

Pre- Application Workforce Development Workshop EPIC Q&A

General

1. **Q: The Energy Commission anticipates at least two awards for the two groups described, but I heard you say you're leaning towards just awarding two awards, did I misconstrue that?**

A: Staff anticipates funding a total of two awards from this solicitation: one award for Group 1 and one award for Group 2.

2. **Q: Can you describe general criteria for defining "advanced"?**

A: Advanced refers to technologies and measures that have been successfully demonstrated in real-world conditions but have not yet been widely deployed.

For Group 1, the focus will be on the advanced measures of installing high performance attics and walls.

In Group 2, the Energy Commission will consider further pursuit of any measures recommended in prior PIER or EPIC research to be "advanced." Examples include training on the following advanced measures or practices:

- *Changing out or adding high performance lighting and controls.*
- *Installing upgraded envelope and HVAC efficiency measures, such as efficient ducts, advanced HVAC systems, and insulation.*
- *Air sealing, such as aerosol mists with multiple injection points combined with humidity control*
- *Installation of information displays which monitors the performance of the equipment.*

See Question 22 for other useful information.

3. **Q: If the focus is on training and the solicitation states that applications must seek to advance classroom training and on-the-job training; can tuition for a vocational training be a component of the application?**

A: No. This solicitation is for very specific areas of focus, and a vocational training program would be too broad and cover additional areas that are beyond the scope of the solicitation.

Measurement and Verification

4. **Q: What does independent mean in terms of the requirement for the Measurement and Verification (M&V) plan? Does this mean independent in that this is the only role they will play in the project? Or does it mean they need to be independent from a training provider, but not someone that is developing the training?**

A: Independent means that the M&V team should provide an unbiased assessment of the training provider, and this will be the only role that they will provide. An exception to this is if the equipment is so new that only the manufacturer can provide both the instruction and testing to ensure it was installed correctly and performing optimally.

5. **Q: What level of rigor are you looking for in the plan? Should we be looking to keep the PUC and their M&V for utility programs? Or is it not that rigorous? And what would be acceptable as M&V in this context (monitoring, metering required, storing of meter data)?**

A: For Group 1, the level of rigor for M&V should be sufficient to a) assess the training performance; and b) determine the in-field energy implications of high performance attic and high performance wall improvements. In addition the M&V should include other in-field performance measures, such as impact on moisture in assemblies and relative humidity in the homes. For Group 1, the M&V will not include energy bill analysis since the homes will be unoccupied.

For Group 2, applicants should describe in their applications how they will a) assess the training performance; and b) evaluate energy bill savings after energy efficiency improvements. This could include, to the extent possible, energy bill analysis that accounts for changes in behavior or home conditions separately from the energy efficiency improvements installed by the trainees. M&V strategies can include estimates based on in-field measurements and/or building simulations or other strategies to be able to obtain the best available information to demonstrate the efficiency savings and assess trainee performance.

For both Group 1 and 2, M&V Teams need strong engineering expertise, including knowledge of electricity use for Group 1 and/or Group 2, as applicable. In-field measurements should be coordinated with product manufacturers to provide feedback on product impacts that could be helpful to manufacturing, commissioning, or product installation improvements.

6. **Q: For Group 1, is the objective of the M&V to assess the effectiveness of the training or the energy benefits of the high performance attics and high performance walls?**

A: The primary purpose is to assess the effectiveness of the training. The secondary purpose is to assess the energy benefits of the energy efficiency measures installed.

- 7. Q: For M&V, what does “Rate of adoption of advanced energy efficiency technologies targeted by the application” mean? If the installations all involve advanced energy efficiency technologies, then would the “rate of adoption” be 100%?**

A: The solicitation manual has been revised to delete the requirement for a description of the rate of adoption of advanced energy efficiency technologies targeted by the application.

- 8. Q: What does and does not need to be included for the measurement in energy savings and documented energy use? Is that entire building energy use, or is it gas and electric, since this is EPIC?**

A: See Question 5. Energy savings is primarily focused on electricity use since the EPIC Program is designed to benefit electric utility ratepayers in IOU service territories. However, applicants should also measure co-benefits such as natural gas savings where applicable.

- 9. Q: Can we assume that measuring building energy use means electric meter?**

A: See Questions 5 and 8.

