

GRANT FUNDING OPPORTUNITY

Investing In California Communities through Building Energy Efficiency Workforce Development



GFO-15-302

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

State of California

California Energy Commission

March 2015

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I. Introduction

A. PURPOSE OF SOLICITATION

The purpose of this solicitation is to fund Market Facilitation projects that realize significant, long-term energy efficiency gains in the building sector by ensuring an adequately trained workforce exists for the proper installation and maintenance of advanced energy efficiency technologies and strategies.

Numerous policies have identified the need for significant energy efficiency improvements to new and existing buildings to achieve the state's energy goals. As the housing and broader construction markets continue to improve, significant energy savings could be missed if new and existing buildings are not built, updated, or retrofitted with the best available technologies, techniques, and practices. Much of the skilled labor workforce may not be not trained in the proper installation, operation, and maintenance of these energy efficiency advancements. This could lead to unrealized energy savings and expense due to improper installation and maintenance; or building developers and others responsible for the design, development, and management of buildings may decide to forgo these energy efficiency advancements because savings and benefits are unrealized. Projects must fall within the following groups:

- **Group 1: On-the-job training for constructing high performance attics and walls for new homes constructed in a manner consistent with proposals for the 2016 building energy efficiency standards.**
- **Group 2: Workforce training for installing advanced energy efficiency measures in existing buildings (residential/commercial/multifamily) in disadvantaged communities as defined by Senate Bill (SB) 535.¹**

See Part II of this solicitation for project eligibility requirements. Applications will be evaluated as follows: Stage One proposal screening and Stage Two proposal scoring. Applicants may submit multiple applications, though each application may address only one of the project groups identified above. If an applicant submits multiple applications that address the same project group, each application must be for a distinct project (i.e., no overlap with respect to the tasks described in the Scope of Work, Attachment 6).

¹ Senate Bill 535 (De Leon, Chapter 830, Statutes of 2012) requires the California Environmental Protection Agency to identify disadvantaged communities for investment opportunities for at least 25 percent of proceeds from the sale of greenhouse gas emission allowances in California's cap-and trade program. The law requires at least 25 percent of the proceeds to benefit disadvantaged communities and at least 10 percent of the proceeds to be invested in projects located in disadvantaged communities. The communities must be identified based on geographic, socioeconomic, public health, and environmental hazard criteria, and may include, but are not limited to, either of the following:

(a) Areas disproportionately affected by environmental pollution and other hazards that can lead to negative public health effects, exposure, or environmental degradation.

(b) Areas with concentrations of people that are of low income, high unemployment, low levels of homeownership, high rent burden, sensitive populations, or low levels of educational attainment.

B. KEY WORDS/TERMS

Word/Term	Definition
Applicant	The respondent to this solicitation
Application	An applicant's formal written response to this solicitation
CAM	<i>Commission Agreement Manager</i> , the person designated by the Energy Commission to oversee the performance of an agreement resulting from this solicitation and to serve as the main point of contact for the Recipient
EPIC	<i>Electric Program Investment Charge</i> , the source of funding for the projects awarded under this solicitation
Energy Commission	California Energy Commission
Entry Level	Jobs or occupations for which employers hire workers with little or no previous work experience or with relatively minimum training or education. Occupations that require more education or training may have specific entry-level classifications such as apprenticeship or internship.
IOU	Electric <i>Investor-owned utility</i> . The following IOUs are involved in EPIC: Pacific Gas and Electric Co., San Diego Gas & Electric Co., and Southern California Edison Co.
Journey Level	A fully qualified worker in a specific trade.
NOPA	<i>Notice of Proposed Award</i> , a public notice that identifies award recipients
Principal Investigator	The lead scientist or engineer for the applicant's project, who is responsible for overseeing the project; in some instances, the Principal Investigator and Project Manager may be the same person
Project Manager	The person designated by the applicant to oversee the project and to serve as the main point of contact for the Energy Commission
Project Partner	An entity or individual that contributes financially or otherwise to the project (e.g., match funding, provision of a demonstration site), and does not receive Energy Commission funds
Recipient	The recipient of an award under this solicitation
Solicitation	This entire document, including all attachments and exhibits ("solicitation" may be used interchangeably with "program opportunity notice")
State	State of California

C. APPLICANTS' ADMONISHMENT

This solicitation contains application requirements and instructions. Applicants are responsible for **carefully reading** the solicitation, asking appropriate questions in a timely manner, ensuring that all solicitation requirements are met, submitting all required responses in a complete manner by the required date and time, and **carefully rereading** the solicitation before submitting an application. In particular, please carefully read the **Screening/Scoring Criteria and Grounds for Rejection** in Part IV, and the terms and conditions located at: <http://www.energy.ca.gov/research/contractors.html>.

Applicants are responsible for the cost of developing applications. This cost cannot be charged to the State. All submitted documents will become public records upon the posting of the Notice of Proposed Award.

D. BACKGROUND

1. Electric Program Investment Charge (EPIC) Program

This solicitation will award projects funded by the EPIC, an electricity ratepayer surcharge established by the California Public Utilities Commission (CPUC) in December 2011.² The purpose of the EPIC Program is to benefit the ratepayers of three investor-owned utilities (IOUs), including Pacific Gas and Electric Co., San Diego Gas & Electric Co., and Southern California Edison Co. The EPIC funds clean energy technology projects that promote greater electricity reliability, lower costs, and increased safety.³ Additionally, complementary principles that further guide the Program include projects that following the loading order of preferred resources and provide: a) societal benefits; b) greenhouse gas (GHG) emissions mitigation and adaptation in the electricity sector at the lowest possible cost; c) low-emission vehicles/transportation; d) economic development; and e) efficient use of ratepayer monies. In addition to providing IOU ratepayer benefits, funded projects must lead to technological advancement and breakthroughs to overcome the barriers that prevent the achievement of the state's statutory energy goals.⁴ The EPIC Program is administered by the California Energy Commission and the IOUs.

2. Program Areas, Strategic Objectives, and Funding Initiatives

EPIC projects must fall within the following **program areas** identified by the CPUC:

- Applied Research and Development;
- Technology Demonstration and Deployment; and
- Market Facilitation

In addition, projects must fall within one of 18 general focus areas ("**strategic objectives**") identified in the Energy Commission's EPIC Investment Plan⁵ and within one or more specific

² See CPUC "Phase 1" Decision 11-12-035, December 15, 2011, http://docs.cpuc.ca.gov/PublishedDocs/WORD_PDF/FINAL_DECISION/156050.PDF.

³ See CPUC "Phase 2" Decision 12-05-037, May 24, 2012, http://docs.cpuc.ca.gov/PublishedDocs/WORD_PDF/FINAL_DECISION/167664.PDF.

⁴ California Public Resources Code, Section 25711.5(a), <http://www.leginfo.ca.gov/cgi-bin/displaycode?section=prc&group=25001-26000&file=25710-25712>.

⁵ http://www.energy.ca.gov/research/epic/documents/final_documents_submitted_to_CPUC/2012-11-01_EPIC_Application_to_CPUC.pdf.

focus areas (“**funding initiatives**”) identified in the plan. This solicitation targets the following program area, strategic objective, and funding initiative:

- Program Area: Market Facilitation
 - **Strategic Objective S17:** Strengthen the Clean Energy Workforce by Creating Tools and Resources that Connect the Clean Energy Industry to the Labor Market.
 - **Funding Initiative S17.1:** Provide Grants to Develop and Enhance Training and Apprenticeship Programs to Support Clean Energy Deployment Programs in IOU Service Territories.

3. Applicable Laws, Policies, and Background Documents

This solicitation addresses the energy goals described in the following laws, policies, and background documents.

Laws/Regulations

- **Assembly Bill (AB) 32 (“The Global Warming Solutions Act of 2006”)**

AB 32 (Nunez, Chapter 488, Statutes of 2006) created a comprehensive program to reduce greenhouse gas (GHG) emissions in California. GHG reduction strategies include a reduction mandate of 1990 levels by 2020 and a cap-and-trade program. AB 32 also required the California Air Resources Board (ARB) to develop a Scoping Plan that describes the approach California will take to reduce GHGs. ARB must update the plan every five years.

Additional information: <http://www.arb.ca.gov/cc/ab32/ab32.htm>

Applicable Law: California Health and Safety Code §§ 38500 et. seq.

- **Renewables Portfolio Standard Senate Bill (SB) X1-2**

SB X1-2 (Simitian, Chapter 1, Statutes of 2011-12) requires that all California electricity retailers adopt the goals of 20 percent of retail sales from renewable energy sources by the end of 2013, 25 percent by the end of 2016, and 33 percent by the end of 2020.

