PON-13-301 Pre-Bid Questions/Answers

Table of Contents

Definitions	2
Related Projects	7
Confidentiality	10
Match Funding	12
Number of Submittals	14
Out-of-State Entities	16
Behavioral Research	18
Eligible Projects	20
Test Plans, M&V	27
Profit	28
IOUs	29
Formatting and Submittals	31
Terms and Conditions	38
Budget	39

(Amended 6/4/14. Changes are in strikethrough format. Additions are in bold, underlined text.)

PON-13-301 Pre-Bid Questions/Answers

(Responses are in bold and italics)

Definitions

1. Define the scope of "pilot-scale."

Page 2 of Attachment 14 defines "pilot-scale demonstration" as a small, laboratory model-size demonstration that is larger than a bench-scale demonstration and smaller than a full-size demonstration.

After basic research determines that the technology or strategy has demonstrated preliminary feasibility, a pilot-scale demonstration or test is used to validate results and provide proof of concept. Pilot demonstrations test the design and validity of an approach, and adjustments can be made at this stage before full-scale demonstrations.

2. Can we get clarification on how the CEC plans to differentiate between a pilot installation and a demo? For instance, for our technology we would need to install around 100-150 light fixtures to test the effectiveness of the technology at rated power. Would the CEC accept such an installation as a pilot, or would this be considered a demo?

We understand that scale will vary based on engineering judgment. The Applicant must make the specific case for the number of units necessary to gather sufficient data on a technology or system. Please refer to the response to question 1.

- 3. Do "pilot" demonstrations need to be the "first" demonstration of a product? For example, if there are similar demonstration efforts in other areas outside of California, does that disqualify the product for this PON?
 - Pilot demonstrations need not be the first demonstration; a pilot-scale demonstration may follow a bench-scale demonstration. Regarding the example given, subsequent pilot tests will need to show the technology's uniqueness and need for multiple testing in California. Generally speaking, pilot demonstrations are intended to test new technologies in conditions approximating real-world applications. Technologies that have already been tested are best suited for Technology Demonstration and Deployment. Please see the responses to questions 1 and 2.
- 4. Please expand on the definition of "lab scale test" or "pilot test." We were specifically thinking about a small number of units field tested in different climates or at different applications to ensure that enough data is collected to support the research findings.
 - Field tests in different climates are acceptable if required to collect sufficient data on uniqueness. Please refer to the responses to questions 1 through 3 for the definition of a pilot-scale demonstration and pilot testing.
- 5. Please explain the nature of "pilot testing" as defined in this PON. Describe the scope, sample size, and/or anything else that would qualify as a pilot test for this proposal.

Please refer to the responses for questions 1 through 4 for the definition of a pilotscale demonstration, pilot testing, and installations at multiple sites.

6. For software projects, what constitutes lab-scale of pilot-scale testing? Can you provide an example or two?

Software projects are not required to have lab-scale or pilot-scale testing. However, software projects are required to have some validation of the accuracy of the program and a description of how energy savings and other benefits will be determined and measured.

7. TechFlow is interested in the CEC's view of sample size they are anticipating relevant to the questions asked during the workshop about lab/pilot-scale testing vs. wide-scale deployment and demonstration. We have a project where we were planning on sampling up to 20 pilot sites. Is that number of pilot sites in the range the CEC is anticipating?

Multiple pilot sites are allowed. Please see the responses to questions 2 and 4.

8. The definition of "pilot-scale demonstration" specifies that projects are "small, laboratory model-sized demonstrations." The solicitation also specifies in Attachment 14 that streetlights are eligible as are pilot projects which improve industry metrics, and test procedures, including "occupant surveys" and "monitoring and verification." For streetlights, developing metrics and procedures or data collection will necessitate deployment on live streets. Would a deployment of a dozen, two dozen or three dozen streetlights with pre-commercial features and an assessment project be eligible as "pilot-scale"? If yes, are there a maximum number of units to be eligible?

Please see the responses to questions 4 and 7.

9. Are there any plans for future solicitations to cover pilot demonstration sites of technologies resulting from advanced energy research outside of IOU territories?

Not at this time.

10. Is further development of a technology and large-scale testing allowed?

This applied research solicitation allows further development of a technology and its pilot testing but not large/full-scale testing or demonstrations where technology design is virtually complete. However, large/full-scale demonstrations will be the subject of future EPIC solicitations under the technology demonstration and deployment phase.

11. Request greater fidelity of what is considered "applied research vs. technology demonstration and deployment," as well as greater explanation of "pre-commercial." Page 11 of the PON states that projects must fall within the "applied research and development" stage, which includes activities that support pre-commercial technologies and approaches intended to solve specific problems in the electricity sector. By contrast, the "technology demonstration and deployment" stage involves the installation and operation of pre-commercial technologies or strategies at a scale that reflects actual operating, performance, and financial characteristics and risks. I don't see the distinction between the two stages, as both allude to pre-commercial technologies and both can solve specific problems in the electricity sector. Also, does this mean that (if

truly pre-commercial) the device/technology to be studied cannot be purchased or has not been built? Or, does "pre-commercial" allow for technologies that are available in the market but have not gained market acceptance and thus are in the "emerging technology" space? Page 1 supports this interpretation, as it states that <u>funded projects must emphasize emerging energy efficiency technologies</u> and improvements to processes and operations.

The difference between Applied Research and Development and Technology Demonstration and Deployment is the stage of development of the technology or strategy.

- Applied research occurs after basic research has shown that the technology has merit and demonstrates preliminary feasibility. For the purposes of the EPIC program, "applied research and development" is defined as activities supporting pre-commercial technologies and approaches that are designed to solve specific problems in the electricity sector. At the Applied Research and Development stage, bench and pilot testing is done to validate results and provide proof of concept. Pilot demonstrations test the design and validity of an approach and adjustments can be made at this stage before full-scale demonstrations. Full-scale demonstrations involve the technology demonstration and deployment phase of the project. For the purposes of the EPIC program, technology demonstration and deployment is defined as the installation and operation of pre-commercial technologies or strategies at a scale sufficiently large and in conditions sufficiently reflective of anticipated actual operating environments to enable appraisal of the operational and performance characteristics and financial risks.2 ☐ In both stages, pre-commercial technologies are involved.
- Pre-commercial technologies are new technologies or enhancements of existing technologies that are not commercially available in California. As defined in Attachment 14, commercially available technologies have been available in the marketplace for at least six months, have manufacturer or independent third-party performance data publicly available, have been successfully demonstrated or installed, and are the subject of marketing and sales efforts.

12. What is the definition of a "pilot test project"?

Refer to the responses to questions 1, 2, and 3.

13. If a technology has been demonstrated elsewhere (outside of California) but has not yet been commercially sold in California, would it fit the "pre-commercialization" criteria?

Yes, if the technology must be modified in order to meet requirements in California, or if it needs to be tested to unique California parameters, and the technology meets the definition of pre-commercial technologies given in the response to question 11. However, new technologies that have already been

_

¹ From D. 13-11-025. OP 3.

² lbid.

successfully demonstrated are better suited for technology demonstration and deployment.

14. For demonstration projects, please specify or explain the intended range of physical site locations allowed. For example, if there is a demonstration on multiple sites, is that acceptable? If so, where does the CEC draw the line between "demonstrations" and "scaled field placement"?