Groups

- 10. Q: In preparation of the 2016 building standards, Group 1 includes examples of ducts and conditioned space as an option for high performance attics. Are we to assume that it's not part of what will be trained on and this is considered standard attic construction?**

A: The language in the solicitation manual has been revised to reflect that this is an allowable expense and training activity, as long as it is for the installation of HVAC equipment associated with high performance attics.

- 11. Q: What is the policy or design rationale for the exclusive focus in Group 1 on attic and wall elements only, rather than the holistic performance of the thermal envelope (even if only the insulated portions)?**

A: The purpose of Group 1 is to focus on high priority measures for the 2016 standards to help builders transition to high performance attics and high performance walls. High performance attics and walls are significantly different than traditional building practices,

and are important to rounding out of building envelope features in California's IOU service territories.

For examples of advanced energy efficiency measures included as part of high performance walls and attics for this group, see the response to Question 45.

12. Q: Are multifamily homes allowable under Group 1?

A: Yes. The focus is on low-rise residential which includes multifamily and single family homes.

13. Q: In Group 2, is doing workforce training that is not advanced, but is more than the weatherization that is currently being done excluded in this grant?

A: The focus of this solicitation is on advanced energy efficiency technologies and measures. See Questions 2 and 45 regarding what is meant by advanced measures or practices.

14. Q: In Group 2 does a single [application] need to address training for all 3 of the referenced sectors (i.e., residential, commercial, and multifamily) or can the [application] focus on specific segments?

A: Applications must focus on at least one of these three segments. However, it is not necessary to address all of them.

15. Q: Please specify what qualifies as "advanced energy efficiency measures" under Group 2.

A: See Questions 2 and 45 regarding what is meant by advanced measures or practices.

16. Q: For Group 2 projects, are the targets for multifamily and/or commercial buildings, or single family homes?

A: Applications can target multifamily dwellings, commercial buildings, and/or single family homes.

17. Q: For Group 2, do you have to work in residential, commercial, and multifamily facilities?

A: Projects under Group 2 must conduct the on-the-job training at sites that are in at least one of these sectors.

18. Q: The Group 2 Project Narrative states that it should include a discussion of the following: “The buildings and properties that will serve as the on-the-job training sites 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.”

a. Is “projects” the same as “the buildings and properties”?

A: Yes, in this case, “project” is meant to describe the “buildings and properties” that are the on-the-job training sites.

b. Do the training sites have to be located in disadvantaged communities, or do the actual buildings where the energy efficiency projects are taking place?

A: Only the on-the-job training sites (the buildings in which the efficiency measures and upgrades are being installed), must be conducted in disadvantaged communities. Classroom training locations do not have to be located in disadvantaged communities. However, the intent of Group 2 is to provide training for individuals living in disadvantaged communities. Applicants should take into consideration the ease in which trainees can travel to the classroom training locations.

19. Q. Is the idea in Group 2, to partner with one training program, or to create a partnership of several training providers within a particular area?

A: The intent is to create a partnership of several training providers but either approach is acceptable.

20. Q: Are there any more specifics as to what "type" of project is preferred for either group 1 or 2 (for example, Prop 39 for schools)? Are residential homes preferred or businesses?

A: For Group 1, projects must focus on low-rise, new residential (multifamily or single family) homes. For Group 2, projects must focus on residential (single family or multifamily) or commercial buildings.

21. Q: Do the building sites have to be identified in advance or can this be part of the application goals/scope of work?

A: Building sites do not need to be identified beforehand. However, applicants should describe in the application their approach for identifying and securing building sites.

22. Q: Can you provide specific examples of model projects?

A: The Energy Commission is not aware of projects that provide on-the-job training for the specific activities that are being focused on under this solicitation. However, the Public Interest Energy Research (PIER) program recently concluded a number of studies resulting in significant efficiency savings that provide good examples of advanced efficiency measures. One is the Central Valley Research Home project (Agreement Number 500-10-014) which conducted studies on upgrades to retrofits. However, some of these same measures for high performance attics can be implemented to obtain higher efficiency savings in new construction. The other is the Western Cooling Efficiency Center Research (Agreement Number 500-08-042). References for these and other useful information are listed below:

Public Interest Energy Research (PIER) 2014 Annual Report:

<http://www.energy.ca.gov/2015publications/CEC-500-2015-009/CEC-500-2015-009-CMF.pdf>. (See pages 18-24)

Central Valley Research Home Project:

<http://www.proctoreng.com/dnld/CVRHProjectWholeHouseConcept.pdf>

<http://www.energyvanguard.com/blog-building-science-HERS-BPI/bid/75484/Stockton-Project-Demonstrates-Huge-Home-Energy-Savings>

Additional information on best practices for energy retrofits:

[http://www.gastechnology.org/Expertise/Documents/MHP/Best-Practices-Guide-v2\(Complete-lo-res\)-11-30-2012.pdf](http://www.gastechnology.org/Expertise/Documents/MHP/Best-Practices-Guide-v2(Complete-lo-res)-11-30-2012.pdf)

<http://www.energy.ca.gov/2003publications/CEC-500-2003-082/CEC-500-2003-082-A-16.PDF>

23. Q: Can demonstrations be funded for these projects that are not for direct purposes of training, but still develop training materials?

A: No, the purpose of this solicitation is to provide workforce training for advanced energy efficiency measures.

24. Q: As far as developing training materials, can we test different methodologies in the field?

A: No. The focus of this solicitation is to provide the training necessary to properly install advanced energy efficiency technologies and measures. Testing and research have already been conducted and is available to the public. Please see Question 22 for examples.

25. Q. What does: “complement training programs provided by other entities to architects and engineers” mean? Can you provide an example?

A: This is referring to the training programs that architects and engineers receive from other entities, such as the utilities, on incorporating advanced energy efficiency measures and technologies into building designs.

SB 535

26. Q: In reference to Senate Bill 535, the solicitation gives examples on low income, high unemployment, and low levels of home ownership. Are there quantitative measures I can refer back to?

A: Yes, there is a webpage that the Office of Environmental Health Hazard Assessment (OEHHA) maintains that applicants can go to for further information on SB 535 and how it is being implemented. Applicants can determine if a certain community is considered “disadvantaged” based on the CalEnviroScreen 2.0 tool (these are communities that are ranked as the top 25%). See links below:

OEHHA: <http://oehha.ca.gov/ej/ces2.html>

CalEPA (Includes the report on the designation of disadvantaged communities and maps): <http://www.calepa.ca.gov/EnvJustice/GHGInvest/>

CalEnviroScreen 2.0 tool:

<http://oehha.maps.arcgis.com/apps/Viewer/index.html?appid=dae2fb1e42674c12a04a2b302a080598>

27. Q: Do you have to work in each SB 535 community for Group 2?

A: No. However, the applicant should identify in the application which SB 535 communities they will be targeting.

28. Q: For disadvantaged communities, there is a specification that it needs to be within the IOU service territory. Is there an ideal location that is preferred for a specific city, county, or several counties that need to be covered?

A: As long as the project is located in a disadvantaged community as determined by the CalEnviroScreen 2.0 (refer to the links and maps in response to Question 26), and located in an IOU service territory.

Allowable Purchases and Match Funding

- 29. Q: Can you provide some more clarification and detail on where the project matching funds can be spent? For example, you talk about providing income for trainees, is that an allowable cost? Materials, equipment, and incremental costs can be counted as match funding of an advanced material, but would you be able to use project funds on those materials or technologies here since this is a training project?**

A: EPIC funds may be used to provide income for trainees during the training period, or this expenditure may be provided by match funds.

See revised language in the solicitation manual for examples of allowable uses of EPIC funding for materials and equipment, under this solicitation.

- 30. Q: Can you clarify whether the “Allowable Purchases” applies to one group or for both?**

A: This section applies to both groups unless otherwise specified in the solicitation manual, and has been revised to provide examples for uses of EPIC funding under each group. Please see pages 11-12 of the solicitation manual.

- 31. Q: Under “Allowable Purchases,” it lists some examples of where project funds cannot be spent, including time of use costs for classrooms. Can you clarify what “time of use costs for classrooms” means? Does it mean the cost of renting the classroom?**

A: Time of use costs are the costs for renting or leasing classroom space during the training portion of the project. The solicitation manual has been revised so that this is an allowable cost.