- **Assembly Bill (AB) 758, Building Efficiency**

AB 758 (Skinner, Chapter 470, Statutes of 2009) requires the Energy Commission to collaborate with the CPUC and stakeholders to develop a comprehensive program to achieve greater energy savings in existing residential and nonresidential buildings. The Energy Commission developed a *Comprehensive Energy Efficiency Program for Existing Buildings Scoping Report* in 2012, and plans to develop voluntary and mandatory strategies and approaches to achieve energy savings.

Additional information: <http://www.energy.ca.gov/ab758/>

Applicable Law: California Public Resources Code § 25943, California Public Utilities Code §§ 381.2 and 385.2

- **Senate Bill (SB) 535, California Global Warming Solutions Act of 2006: Greenhouse Gas Reduction Fund (Statutes of 2012)**

SB 535 (De Leon, Chapter 830, Statutes of 2012) requires the California Environmental Protection Agency to identify disadvantaged communities for investment opportunities. The bill requires the Department of Finance, when developing a specified 3-year investment plan, to allocate 25 percent of the available moneys in the Greenhouse Gas Reduction Fund to projects that provide benefits to disadvantaged communities, and to allocate a minimum of 10 percent of the available moneys in the Greenhouse Gas Reduction Fund to projects located within disadvantaged communities.

- **Senate Bill (SB) 96, Committee on Budget and Fiscal Review (Budget Act of 2013)**

SB 96 (Committee on Budget and Fiscal Review, Chapter 356, Statutes of 2013) requires the Energy Commission to award EPIC funds for projects that will benefit electricity ratepayers and lead to technological advancement and breakthroughs to overcome the barriers that prevent the achievement of the state's statutory energy goals and that result in a portfolio of projects that is strategically focused and sufficiently narrow to make advancement on the most significant technological challenges that shall include, but not be limited to, energy storage, renewable energy and its integration into the electrical grid, energy efficiency, integration of electric vehicles into the electrical grid, and accurately forecasting the availability of renewable energy for integration into the grid.

Additional Information:

http://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=PRC&division=15.&title=&part=&chapter=8.1.&article

Applicable Law: California Public Resources Code § 25711.5.

- **Assembly Bill (AB) 1109 (“The California Lighting Efficiency and Toxics Reduction Act”)**

AB 1109 (Huffman, Chapter 534, Statutes of 2007) places restrictions on the manufacture and sale of certain general purpose lights (i.e., lamps, bulbs, tubes, and other electric devices that provide functional illumination for indoor and outdoor use) that contain hazardous substances. It also requires the Energy Commission to adopt minimum energy efficiency standards for general purpose lights and to make recommendations to the Governor and Legislature regarding the continuation of reduced lighting consumption beyond 2018.

Additional Information: <http://www.energy.ca.gov/2008publications/CEC-400-2008-015/CEC-400-2008-015.PDF>

Applicable Law: California Health and Safety Code §§ 25210.9 et. seq., California Public Resources Code § 25402.5.4

- **Appliance Efficiency Regulations**

The Energy Commission promulgates appliance efficiency regulations that require manufacturers of various new appliances sold or offered for sale in California to test them using specified test methods. Covered appliances include refrigerators, air conditioners, heaters, plumbing fitting/fixtures, lighting, washers, dryers, cooking products, electric motors, transformers, power supplies, televisions, and battery charger systems.

Additional information: <http://www.bsc.ca.gov/>; <http://www.energy.ca.gov/appliances/>

Applicable Law: California Code of Regulations, Title 20, Division 2, Chapter 4, Article 4, §§ 1601 et. seq.

- **California Energy Code**

The Energy Code is a component of the California Building Standards Code, and is published every three years through the collaborative efforts of state agencies including the California Building Standards Commission and the Energy Commission. The Code ensures that new and existing buildings achieve energy efficiency and preserve outdoor and indoor environmental quality through use of the most energy efficient technologies and construction.

Additional information: <http://www.energy.ca.gov/title24/>

Applicable Law: California Code of Regulations, Title 24, Part 6 and associated administrative regulations in Part 1.

Policies/Plans

- **Governor's Clean Energy Jobs Plan (2011)**

As part of Governor Jerry Brown's campaign, he announced a plan to invest in clean energy and increase efficiency. The plan includes a goal of producing 20,000 megawatts (MW) of renewable electricity by 2020 by taking the following actions: addressing peak energy needs, developing energy storage, creating efficiency standards for buildings and appliances, and developing combined heat and power (CHP) projects. Specific goals include building 8,000 MW of large-scale renewable and transmission lines, 12,000 MW of localized energy, and 6,500 MW of CHP.

Additional information: http://gov.ca.gov/docs/Clean_Energy_Plan.pdf

- **Comprehensive Energy Efficiency Program for Existing Buildings (2012)**

This report explores the market characterization and potential program targets, and analyzes eight market components. These market components include financing, workforce development, residential and nonresidential ratings and assessments, energy upgrade programs, compliance and enforcement, marketing education, and outreach, and data. The report also investigates preliminary results from the Energy Commission/American Recovery and Reinvestment Act investments in the existing building energy efficiency upgrade industry. The report finds that major needs exist within each sector to achieve the energy efficiency targets stated by the CPUC and the Energy Commission in the *Long Term Energy Efficiency Strategic Plan*.

Additional information: <http://www.energy.ca.gov/ab758/>

- **Integrated Energy Policy Report (IEPR), Biennial**

California Public Resources Code Section 25302 requires the Energy Commission to release a biennial report that provides an overview of major energy trends and issues facing the state. The IEPR assesses and forecasts all aspects of energy industry supply, production, transportation, delivery, distribution, demand, and pricing. The Energy Commission uses these assessments and forecasts to develop energy policies.

Additional information: <http://www.energy.ca.gov/energypolicy>
Applicable Law: California Public Resources §§ 25300 et. seq.

- **CPUC's Energy Efficiency Strategic Plan (2008)**

The Energy Efficiency Strategic Plan creates a roadmap for achieving energy efficiency within the residential, commercial, industrial, and agricultural sectors. The plan was updated in January 2011 to include a lighting chapter.

Additional information: <http://www.cpuc.ca.gov/PUC/energy/Energy+Efficiency/eesp/>

Reference Documents

Refer to the documents below for information about activities associated with clean energy workforce development:

- Building Performance Institute, Inc.
 - Building Science Principles certificate
http://www.bpi.org/professionals_certificate.aspx
- California Title 24 Building Standards,
 - Educational Resources
http://www.energy.ca.gov/efficiency/educational_resources.html
 - Home Energy Rating System (HERS) Program
<http://www.energy.ca.gov/HERS/http://www.energy.ca.gov/HERS/>
- California Energy Service Corps Program.
<http://www.ccc.ca.gov/work/programs/AmeriCorpsPrograms/CalEnergyServiceCorps/Pages/CalEnergyServiceCorps.aspx>
- California Department of Community Services and Development. Weatherization Assistance Program (WAP).
<http://www.csd.ca.gov/Services/ResidentialEnergyEfficiencyServices.aspx>
- Guidelines for Home Energy Professionals.
<http://energy.gov/eere/wipo/guidelines-home-energy-professionals>
 - Standard Work Specifications (SWS) are a major component of the Guidelines for Home Energy Professionals project
<https://sws.nrel.gov/>

- UC Berkeley Donald Vial Center on Employment in the Green Economy.
 - <http://www.irle.berkeley.edu/vial/publications/ca-workforce-issues-energy-efficiency-programs14.html>
 - http://www.irle.berkeley.edu/vial/publications/ca_workforce_needs_assessment.html
- U.S. Department of Energy (DOE) Better Buildings Workforce Guidelines
<https://www4.eere.energy.gov/workforce/projects/workforceguidelines>.

Refer to the link below for information about past Energy Commission research projects and activities:

- <http://www.energy.ca.gov/research/>

E. FUNDING

1. Amount Available and Minimum/Maximum Funding Amounts

There is **up to \$9 million** available for grants awarded under this solicitation. The minimum funding amount for each grant is **\$2 million**. The maximum funding amount is **\$4.5 million**.

Project Group	Available funding	Minimum award amount	Maximum award amount
Group 1: Advanced energy efficiency for new homes constructed under the 2016 building standards.	\$4.5 million	\$2 million	\$4.5 million
Group 2: Energy efficiency improvements in existing buildings in disadvantaged communities.	\$4.5 million	\$2 million	\$4.5 million

The Energy Commission anticipates ~~at least two~~ **funding one** awards **(two total)** ~~for a minimum of \$2 million up to \$4.5 million~~ for each of the following groups:

- Funding for Group 1 must be expended for on-the-job training for high performance walls and attics in new home construction projects in IOU service territories. Training must be based on existing state-approved programs widely accepted by the building industry.
- Funding for Group 2 must be expended for on-the-job training on building retrofit projects located in SB 535 communities within an IOU service territory to facilitate local resident participation. Applicants are encouraged to leverage other regional workforce development programs that bring together employers, accredited training providers, community organizations, and local government.