Conducting pilot tests on multiple sites is allowed if they are needed to prove the innovation's technical feasibility. Applicants must justify the need for multiple sites in the application. This solicitation is for applied research and not large-scale demonstrations and scaled field placements. Please refer to the responses to questions 2, 3, 4, 7, and 8 regarding pilot testing and multiple sites.

15. What is a typical technology readiness level (TRL) at the beginning of the program?

This solicitation is for Applied Research and Development. As discussed in the First Triennial EPIC Investment Plan

(http://www.energy.ca.gov/2012publications/CEC-500-2012-082/CEC-500-2012-082-SF.pdf), Applied Research and Development is defined as activities supporting pre-commercial technologies and approaches that are designed to solve specific problems in the electricity sector. The purpose is to address gaps in the funding needed to help innovative energy technologies and approaches bridge the "Technological Valley of Death." Projects can include development of new technologies, methods, and approaches from early bench-scale up to pilot-scale prototype demonstration. Non-technology approaches are also included, such as strategies and methods to enhance adoption of clean energy technologies with a linkage to electricity sector ratepayer benefits. At this phase, projects are unlikely to have had large-scale demonstrations of the technology, independent documentation of savings and benefits or a clear business case for deployment and securing of public capital.

16. Is a low TRL idea within the scope of the proposal? For example, if it is an idea with some proof of the fundamental physics behind it, but no existing demonstration – is that within the scope?

The EPIC Program does not fund basic research. As discussed in the Department of Energy Technology Readiness Assessment Guide https://www.directives.doe.gov/directives-documents/0413.3-EGuide-04a, projects must be within TRL Level 3 to 6 for this solicitation. At a minimum, active research and development of the technology must be initiated. Please see the response to question 15.

³ TRL 3: Active research and development is initiated. This includes analytical studies and laboratory scale studies to physically validate the analytical predictions of separate elements of the technology. Work has moved beyond the paper phase to experimental work that verifies that the concept works as expected on stimulants. ISource: DOE Technology Readiness Assessment Guidel.

TRL 6: Engineering-scale models or prototypes are tested in a relevant environment. It begins true engineering development of the technology as an operational system. The prototype should be capable of performing all the functions that will be required of the operational system. [Source: DOE Technology Readiness Assessment Guide].

17. Could you please clarify what you mean by "pre-commercial" technologies?

Please see the response to question 11.

18. Please clarify what you mean by "pre-commercialization" technologies?

Please see the response to question 11.

19. Are "pre-commercialization" technologies different than "emerging" technologies? If so, what is the difference?

Emerging technologies can be pre-commercial technologies if they meet the requirements stated in the answer to questions 11 and 13.

20. Please expand on the definition of "pre-commercial technology." For example, if a technology is commercially available outside of California, but not yet commercially available in California, would it be appropriate to propose the technology, particularly if the proposed research addressed the commercialization barriers that have prevented it from reaching the California market?

Please refer to the responses to guestions 11 and 13.

21. Please explain the nature of "pre-commercialization" as it is defined for this PON. Specifically explain the minimum level of market availability and/or minimum adoption rate, if either of these criteria fall within the definition of pre-commercial technology.

We have no minimum level of market availability or adoption rate to qualify as precommercial. Please also refer to the response to question 11.

22. The concept of "energy reporting" is mentioned several times in Attachment 14, Part 1, Section D. Is there a fundamental difference in what is being sought when energy reporting is described in the "Technology" area vs. the "Control Integration and Displays" area?

The areas are related. Technologies may require manual energy reporting or the data on energy use could be integrated in its controls and displays. Here are the definitions of these areas:

Technology Area: Projects may target devices and components that are
highly inefficient, operate uncontrolled with long operating hours, and have
the potential for large energy savings (in part through power scaling) in residential and commercial buildings.

Control Integration Area: Systems that take the output from the devices and components in the technology area and integrate that information with a display (for example) to better inform consumers to make energy efficient choices.

Related Projects

23. Please clarify what is considered "related projects." Can this include a number of alternative technologies to address the same problem (e.g., several different HVAC technologies)?

Related projects are those that fall within the same technology family. For instance, alternative HVAC technologies that address reducing energy use in residential and commercial buildings will be related since they address the HVAC energy use in California. For this example, if you want to include other non-HVAC technologies, such as lighting, then the proposal must clearly state how they are related, such as a control system that communicates between the technologies to optimize performance, or multiple technologies that address the same issue. If you cannot make the connection, then separate proposals will be required.

24. On page 1, the PON states "As each group will be evaluated and scored separately, applicants must submit a separate application for each group. If projects fall within one funding group but are distinct and unrelated, applicants must submit a separate application for each project. Applications will be rejected during the Stage One or Two screening stages if they include multiple projects that fall within one group but are distinct and unrelated."

The screening criteria checklists on page 23 and 25 reinforce this point, referring applicants back to the introduction.

On page 14, the PON states "Submit only <u>one</u> abstract or proposal per Funding Group (A, B, or C). Projects proposed in each abstract or proposal must be related to each other (see the "Introduction" section for a discussion of related and distinct, unrelated projects)."

These statements seem at odds with each other. Page 1 tells applicants to split their applications among both group and type, explicitly stating that multiple applications within a group are allowable. Page 14 seems to say that applicants can only split their applications by group, and that only 1 application is allowable within each group. This would be particularly problematic, since there are multiple and distinct technology types within each group.

Addendum 1 to PON 13-301 has included an update to page 14 to be consistent with page 1. Applicants may submit multiple abstracts and proposals.

25. Request CEC give greater explanation on what constitutes related versus distinct/unrelated projects within each listed group. Page 1 of the PON states that Applications will be rejected during the Stage One or Two screening stages if they include multiple projects that fall within one group but are distinct and unrelated. The PON then gives two examples, but they do not sufficiently explain what would be considered related and what would be considered distinct and unrelated. For example: would a submission with multiple projects that included commercial lighting and commercial HVAC research be considered "related" as both address energy efficiency in commercial buildings? Would a project that researched a specific HVAC technology in residential and commercial buildings be considered "related"?

Relate	ed projects include the following:
	Those that fall within the same technology family, such as HVAC,
	regardless of application (e.g., residential/commercial)
	Those that include multiple different technologies (e.g., lighting and HVAC) that are linked together through an energy management system or controller.

A project with multiple different technologies (e.g., lighting and HVAC) operating independently of each other in commercial buildings is not an example of a related project. Please see the responses to questions 23 and 24 for information on related projects.

26. Can a given project involve multiple initiative areas, i.e., S1.1, S1.2, S1.3?

Yes. However, the applicant must make the case for how the projects are related. Please see the response to question 23.

27. Please clarify what you will consider as "related" projects for Group A. Your responses in the RFP and the pre-bid suggest that it is NOT possible to suggest a suite of measures that together make an advanced building package. Say lighting, HVAC, and controls for an office building or retail or warehouse. Would these projects NOT be considered "related"?

This solicitation is focused on individual technologies and not an integration of multiple technologies operating independently of each other in a whole building (such as ZNE or retrofit buildings). Integrated approaches will be the focus of a future solicitation. For this solicitation, projects must have a direct technological connection, such as a control system that communicates between the technologies to optimize performance. The proposal must make a case for how the projects are related. In your example, a control system for lighting and HVAC in a building will be considered a related project. Please also refer to the response to question 23.

28. We would like to submit two unrelated proposals to funding group A. On the one hand, this seems in keeping with one part of the PON, which says, "If projects fall within one funding group but are distinct and unrelated, applicants must submit a separate application for each project." However, another part of the PON seems to prohibit multiple proposals to one funding group: "Submit only one abstract or proposal per Funding Group (A, B, or C)." What am I missing? Is it ok to submit two unrelated proposals to group A?