- 32. Q: Why was HVAC excluded, would that include the thermostat be excluded as well (such as a smart thermostat)? What about a hybrid HVAC system or mini split that can be considered advanced technologies?**

A: The solicitation manual has been revised to allow for training on the installation of HVAC systems associated with high performance attics under Group 1. Training on advanced installation practices for HVAC, such as that recommended by prior PIER or EPIC research (see questions #2 and 22), is allowable under Group 2.

33. Q: Insulation is listed as a non-allowable cost for workforce training. However, high performance attics and high performance walls (Group 1) are all about insulation so I'm confused?

A: The solicitation manual has been revised to allow for training on the installation of insulation for high performance attics and high performance walls.

34. Q: What are ineligible expenses around "renewable generation hardware such as photovoltaic system"?

A: Ineligible expenses include those related to the installation, maintenance, or training of renewable energy systems. However, these expenses can be counted as match funding.

35. Q: On the match funding, can utility incentive program funds be used to count towards rent funding? Also, for the CPUC, will any project that participates in this solicitation be ineligible for IOU program funding?

A: The Energy Commission does not have any restrictions on where the match funding comes from. Applicants planning to use utility incentive program funds as match share, or are planning to seek future IOU program funding should consult with the IOU's.

36. Q: Can the leveraged funding include existing weatherization programs, if the new technologies will be incorporated into them?

A: Yes, leveraged funding can include existing weatherization programs if the new technologies will be incorporated into them.

37. Q: On page 9 of the GFO, it says pilot testing/demonstration/deployment sites (e.g., test site staff services) count towards match funds. What does "test site staff services" mean?

A: These are the personnel that are employed to work at the demonstration or research (test) site.

38. Q: In the GFO, it states that pilot testing/demonstration/deployment sites (e.g., test site staff services) will count as match. Does this include staff time (i.e. salaries paid to trainers/instructors) at existing training facilities that will be used in the project?

A: Yes, salaries for staff's time (i.e., the trainers) may be used as match.

39. Q: Can existing equipment at the training facility count for match funds?

A: Yes, however for existing equipment only the amount of depreciation that occurs during the course of the training period may count as match for the project.

40. What about the salaries paid to apprentices?

A: Salaries paid to apprentices that participate in the training are treated the same as income for trainees. Income can be provided by EPIC funding or match funding.

41. Q: Please clarify the minimum award amounts on page 9. Does the \$2 million threshold include match funding or is the \$2M CEC with the requirement for an additional \$1M match?

A: The minimum award amounts shown on page 9 are the minimum amount of EPIC funds that can be requested by applicants. These amounts do not include match funding. For example, a minimum award amount of \$2M would require a minimum match share amount of \$1M.

42. Q: Can you explain what “contractor in-kind labor costs” means, under match funds?

A: The definition for Contractor/Partner in-kind Labor Costs states that this is for “contractor or project partner labor costs that are not charged to the Energy Commission.” These are costs incurred by the contractor or project partner in the course of the project that are not billed to the Energy Commission. This category of match funds may be provided for by the Prime or any of the project partners.

43. Q: Can you provide an example of a “strategy for replacing the [match] funds if they are significantly reduced or lost?”

A: Applicants should cite the steps they would take if their original match funding strategy was no longer possible. For example:

- *The applicant may decide to provide the amount of match funds that is no longer available, if the match was originally supposed to be provided by a project partner.*
- *The applicant could seek commitment from another subcontractor or project partner, to cover the amount of reduced match funds.*

44. Q: What about cash that is maintained by the Joint Apprenticeship and Training Committee (JATC) to pay apprentices or pay salaries of instructors?

A: JATC funding for apprentices or instructors are eligible to count for match funding as long as these apprentices and instructors are participants of the project training.

CEQA

45. Q: Regarding the CEQA exemption, since we are going to be looking at doing projects on existing job sites that have already passed CEQA, do we need to expose that job site to further CEQA review?