Competitive Solicitation: Applicants compete based on selection criteria and are scored and ranked based on those criteria. The highest scoring application in each group, achieving at least the minimum technical score, will be recommended for funding. If the Energy Commission does not receive sufficient passing application(s) requesting at least the \$2 million in one of the groups, the Energy Commission reserves the right, at its sole discretion, to redirect the remaining funding balance from that group to the other group that may have a passing, but unfunded application. Funds will be redirected to the highest scoring, unfunded applicants.

2. Match Funding Requirement

Match funding is required in the amount of at least 50 percent of the requested project funds. Applicants that provide more than this amount will receive additional points during the scoring phase (See Part IV).

- **“Match funds”** include: (1) “cash in hand” funds; (2) equipment; (3) materials; (4) information technology services; (5) travel; (6) subcontractor costs; (7) contractor/project partner in-kind labor costs; and (8) “advanced practice” costs. Match funding sources include the prime contractor, subcontractors, and pilot testing/demonstration/deployment sites (e.g., test site staff services). “Match funds” do not include Energy Commission awards, EPIC funds received from other sources, future/contingent awards from other entities (public or private), or the cost or value of the project work site or structures or

other improvements affixed to the project work site permanently or for an indefinite period of time. Definitions of “match funding” categories are listed below.

- **“Cash in hand” funds** means funds that are in the recipient’s possession and are reserved for the proposed project, meaning that they have not been committed for use or pledged as match for any other project. “Cash in hand” funds include funding awards earned or received from other agencies for the proposed technologies or study (but not for the identical work). As applicable, proof that the funds exist as cash is required at the project kick-off meeting.
- **“Equipment”** means an item with a unit cost of at least \$5,000 and a useful life of at least one year. **Purchasing equipment with match funding is encouraged** because there are no disposition requirements at the end of the agreement for such equipment. Typically, grant recipients may continue to use equipment purchased with Energy Commission funds if the use is consistent with the intent of the original agreement.
- **“Materials”** means tangible project items that cost less than \$5,000 and have a useful life of less than one year.
- **“Information Technology Services”** means the design, development, application, implementation, support, and management of computer-based information systems directly related to the tasks in the Scope of Work. All information technology services in this area must comply with the electronic file format requirements in Subtask 1.1 (Products) of the Scope of Work (Attachment 6).
- **“Travel”** means all travel required to complete the tasks identified in the Scope of Work. Travel includes in-state and out-of-state travel, and travel to conferences. Use of match funds for out-of-state travel and travel to conferences is encouraged.
- **“Subcontractor Costs”** means all costs incurred by subcontractors for the project, including labor and non-labor costs.
- **“Contractor/Project Partner in-Kind Labor Costs”** means contractor or project partner labor costs that are not charged to the Energy Commission.
- **“Advanced Practice Costs”** means costs not charged to the Energy Commission that represent the incremental cost difference between standard and advanced practices, measures, and products used to implement the proposed project. For example, if the cost of purchasing and/or installing insulation that meets the applicable building energy efficiency standard is \$1/square foot and the cost of more advanced, energy efficient insulation is \$3/square foot, the Recipient may count up to \$2/square foot as match funds.
- Match funds may be spent only during the agreement term, either before or concurrently with EPIC funds. Match funds also must be reported in invoices submitted to the Energy Commission.
- All applicants providing match funds must submit commitment letters that: (1) identify the source(s) of the funds; (2) justify the dollar value claimed; (3) provide an unqualified (i.e., without reservation or limitation) commitment that guarantees the availability of the funds for the project; and (4) provide a strategy for replacing the funds if they are significantly reduced or lost. Please see Attachment 11, Commitment and Support Letter Form.

3. Allowable Purchases Expenditures

Allowable expenditures are those used for developing, conducting, and evaluating workforce training on the proper installation, operation, and maintenance of advanced energy efficiency technologies and measures.

For Group 1, the following activities are examples of eligible expenditures:

- Income for trainees during the training period.
- Training related to the proper implementation of advanced energy efficiency technology measures, such as:
 - Training related to the HVAC installation, maintenance, and duct installation to achieve high performance attics.
 - Training related to the installation of insulation above or below the roof deck over a vented attic to achieve high performance attics.
 - Training related to the installation of high performance walls by increasing the R-value of cavity and exterior insulation.
- Equipment and materials used in the training of advanced energy efficiency technology measures.

For Group 2, the following activities are examples of eligible expenditures:

- Income for trainees during the training period.
- Training related to the proper implementation of advanced energy efficiency measures, such as:
 - Insulation, HVAC installation, maintenance, and duct installation to achieve high energy savings, including replacement of heating or cooling systems, shorter ducts, and repositioning of registers to interior walls.
 - Changing out or adding ventilation for energy or heat recovery.
 - Sealing of building envelope and duct systems to achieve low leakage.
 - Changing out lighting and controls.
 - Adding information display systems to show equipment performance.
- Equipment and materials used in the training of advanced energy efficiency technology measures.

~~None of the EPIC funds requested may be used to provide workforce training for the following topics~~
Examples of non-eligible expenditures include but are not limited to:

- Energy audits or Building Performance Institute Building Analyst certification to perform whole-home assessments;
- ~~Training for HVAC installation, maintenance and duct installation, and insulation.~~
- ~~Renewable generation hardware such as photovoltaic systems.~~ Training related to the installation and operation of non-efficiency equipment (e.g., such as rooftop PV).
- ~~Time of use costs for classroom(s).~~

However, such training may count for the match-funding requirement, ~~under the category of “advanced practice costs.”~~

4. Change in Funding Amount

The Energy Commission reserves the right to:

- Increase or decrease the available funding and minimum/maximum award amounts described in this section.
- Allocate any additional funds to passing applications, in rank order.
- Reduce funding to an amount deemed appropriate if the budgeted funds do not provide full funding for agreements. In this event, the Recipient and Commission Agreement Manager will reach agreement on a reduced Scope of Work commensurate with available funding.

F. KEY ACTIVITIES SCHEDULE

Key activities, dates, and times for this solicitation and for agreements resulting from this solicitation are presented below. An addendum will be released if the dates change for activities that appear in **bold**.

ACTIVITY	DATE	TIME ⁶
Solicitation Release	Mar 18, 2015	
Pre-Application Workshop	April 1, 2015	1:30 p.m.
Deadline for Written Questions	April 2, 2015	5:00 p.m.
Anticipated Distribution of Questions and Answers	May 1, 2015 June 18, 2015	
Deadline to Submit Applications	June 4, 2015 July 29, 2015	3:00 p.m.
Anticipated Notice of Proposed Award Posting Date	July 3, 2015 August 26, 2015	
Anticipated Energy Commission Business Meeting Date	August 12, 2015 November 10, 2015	
Anticipated Agreement Start Date	September 11, 2015 November 16, 2015	
Anticipated Agreement End Date	Mar 29, 2019 November 1, 2019	

G. PRE-APPLICATION WORKSHOP

Energy Commission staff will hold one Pre-Application Workshop to discuss the solicitation with applicants. Participation is optional but encouraged. Applicants may attend the workshop in-person, via the internet (WebEx, see instructions below), or via conference call on the date and at the time and location listed below. Please call (916) 654-4381 or refer to the Energy Commission's website at www.energy.ca.gov/contracts/index.html to confirm the date and time.

⁶ Pacific Standard Time or Pacific Daylight Time, whichever is being observed.

Date and time: Wednesday, April 1, 2015, 1:30 pm (Pacific Standard Time)

Location: California Energy Commission

1516 9th Street

Sacramento, CA 95814

Hearing Room A

WebEx Instructions:

- To join the WebEx meeting, go to <https://energy.webex.com> and enter the meeting number and password below:

Meeting Number: 921 462 543

Meeting Password: meeting@130

Topic: Pre-Application Workshop GFO-15-302

- **To Logon with a Direct Phone Number:** After logging into WebEx, a prompt will appear on-screen for a phone number. In the "Number" box, enter your area code and phone number and click "OK" to receive a call for the audio of the meeting. International callers may use the "Country/Region" button to help make their connection.
- **To Logon with an Extension Phone Number:** After you login, a prompt will ask for your phone number. Select "CANCEL." Call **1-866-469-3239** (toll-free in the U.S. and Canada). When prompted, enter the meeting number above and the unique Attendee ID number listed in the top left area of the screen after login. International callers may dial in using the "Show all global call-in numbers" link (also in the top left area).

