Improving performance and reducing cost of fuel-flexible commercial CHP system powered by key DG technologies (e.g., fuel cells, microturbines, Stirling engines, reciprocating engines)
- Demonstrating and improving technical viability of fuel-flexible advanced simple cycle for peaking
- Adapting CHP/CCHP systems to use otherwise wasted fuels and flare gases as system fuels
- Improving physical, thermal, and electrical integration among multiple DG/CHP/CCHP system and components
- Improving operational and fuel flexibility of DG/CHP/CCHP systems

Solicitation - Definitions



- 1. Distributed generation - localized electricity generation or storage systems located at or very near the location where the energy is used. These systems may be grid-connected or stand-alone, and connected at the distribution level.**
- 2. Hybrid generation - seamlessly integrated and managed combinations of two or more energy conversion technologies**
- 3. Fuel flexible systems - technologies that have the ability to use two or more types of fuels, including renewable and alternative fuels**

Solicitation - PIER Funding



1. Currently \$5 million is available for grant funding
2. CEC reserves the right to alter the amount of funding award to a selected project, or to make no awards
3. Maximum award for any one proposal is \$2 million

Solicitation – Applicant Matching Funds



1. Match funding of at least 25 percent of the requested PIER funding is required
2. Proposals with higher match funding are desirable
3. Match funding may be cash, in-kind services, labor hours, equipment, facilities, materials, etc.
4. Value of the match funding contributions may be based on documented market/book values and is depreciated using standard accounting principles
5. Standard office supplies, property or equipment that are part of normal business activities do not qualify as match funding items

Solicitation – Applicant Matching Funds



6. Prior investments in the research area do not qualify as match funds
7. Funding from other CEC agreements do not qualify as matching funds
8. Applicants should include letters of commitment for each source of match funds
9. The CEC reserves the right to approve or disapprove applicant matching funds contributions

Solicitation - Project Selection



1. CEC Program staff will conduct an initial pass/fail screening (See Attachment G)
2. Qualifying proposals will then be reviewed on a confidential basis by a technical scoring committee
3. California-based Entities (CBEs) will be given preference (See Attachment G and H)
4. A minimum score of 102 (70%) out of maximum score of 145 is required to be eligible for funding consideration
5. Proposals will be ranked starting with the highest ranked project

Solicitation - Award Process



1. List of project(s) recommended for funding will be presented to the Lead Commissioner for approval
2. A Notice of Proposed Awards (NOPA) will be posted on the CEC's website
3. For all awards, the selected Recipient(s) and CEC Project Manager shall meet and reach an accord on a schedule, budgets, work statement including project tasks, products, critical project reviews, etc. If a funding agreement cannot be successfully executed, the CEC reserves the right to cancel the pending award and fund the next highest ranked eligible proposal.

Solicitation - Award Process



4. Non-profit organizations must provide an authorizing resolution approved by their governing authority
5. A funding agreement will be written, presented at a Business Meeting for approval, and sent to the Recipient(s) for review, approval and signature
6. Recipient may begin the project only after the funding agreement is executed
7. All work must be completed by March 31, 2015, and all invoices must be submitted before June 30, 2015. No time extensions will be granted.

Solicitation – Proposal Requirements



Proposals must contain the following elements. Failure to include these elements WILL result in a proposal receiving a lower score and/or MAY be rejected.

- Grant Proposal Cover Page and Instructions - Attachment A
- Executive Summary
- Project Narrative
- Statement of Work - Attachment B
- Statement of Work Instructions - Attachment C
- Budget Forms - Attachment D
- Schedule of Products and Due Dates and Instructions - Attachment E
- Examples of Previously Funded Projects - Attachment F
- **Proposal Screening and Scoring Criteria - Attachment G**
- California-Based Entities - Attachment H
- Prevailing Wage Special Condition Template - Attachment I
- Prevailing Wage Compliance Certificate - Attachment J
- Prevailing Wage Compliance Questions and Answers - Attachment K
- Content and Format of Progress Reports - Attachment L
- Resolution Requirements - Attachment M
- PIER Terms and Conditions - Attachment N

Proposal Screening and Scoring Criteria - Attachment G



Section 1: Initial Proposal Pass/Fail Screening Criteria

1. Grant Proposal Cover Page and Instructions
 - Attachment A is complete and signed by an authorized representative
2. California-Based Entities (CBE)
 - The proposal includes a CBE as either the Recipient or a subcontractor
 - The budget reflects that CBEs will receive at least 60% of PIER funds
 - A CBE Form (Attachment H) is provided for each CBE
3. Economic Investment in California
 - The budget provides evidence that the CBE (or one or more CBEs collectively) will spend at least 60% of PIER funds in California
 - The budget documents how PIER funds will be spent in California
4. Project Location for Demonstration Projects
 - The proposed demonstration project is located in an IOU service area

Section 1: Initial Proposal Pass/Fail Screening Criteria



5. Project Completion Date

- All work must be completed by March 31, 2015, and all invoices must be submitted before June 30, 2015. No time extensions will be granted.

