



Workshop

American Recovery and Reinvestment Act of 2009 Cost Share

PIER Energy Research, Development and
Demonstration

*Hearing Room B
California Energy Commission
June 26, 2009
1 pm*

Agenda



1. Introduction and workshop logistics (5 min)
2. Welcome and Overview of the ARRA Cost Share Solicitation (15 min)
3. Details of Solicitation (30 min)
 - Funding information; Eligible Applicants; Eligible Projects; Selection and Award Process; Schedule and deadlines
4. Session/Project Specific Details (30 min)
 - Examples of project areas; Pre-application requirements; Final application scoring criteria; CBE Preference Points
5. Administrative requirements (20 min)
6. Questions & Answers (20 min)



Welcome and Overview of ARRA Cost Share Solicitation

Sandra Fromm



Purpose of the ARRA Cost Share Solicitation

Purpose of this Solicitation



- This is a competitive solicitation, limited to applicants who are submitting applications to energy research and development-related ARRA funding opportunity announcement(s)
- Identify and offer eligible applicants funding to be used as cost share for their application to the federal government.



To be eligible for funding, applicants must fulfill all of these requirements:

- Seek and obtain an award through one of the ARRA funding opportunity announcements identified in this solicitation.
- Address the pre-application requirements and final application evaluation criteria.
- Obtain a minimum passing score..
- Applications are consistent with the goals of the PIER program (Public Resources Code Section 25620 et seq.) and of the relevant federal funding opportunity announcement.



ARRA Funding Opportunity Announcements

ARRA Funding Opportunity Announcements



To participate in this solicitation, applicants must submit applications to the federal government in response to one or more of the following ARRA funding opportunity announcements:

- Enhanced Geothermal Systems Component Research and Development/Analysis, DE-FOA-0000075
- Enhanced Geothermal Systems Demonstration, DE-FOA-0000092
- Geothermal Technologies Program, DE-FOA-0000109
- High Penetration Solar Deployment, DE-FOA-0000085



Details of Solicitation

Rizaldo Aldas



Funding Information

Funding Information



Up to \$21 million of PIER funds

for cost share for current and future research-related ARRA funding opportunities

Attention

- ❖ The Energy Commission reserves the right to adjust the available funding for this solicitation.
- ❖ Pursuant to Executive Order S-09-09, the Energy Commission may be prohibited from awarding match funding under this solicitation. The Applicant will be responsible for obtaining sufficient cost share to meet ARRA funding requirements if the Energy Commission is unable to successfully execute a funding agreement.

Funding Information



Maximum ARRA cost share to be awarded for any one application

ARRA Funding Opportunity Announcement	Maximum Energy Commission Cost Share for a Single project
Enhanced Geothermal Systems Component Research and Development/Analysis, DE-FOA-0000075	\$380,000
Enhanced Geothermal Systems Demonstration, DE-FOA-0000092	\$250,000
Geothermal Technologies Program, DE-FOA-0000109	\$410,000
High Penetration Solar Deployment, DE-FOA-0000085	\$500,000



Eligible Projects

Eligible Projects



To be eligible to receive cost share award:

- Project must advance the science and technology of energy technologies
- Project must meet the minimum scoring criteria.
- Projects must be based in California.
- Project must correspond to the eligibility requirements of the relevant ARRA funding opportunity announcement **and receive ARRA funding from the federal government.**



Eligible Applicants

Eligible Applicants



This is an open solicitation and all types of organizations may be eligible to apply (refer to relevant FOA for federal eligibility requirements) subject to the following conditions:

- Application is for new projects or new tasks associated with existing projects.
- Organizations may submit multiple proposals.
- Each application must be distinct & separate project.
- Each application must be submitted separately adhering to all requirements contained in this solicitation.

Eligible Applicants



ATTENTION

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

- If not currently registered with the California Secretary of State, Applicants are encouraged to contact the Secretary of State's Office as soon as possible to avoid potential delays in beginning the proposed project if your application is successful.
- For more information, contact the Secretary of State's Office via their website at www.sos.ca.gov.