Telephone Access Only:

Call **1-866-469-3239** (toll-free in the U.S. and Canada). When prompted, enter the meeting number above. International callers may select their number from

<https://energy.webex.com/energy/globalcallin.php>.

Technical Support:

- For assistance with problems or questions about joining or attending the meeting, please call WebEx Technical Support at **1-866-229-3239**. You may also contact Gina Archuleta at (916) 654-4381.
- System Requirements: To determine whether your computer is compatible, visit: <http://support.webex.com/support/system-requirements.html>.
- Meeting Preparation: The playback of UCF (Universal Communications Format) rich media files requires appropriate players. Please determine whether the players are installed on your computer by visiting: <https://energy.webex.com/energy/systemdiagnosis.php>

H. QUESTIONS

During the solicitation process, direct questions to the Commission Agreement Officer listed below:

Crystal Presley-Willis, Commission Agreement Officer

California Energy Commission

1516 Ninth Street, MS-18

Sacramento, California 95814

Telephone: (916) 654-5067

FAX: (916) 654-4423

E-mail: Crystal.Presley-Willis@energy.ca.gov

Applicants may ask questions at the Pre-Application Workshop, and may submit written questions via mail, email, and FAX. However, all questions must be received by the deadline listed in the “Key Activities Schedule.”

A question and answer document will be e-mailed to all parties who attended the Pre-Application Workshop and provided their contact information on the sign-in sheet. The questions and answers will also be posted on the Energy Commission’s website at: <http://www.energy.ca.gov/contracts/index.html>.

Any verbal communication with an Energy Commission employee concerning this solicitation is not binding on the State and will in no way alter a specification, term, or condition of the solicitation. Therefore, all communication should be directed in writing to the assigned Commission Agreement Officer.

II. Eligibility Requirements

A. APPLICANT REQUIREMENTS

1. Eligibility

This solicitation is open to all public and private entities and individuals, except for Publicly Owned Utilities.

2. Terms and Conditions

Each grant agreement resulting from this solicitation will include terms and conditions that set forth the recipient's rights and responsibilities. By signing the Application Form (Attachment 1), each applicant agrees to enter into an agreement with the Energy Commission to conduct the proposed project according to the terms and conditions that correspond to its organization, without negotiation: (1) University of California terms and conditions; (2) U.S. Department of Energy terms and conditions; or (3) standard terms and conditions. The standard terms and conditions are located at <http://www.energy.ca.gov/research/contractors.html>. The University of California and U.S. Department of Energy terms and conditions are under negotiation and will be posted once finalized.

Failure to agree to the terms and conditions by taking actions such as failing to sign the Application Form or indicating that acceptance is based on modification of the terms will result in **rejection** of the application. Applicants **must read** the terms and conditions carefully. The Energy Commission reserves the right to modify the terms and conditions prior to executing grant agreements.

3. California Secretary of State Registration

California business entities and non-California business entities that conduct intrastate business in California and are required to register with the California Secretary of State must do so and be in good standing in order to enter into an agreement with the Energy Commission. If not currently registered with the California Secretary of State, applicants should contact the Secretary of State's Office as soon as possible. For more information, visit the Secretary of State's website at: www.sos.ca.gov.

B. PROJECT REQUIREMENTS

1. Market Facilitation Stage

Projects must fall within the "market facilitation" stage, which includes activities such as program tracking, market research, education and outreach, regulatory assistance and streamlining, and workforce development to support clean energy technology and strategy deployment.⁷

2. Project Focus

Energy efficiency is a critical strategy for reducing the state's energy costs and greenhouse gas (GHG) impacts. Realizing the potential energy savings from the building sector requires that clean energy workers have the skills to ensure that advanced energy efficiency equipment is properly installed and maintained, and that buildings are designed, constructed, and retrofitted consistent with best practices and technical specifications for energy efficiency.

Deployment sites must be located in California and within an electric IOU service territory.

⁷ See CPUC "Phase 2" Decision 12-05-037 at pp. 61-62 and 90, http://docs.cpuc.ca.gov/PublishedDocs/WORD_PDF/FINAL_DECISION/167664.PDF.

This solicitation seeks applications for the following groups:

Group 1: On-the-job training for constructing high performance attics and walls for new homes constructed in a manner consistent with proposals for the 2016 building energy efficiency standards.

Projects funded within this group will provide on-the job training programs to construction superintendents on the proper installation of advanced energy efficiency measures and construction practices for new homes, specifically measures being proposed in the 2016 building standards. Applicants may propose to train design teams, including architects, building designers, foremen, building trade workers, subcontractors and other related specialists. The 2016 standards are expected to go into effect January 1, 2017. The 2016 standards will lead up to the 2019 buildings standards, which will include measures intended to meet the policy goal for all new residential housing to be zero-net energy by 2020.⁸ The training programs funded in this group should complement design assistance and training programs provided by other entities to architects and structural engineers designing high performance buildings. In the application, applicants must describe the team qualifications, capabilities, and resources to demonstrate workforce development expertise, such as a track record of successful job placement, and established communication channels with industry partners as well as federal, state, and local workforce providers. Training funded in this group will help ensure proper installation, recognizing new characteristics of the following advanced energy efficiency measures:

- High performance attics require technology-specific building practices different from standard attics to ensure advances in energy efficiency are achieved, while maintaining required levels of performance in roofing, indoor air quality, heating, ventilation, and cooling. For example, high performance vented attics include whole house fans, an efficient technology for cooling homes, but one that typically requires vents in the attic. High performance unvented attics require specialized techniques to avoid condensation and related health and roofing performance challenges.
- High performance walls also require specialized techniques, depending on the materials, framing design, and thickness of insulation. For example, exterior rigid insulation thicker than 1.25 inches may require a change in window and door specifications.

The Project Narrative (Attachment 4) should at a minimum include a discussion of the following:

- **The applicant's approach for recruiting construction companies to participate in the training program.**
- **If applicable, the applicant's progress in seeking a determination from the California Department of Industrial Relations (DIR) regarding prevailing wage requirements.**
- How the application will leverage existing state-approved or similar accredited training programs that are widely accepted by the building industry to ensure trainees have

⁸ The CPUC Energy Efficiency Strategic Plan (2008) (<http://www.cpuc.ca.gov/PUC/energy/Energy+Efficiency/eesp/>) and the 2007 Integrated Energy Policy Report (http://www.energy.ca.gov/2007_energy_policy/) set goals of zero net energy for new residences by 2020 and new commercial buildings by 2030. The 2013 Integrated Energy Policy Report (http://www.energy.ca.gov/2013_energy_policy/) updates the definition of zero net energy buildings and discusses related issues and options.

adequate safety, electricity, and workmanship training and competency before going out to job sites. Examples include the Building Energy Code Training Program and other similar programs.

- How each application will identify and address the skills needed to install the advanced energy efficiency measures described above.
- **Describe partnerships involved with the proposed training, such as commitments from equipment manufacturers to provide or donate equipment.**
- Housing construction sites for on-the-job training to upgrade the skills of the trainees to install the technologies and systems targeted by the proposed training; or how the applicant will acquire residential construction sites for on-the-job training, and how these sites will be leveraged to upgrade the skills.
- How building practices and techniques learned through this training for advanced energy efficiency measures will be disseminated to other construction superintendents working in new home construction, and, if applicable, design teams, including architects, building designers, foremen, building trade workers, subcontractors and other related specialists. Materials used to disseminate information should be prepared in English, Spanish, and all other languages needed to communicate effectively with target audiences.
- As part of the measurement and verification plan, specify a team of qualified, independent performance testers with the expertise needed to conduct the following analysis as part of the application: 1) assess whether the technologies used in on-the-job training opportunities are installed and operating according to required designed specifications; 2) ~~measure the building energy use, determine actual energy savings resulting from the installations, and compare to the projected savings~~ **determine the energy implications of high performance attic and high performance wall improvements; 3) any other in-field performance measures, such as impact on moisture in assemblies and relative humidity in the homes; and 4) make recommendations for installation improvement or additional training.**
- How feedback from field performance of different technologies in different regions will be collected and reported to inform refinement and improvement of the California Title 24 Building Standards.
- Proposed plan to sustain the training beyond the term of the agreement.

The Technical Tasks in Part II of the Scope of Work (Attachment 6) must incorporate the following:

- Commissioning and performance testing to measure energy saving benefits of high performance attics and walls installed with support from this funding.
- ~~Hiring statistics for trainees completing the workforce training proposed in the application.~~
- A summary of lessons learned and best practices.
- Development of outreach materials, such as informational brochures or videos, to inform future construction teams of correct installation procedures and building practices going forward.