A: Each applicant must complete the CEQA Compliance Form (Attachment 8), and the lead agency for the project must make a CEQA determination for each project. It is anticipated that the following project activities will be conducted under agreements resulting from this solicitation:

Group 1 may include changing the placement of HVAC systems by moving the air handlers and ducts to a conditioned space or installing air handlers and ducts in an encapsulated, unvented attic; installing insulation above or below the roof deck over a vented attic to achieve a high performance attic; or installing a high performance wall by increasing the R-value of cavity and exterior insulation. These activities may fall into one of several categorical exemptions under CEQA, such as California Code of Regulations, title 14, sections 15301 (“Existing Facilities”), 15303 (“New Construction or Conversion of Small Structures”), and 15061(b)(3) (“Common Sense Exemption”).

Group 2 may include making ducts shorter so that the registers are closer to the interior walls as opposed to the exterior walls, coupled with registers that throw the conditioned air efficiently to promote mixing; sealing building envelopes and duct systems so that they have low leakage; ensuring HVAC distribution systems are properly installed; replacing heating and cooling equipment with properly-sized equipment to meet low loads; adding an informational display system so that occupants can monitor performance of plug-load equipment and appliances; changing out lighting and controls; or changing out or adding ventilation for energy or heat recovery. These activities may fall into one of several categorical exemptions under CEQA, such as California Code of Regulations, title 14, sections 15301 (“Existing Facilities”), 15303 (“New Construction or Conversion of Small Structures”), 15309 (“Inspections”), and 15061(b)(3) (“Common Sense Exemption”).

This answer is for informational purposes only. There is no guarantee that projects under Groups 1 or 2 that include the above-mentioned activities will be exempt. CEQA determinations are very fact specific. The Energy Commission cannot make a CEQA determination until a completed application is received and the full facts of the project are known.

Prevailing Wage

46. Q: For the prevailing wage requirement, does that mean everything completed in this project needs to be prevailing because construction sites are not usually prevailing?

A: A: Projects funded by the Energy Commission may be considered “public works” under the California Labor Code (See California Labor Code Section 1720 et seq. and Title 8 California Code of Regulations, Section 16000 et seq.). Public works projects require the payment of prevailing wage rates. Public works projects may be exempt from prevailing

wage requirements if the project falls under an exemption provided in the Labor Code. Typically, grant funds spent on classroom training alone would likely not trigger prevailing wage requirements. But on-site construction, installation, demolition, maintenance, or repair, could require the payment of prevailing wages. Analysis of whether a proposed project is subject to prevailing wage requirements is fact specific. Applicants should consult their own legal counsel or the Department of Industrial Relations, which issues public work decisions, to determine if the facts of the project trigger prevailing wage requirements. (Additional information on public works is available at DIR's website <http://www.dir.ca.gov/Public-Works/PublicWorks.html>) Applicants must comply with all applicable laws, including the payment of prevailing wages when required.

Electric Ratepayer

47. Q: Should we attempt to quantify the electric ratepayer benefits of those better design decisions?

A: Yes. See Question 8.

Miscellaneous

48. Q: Can we include subtasks in any of the TBD tasks (i.e. Technology Knowledge Transfer)?

A: No, the mandatory tasks with TBD numbers may not be revised. Applicants must add additional tasks for all other activity, including activities related to the mandatory tasks.

49. Q: Are there restrictions on foreign students working on this grant?

A: The Electric Program Investment Charge does not contain restrictions on foreign students. However, there may be other restrictions that apply, such as federal export control laws and immigration laws. Restrictions on foreign students are fact-specific and need to be determined on a case-by-case basis.

50. Q: In the evaluation, will you give more weight to projects that complete more projects? For example, if there are two proposals: one builder has 20 lots that will be trained and built, and another that has 80 lots to be trained and built. Would that be factored into your evaluation?

A: Most likely the application that proposes to conduct training at more sites will result in a higher score for the Technical Approach section of the Evaluation Criteria. However, the evaluation committee will take the overall application into consideration.

51. Q: Is the CEC aware that the ARB does not allow GHG monies for WE&T? Is the curriculum development only to be considered for an award?

A: Funding for this solicitation is from the EPIC Program, not from the Cap –and-Trade Program. While funding can be used on curriculum development, the primary focus of this solicitation is on training.

52. Q: In addition to providing training for the proper installation of advanced energy efficiency technologies and measures, is the aim of this project to also get better design decisions by architects and engineers?

A: The focus of this solicitation is on training related to installation. However, lessons learned from installations may inform future design decisions by architects and engineers.