Selection of Projects & Award Process

Selection & Award Process



The Energy Commission will employ the following two-step process:

- Submission of a pre-application
 - Final application (if invited)
-
- Pre-applications and final applications that meet the eligibility requirements will be reviewed by an Evaluation Committee.
 - The Evaluation Committee and any application reviewers will keep the contents of the pre-applications and final applications confidential until they become publicly accessible.



Pre-Application

Selection & Award Process:

Pre-application



The Energy Commission will consider pre-applications that contain all of the following information:

- Cover Page (Attachment A)
 - The cover page is a separate Microsoft Word document that can be accessed at www.energy.ca.gov/contracts as part of this solicitation package.
- Project Summary (Requirements specified in Attachment B)
- California Environmental Quality Act (CEQA) Compliance Form (Attachment O, Form 1).
- Short biographies for the Project Manager/Principal Investigator and key project personnel
 - **No more than 200 words per person. Do not submit complete resumes.**
- Signature of the organization's authorized representative

Selection & Award Process:

Pre-application



1. Pre-applications will be reviewed by an Evaluation Committee
2. Letter of Intent (LOI) to Provide Funding will be sent to selected pre-applications
 - Applicants may include the Letter of Intent in an application for funding through any of the federal funding opportunity announcements specified in this solicitation
 - **Applicants that do not receive a Letter of Intent will not be eligible for cost share funding pursuant to this solicitation**
3. The Energy Commission will send a letter of rejection to unsuccessful applicants
4. A Summary including the applicant's name, requested PIER amount and project title will be made public.
5. Applicants may request a debriefing no later than 30 days after Letters of Rejection are postmarked



Final Application

Selection & Award Process:

Final Application



- ❖ Applicants **must receive a Letter of Intent** to submit a final application
 - Receipt of a Letter of Intent does **NOT** guarantee that the final application will be approved for funding.

The final application **must** include the following:

- Written proof that the application has been submitted to the federal government in response to an ARRA funding opportunity announcement.
- A response to the scoring criteria (Attachment C).
- A PIER Budget Workbook (Attachment F)
- Scope of Work (Attachment D)
- Product Schedule (Attachment G)
- CEQA Compliance Form (Attachment O, Form 2) if applicable
- Permitting Information Form (Attachment P) if applicable.

Selection & Award Process:

Final Application



1. A scoring committee will score the final applications using the relevant scoring criteria described in Attachment C.
2. The Energy Commission may invite applicants to a clarification interview for their final applications.
3. A minimum score of 70% is required for the application to pass and be considered for cost share funding (eligible project).
4. Applicants whose projects are eligible and who meet the criteria of a California-Based Entity (CBE) may have preference points added to their final technical score.
 - Refer to [Attachment M](#) for more information
 - Applicants must request and demonstrate eligibility by filling out and submitting as part of the application package the questionnaire contained in Attachment N.

Selection & Award Process: Final Application



5. Eligible projects will be ranked within the federal solicitation category starting with the highest ranked project.
6. Projects obtaining at least the minimum score will be considered for cost share funding, starting with the highest ranked project
 - The Energy Commission reserves the right to determine the number of final applications it will fund under each federal solicitation rank list
 - The Energy Commission reserves the right to negotiate with the Applicant: the final project scope, any additional special terms and conditions, and the level of funding received pursuant to this solicitation.
7. The results of the Energy Commission's decision will be released through a Notice of Proposed Awards (NOPA).
 - Applicants not selected for funding may request a debriefing no later than 30 days after the release of NOPA

Selection & Award Process:

Final Application



8. Applicants proposed for an award pursuant to this solicitation will be required to prepare a detailed set of award documents, including but not limited to:

- A Scope of Work (Attachment D)
- A schedule of products and due dates (Attachment G)
- Detailed budget documents.