Group 2: Workforce training for installing advanced energy efficiency measures in existing buildings (residential/commercial/multifamily) in disadvantaged communities as defined by SB 535 (2012).

Applications submitted for this group must seek to advance the goals of AB 758 (2009) by providing classroom and on-the-job training on the installation, maintenance, and operation of advanced energy efficiency technologies and measures in existing buildings, specifically in disadvantaged communities where electricity costs represent a higher percentage of living expenses. On-the-job training projects must be informed by the *Comprehensive Energy Efficiency Program for Existing Buildings Scoping Report (2012)* and related work at the Energy Commission and the CPUC to implement AB 758.⁹ In the application, applicants must describe the team qualifications, capabilities, and resources to demonstrate workforce development expertise, such as a track record of successful job placement, and established communication channels with industry partners as well as federal, state, and local workforce providers. Applications must be structured to:

- Provide trainees with income while they learn new skills to enhance career development.
- Provide training and funding for workers to install and provide feedback on the performance and reliability of **on the installation, operation, and maintenance of** advanced energy efficiency measures, such as:
 - High performance lighting and controls.
 - Advanced building envelope sealing technologies, such as use of aerosol mists to seal building leaks.
 - Information systems to identify when energy using equipment are operating sub-optimally.
 - ~~Energy recovery ventilation, heat recovery ventilation and other energy efficient methods of providing ventilation.~~
 - **Supply-based (or controlled) ventilation.**
 - **High performance ventilative cooling technologies (such as whole house fans or pre-cooling with filtered outdoor air).**
 - **Distribution system technologies and practices for energy savings (heating and cooling).**

The Project Narrative (Attachment 4) should at a minimum include a discussion of the following:

- The applicant's approach to recruit trainees from disadvantaged communities. This includes providing recruiting material and training in English, Spanish, and all other languages needed to communicate effectively with trainees.
- The advanced energy efficiency technologies, systems, and construction methods that will be the focus of the training, including the building and property types where they will be installed.

⁹ For more information on AB 758 implementation at the Energy Commission, see <http://www.energy.ca.gov/ab758/>. For more information on energy efficiency programs at the CPUC, see <http://www.cpuc.ca.gov/PUC/energy/Energy+Efficiency/>.

- How the applicant will ensure: 1) workers have applicable trade-related certifications to participate in on-the-job training; 2) workers are familiar with practices and procedures to maintain a safe work environment; and 3) the work product complies with applicable health and safety codes.
- Identify funding sources, including employer and other match funding (if applicable), to be used to provide trainees with income while they learn new skills to enhance career development. Describe partnerships involved with the proposed training, such as commitments from equipment manufacturers to provide or donate equipment; ~~information, and assistance to facilitate access to the best available information and feedback from the training locations to equipment manufacturers on installation practices and procedures for the advanced energy efficiency measures included in the training.~~
- Describe how applicant will leverage other regional workforce development programs that bring together employers, accredited training providers, community organizations, and local government.
- **If applicable, the applicant's progress in seeking a determination from the California Department of Industrial Relations (DIR) regarding prevailing wage requirements.**
- The buildings and properties that will serve as the on-the-job training sites; **or how the applicant will acquire buildings and properties for on-the-job training, and how these sites will be leveraged** to upgrade the skills of the trainees to install the technologies and systems targeted by the proposed training. Projects must be located in disadvantaged communities (as defined by SB 535, De Leon, Chapter 830, Statutes of 2012) within electric IOU service territories.¹⁰ These communities can be identified using the Office of Environmental Health Hazard Assessment's CalEnviroScreen tool (available at <http://oehha.ca.gov/ej/ces2.html>). This tool is a screening methodology that can be used to help identify California communities that are disproportionately burdened by multiple sources of pollution, including air and water pollution and other adverse environmental impacts.
- Applications, where applicable, should also include training, such as information and maintenance service programs, for trainees and building occupants on how to operate the systems and ensure sustained savings. Applications, where applicable, should also include community engagement forums for building occupants.
- As part of the measurement and verification plan, specify a team of qualified, independent performance testers with the expertise needed to conduct the following analysis as part of the application: 1) assess whether the technologies used in on-the-job training opportunities are installed and operating according to required designed specifications; 2) for on-the-job training, measure the pre and post building energy use and determine actual energy savings resulting from the installations and compare to the projected savings; and 3) make recommendations for installation improvement or additional training.
- Proposed plan to sustain the training beyond the term of the agreement. This includes a description of how the applicant will recruit building owners to participate as project sites for future on-the-job training opportunities for advanced energy efficiency measures.

¹⁰ Pacific Gas and Electric, San Diego Gas & Electric, and Southern California Edison.

- **Proposed plan to connect trainees to employment opportunities after the training is completed.**

The Technical Tasks in Part II of the Scope of Work (Attachment 6) must incorporate the following:

- **Hiring statistics for trainees completing the workforce training proposed in the application.**
- **A summary of lessons learned and best practices.**

3. Ratepayer Benefits, Technological Advancements, and Breakthroughs

California Public Resources Code Section 25711.5(a) requires EPIC-funded projects to:

- Benefit electricity ratepayers; and
- Lead to technological advancement and breakthroughs to overcome the barriers that prevent the achievement of the state’s statutory energy goals.

The CPUC defines “ratepayer benefits” as greater reliability, lower costs, and increased safety.¹¹ The CPUC has also adopted the following guiding principles as complements to the key principle of electricity ratepayer benefits: societal benefits; GHG emissions mitigation and adaptation in the electricity sector at the lowest possible cost; the loading order; low-emission vehicles/transportation; economic development; and efficient use of ratepayer monies.¹²

Accordingly, the Project Narrative Form (Attachment 4) and the “Goals and Objectives” section of the Scope of Work Template (Attachment 6) must describe how the project will: (1) benefit California electric IOU ratepayers by increasing reliability, lowering costs, and/or increasing safety; and (2) lead to technological advancement and breakthroughs to overcome barriers to achieving the state’s statutory energy goals.

4. Measurement and Verification Plan

Include a Measurement and Verification Plan in the Project Narrative (Attachment 4) that reflects knowledge of best practices and requirements for measuring and verifying energy efficiency in California investor-owned utility service territories. The plan must describe how actual project benefits will be measured and quantified, including metrics such as:

- Pre and post-project energy use (kilowatt hours, kilowatts) and cost. Any estimates of energy savings or GHG impacts must be calculated using the References for Calculating Electricity End-Use, Electricity Demand, and GHG Emissions (Attachment 12).
- Number of workers trained in correct installation and operation of advanced energy efficiency technologies targeted by the application.
- ~~Rate of adoption of advanced energy efficiency technologies targeted by the application.~~ Energy use and cost savings attributable to correct installation of advanced energy efficiency measures targeted by the application.

¹¹ CPUC Decision 12-05-037 at p. 19.

¹² *Id.* at pp. 19-20.

III. Application Organization and Submission Instructions

A. APPLICATION FORMAT, PAGE LIMITS, AND NUMBER OF COPIES

The following table summarizes the application formatting and page limit requirements:

<p>Format</p>	<ul style="list-style-type: none"> • Font: 11-point, Arial (excluding Excel spreadsheets, original template headers and footers, and commitment or support letters) • Margins: No less than one inch on all sides (excluding headers and footers) • Spacing: Single spaced, with a blank line between each paragraph • Pages: Numbered and printed double-sided (when determining page limits, each printed side of a page counts as one page) • Signatures: Manual (i.e., not electronic) • Labeling: Tabbed and labeled as required in Sections B and C below • Binding: Original binder clipped; all other copies spiral or comb bound (binders discouraged) • File Format: MS Word version 1997-2003, or version 2007 or later (.doc or .docx format), excluding Excel spreadsheets and commitment or support letters (PDF files are acceptable for the letters) • File Storage: Electronic files of the application must be submitted on a CD-ROM or USB memory stick
<p>Page Limits</p>	<ul style="list-style-type: none"> • Page limits are as follows: <ul style="list-style-type: none"> ○ Executive Summary (Attachment 2): two pages ○ Fact Sheet (Attachment 3): two pages ○ Project Narrative Form (Attachment 4): twenty pages ○ Project Team Form (Attachment 5): two pages for each resume ○ Reference and Work Product Form (Attachment 9): one page for each reference, two pages for each project description ○ Commitment and Support Letter Form (Attachment 11): two pages, excluding the cover page <p>The following attachments may not cumulatively exceed seventy pages:</p> <ul style="list-style-type: none"> ○ Executive Summary Form ○ Fact Sheet Template ○ Project Narrative Form ○ Scope of Work Template (Attachments 6 and 6a) • There are no page limits for the following: <ul style="list-style-type: none"> ○ Application Form (Attachment 1) ○ Budget Forms (Attachment 7) ○ CEQA Compliance Form (Attachment 8) ○ Contact List Template (Attachment 10)
<p>Number of Copies of the Application</p>	<ul style="list-style-type: none"> • Five hard copies (including one copy with original signatures) • One electronic copy (on a CD-ROM or USB memory stick)

B. APPLICATION DELIVERY

Include the following label information on the mailing envelope:

Applicant's Project Manager Applicant's Name Street Address City, State, and Zip Code	GFO-15-302 Contracts, Grants, and Loans Office, MS-18 California Energy Commission 1516 Ninth Street, 1st Floor Sacramento, California 95814
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Applications must be delivered to the Energy Commission's Contracts, Grants, and Loans Office in a sealed package (in person or via U.S. mail or courier service) during normal business hours, prior to the date and time specified in the "Key Activities Schedule" in Part I of this solicitation. Applications received after the specified date and time are considered late and will not be accepted. Postmark dates of mailing, e-mail, and facsimile (FAX) transmissions are not acceptable in whole or in part, under any circumstances.