Yes, it is acceptable to submit two unrelated proposals to group A. Addendum 1 reflects this. Please also refer to the response to question 24.

29. For an abstract that integrates across related technologies (e.g., S1.1 and S1.2), shall applicants check multiple boxes under "funding initiatives" on Attachment 1?

Yes.

30. Would a commercial lighting project and a commercial HVAC project be considered "related projects" and thus be included in a single application under Group A if:

they do not have an integrated approach, or
they have an integrated approach?

Only pre-commercial technologies are eligible for this solicitation (please see the response to question 11 for a definition of "applied research and development").

If the question is about pre-commercial lighting and HVAC projects, then these could be in a single application if there is an integrated approach and the proposal clearly states how they are related. For example, a control system that communicates between the technologies to optimize performance can be included in the same application. However, if there is no integrated approach and the proposal does not make the case for how the technologies are related, then a proposal for each technology must be submitted separately.

Confidentiality

31. My question regarding the application process for PON 13-301 concerns inclusion of confidential information and data: is it truly the case that CEC does not allow these in the full proposal (application), and furthermore that the proposal contents become public record if an award is made? In addition, what if an application is not awarded – does is still become publicly available?

The implication of this policy is that commercial entities in particular will not be able to include the level of detail necessary to adequately convey and justify their proposed work plan. The highly competitive nature of solid-state lighting and other high-tech fields is such that advanced concepts must be kept proprietary; otherwise intellectual property has little value. The CEC is effectively removing the incentive for inclusion of advanced concepts in the proposal. In contrast, the Dept. of Energy makes provision for keeping proprietary data confidential, as long as it is clearly marked as such. I don't see why CEC couldn't have a similar policy.

I would also add that I can imagine few companies which would want to publically disclose their employees' salary data (which appears to be necessary in the budget spreadsheet).

Confidential information is not allowed in Stage 1 or Stage 2 submittals. The applicant should describe the technology in sufficient detail to convey the significance of the project without disclosing proprietary or confidential information in the proposal. Please refer to Abstract and Proposal Screening in Part IV of the PON. All submitted documents will become public records after the Energy Commission publishes the Notice of Proposed Award (NOPA), or cancellation of the solicitation.

32. Regarding "pre-commercialization" stage of technologies - the CEC intends to make all proposals public. How will the CEC protect intellectual property of technology developers that may not yet have patent protections in place? How is one to submit a 'pre-commercial' technology for EPIC funding if there is no patent in place yet and still ensure that the product idea will not be widely copied due to the public availability of the proposal?

Please see the response to question 31 above.

33. What IP rights will the state of California have for patents based on project work funded by EPIC?

Please refer to the EPIC terms and conditions for provisions addressing the treatment of IP developed with EPIC funds.

34. Page 3 of the PON document states that "All submitted documents will become public records upon the posting of the Notice of Proposed Award." Does this mean that submitted applications will be accessible for everyone to see?

Yes.

35. If I submit to Phase 1 and do not pass the screening or do not choose to submit to Phase 2, will the application materials from Phase 1 be made public?

Yes. As stated on page 22 of the PON document, all submitted proposals including all attachments become public documents after the NOPA is released or the solicitation is cancelled.

36. If a proposal is awarded, does the detailed budget breakdown (e.g. individuals' labor rates) become a public record? Or just the total project funding?

The entire proposal will be publicly available, including the budget. Please see the responses to questions 34 and 35.

37. During the Q&As of the Webex you mentioned that the proposals will be made public. Does that mean the entire proposal will be made public, or is there a public release or short summary version of the proposal that will be made public? Are all the selected and rejected proposals made public?

All selected and rejected proposals become public documents after the NOPA is released or the solicitation cancelled. Please see the responses to questions 34, 35, and 36.

Match Funding

38. Are utilities allowed to spend energy efficiency money on EPIC projects?

Yes, as long as the utilities have the authority to do so. The Energy Commission has no restrictions on Investor Owned Utilities (IOUs) using non-EPIC funds as match funding for EPIC projects in this solicitation. However, the Energy Commission does not regulate utilities. Our understanding is that IOUs seeking recovery of any funds spent by them on EPIC projects must go through the California Public Utilities Commission (CPUC).

39. Can match funding be in the form of complementary efforts in non-IOU territories? For example: if non-IOU territory demo and test site activities are solely funded by match funding, can they be included in an EPIC-funded project with IOU service territory demos and test sites? Conversely, does all co-funding need to be supporting the demonstrations in IOU territory?

Match funds must benefit and be directly related to the EPIC-funded project. If a parallel project is being conducted in non-IOU territory, this project can be included as match funding if it is directly connected to the project in the IOU service territory. All work (EPIC and match funded) must benefit California IOU electric ratepayers.

40. Can IOUs spend ratepayer money as match funds for this solicitation?

See the response to question 38.

41. Can IOUs spend their own EPIC money as match funds for this CEC solicitation?

IOUs do not have EPIC funds for Applied Research. IOUs have funding for technology demonstration and deployment for electric transmission and distribution projects. These funds cannot be used as match funds for applied research or technology demonstration and deployment projects funded by the Energy Commission. Please also see the response to question 138.

42. Can unreimbursed personnel time be counted as match funding?

Yes. Please refer to Part I, Section E of the PON (pages 6-7) for more information on acceptable forms of match funding.

43. Are bidders required to submit one commitment letter for match funds (signed by all sources of match funds) or is a letter required from each source individually?

Applicants must submit a commitment letter from each match funding source. Please see item 1 in Attachment 11.

44. How can the applicant indicate that matching funds have been applied for but not yet committed at both the Abstract and Proposal stages?

Match funding commitment letters are not required during the Abstract stage (Stage 1), but are required for the Proposal stage (Stage 2). If match funds have

been applied for but not yet committed during the Proposal stage, those match funds will not be taken into consideration during the scoring process.

45. Is it acceptable for the match funding amount to change between Phase 1 and Phase 2 of the proposal?

Yes.

46. "Match funds" include: (1) "cash in hand" funds; (2) equipment; (3) materials; (4) information technology services; (5) travel; (6) subcontractor costs; (7) contractor in-kind labor costs; and (8) "advanced practice" costs.

We will be coordinating project manufacturing partners to co-develop new products. Could this in-kind support from project partners for R&D be considered under (7) contractor in-kind labor costs?

Yes.

47. Are third party/partner cash or in-kind contributions directly supporting the project considered match funding?

Yes.

48. Can future DOE funding that has been committed, but not received, be included as match funding? DOE typically writes that it will intend to fund, "subject to the Congress"?

"Match funds" do not include future/contingent awards, as specified on page 6 of the PON Application Manual. Match funds must be committed and fully approved to be considered for scoring points.

Number of Submittals

- 49. Can we submit two separate proposals for distinct technologies (e.g., one for lighting and one for ventilation) assuming they are not related and we have the capacity to do them both if selected?
 - Yes. There is no limit on the number of proposals an entity can submit as long as the projects fall within the scope of the funding groups and the proposer has the capacity to undertake all projects submitted.
- 50. Can multiple abstracts be submitted?
 - Yes. There is no limit on the number of abstracts that may be submitted by an organization/individual. However, each project/abstract must be unique and fall within one of the funding groups, and the applicant must have the capacity to execute all proposed projects if selected.
- 51. How many related projects can be submitted within a single project area?
 - There is no limit to the number of related projects submitted within a single project area (Group A). However, the applicant must provide justification for why the projects are linked and related. Additionally, the applicant and its team must be able to perform all tasks indicated in the Scope of Work in the event that all bids are awarded.
- 52. Can a prime applicant be funded for more than 1 project since multiple submittals are allowed?