Attention:

- Information required in the final application should be complete and in the specified format.
- Public agencies and non-profit organizations must provide an authorizing resolution approved by their governing authority.

Selection & Award Process:

Final Application



9. Upon receiving the required documents, the Energy Commission will prepare a Grant Agreement, including applicable Terms and Conditions*, and any additional terms and conditions, and send it to the grant recipient for:

- ✓ review,
- ✓ approval, and
- ✓ signature.

***Attention:**

See PIER Grant Terms and Conditions at <http://www.energy.ca.gov/contracts/index.html>

- Read carefully the PIER Grant Terms and Conditions
- The Energy Commission reserves the right to modify the terms and conditions prior to executing grant agreements.

Selection & Award Process: Final Application



10. The Grant Agreement will be scheduled and heard at an Energy Commission Business Meeting for approval.

11. If approved, the Energy Commission will fully execute the Grant Agreement.

- ❖ Recipient(s) are approved to begin the project only after full and final execution of the Grant Agreement.



Grounds for Rejection

Grounds for Rejection: Pre-application



A **pre-application** *WILL* be rejected and not considered for funding if it:

1. Does not include the signature of the organization's authorized representative.
2. Requests an amount for any Project/Activity greater than the identified amount (Table 2).
3. Is not received by the Energy Commission by the specified due date and time (Table 1).
4. Contains any information the Applicant has labeled as confidential, secret or protected in any manner.
5. Is inconsistent with the goals of PIER and/or the relevant ARRA funding source.

Grounds for Rejection: Final Application



A final application *WILL* be rejected and not considered for funding if:

1. The Applicant has not submitted an application by the required deadline to the federal government in response to a federal ARRA solicitation.
2. The application is not received by the Energy Commission Grants and Loans office by 4 p.m. on specified due date (Table 1).
3. Contains any information the Applicant has labeled as confidential, secret or protected in any manner.
4. Requests an amount for any Project/Activity greater than the identified amount (Table 2).
5. Is inconsistent with the goals of PIER and/or the relevant ARRA funding source.

Grounds for Rejection:

Final Application



A final application ***MAY*** be rejected and not considered for funding if:

- It does not include a Resolution (if applicable). A resolution authorizing submission of the application is required from a local jurisdiction's governing body (Sample in Attachment Q)



Schedule and Submission Due Dates

Schedule and Submission Due Dates



Due Dates and FOA Specific information

ARRA Funding Opportunity Announcement	Pre-Applications to Energy Commission by 4:00 p.m.	LOI Provided To Applicants	Final Applications to Energy Commission by 4:00 p.m.	Tentative Dates for Federal Award Notifications
Enhanced Geothermal Systems Component Research and Development/Analysis DE-FOA-0000075	7/07/09	7/10/09	7/24/09	9/09
Enhanced Geothermal Systems Demonstration DE-FOA-0000092	7/20/09	7/23/09	8/06/09	9/09
Geothermal Technologies Program DE-FOA-0000109	7/10/09	7/15/09	7/29/09	12/09-1/10
High Penetration Solar Deployment DE-FOA-0000085	7/16/09	7/23/09	8/06/09	8/09

Schedule and Submission Due Dates



Proposal and Award Process Schedule

Event	Date
Release of Solicitation	June 18, 2009
Workshop	June 26, 2009
Posting of Questions & Answers from Workshop	June 29, 2009
Deadline to Submit Written Questions	June 30, 2009
Posting of Questions and Answers	July 6, 2009
Deadline to Submit Pre-Applications	By 4 p.m. on the date listed in Table 1
Release of Letters of Intent	As listed in Table 1
Deadline to Submit Final Applications	By 4 p.m. on the date listed in Table 1
Approval of Awards at Energy Commission Business Meeting	TBD



Submission Requirements

Submission Requirements:

Pre-application



Submit: **Five written (physical) copies** of each pre-application

Due: Must be **received** by 4:00 p.m. on the due date (Table 1)