C. APPLICATION ORGANIZATION AND CONTENT

1. Submit attachments in the order specified below.
2. Label the application cover "Grant Funding Opportunity GFO-15-302" and include: (a) the title of the application; and (b) the applicant's name.
3. Separate each section of the application by a tab that is labeled only with the tab number and section title indicated below.

Tab/Attachment Number	Title of Section
1	Application Form (requires signature)
2	Executive Summary
3	Fact Sheet
4	Project Narrative
5	Project Team
6 (<i>includes 6a</i>)	Scope of Work
7	Budget
8	CEQA Compliance Form
9	References and Work Product
10	Contact List
11	Commitment and Support Letters (letters require signature)

Below is a description of each required section of the application:

1. Application Form (Attachment 1)

This form requests basic information about the applicant and the project. The application must include an original form that includes all requested information and is signed by an authorized representative of the applicant's organization.

2. Executive Summary Form (Attachment 2)

The Executive Summary must include: a project description; the project goals and objectives to be achieved; an explanation of how the goals and objectives will be achieved, quantified, and measured; and a description of the project tasks and overall management of the agreement.

3. Fact Sheet Template (Attachment 3)

The project fact sheet must present project information in a manner suitable for publication (if the project receives funding, the Energy Commission may use the fact sheet to publicize the project). The fact sheet must follow the template, which includes a summary of project specifics and a description of the issue addressed by the project, a project description, and anticipated benefits for the state of California.

4. Project Narrative Form (Attachment 4)

This form will include the majority of the applicant's responses to the Scoring Criteria in Part IV.

5. Project Team Form (Attachment 5)

Identify by name all key personnel¹³ assigned to the project, including the project manager and principal investigator (if applicable), and individuals employed by any major subcontractor (i.e., a subcontractor receiving at least 25 percent of Energy Commission funds or \$100,000, whichever is less). Clearly describe their individual areas of responsibility. Include the information required for each individual, including a resume (maximum two pages, printed double-sided).

6. Scope of Work Template (Attachments 6 and 6a)

Applicants must include a completed Scope of Work for each project, as instructed in the template. The Scope of Work identifies the tasks required to complete the project. It includes a project schedule that lists all products, meetings, and due dates. All work must be scheduled for completion within 36 to 48 months of the project start date.

Electronic files for **Parts I-IV** of the Scope of Work are in **MS Word**. **Part V** (Project Schedule, Attachment 6a) is in **MS Excel**.

7. Budget Forms (Attachment 7)

The budget forms are in MS Excel format and consist of seven worksheets. Detailed instructions for completing them are included at the beginning of Attachment 7. **Read the instructions before completing the worksheets.** Complete and submit information on **all** budget worksheets. The salaries, rates, and other costs entered on the worksheets will become a part of the final agreement.

¹³ "Key personnel" are individuals that are critical to the project due to their experience, knowledge, and/or capabilities.

- 1) All project expenditures (match share and reimbursable) must be made within the approved agreement term. Match share requirements are discussed in Part I of this solicitation. The entire term of the agreement and projected rate increases must be considered when preparing the budget.
- 2) The budget must reflect estimates for **actual** costs to be incurred during the agreement term. The Energy Commission may only approve and reimburse for actual costs that are properly documented in accordance with the grant terms and conditions. Rates and personnel shown must reflect the rates and personnel the applicant would include if selected as a Recipient.
- 3) The proposed rates are considered capped and may not change during the agreement term. The Recipient will only be reimbursed for **actual** rates up to the rate caps.
- 4) The budget must **NOT** include any Recipient profit from the proposed project, either as a reimbursed item, match share, or as part of overhead or general and administrative expenses (subcontractor profit is allowable, though the maximum percentage allowed is 10 percent of project expenses). Please review the terms and conditions and budget forms for additional restrictions and requirements.
- 5) The budget must allow for the expenses of all meetings and products described in the Scope of Work. Meetings may be conducted at the Energy Commission or by conference call, as determined by the Commission Agreement Manager.
- 6) Applicants must budget for permits and insurance. Permitting costs may be accounted for in match share (please see the discussion of permits in the Scope of Work, Attachment 6).
- 7) **Prevailing wage requirement:** Applicants must pay prevailing wages (i.e., rates pre-determined by the California Department of Industrial Relations) to all workers employed on public works projects that exceed \$1,000. Public works projects involve demolition, installation, repair, or maintenance work. If the proposed project involves such work, the Applicant must assume that the project is a public work and budget accordingly unless it obtains a determination from the California Department of Industrial Relations or a court of competent jurisdiction that the project is not a public work. Please see the terms and conditions for additional information about the prevailing wage requirement.

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

The Energy Commission requires the information on this form to facilitate its evaluation of the funded activities under CEQA (Public Resources Code section 21000 et. seq.), a law that requires state and local agencies in California to identify and mitigate the significant environmental impacts of their actions. The form will also help applicants to determine CEQA compliance obligations by identifying which funded activities may trigger CEQA. If activities do not trigger CEQA (such as paper studies) the worksheet will help to identify and document this. *This form must be completed regardless of whether the proposed activities are considered a "project" under CEQA.*

Failure to complete the CEQA process in a timely manner after the Energy Commission's issuance of an award may result in cancellation of the award and allocation of funding to the next highest-scoring project.

9. Reference and Work Product Form (Attachment 9)

1) Section 1: Provide applicant and subcontractor references as instructed.

- 2) Section 2: Provide a list of past projects detailing technical and business experience of the applicant (or any member of the project team) that is related to the proposed work. Identify past projects that resulted in market-ready technology, advancement of codes and standards, and/or advancement of state energy policy. Include copies of up to three of the applicant or team member's recent publications in scientific or technical journals related to the proposed project, as applicable.

10. Contact List Template (Attachment 10)

The list identifies the names and contact information of the project manager, administrator, accounting officer, and recipient of legal notices.

11. Commitment and Support Letter Form (Attachment 11)

A commitment letter commits an entity or individual to providing the service or funding described in the letter. A support letter details an entity or individual's support for the project.

IV. Evaluation and Award Process

A. APPLICATION EVALUATION

Applications will be evaluated and scored based on responses to the information requested in this solicitation. To evaluate applications, the Energy Commission will organize an Evaluation Committee that consists primarily of Energy Commission staff. The Evaluation Committee may use technical expert reviewers to provide an analysis of applications. Applications will be evaluated in two stages:

1. Stage One: Application Screening

The Contracts, Grants, and Loans Office and/or the Evaluation Committee will screen applications for compliance with the Screening Criteria in **Section E** of this Part. **Applications that fail any of the screening criteria will be rejected.**

2. Stage Two: Application Scoring

Applications that pass Stage One will be submitted to the Evaluation Committee for review and scoring based on the Scoring Criteria in **Section F** of this Part.

- The scores for each application will be the average of the combined scores of all Evaluation Committee members.
- **A minimum score of 70.00 points** is required for the application to be eligible for funding. In addition, the application must receive a minimum score of **49.00 points** for criteria **1–4** to be eligible for funding.
- **Clarification Interviews:** The Evaluation Committee may conduct optional in-person or telephone interviews with applicants during the evaluation process to clarify and/or verify information submitted in the application. However, these interviews may not be used to change or add to the content of the original application. Applicants will not be reimbursed for time spent answering clarifying questions.

B. RANKING, NOTICE OF PROPOSED AWARD, AND AGREEMENT DEVELOPMENT

1. Ranking and Notice of Proposed Award

Applications that receive a minimum score of 70.00 points for all criteria will be ranked according to their score.