Yes.

- 53. Can a private entity participate as a Prime on one proposal and as a Major or minor Sub on multiple other proposals for the same PON?
 - Yes, private entities can participate on multiple proposals as an applicant, major subcontractor, or minor subcontractor. However, the proposals must be unique, not identical projects for which the applicant and subcontractor have switched roles.
- 54. Is there a limit to the number of applications that can be submitted?
 - No. Please also see the responses to questions 49, 50, and 51.
- 55. Can a private entity participate as Prime on more than one proposal?
 - Yes. Please see the response to question 53.
- 56. Can a firm be a subcontractor (major or minor) on a bid and Prime on another for different EPIC Program Opportunity Notices?
 - Yes. Please see the response to guestion 53.
- 57. Can a firm be a subcontractor (major or minor) on more than one bid for different EPIC Program Opportunity Notices?
 - Yes. Please see the response to question 53.

58. Can a firm be a vendor on one bid and Prime on another?

Yes. However, the recipient cannot charge profit and it must have technical expertise to oversee and manage the team of subcontractors. A vendor is a supplier of goods, such as equipment, supplies. Please also see the response to question 125.

59. Is there a minimum threshold for how much work must be done by a prime contractor?

No minimum has been established. However, if the applicant lacks technical knowledge and/or the ability to oversee the work of its proposed subcontractors, it will receive lower scores under scoring criterion 4, Team Qualifications, Capabilities, and Resources.

Out-of-State Entities

60. I want to compare a pilot project in a California IOU service territory to one in another state. Is this acceptable?

The project may be acceptable. The comparisons must show clear linkages, relevance, and project benefits to California IOU electric ratepayers and explain why an in-state comparison cannot be made. Additionally, EPIC funds may be applied to the pilot project in a California IOU service territory, but not to the out-of-state pilot. Please refer to the project requirements as described in Part II of the PON manual.

61. Is there a penalty for not being headquartered in California, but operated in the state?

No. Projects that spend 60 percent or more of the EPIC funds in California will receive points as indicated in the table in Part IV, Section G, Item 6.

62. Can a project involve California-based researchers studying solutions deployed in other states or countries if the proposal demonstrates benefits to California electric IOU customers?

The project may be acceptable. The proposal must describe clear linkages and relevance to California IOU electric ratepayers, including energy and cost savings, and potential economics and cost effectiveness. However, all test sites using EPIC funds must be in California electric IOU service areas.

63. Can a project research the impact of energy information in different states in order to better determine the impact in California?

The project may be acceptable depending on the type of energy information to be researched and the relevance to California IOU electric ratepayers. Please refer to the project requirements as described in Part II of the PON manual.

64. What are the conditions for funding to an out-of-state collaborator or the Prime being located outside of California?

There are no prohibitions on funding to an out-of-state firm or on the location of the Prime outside of California. However, to receive points for scoring criterion 6 (Part IV, Section G), 60 percent or more of the EPIC funds must be spent in California.

65. Are there requirements for project managers to reside in California?

No.

66. We are in the process of opening an office in CA and hiring staff. We plan to use this office for the EPIC project we are proposing. Can we include this future office and staff in our application as part of the 60% funds spent in CA?

As stated in scoring criterion 6 in the PON Application Manual, "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.

Staff may count toward the 60% requirement if they pay California state income taxes as described above. While the physical office would not count toward the 60% requirement, any business transactions described above would count toward the requirement.

Behavioral Research

67.	The "Funding Group and EPIC Funding Initiatives" section of the Application Form (Attachment 1) includes this wording when determining which funding initiatives to select for our project:
	□ "S1.4 Building occupant behavior and consumer choice motivations (must be in conjunction with S1.1, S1.2, S1.3 or 1.6)."
	Is there any situation where S1.4 can be selected as the sole funding initiative for a potential project under this PON? Or would it have to include funding initiatives S1.1, S1.2, S1.3, or S1.6?
	Behavioral research must be in conjunction with S1.1, S1.2, S1.3, or S1.6.
	We see a potential conflict between the Application Form and the PON: On page 7 of the PON, S1.6 is described this way:
	□ "S1.6: Reduce the energy use of plug-load devices through the development of products, systems, and controls, and evaluation of consumer behavior that affects energy use."
	Our project involves occupant behavior and consumer choice motivations, and may also involve funding initiative 1.6. If there is a behavior component to the S1.6 funding initiative already, why would S1.4 be considered as an additional funding initiative?
	If requesting funding under initiative S1.6, it is not necessary to include S1.4 in the funding request since behavioral research is already a potential aspect of initiative S1.6.
68.	The Energy Commission's EPIC Investment Plan states that initiative S1.4 includes "behavior-based programs" (p. 49). The Energy Institute is puzzled that the solicitation Application Form limits behavioral projects (S1.4) to those that can be linked to S1.1, S1.2, S1.3 or S1.6. If a behavior-based program takes a new approach to providing occupants or owners with whole building energy information feedback to encourage energy-saving behavior, the ultimate actions that the consumer will take to save energy cannot be predicted in advance, so cannot be associated with S1.1, S1.2, S1.3 or S1.6

Whole building energy efficiency approaches associated with behavioral-based programs will be the focus of two future solicitations to be released in fiscal year 2014/15. One will be Phase 2 of this solicitation (Developing a Portfolio of Advanced Efficiency Solutions) and the second solicitation will be in the market facilitation area. Please sign up on the list server and review the following website for updates: www.energy.ca.gov/research/upcoming_funding.html.

in advance. For some programs it may even be difficult after-the-fact to identify with certainty what action occupants took even if the overall energy savings is statistically valid. Will the Energy Commission fund projects that conduct applied research and development on behavioral-based programs that are targeted at the whole-house or whole-building level and cannot be associated before-the-fact with a specific end-use

category described in S1.1, S1.2, S1.3 or S1.6?

69. If this solicitation is not intended for behavior-based approaches as described in the Investment Plan initiative S1.4 (pp. 48-51) that are not connected to specific precommercial end use technologies, then in what future solicitation does the Energy Commission intend to fund such projects?

They will be addressed in the next phase of this solicitation. Please also see the response to question 68.

70. Will this be the only solicitation with a behavioral research component?

This area may be included in future solicitations. Please also see the response to question 69.

71. Can a proposal on building occupant behavior cover three technology areas such as lighting, HVAC, and plug loads?

Yes, a project like this would be considered if it is done in conjunction with S1.1-S1.3 or S1.6. Please ensure the project meets the Eligibility Requirements as described in Part II of the PON.

72. In the list of suggested projects in PON-13-301, Attachment 14, under Group A ("Building Energy Efficiency Technology and Codes and Standards Advancement"), funding initiative S1.4 is listed as a specific focus area. However, all of the other focus areas (S1.1-S1.3, S1.6) have suggested topics, which include ideas for S1.4 as an adjunct activity. There are no examples in which S1.4 is the primary focus of a project. Does this presentation indicate a preference for projects that contain elements of S1.1-S1.3 and S1.6?

The focus of projects under S1.4 Building occupant behavior and consumer choice motivations must be related to the topics in S1.1, S1.2, S1.3 and S1.6.