✓ Pre-applications may be mailed or delivered to:

Crystal Willis

California Energy Commission

Grants and Loans Office

Attn: American Recovery and Reinvestment Act of 2009 Cost Share

1516 Ninth Street, MS-1

Sacramento, CA 95814

cpresley@energy.state.ca.us

- ✓ Postmark dates of mailing, electronic mail (E-mail), and facsimile (Fax) transmissions are not acceptable in whole or in part under any circumstances.
- ✓ The Energy Commission will reject all proposals not received by the Energy Commission's Grants and Loans Office by the stated due date and time.

Submission Requirements:

Final Application



Submit: **Five written (physical) copies and one CD with electronic files** for all documents submitted in word or excel files of each final application

Due: Must be **received** by 4:00 p.m. on the due date (Table 1)

✓ Final applications may be mailed or delivered to:

Crystal Willis

**California Energy Commission
Grants and Loans Office**

**Attn: American Recovery and Reinvestment Act of 2009 Cost Share
1516 Ninth Street, MS-1
Sacramento, CA 95814
cpresley@energy.state.ca.us**

- ✓ Postmark dates of mailing, electronic mail (E-mail), and facsimile (Fax) transmissions are not acceptable in whole or in part under any circumstances.
- ✓ The Energy Commission will reject all proposals not received by the Energy Commission's Grants and Loans Office by the stated due date and time.



Document Availability / Notification

- ❖ This solicitation, all supporting documents and forms can be found at:

<http://www.energy.ca.gov/contracts/index.html>

- ❖ Interested parties may also sign on to the electronic mailing list to be notified of any changes to this solicitation.

<http://www.energy.ca.gov/listservers/index.html>

[research](#) (Energy RD&D / PIER program)

[opportunity](#) (RFPs, contracts, funding announcements)



Project Specific Requirements

Prab Sethi

FINANCIAL ASSISTANCE FUNDING OPPORTUNITY ANNOUNCEMENT



U.S. Department of Energy
Golden Field Office

Recovery Act: High Penetration Solar Deployment

- Topic Area 1: Improved Modeling Tools Development
- Topic Area 2: Field Verification of High-Penetration Levels of PV into the Distribution Grid
- Topic Area 3: Modular Power Architecture
- Topic Area 4: Demonstration of PV and Energy Storage for Smart Grids

Funding Opportunity Announcement Number: DE-FOA-0000085
CFDA Number: 81.087 Renewable Energy Research and Development

Issue Date: May 27, 2009
Application Due Date: July 30, 2009

Examples of current and recently completed projects (Attachment H)



- Design & development of low-cost high-temperature solar collectors for mass production
- Reduce Natural Gas Use for Industrial Process Heat using High-Temperature Parabolic Trough Solar Collectors
- Solar Combined Heat and Power System
- Advanced Community Scale Solar Home Design Tools
- Demonstration of a Novel, Low-Cost Two Axis Solar Tracking System
- Design & Optimization of a Solar Fired 2E Absorption Chiller
- Residential Electric Power Security
- Hybrid Solar-Fossil Thermophotovoltaics

Project Summary Requirements:

Solar Projects (Attachment B)



- ❖ Project Summary must address the following:
- ❖ Limit your response to **no more than five pages**.

1. Project Description:

- proposed project
- specific quantified goals,
- barriers and their resolution
- tasks and deliverables
- project duration.

2. Funding/Team:

- amount of funding needed from the Energy Commission
- total project budget
- match funding partners
- list team members (such as universities, national laboratories and utilities)
- relevant experience
- project site location.