- The Energy Commission will post a **Notice of Proposed Award (NOPA)** that includes: (1) the total proposed funding amount; (2) the rank order of applicants; and (3) the amount of each proposed award. The Energy Commission will post the NOPA at its headquarters in Sacramento and on its website, and will mail it to all parties that submitted an application. Proposed awards must be approved by the Energy Commission at a business meeting.
- **Debriefings:** Unsuccessful applicants may request a debriefing after the release of the NOPA by contacting the Commission Agreement Officer listed in Part I. A request for debriefing must be received **no later than 30 calendar days** after the NOPA is released.
- The Energy Commission reserves the right to:
 - Allocate any additional funds to passing applications, in rank order; and
 - Negotiate with successful applicants to modify the project scope, schedule, and/or level of funding.

2. Agreements

Applications recommended for funding will be developed into a grant agreement to be considered at an Energy Commission Business Meeting. Recipients may begin the project only after full execution of the grant agreement (i.e., approval at an Energy Commission business meeting and signature by the Recipient and the Energy Commission).

- **Resolution Requirement (for government agency recipients only):** Prior to approval of the agreement at a business meeting, government agency recipients (e.g., federal, state, and local governments; air/water/school districts; joint power authorities; and state universities) must provide a resolution that authorizes the agency to enter into the agreement and is signed by a representative authorized to execute the agreement and all documents related to the award.
Resolutions must include: (1) a brief description of the project; (2) the award amount; and (3) an acceptance of the award.
- **Agreement Development:** The Contracts, Grants, and Loans Office will send the Recipient a grant agreement for approval and signature. The agreement will include the applicable terms and conditions and will incorporate this solicitation by reference. The Energy Commission reserves the right to modify the award documents (including the terms and conditions) prior to executing any agreement.
- **Failure to Execute an Agreement:** If the Energy Commission is unable to successfully execute an agreement with an applicant, it reserves the right to cancel the pending award and to fund the next highest-ranked, eligible application.
- **Agreement Amendment:** The executed agreement may be amended by mutual consent of the Energy Commission and the Recipient. The agreement may require amendment as a result of project review, changes in project scope, and/or availability of funding.

C. GROUNDS TO REJECT AN APPLICATION OR CANCEL AN AWARD

Applications that do not pass the screening stage will be rejected. In addition, the Energy Commission reserves the right to reject an application and/or to cancel an award if the following circumstances are discovered at any time during the application or agreement process:

- The application contains false or intentionally misleading statements or references that do not support an attribute or condition contended by the applicant.
- The application is intended to erroneously and fallaciously mislead the State in its evaluation and the attribute, condition, or capability is a requirement of this solicitation.
- The application does not literally comply or contains caveats that conflict with the solicitation, and the variation or deviation is material.
- The application does not contain sufficient information to enable a useful evaluation to be conducted.
- The applicant has previously received funding through a Public Interest Energy Research (PIER) agreement, has received the PIER royalty review letter (which the Energy Commission annually sends out to remind past recipients of their obligations to pay royalties), and has not responded to the letter or is otherwise not in compliance with repaying royalties.
- The applicant has received unsatisfactory evaluations from the Energy Commission or another California state agency.
- The applicant is a business entity that is not in good standing with the California Secretary of State.

- The applicant has not demonstrated that it has the financial capability to complete the project.
- The application is not submitted in the format specified in Part III, Sections A, B, and C of the solicitation.
- The project end date extends past the anticipated agreement end date specified in the “Key Activities Schedule” in Part I.

D. MISCELLANEOUS

1. Solicitation Cancellation and Amendment

It is the policy of the Energy Commission not to solicit applications unless there is a bona fide intention to award an agreement. However, if it is in the State’s best interest, the Energy Commission reserves the right to do any of the following:

- Cancel this solicitation;
- Revise the amount of funds available under this solicitation;
- Amend this solicitation as needed; and/or
- Reject any or all applications received in response to this solicitation.

If the solicitation is amended, the Energy Commission will send an addendum to all parties who requested the solicitation, and will also post it on the Energy Commission’s website at: www.energy.ca.gov/contracts. The Energy Commission will not reimburse applicants for application development expenses under any circumstances, including cancellation of the solicitation.

2. Modification or Withdrawal of Application

Applicants may withdraw or modify a submitted application before the deadline to submit applications by sending a letter to the Commission Agreement Officer listed in Part I. Applications cannot be changed after that date and time. An Application cannot be “timed” to expire on a specific date. For example, a statement such as the following is non-responsive to the solicitation: “This application and the cost estimate are valid for 60 days.”

3. Confidentiality

Though the entire evaluation process from receipt of applications up to the posting of the NOPA is confidential, **all submitted documents will become public records** after the Energy Commission posts the NOPA or the solicitation is cancelled. **The Energy Commission will not accept or retain applications that identify any portion as confidential.**

4. Solicitation Errors

If an applicant discovers any ambiguity, conflict, discrepancy, omission, or other error in the solicitation, the applicant should immediately notify the Energy Commission of the error in writing and request modification or clarification of the solicitation. The Energy Commission will provide modifications or clarifications by written notice to all parties who requested the solicitation, without divulging the source of the request for clarification. The Energy Commission will not be responsible for failure to correct errors.

5. Immaterial Defect

The Energy Commission may waive any immaterial defect or deviation contained in an application. The Energy Commission’s waiver will not modify the application or excuse the successful applicant from full compliance with solicitation requirements.

6. Disposition of Applicant’s Documents

Upon the posting of the NOPA, all applications and related materials submitted in response to this solicitation will become property of the State and public records. Unsuccessful applicants who seek the return of any materials must make this request to the Agreement Officer listed in Part I, and provide sufficient postage to fund the cost of returning the materials.

E. Stage One: Application Screening

SCREENING CRITERIA	Pass/Fail
<i>The Applicant must pass ALL criteria to progress to Stage Two.</i>	
1. The application is received by the Energy Commission’s Contracts, Grants, and Loans Office by the due date and time specified in the “Key Activities Schedule” in Part I of this solicitation.	<input type="checkbox"/> Pass <input type="checkbox"/> Fail
2. The Application Form (Attachment 1) is signed where indicated.	<input type="checkbox"/> Pass <input type="checkbox"/> Fail
3. The application addresses only one of the eligible project groups, as indicated on the Application Form.	<input type="checkbox"/> Pass <input type="checkbox"/> Fail
4. If the applicant has submitted more than one application for the same project group, each application is for a distinct project (i.e., no overlap with respect to the tasks described in the Scope of Work, Attachment 6). <i>If the projects are not distinct and the applications were submitted at the same time, only the first application screened by the Energy Commission will be eligible for funding. If the applications were submitted separately, only the first application received by the Energy Commission will be eligible for funding.</i>	<input type="checkbox"/> Pass <input type="checkbox"/> Fail
5. The requested funding falls within the minimum and maximum range specified in Part I of this solicitation.	<input type="checkbox"/> Pass <input type="checkbox"/> Fail
6. The Application Form and budget specify that the applicant will provide at least 50% of the requested Energy Commission funds in match funds.	<input type="checkbox"/> Pass <input type="checkbox"/> Fail
7. <i>If the project involves on-the-job training activities:</i> <ul style="list-style-type: none"> o The Application Form identifies one or more on-the-job training site locations. o All on-the-job training sites are located in a California electric IOU service territory (PG&E, SDG&E, or SCE). 	<input type="checkbox"/> Pass <input type="checkbox"/> Fail <input type="checkbox"/> N/A (project does not involve on-the-job training activities)
8. The application does not contain any confidential information or identify any portion of the application as confidential.	<input type="checkbox"/> Pass <input type="checkbox"/> Fail
9. The applicant has not included a statement or otherwise indicated that it will not accept the terms and conditions, or that acceptance is based on modifications to the terms and conditions.	<input type="checkbox"/> Pass <input type="checkbox"/> Fail

<p style="text-align: center;">SCREENING CRITERIA</p> <p><i>The Applicant must pass ALL criteria to progress to Stage Two.</i></p>	<p style="text-align: center;">Pass/Fail</p>
<p>10. The proposal includes one or more support letters, a match funding commitment letter, and a commitment letter for each on-the-job training site, as specified in Attachment 11.</p> <p><i>If the proposal includes commitment letters that are not required and do not meet the requirements of Attachment 11, the letters will not be considered in the scoring phase.</i></p>	<p><input type="checkbox"/> Pass <input type="checkbox"/> Fail</p>

F. STAGE TWO: APPLICATION SCORING

Proposals that pass ALL Stage One Screening Criteria will be evaluated based on the Scoring Criteria on the next page and the Scoring Scale below (with the exception of criteria 6–8, which will be evaluated as described in each criterion). Each criterion has an assigned number of possible points, and is divided into multiple sub-criteria. The sub-criteria are not equally weighted. The Project Narrative (Attachment 4) must respond to each sub-criterion, unless otherwise indicated.