73. If the research will include human subjects, what conditions must be met at time of application (assuming federal and contractor requirements are met before the work actually begins)?

The Energy Commission has no requirements in this area.

Eligible Projects

- 74. Can gas technologies that offset peak electricity consumption be acceptable for this solicitation?
 - No. The focus is on increasing energy efficiency of electrically-driven systems, and not on fuel switching.
- 75. Would it be acceptable to conduct a pilot test in an IOU service territory that only supplies gas while a POU supplies the electricity?
 - No, the pilot test site must be in IOU electric service territory.
- 76. If a technology or behavior change directly and significantly reduces electricity use, but also reduces gas use, would the project be disqualified?
 - No. However, evaluation will be based on the benefits that accrue to electricity ratepayers.
- 77. How will the CEC evaluate research proposals that study natural gas appliances if the applicant demonstrates that the results are relevant to electric appliances?
 - Proposals must directly relate to and accrue benefits to electric ratepayers; natural gas benefits will not be evaluated. See the response to question 76.
- 78. The EPIC Investment Plan states that initiative S1.4 will examine "[h]ow to quantify and correlate nonenergy benefits and their motivational effect on energy–related consumer choices" and "the factors that motivate customer and tenants to make energy-efficient equipment purchases" (p. 48). Could the solicitation fund projects that investigate how information about water and natural gas usage could influence consumer purchases of energy efficient appliances?
 - No. Water and natural gas-related areas are not within the scope of this solicitation. Please see Attachment 14 for target research areas/funding initiatives.
- 79. Is water heating excluded?
 - Standalone water heating systems are not included in the solicitation. However, if water heating is a feature of another listed technology (e.g., HVAC) then it would be considered if the technology uses electricity.
- 80. If a technology or behavior change reduces electricity within the identified areas (lighting, HVAC, etc.), but also reduces electricity in an area not called out (e.g., electric water heating), would it be disqualified?
 - The focus of the project must be specific to the Targeted Research Areas of this solicitation. Water heating is not one of the funding initiative areas unless it is also related to HVAC advances (see Attachment 14).
- 81. For tools or other approaches that are not intended to develop a physical "widget," please specify how Group A and Group B funds will be applicable. How do you define "pre-commercialization" for tools and approaches?

Each of the Group A projects has a Codes and Standards element that is not "widget" based. Group B is a paper study. Pre-commercial models and tools can include: (a) development of new models, tools, and strategies and the resulting testing and evaluation to ensure that they meet the established criteria, objectives and goals; or (b) modifications to an existing model/tool and conducting test to validate that it meets the specified requirements. Please also see the response to question 6.

- 82. One of the issues identified in the Energy Commission's EPIC Investment Plan for S1.4 to investigate is "[h]ow to effectively identify target customers for efficiency and demand response program participation and how to effectively develop marketing, incentive, and education programs for customer segments that will produce measurable energy savings." (p. 48). In this solicitation will the Energy Commission fund projects that investigate this issue with respect to existing commercially available energy efficiency technologies that have not been widely adopted, such as certain efficient central and room air conditioners?
 - No. This type of study is outside the scope of this solicitation. Funding initiative S1.4 must be associated with research on technologies resulting from funding initiatives S1.1, S1.2, S1.3, or S1.6.
- 83. S1.5 and S1.7 funding areas (i.e., projects for retrofit or indoor air quality strategies) were not included in this PON. Should separate PONs be expected for buildings projects related to these two funding initiatives?
 - Yes. Both funding initiatives (S1.5 and S1.7) are planned to be addressed in future solicitations.
- 84. Why isn't S1.8 (ZNE) included in Group A?
 - This area will be addressed in a future solicitation.
- 85. Attachment 14 makes it seem that Group A is limited to Funding Initiatives S1.1 through S1.4 and S1.6. Is that true or can any EPIC Funding Initiative be referenced under a Group A proposal?
 - Group A ONLY includes S1.1-S1.4 and S1.6. The other areas identified in Strategic Objective S1 will be addressed in a future solicitation, as will S1.5, S1.7, and S1.8.
- 86. Could a project that includes development of approaches to achieve the ZNE goal (example S1.8, Attachment 14) be accepted under Group A?
 - No, projects that include development of approaches to achieve the ZNE goal will not be accepted. Please also see the response to question 85.
- 87. City and County of San Francisco, Department of the Environment has the following comments regarding PON 13-201. With your ZNE goals in mind, we have several suggestions for your consideration:
 - We would like to test in the open marketplace, web-based occupant engagement software across a wide-ranged demographic (e.g., age, income, ethnicity, income, location, education) and housing type (multiple tenants, condos, high-rises, market rate apartments and low income communities.)

- Micro-grid mapping, solar mapping which would entail the study and identification of eligible properties which could then be pitched for whatever solution worked for that building
- Marketing and outreach for condos on the value and process to adopt Virtual Net Metering
- Multi-tenant tool kit with streamlined directions for installing solar and adopting energy efficiency measures and more
- Working to change legislation to allow utilities to implement micro-grids
- Working to change legislation to allow and exemption for small scale solar so that a utility can give preference to a micro-grid

These proposed areas do not fall within the scope of our solicitation. They may be appropriate for future solicitations.

- 88. The scoring criteria (page 25) state that all pilot test sites are to be located in a California electric IOU service territory (PG&E, SDG&E, or SCE). If we have additional demonstration or test sites in non-IOU territories, can EPIC funds be used for those demos and test sites?
 - No. EPIC funds cannot be used for non-IOU demos and test sites. However, match funds can be used for sites in non-IOU territories. Also see the response to question 126.
- 89. Are there guidelines (or rules) for the "occupant surveys" and "independent monitoring and verification of energy savings" activities required for Group A topics?
 - Independent M&V is not required in this solicitation for Group A projects (please also refer to Addendum 2). Also see the response to question 120.
- 90. If a technology has dual applications, such as controls that can be integrated with both lighting and HVAC systems, can it be proposed?
 - Yes. Keep in mind that evaluation will be based on the direct electric benefits, such as electricity savings due to the lights and the electrically-driven portion of the HVAC system.
- 91. Would alternate ventilation technologies be responsive?

Yes.

92. Would advanced ventilation to improve energy efficiency by maximizing the recirculation of air in the building be of interest to the CEC and compliant with the solicitation?

Yes.

93. Within the context of commercial buildings (e.g., restaurants), does the definition of "plug load" encompass ancillary equipment (e.g., countertop coffee machines, toasters, dishwasher pumps, etc.)?

Plug loads include all electrical devices that plug into a wall outlet, including but not limited to indoor appliances, such as kitchen and laundry appliances, commercial plug-in refrigeration, and security appliances; and outdoor appliances. Plug load devices are those that are not built into the building and are

installed by occupants at some later time. Plug loads do not include servers in data centers, HVAC equipment, built-in lighting, infrastructure loads, electrical vehicles, or medical devices.

94. Under Group A, does the plug loads area include "white goods"?

It could if they are electrical appliances and are not built into the building. Please see the response to question 93.

95. What is the scope for "plug loads?" Does it include major appliances or hard-wired miscellaneous devices (e.g., security systems)?

Please see the response to questions 93 and 94.

96. Is designing, building, deploying, and monitoring a new prototype technology considered research?

Yes. However, the project must meet the Eligibility Requirements of this solicitation under Part II, Section B of the PON.

97. May Codes and Standards proposals include software tools for geographically targeting code changes?

No. This project is outside of the scope of the solicitation.