6. Project Narrative

- Describes how the proposed project advances the science, technology, and market penetration in California of grid-connected DG, CHP and/or CCHP systems
- Addresses technical and/or economic challenges to the development and market deployment of integrated multiple DG/CHP/CCHP technology, energy storage and/or fuel flexible systems, in diverse market applications; and,
- Explains how the proposed project will benefit California electricity and/or natural gas ratepayers

Section 1: Initial Proposal Pass/Fail Screening Criteria



7. Resumes and Background

- Resumes of the principal investigator and research partners must emphasize experience related to activities to be performed in the proposed project

8. Project Budget and Cost Effectiveness

- The applicant must complete and include the Budget Forms in Attachment D
- The Budget provides for match funding of at least 25 percent
- The Budget information includes the match funding source(s)
- The Budget identifies average loaded rates

9. Schedule of Products and Due Dates

- Applicants must include the Schedule of Products and Due Dates template in Attachment E

Section 1: Initial Proposal Pass/Fail Screening Criteria



10. Acceptance of Terms and Conditions

- The applicant affirms the statement in Attachment A that it will abide by the PIER Grant Terms and Conditions

11. Letters of Commitment

- The proposal includes a letter of commitment from each source of matching funds
- If the proposal involves a demonstration, the proposal should provide a letter of support from a project host site
- The proposal includes a letter of commitment from each project partner

12. Confidential Information

- The proposal does not contain confidential information

13. False or Misleading Information

- The proposal does not contain intentionally false or misleading information

Proposal Screening and Scoring Criteria – Attachment G



Section 2: Scoring Criteria

- Each proposal will be evaluated on a 10 point scale for each criterion:
 - 0 points - Not responsive
 - 1 – 2 points - Response is minimal
 - 3 – 4 points - Responds only marginally to relevant considerations
 - 5 – 6 points - Responds satisfactorily to most relevant considerations
 - 7 – 8 points - Responds satisfactorily to all relevant considerations
 - 9 points - Responds completely, accurately, and convincingly to all relevant considerations
 - 10 points - Response is complete, specific and superior, both quantitatively and qualitatively
- A minimum score of 102 (70%) out of 145 is required to pass the technical evaluation

Section 2. Scoring Criteria



Technical Evaluation Criteria:

Points:

1. Problem Statement and Status of Technology	20
2. Technical Description and Approach	30
3. Cost and Technical Performance Goals	15
4. Scope of Work, Products, and Due Dates	10
5. California Ratepayer Benefits	15
6. Qualifications of Project Manager and Project Team	5
7. Market Performance Goals and Commercialization Path	15
8. Project Budget and Cost Effectiveness	<u>35</u>
	145

8. Project Budget and Cost Effectiveness - Max. Points: 35



- Part 1: Project Budget - 5 points
- Part 2: Average Loaded Hourly Rates - 10 points
Maximize PIER funds spent for research, development and demonstration projects and minimizes expenditure of PIER funds for administration and overhead costs
- Part 3: Economic Investment in California - 20 points
Maximize economic investment in California by giving preference to CBEs that spend PIER funds in California

8. Project Budget and Cost Effectiveness



Part 1: Project Budget - 5 points

- The total project budget is consistent with the work to be performed and the level of expertise required
- The PIER funding requested is appropriate and consistent with the expected level of public benefit
- The Budget Forms are properly completed
- Private benefits of a commercial product are described and quantified
- The match funding provided meets the minimum requirement and is appropriate and consistent with the expected level of private benefits
- The sources of match funding are described and identified as in-kind or cash
- The Budget describes the anticipated and necessary interconnection costs, if any, and identifies how this cost will be paid
- Budget identifies cost share by host site and local utility, if any

8. Project Budget and Cost Effectiveness



Part 2: Average Loaded Rates - 10 Points

The Average Loaded Rates (ALR) must be identified in the Budget. Proposals will be scored based on the following formula:

Points Scored = 13 - (0.06 x ALR), where ALR = Average Loaded Rates in \$/hour

- If ALR = \$50/hr or less, score = 10 points
- If ALR = \$51 - 68/hr, score = 9 points
- If ALR = \$69 - 86/hr, score = 8 points
- If ALR = \$87 - 104/hr, score = 7 points
- If ALR = \$105 - 122/hr, score = 6 points
- If ALR = \$123 - 140/hr, score = 5 points
- If ALR = \$141 - 158/hr, score = 4 points
- If ALR = \$159 - 176/hr, score = 3 points
- If ALR = \$177 - 199/hr, score = 2 points
- If ALR = \$200/hr or more, score = 1 point

8. Project Budget and Cost Effectiveness



Part 3. Economic Investment in California - 20 Points

1. The proposal must include a CBE as either the prime contractor/recipient or a subcontractor
2. At a minimum, 60% of PIER funds will be expended in California by the CBE. The 60% applies only to PIER funds and does not include the applicant's matching funds
3. An applicant must meet the stated requirements to receive preference points
4. A CBE is a corporation or other business entity organized for the transaction of business that:
 - Either has its headquarters or an office in California; and,
 - Substantially manufactures the product or substantially performs the research within California that is the subject of the award

Part 3. Economic Investment in California



Scoring for this criterion will be implemented as follows:

- 60% to 64% of PIER funds spent in CA, 1 out of 10 possible points
- 65% to 68% of PIER funds spent in CA, 2 out of 10 possible points
- 69% to 72% of PIER funds spent in CA, 3 out of 10 possible points
- 73% to 76% of PIER funds spent in CA, 4 out of 10 possible points
- 77% to 80% of PIER funds spent in CA, 5 out of 10 possible points
- 81% to 84% of PIER funds spent in CA, 6 out of 10 possible points
- 85% to 88% of PIER funds spent in CA, 7 out of 10 possible points
- 89% to 92% of PIER funds spent in CA, 8 out of 10 possible points
- 93% to 96% of PIER funds spent in CA, 9 out of 10 possible points
- 97% to 100% of PIER funds spent in CA, 10 out of 10 possible points

Solicitation - Grounds for Rejection



Proposals WILL be rejected if...

1. The proposal is not received by stated due date and time
2. The proposal contains confidential information
3. The applicant proposes a project that has been or already being funded under a CEC funding agreement
4. The proposal contains any intentionally false or misleading information
5. The proposal only addresses regulatory requirements that should be borne by the permit applicant
6. Lack of signatures or improper signatures on the Grant Proposal Cover Page (Attachment A)

Solicitation - Grounds for Rejection



Proposals WILL be rejected if...

7. Amount of non-PIER match funding is less than 25% of the PIER funds requested
8. The proposed project is not scheduled for completion by **March 31, 2015**, and all funds must be invoiced by June 30, 2015
9. The proposed budget contains unloaded rates but does not identify average loaded rates
10. Demonstration projects are not located in a IOU service area
11. The proposal does not include a CBE as either the prime contractor/recipient or a subcontractor
12. The proposal budget does not disclose which CBE(s) will receive at least 60% of PIER funds

Solicitation - Grounds for Rejection



Proposals **MAY** be rejected if...

1. Proposal is missing sections listed under "16. Proposal Requirements"
2. Proposal does not adhere to the guidelines listed under "17. Proposal Guidelines"
3. An applicant submits more than one proposal for the same project or for minor variations of the same project
4. A member of the applicant's project team has a poor performance record for any previous PIER grant agreement or contract

Solicitation - Schedule



Release of Program Opportunity Notice	January 6, 2012
Proposal Workshop (via in person participation, teleconference, WebEx)	January 17, 2012
Deadline to Submit Questions	January 20, 2012
Post Questions and Answers to Website	January 27, 2012
Deadline to Submit Proposals	February 29, 2012 4:00 P.M.
Interview Applicants (if necessary)	March 14, 2012
Post Notice of Proposed Awards (NOPA)	April 12 2012 – Estimated
Approval of Awards at CEC Business Meetings	April 2012 – Estimated

Solicitation - Proposal Submittal



One (1) original and six (6) copies of the grant application and a CD containing all the documents must be received no later than:

February 29, 2012 by 4:00 p.m.

Mail or deliver completed grant applications to:

California Energy Commission
Grants and Loans Office
Attn: DG/CHP/CCHP Program
1516 Ninth Street, MS-1
Sacramento, CA 95814

Commission Staff Contacts



Please send all PON related questions:

[Kevyn Piper](#)

[Grant Officer](#)

kpiper@energy.state.ca.us

**California Energy Commission
Grants and Loans Office
Attn: DG/CHP/CCHP Program
1516 Ninth Street, MS-1
Sacramento, CA 95814**