Project Summary Requirements: Solar Projects



3. Proposed Development:

- products to be delivered.
- anticipated performance improvements (technical and operational) of the proposed development vs. current practices
- broad applicability and adaptability for similar applications in the State of California

4. Impacts:

- *potential impact of the technology on*
 - *California industry*
 - *market*
 - *accelerated deployment of renewable energy.*
- *projected cost reduction impact in dollar/watt*
- *levelized cost of electricity.*

Project Summary Requirements: Solar Projects

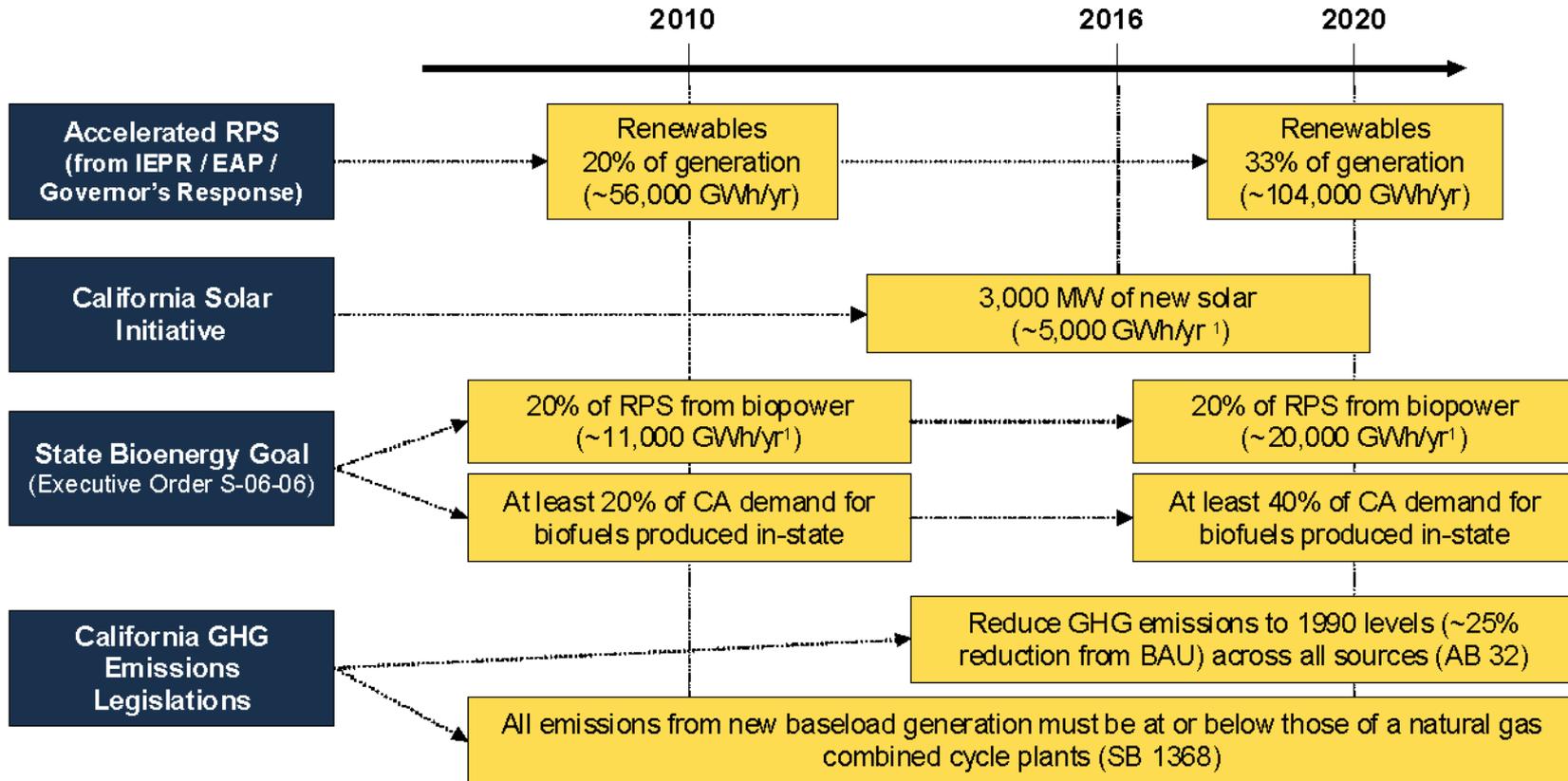


5. Policy Goals:

- Describe how the proposed project will help meet the goals of:
 - California Solar Initiative
 - California's Renewable Portfolio Standard
 - California's Global Warming Solutions Act (AB 32)
 - Quantify results and benefits for above mentioned policy goals.