98. Is a project responsive if it reduces peak electrical demand of commercial buildings, rather than reducing energy usage?

Yes.

99. Related to Plug Loads (Attachment 14: page 7, S1.6 and S1.4) It looks like the CEC is suggesting a "golden carrot" set-top box development. Would other types of plug loads qualify for "golden carrot" development as well?

There are no Golden Carrot offerings under this solicitation for set top boxes or any other technology.

100. I'm planning to do a larger project on a microgrid and wondering if the core RD&D part of the project can be funded under this solicitation with the demonstration & deployment part of the project being potentially funded under a future EPIC solicitation. Would this be acceptable?

This type of project could be considered if the microgrid application is in the context of Group B projects and relates to direct current applications for future zero net energy buildings. The Energy Commission plans future solicitations specifically on microgrids.

101. Would a standalone codes and standards effort be acceptable?

Yes, but the effort must be tied to a specific EPIC research initiative from this solicitation. The research needs to be directly related to electric IOU ratepayer benefits. Please also refer to Attachment 14 for examples of potential projects.

102. Is software development work beyond code compliance software acceptable?

Yes, please see the response to question 101.

- 103. Are software development efforts supporting code compliance software allowed?
 - No, please see the response to question 97.
- 104. Does Group B include pilot testing?
 - No. Group B is meant to include only paper studies.
- 105. With respect to S1.4, would a project that determines how consumers use and why adopt a specific technology be ideal?
 - Projects related to S1.4 must be in conjunction with S1.1-S1.3 or S1.6 for Group A, or S1.8 for Group B. Please refer to Attachment 14 for more information.
- 106. Under S1.3, would a transparent window film harvesting solar energy be acceptable?
 - Yes, if the technology addresses end-use efficiency as required by the PON. Please refer to Part I of the PON manual and Attachment 14 for more information.
- 107. Is building commissioning included in this PON?
 - Yes, but it must be in conjunction with S1.1-S1.3 or S1.6, or Group C projects.
- 108. Would a project on commercial refrigeration be acceptable under this solicitation?
 - Yes, it would be considered.
- 109. Would a comparative analysis be acceptable?
 - There is not enough information to determine whether such an analysis would be acceptable. Please see the responses to questions 60, 63, 126, and 128 on specific comparative analysis projects.
- 110. Is Funding Group C specific to residential?

Yes.

- 111. Attachment 14 describes examples of projects. The first page describes Funding Initiative S1.1 is as follows:
 - □ S1.1: Develop, test, and demonstrate next-generation lighting systems and components

However on the second page, the same initiative, S1.1, under the "Applications" heading appears to mandate that the proposed solutions consume electricity. Was this the intention of the CEC? Are daylighting solutions disallowed under the solicitation?

Daylighting solutions are allowed under this solicitation, as daylighting technologies reduce or eliminate electric lighting loads accruing benefits to electric ratepayers.

112. Would a project studying how consumers respond to energy information be considered a "pilot test project"?

This could be considered a research project if done in conjunction with S1.1-S1.3 or S1.6.

113. Would a project involving assessment of new business models for streetlights and ancillary, non-lighting features which create a substantially improved business case for advanced lighting with controls and dimming, be eligible?

This may be considered if the applicant makes a case for the uniqueness and novelty aspect of its technology/product in terms of new product, new technique, new process, modification of product/process, or additional application that increases energy efficiency and potential cost effectiveness. With respect to the latter area, there must be a linkage to how this will help inform future changes in codes and standards and utility tariff structures.

114. Would research to determine required lighting levels on roads and pedestrian areas for the purpose of determining appropriate streetlight adaptive/dimming levels be eligible?

This may be considered if it is related to future changes to codes and standards. Please see also the response to question 113.

115. Would development of tariffs, metering standards, or piloting of metering technology to support adaptive/dimming streetlights, essential elements to commercial adoption, be eligible?

Development of tariffs and meter standards is beyond the scope of this solicitation. However, piloting metering technology to support advanced streetlights may be considered in this solicitation if it supports future changes to codes and standards, and the potential benefits (e.g., energy savings) and costs can be estimated.

116. Page 15 of the PON defines "Applied Research and Development" as "activities that support pre-commercial technologies and approaches intended to solve specific problems in the electricity sector." The PON defines "Technology demonstration and deployment" as involving "the installation and operation of pre-commercial technologies or strategies at a scale that reflects actual operating, performance, and financial characteristics and risks."

Would the S1.4 funding initiative ("Investigate and improve understanding of building occupant behavior and related consumer choice motivations to increase and sustain energy efficiency improvements in buildings") count towards an applied research and development project? Or a technology demonstration and deployment project? Since our proposed project would involve identifying operator behaviors in the field and implementing both technological and educational strategies to change those behaviors, this funding initiative both supports a) approaches intended to solve a specific problem in the electricity sector (i.e. behavioral changes), AND b) involves implementing strategies at a scale that reflects actual operating performance, characteristics and risks.

This solicitation targets applied research and development projects. Behavioral elements and strategies must be directly linked to S1.1-S1.3, or S1.6 for Group A projects and S1.8 for Group B projects. Future EPIC solicitations will support full-scale demonstration and deployment projects. Please also see the response to questions 67 to 72.

117. Criterion 12d of the abstract screening criteria (page 23 of the PON) states that the proposal must not be "duplicative of existing technology." Please clarify how this is meant - is "technology" in this context synonymous with "product?" Would a modified version of an existing product be considered duplicative? How different from existing technology must the proposed technology be to qualify? Because this statement, which I only found once in the PON, could be interpreted as moving the PON's objectives from applied to basic research.

The technology that is the subject of your proposal cannot be the same as something already available in the marketplace. For instance, if you are proposing an LED lamp that has an efficacy of XX lumens/watt and there is a lamp that has this efficacy in the marketplace, then this would be an example of duplication of existing technology. A modified version of an existing product that shows increased efficiency or energy performance would be acceptable and meet the definition of pre-commercial technology referenced in question 11. The objective is to move promising technologies (or products) from basic research to the next step, which is applied research.

Proposals must be able to show the uniqueness and novelty aspect of their technology/product in terms of new product, new technique, new process, modification of product/process, or additional application that results in improved energy efficiency or energy performance.

118. Are the project types listed on page 1 of Attachment 14 examples, or must projects fit specifically within these categories?

The proposals must fall within the categories of the project types listed on page 1 of Attachment 14. The projects listed in Attachment 14 are examples of potential projects.

119. For group B, DC applications for future zero net energy buildings; can a proposal include a pilot installation? Or should the proposal be only for the development of DC technology? And is it applicable for commercial installations?

Group B is intended to be a paper study, which does not include technology development and/or pilot testing. Please refer to Attachment 14 for more information. Please also see the response to question 104.

Test Plans, M&V

120. Must proposals include an M&V plan? Any guidelines for this plan?

Projects that include pilot or prototype testing will require a pilot test plan that describes how actual project benefits such as energy savings and greenhouse gas reductions will be measured and quantified. Please refer to Part II, Section B of the PON (page 12) for guidelines on the pilot test plan. For the lighting technologies, pilot test plans will be required and not independent (third-party) M&V. This will be reflected in Addendum 2. Please also see the response to question 89.

121. Project Narrative Form, 1f (under the "Technical Merit and Need" section) is explained as follows:

"Provide a clear and plausible test plan that describes how energy savings and other benefits specified in the application will be determined and measured."