- The total minimum passing score is **70.00 out of 100 points**.
- The minimum passing score for **criteria 1–4 is 49.00 points**. The points for criteria 5–8 will only be applied to proposals that achieve the minimum score for criteria 1–4.

SCORING SCALE

% of Possible Points	Interpretation	Explanation for Percentage Points
0%	Not Responsive	<ul style="list-style-type: none"> • The response fails to address the criteria. • The omissions, flaws, or defects are significant and unacceptable.
10-30%	Minimally Responsive	<ul style="list-style-type: none"> • The response minimally addresses the criteria. • The omissions, flaws, or defects 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 omissions, flaws, or defects are inconsequential and acceptable.
80%	Good	<ul style="list-style-type: none"> • The response fully addresses the criteria with a good degree of confidence in the applicant's response or proposed solution. • There are no identified omissions, flaws, or defects. 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 criteria 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.

SCORING CRITERIA

The Project Narrative (Attachment 4) must respond to each criterion below, unless otherwise indicated. Any estimates of energy savings or GHG impacts should be calculated as specified in the **References for Calculating Electricity End-Use, Electricity Demand, and GHG Emissions (Attachment 12)**, to the extent that the references apply to the proposed project.

Scoring Criteria	Maximum Points
<p>1. Technical Merit and Need</p> <ul style="list-style-type: none">a. Provides a clear and concise description of the goals, objectives, technological or scientific knowledge advancement, and innovation in the proposed project.b. Explains how the proposed project will lead to technological advancement and breakthroughs that overcome barriers to achieving the state's statutory energy goals.c. Summarizes the current status of the relevant technology and/or scientific knowledge, and explains how the proposed project will advance, supplement, and/or replace current technology and/or scientific knowledge.d. Justifies the need for EPIC funding, including an explanation of why the proposed work is not adequately supported by competitive or regulated markets.e. Discusses the degree to which the proposed work is technically feasible and achievable.f. Provides a clear and plausible measurement and verification plan that describes how energy savings and other benefits specified in the application will be determined and measured.	20

Scoring Criteria	Maximum Points
<p>2. Technical Approach</p> <ul style="list-style-type: none"> a. Describes the technique, approach, and methods to be used in performing the work described in the Scope of Work. Highlights any outstanding features. b. Describes how tasks will be executed and coordinated with various participants and team members. c. Identifies and discusses factors critical for success, in addition to risks, barriers, and limitations. Provides a plan to address them. d. Describes how the knowledge gained, experimental results, and lessons learned will be made available to the public and key decision-makers. e. Includes a complete Scope of Work and Project Schedule, as instructed in Attachments 6 and 6a. 	<p>20</p>
<p>3. Impacts and Benefits for California IOU Ratepayers</p> <ul style="list-style-type: none"> a. Explains how the proposed project will benefit California Investor-Owned Utility (IOU) ratepayers with respect to the EPIC goals of <u>greater reliability, lower costs, and/or increased safety</u>). b. Provides clear, plausible, and justifiable quantitative estimates of potential benefits for California IOU electricity ratepayers, including the following (<i>as applicable</i>): annual electricity and thermal savings (kilowatt-hour and therms), peak load reduction and/or shifting, energy cost reductions, greenhouse gas emission reductions, air emission reductions (e.g., NOx), and water use and/or cost reductions. c. States the timeframe, assumptions, and calculations for the estimated benefits, and explains their reasonableness. d. Identifies impacted market segments in California, including size and penetration or deployment rates, with underlying assumptions. e. Discusses any qualitative or intangible benefits to California IOU electricity ratepayers, including timeframe and assumptions. f. Provides a cost-benefit analysis that compares project costs to anticipated benefits. Explains how costs and benefits will be calculated and quantified, and identifies any underlying assumptions. 	<p>20</p>
<p>4. Team Qualifications, Capabilities, and Resources</p> <ul style="list-style-type: none"> a. Describes the organizational structure of the applicant and the project team. Includes an <u>organizational chart</u> that illustrates the structure. b. Identifies key team members, including the project manager and principal investigator (<i>include this information in Attachment 5, Project Team Form</i>). c. Summarizes the qualifications, experience, capabilities, and credentials of the key team members (<i>include this information in Attachment 5,</i> 	<p>10</p>

Scoring Criteria	Maximum Points
<p><i>Project Team Form</i>).</p> <p>d. Explains how the various tasks will be managed and coordinated, and how the project manager’s technical expertise will support the effective management and coordination of all projects in the application.</p> <p>e. Describes the facilities, infrastructure, and resources available to the team.</p> <p>f. Describes the team’s history of successfully completing projects (e.g., RD&D projects) and commercializing and/or deploying results/products.</p> <p>g. Identifies past projects that resulted in a market-ready technology (<i>include this information in Attachment 9, Reference and Work Product Form</i>).</p> <p>h. References are relevant to the proposed project and are current, meaning within the past three years (<i>include this information in Attachment 9, Reference and Work Product Form</i>).</p> <p>i. Identifies any collaborations with utilities, industries, or others. Explains the nature of the collaboration and what each collaborator will contribute.</p> <p>j. Demonstrates that the applicant has the financial ability to complete the project, as indicated by the responses to the following questions:</p> <ul style="list-style-type: none"> • Has your organization been involved in a lawsuit or government investigation within the past five years? • 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 agreements listed in the application that were executed (i.e., approved at an Energy Commission business meeting and signed by both parties) within the past five years, has your organization ever failed to provide a final report by the date indicated in the agreement? <p>k. Support or commitment letters (for match funding, test sites, or project partners) indicate a strong level of support or commitment for the project.</p>	
<p>Total Possible Points for criteria 1–4 (Minimum Passing Score for criteria 1–4 is <u>49.00</u>)</p>	<p>70</p>

Scoring Criteria	Maximum Points												
<p>5. Budget and Cost-Effectiveness</p> <ul style="list-style-type: none"> a. Budget forms are complete, as instructed in Attachment 7. b. Justifies the reasonableness of the requested funds relative to the project goals, objectives, and tasks. c. 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. d. Explains why the hours proposed for personnel and subcontractors are reasonable to accomplish the activities in the Scope of Work (Attachment 6). e. Explains how the applicant will maximize funds for the technical tasks in Part IV of the Scope of Work and minimize expenditure of funds for program administration and overhead. 	10												
<p>6. EPIC Funds Spent in California</p> <p>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.</p> <p>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.”</p> <table border="1" data-bbox="188 1371 1060 1570"> <thead> <tr> <th>Percentage of EPIC funds spent in CA (derived from budget attachment B-2)</th> <th>Percentage of Possible 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>	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%	15
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=100%	100%												
<p>7. Ratio of Direct Labor and Fringe Benefit Rates to Loaded Labor Rates</p> <p>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.</p>	5												
<p>Total Possible Points (Minimum Passing Score is <u>70</u>)</p>	100												

Scoring Criteria	Maximum Points
<p>8. Match Funding above the 50% Minimum (Optional)</p> <ul style="list-style-type: none"> • Match funding is required in the amount of at least 50% of the requested EPIC funds. • Each match funding contributor must submit a commitment letter that meets the requirements of Attachment 11. Failure to meet these requirements will disqualify the proposal from consideration <u>for match funding points</u>. • 5 points for this criterion will be awarded based on the percentage of match funding that exceeds the minimum match funding amount. This ratio will be multiplied by 5 to yield the points, and rounded to the nearest whole number. For example: If requested EPIC funds are \$1,000,000, the applicant must provide at least \$200,000 (20% of \$1,000,000) in match funding. If the applicant pledged \$500,000 in match funding, the amount that will be evaluated for additional points is \$300,000. The match funding ratio is 0.30. (5 x 0.30 = 1.5, rounded to the nearest whole number = 2). The proposal will be awarded 2 points. • The remaining 5 points for this criterion will be based on the level of commitment, type of match funding (cash in hand funds will be considered more favorably than other types of match funding), dollar value justification, and funding replacement strategy described in the match funding commitment letter (see Attachment 11). The proposal scoring scale in Section F will be used to rate these criteria. • Any match funding pledged in Attachment 1 must be consistent with the amount or dollar value described in the commitment letter(s) (e.g., if \$5,000 “cash in hand” funds are pledged in a commitment letter, Attachment 1 must match this amount). Only the total amount pledged in the commitment letter(s) will be considered for match funding points. 	<p>10</p>