6. Discuss proposed project system integration with the California utility grid and resulting benefits.

Policies Driving PIER RE R&D Strategy



1. Assumed average capacity factors are 20% for solar and 90% for biopower.
 Note: The roadmap also considered detailed policy guidance as stated in the IEPR.



Final Application Scoring Criteria

Final Application Scoring Criteria



ATTENTION:

- The Energy Commission will fully evaluate each proposed project.
- Applicants must address the scoring criteria.
- Applicants' responses to the scoring criteria must be based on the entire project as proposed to the Federal government in response to an ARRA solicitation.
- Scoring will be based on the merits of the project proposals.
- Scores from each criterion will be summed to provide the overall project score. A minimum score of 70 (out of 100) is required to be eligible for cost share funding.

Final Application Scoring Criteria: Solar Projects



See Attachment C for Scoring Criteria for solar application

❖ Applicants must provide **no more than 20 pages**, using 12 point font, of qualitative and quantitative supporting documents for this attachment.

1. Technical Merit (20 points)

2. Description of Proposed RD&D (30 points)

3. Identified Targets, Goals, and Market Application (25 points)

4. Qualifications of Project Manager and Project Team (25 points)

1. Technical Merit ■ ■



- The current status of the proposed technology as it has been developed by the research and industrial community at large.
- How the proposed project will address current barriers or knowledge gaps to advance the state-of-the-art and market acceptance.
- Past and current work in the subject technology performed by the project team and others, including successes and failures.
- The extent to which the project will address the objectives of the PIER Program in the area of Solar and Energy Storage.
- How the proposed project will help meet the goals of California Solar Initiative, California's Renewable Portfolio Standard, and California's Global Warming Solutions Act (AB 32).

2. Description of Proposed RD&D



- The technical tasks are clearly and logically presented, with appropriate objectives, logical and discrete tasks, sequence of activities, products produced, deliverables, schedule, and budget.
- The application describes the scientific and technical principles underlying the proposed work, and the manner in which the scientific and engineering principles will be applied.
- The distinctive and innovative features of the approach are discussed.
- The likelihood of success based upon a sound research plan.

3. Identified Targets, Goals, and Market Application



- The proposed project is cost effective and will significantly help in adding additional solar generation capacity.
- The extent to which the project addresses significant key issues and barriers to the development and market acceptance of solar technology.
- Quantitative or measurable technical and economic performance goals and the methodology used to determine if the goals have been achieved.
- How the project will fulfill market needs. A reasonable path is described for commercialization of the technology if the project is successful.
- Quantified results and benefits for meeting policy goals of CSI, RPS and AB 32.

4. Qualifications of Project Manager and Project Team



- The Project Manager and team members have the technical capabilities, specific experience and financial capability to successfully complete the project.
- The Project Manager can successfully manage the project, control cost, and maintain the schedule, and report results and accomplishments in an effective manner.
- The application clearly and adequately presents capabilities and experience of the team members to perform the proposed work for different tasks.
- The application presents the team members' collaboration to perform and facilitate transfer of project products to the marketplace. Is electric utility part of the team?
- The project cost is consistent with the work to be performed and is justified.
- The PIER funding request, match funding, and need for PIER funding are appropriate and consistent with the expected level of public benefits if the project is successful



California-Based Entity (CBE) Preference Points

(Attachment M)

California-Based Entity (CBE) Preference Points



- ❖ Applicants whose projects are eligible and who meet the criteria of a California-Based Entity (CBE) may have preference points added to their final technical score, subject to certain restrictions (AB 2267, (Fuentes, 2008)).
 - Please see Attachment M for more information.
 - Eligible applicants must request and demonstrate eligibility by filling out and submitting as part of the proposal package the questionnaire contained in Attachment N.
 - Otherwise eligible applicants who do NOT submit the Attachment N questionnaire shall NOT be eligible for the CBE Preference Points.