Sections 2a and 2b under the "Technical Approach" section of the Project Narrative Form are explained as follows:

- "a. Describe the technique, approach, and methods to be used in performing the work described in the Scope of Work. Highlight any outstanding features."
- "b. Describe how the tasks will be executed and coordinated with various participants and team members."

These both sound very much like elements of a test plan, which we would have already described in a clear and plausible test plan (covered in 1f). Could you explain the differences between 1f and what has been described in 2a and 2b?

energy savings and other benefits from the project.
Items 2a and 2b are more comprehensive in nature and ask that you describe how you would perform the work listed in the Scope of Work and how you would coordinate among team members and other participants to
ensure successful completion of a project.

Item 1f addresses how the applicant plans to measure and document the

Profit

122. Please clarify the provision of profit for subcontractors. Is there any limit on work scope/budget/type of work that would trigger the "no-profit" provisions? For example, if a subcontractor is doing the bulk of the work on a proposed project, would that require the subcontractor to forego profit?

Only the grant recipient must forego profit. Subcontractors are permitted to charge profit.

- 123. Are major subcontractors prohibited from making profit? **No.**
- 124. Are minor subcontractors prohibited from making profit? **No.**
- 125. Are vendors prohibited from making profit? The terms and conditions mention vendors and subcontractors; what is the difference between a vendor and a subcontractor?

Vendors can charge profit, unless they are the applicant.

Vendors provide goods; contractors/subcontractors provide services. Vendors and major/minor subcontractors are permitted to make profit under this grant solicitation. Please also see the response to question 58.

IOUs

126. If a pilot test project is primarily in the service territory of a California electric investorowned utility (IOU), but is also in adjacent non-IOU service territories, will the project fail Abstract and Proposal Screening Criteria 9?

To pass screening criterion 9 for Stages 1 and 2, the pilot test sites must be located in a California electricity IOU service territory. The portion of the project in the non-IOU service territory can be supported with match funding. Additionally, the project must benefit California IOU electric ratepayers. Please also see the responses to questions 88 and 128.

127. If a pilot test project is in the service territory of a California electric IOU, is it required that the electric IOU is a partner or participant in the project?

No.

128	Can a project have components outside	de of California	a if the project will	l benefit California
	IOU customers?			

- ☐ If the project involves pilot test sites, those sites must be in a California electric IOU service territory (see the response to question 126). EPIC funds can only be applied to pilot test sites in a California IOU service territory.
- If the project involves no pilot tests, then it may be acceptable to have some components outside of California. However, the applicant must show clear linkages, relevance, and project benefits to California IOU electric ratepayers and why in-state components cannot be used.
- □ Please refer to the project requirements as described in Part II of the PON manual. Please also see the responses to questions 60, 62, and 63.
- 129. For pilot test projects that involve an electric IOU, does a commitment from the IOU need to be in place at the time the abstract is submitted?

No. However, letters of commitment are required for Stage Two proposals. Please see Attachment 11 for more information.

- 130. I understand that the project must benefit CA IOU customers but I wasn't able to find any explicit explanation whether or not an IOU can directly participate on a project, so here are a few questions around that:
 - 1. Can support letters come directly from one or more CA IOU?

Yes.

2. Can cost share come directly from one or more CA IOU?

Yes. Please also see the responses to questions 38, 40 and 41.

3. Can the lab-scale or pilot testing be performed by the CA IOU staff? For instance, an IOU performing customer pilot testing of an energy efficiency decision making software tool.

Yes.

131. Is it acceptable for the IOU service territory to change between Phase 1 and Phase 2 of the proposal?

Yes.

132. Are there any restrictions on having an IOU as a participating partner?

No.

133. May California IOUs be minor or major subcontractors on this PON?

Yes.

134. Can utilities receive funds from EPIC program for projects?

Yes. IOUs can receive EPIC funds.

135. Can ratepayers of a Community Choice Aggregation (CCA) participate in this solicitation?

Yes.

136. Can an IOU be a prime on this solicitation?

Yes.

137. If the pilot test is located in an IOU territory, does the utility need to be a partner?

No.

138. Please explain how and whether IOU energy efficiency funds such as codes and standards, programs and emerging technologies can be leveraged as co-funding. Are there any restrictions on how IOUs can support a proposal?

We have no restrictions. Please also see the responses to questions 38, 40, 130, 132, 133, 134, and 136.

Formatting and Submittals

139. Will the written answers be on the same webpage as the solicitation?

Yes. The responses can be found at: www.energy.ca.gov/contracts/PON-13-301/.

140. Since there are still significant questions about the intent of the PON and whether a whole class of technologies (emerging technologies) is eligible, it is critical that the proposal teams have adequate time to submit the proposals. Since the CEC intends to provide answers to some of these basic questions along with others on May 6th (few days before the proposals are due), it does present a challenge for many proposers. Can the CEC provide additional time for bidders to submit proposals?

We will extend the date for submission of the Stage 1 abstracts. Please refer to Addendum 2.

141. Where can we get a copy of the pre-bid PowerPoint presentation?

The PowerPoint and documents related to this solicitation are located at: http://www.energy.ca.gov/contracts/PON-13-301/

142. The address you provide for shipping of abstract packages doesn't list a phone number. Fed Ex requires a phone number for shipping. Is Fed Ex acceptable? Should we use this number: 916-654-5186?

Yes, this is the phone number for the Commission Agreement Officer, Angela Hockaday.

- 143. Regarding the Abstract, in the PON double-sided printing is designated. Does the 8 page limit then indicate that there are actually 16 printed sides allowable (i.e. 8 pieces of paper with printing on both sides of each)?
 - No. Only 8 printed sides are allowed (4 pages double-sided).
- 144. The Attachment 1 Application Form asks for a list of any active or past (within the last three years) agreements with Energy Commission, other state agencies, California utilities, and/or the U.S. Department of Energy. There is space for seven items.

Our entity has many more than seven such agreements that are active or ended within the last 36 months. Can we confine our list to only the seven most recent, only the most relevant to this solicitation (because they involve buildings), or only those that are current?

There is no page limit for Attachment 1. Please insert additional rows as necessary to include all active and past projects (that ended within the last 36 months).

145. Copies of recent scientific and technical journal articles: Page 18 states that up to five are required, Attachment 9 says up to three. Which is correct?

Up to 5 articles will be accepted. No penalty will be incurred for those providing greater than 3 or fewer than 5.

146. Page 13 of the PON requires electronic files be submitted in "MS Word XP (.doc format), excluding excel spreadsheets." However, about half of the CEC-provided templates are in .docx format. Additionally, it is time consuming and awkward to convert documents that require signatures, such as the application form and letters of support, to MS Word; it can be done, but the results are worse than using Adobe Acrobat (.pdf) format, which is universally available. Request CEC explicitly allow .pdf and .docx file format submissions where common sense dictates it.

Addendum 1 to PON 13-301 has included .docx formats. However, .pdf formats are not included.

147. Can the point size for captions and/or table text be smaller than 11 point?

Yes.

148. What information should the headers and footers of the Abstract and Proposal contain? Should that text also be Arial 11 point?

Use headers and footers for any supplemental information (topic headings, page number, footnotes, etc).

Unless otherwise indicated in the templates for the attachments, headers and footers must also be in Arial 11 point.

149. The type of tabs we normally use are tabs that are a full sheet in the binder. Is that acceptable or would that count against the page count?

The tabs will not count towards the page total, provided that they do not contain any information other than the tab number and section title.