California-Based Entity (CBE) Preference Points



❖ The preference points will be awarded as follows:.

<i>Technical Score (prior to preference points being added)</i>	<i>Additional Points</i>
70-75	1
76-81	2
82-87	3
88-93	4
94-100	5

- The total possible points, not counting any preference points, for this solicitation is 100.
- The minimum passing score is 70 points.
- Each application that has a score of 70 points or more and qualifies for this preference will receive additional points based on the table above.



Administrative Requirements

Sarah Williams

Administrative Requirements



Federal Requirements

- Projects selected by the federal government for ARRA funding must comply with federal administrative and national policy requirements.
- Applicants must review the relevant ARRA funding opportunity announcement(s) for information regarding these requirements.



Administrative Requirements: Payment of Prevailing Wage

Payment of Prevailing Wage



- ❖ Some projects under this solicitation might be considered public works pursuant to the California Labor Code.
 - If the project is a public work, prevailing wage is required.
 - See page 11 of the Application Package and Attachments J, K & L for prevailing wage requirements.



Administrative Requirements:

California Environmental Quality Act

California Environmental Quality Act



- ❖ Projects must comply with the California Environmental Quality Act (CEQA) in order to receive funding from the Energy Commission.
 - See page 12 of the application package and Attachment O for the CEQA requirements.
- Pre-applications must include **CEQA Compliance Form 1**
- Final applications must include **CEQA Compliance Form 2**
- Please submit separate form for each project
- ☐ For an explanation of the CEQA process, please visit <http://ceres.ca.gov/ceqa/summary.html>



Terms and Conditions

Terms and Conditions



The PIER Grant Terms and Conditions can be found at:

<http://www.energy.ca.gov/contracts/index.html>

- ❖ Read carefully the PIER Grant Terms and Conditions
- ❖ The Energy Commission reserves the right to modify the terms and conditions prior to executing grant agreements.



Confidential Information

Confidential Information



No confidential information will be accepted during the proposal and selection phase of this solicitation.

- If any confidential information is submitted, your entire proposal will be returned, and not considered for funding.**
- Proposals containing confidential information will be returned to the applicant.**
- While discouraged, applicants may *propose* to deliver confidential products during the course of the project if funded.**
- If necessary, instructions on submitting confidential products will be provided by the Energy Commission prior to executing the Grant Agreement.**



Amendment or Cancellation of this Solicitation

Amendment or Cancellation of this Solicitation



The Energy Commission reserves the right to do any of the following:

- Cancel this solicitation
- Amend or revise this solicitation as needed or
- Reject any or all proposals received in response to this solicitation.

Amendment or Cancellation of this Solicitation



- ❖ Any amendments or revisions will be posted on the Energy Commission web site, and an announcement will be distributed via the email Listservers
 - <http://www.energy.ca.gov/contracts/index.html>
 - <http://www.energy.ca.gov/listservers/index.html>



Additional Questions

Additional Questions



Additional questions about this solicitation must be submitted by 4:00 p.m. on June 30, 2009, and may be submitted by email or letter.

The questions and answers will be posted on the Energy Commission's website by July 6, 2009. Questions may be directed to the technical contact listed in Table 1.

Questions



Paper copies of the PON, Manual and Q's & A's can be obtained by contacting:

Angela Layton
Administrative Assistant
Energy Generation Research Office
California Energy Commission
1516 Ninth Street, MS-43
Sacramento, CA 95814
Telephone: (916) 651-9312
Email: alayton@energy.state.ca.us