- 150. Attachment 9: References and Work Product Form. Page 13 of the PON mentions a 2-page minimum per project, which refers exclusively to "Section 2: Work Product" of the form.
 - (a) Will "Section 1: References" of this form be included in any of the page limitations for this proposal?
 - (b) Will the "Recent Publications" subsection of "Section 2: Work Product" of this form be included in any of the page limitations for this proposal?

No section of Attachment 9 counts towards the cumulative sixty page limit. The "Recent Publications" subsection does not have a page limitation.

151. Does registration with the Secretary of State have to be completed before Abstract is submitted?

No. However, recipients that are required to register with the Secretary of the State must be registered in order to enter into an agreement with the Energy Commission. Please refer to Part II of the PON for more information.

152. Is a California-Based Entity (CBE) form required?

No.

153. Please clarify the intent behind the 60% minimum spent in California. The terms and conditions posted on the EPIC site do NOT have any mention of California Based Entities. Please clarify the rationale for including this in the PON.

The intent of this criterion is to maximize economic benefits in California, as explained in Chapter 7 of the Energy Commission's EPIC Investment Plan.

- 154. Is there any indication of how the funds will be divided over each of the funding initiatives (S1.1 lighting vs.S1.2 HVAC, etc.)?
 - No. However, funds will be allocated only by Funding Group as indicated on page 6 of the PON and Attachment 14. This means that lighting, HVAC, plug load, and envelope projects will be scored and ranked relative to each other.
- 155. Page 30 of the Pre-Application workshop .pdf under "Grounds For Rejection" states:

"Applicant has not demonstrated financial capability to complete the project"

If we had the financial capability we wouldn't be applying for the grant.

Is this inferring that we must already have the funding for the project to receive a grant, or is the sentence in question suggesting that the tasks must be capable of completion as budgeted in the application?

- No. You must have the financial resources and capabilities to complete the project if awarded funds. Unless otherwise specified in the applicable terms and conditions, grant funds are released in arrears on a monthly basis following the receipt of an invoice. Your financial capability will be evaluated and based on your responses to the questions listed in Part IV, Section C of the PON manual.
- 156. Am I correct in assuming that Group A: Building Energy Efficiency Technology and Codes and Standards Advancement funding level is \$1-3 million (slide14) available each year of the project?
 - The \$1-3 million award amount is the total award per project. Once the agreement has been executed by all parties, funds are distributed in arrears based on completed work products as indicated in Subtask 1.5 of the Scope of Work template, Attachment 6.
- 157. Can a project fail if the applicant doesn't have the financial means?
 - Yes. Financial ability to complete the project is considered in Scoring Criterion number 4 (Team Qualifications, Capabilities, and Resources) and the "Grounds for Rejection" in Part IV, Section C of the PON. Please see the response to question 156.
- 158. Can a different dollar amount be requested in the Proposal (State 2) than was included in an accepted Abstract (Stage 1)?

Yes. However, the dollar amount requested must still remain between the minimum and maximum award amounts and the project described in the abstract must be similar.

159. Is it acceptable for the choice of subcontractors to change between Stage 1 and Stage 2 of the proposal? Or for subcontractors to be added between Stage 1 and Stage 2?

Yes.

160. Can the proposer improve and edit proposal ideas between stage 1 and stage 2 based on information that becomes available between stage 1 and stage 2 submittals?

Yes. However, the proposal must meet the solicitation's requirements and be consistent with the abstract.

161. Is there any recommendation for project duration, besides the restriction that it can't go beyond 3/31/19?

As stated in the PON document, Part III, Section C, all work must be scheduled for completion within 36 to 48 months of the project start date and no later than March 31, 2019.

162. Can projects be completed earlier than March 2019?

Yes.

163. If awarded funding, can an applicant commercialize a technology prior to March 2019?

Yes.

164. If our application is selected to receive an award on September 30, 2014, must we wait for our agreement to be signed on March 31, 2014 before we can start our R&D activity? Or, can we start R&D work with own expenses and we will receive reimbursement per what we have spent between September 30, 2014 to March 31, 2015?

The Energy Commission will only reimburse for funds spent during the agreement term. An agreement is not effective until approved at an Energy Commission Business Meeting <u>and</u> final documents are signed by both the recipient and the Energy Commission. This is not anticipated until February 2015.

165. If there are multiple project partners and stakeholders, are support letters needed from all of them in Phase 1 or just from one of them?

At least one support letter is required for Stage 1. Please refer to Attachment 11 for more information.

166. Can a prime submit support letters from non-subs, for example from an IOU?

Yes.

167. In the pilot test plan, section B.4 (page 12) it says that the proposal "...must identify one or more pilot test sites..." In the past the Energy Commission has interpreted this to mean written agreements from building owners. This has proven to be problematic for any project investigating home retrofits or new homes because the owners of the exact test homes are unknown at the time of writing the proposal. This severely limits the proposals that can be submitted to the PON for single-family residences.

Is the Commission going to continue with this (unwritten) requirement?

If your project involves a pilot test site, then a commitment letter, signed by an authorized representative, that commits to providing that site for the pilot activities is required as part of the stage two application. We understand that securing pilot test sites can be difficult but we have had agreements delayed or cancelled due to the inability to secure test or demonstration sites during the term of the agreement. Please refer to Attachment 11 for details on what is required in a commitment letter.

- 168. If an entity submits a letter of support on behalf of a project abstract, can the entity later become a subcontractor on that project?
 - No. Yes. Please refer to Attachment 11. A support letter may come from any project stakeholder (i.e., an entity or individual that will benefit from or be involved in the project), including subcontractors and project partners.
- 169. Are commitment letters required during the abstract phase?
 - No. Only support letters are required in Stage 1, abstracts. Commitment letters are required for Stage 2 formal proposals.
- 170. Would it be acceptable to more generally identify test sites in terms of city and IOU territory and the partner who will determine the exact final locations a builder for new construction or contractor for retrofits?
 - No. Letter(s) of commitment are required from pilot test sites under Stage Two, as described on page 18.
- 171. Can a proposal build off of an existing CEC funded effort? Not cost share but leverage infrastructure put in place by a previously funded effort?
 - Yes. The CEC award amount may not count toward match funds (see the match funding restrictions in Part I, Section E, item 2 of the PON).
- 172. For phase II of this solicitation scheduled to be released later this year, will the same areas be emphasized or have a different focus?

Phase II of this solicitation will focus on the 2012-2014 EPIC Investment Plan Applied Research Funding Initiatives not covered in this Phase I effort. Please refer to the following link for the latest on EPIC solicitations:

http://www.energy.ca.gov/research/upcoming_funding.html

173. The solicitation speaks to renegotiating funding levels (and scopes) if there is not enough to fund all projects the CEC would like to fund (page 8, section E.3). Does the

CEC retain complete flexibility in this regard? For example, is it possible the funding and work scope could be reduced by 50% or more?

If budgeted funds do not provide full funding for agreements, the recipient and the Energy Commission will mutually agree upon a reduced scope of work commensurate with available funding.

174. Request greater fidelity into what constitutes an "applicant." The key word definition on page 2 is the respondent to this solicitation. Does that mean, for example, that the "applicant" is the Regents of the University of California? A particular UC campus? A research center and/or academic department under a UC or CSU campus? Or a specific PI within a research center/academic department?

The term "applicant" refers to the legal name of the main organization responding to the solicitation. This will be the recipient. With organizations such as the University of California, the applicant may be Regents of the University of California on behalf of a specific campus. Please consult with your legal and/or administrative staff to determine the correct designation for your organization.

175. Which category on the application should be checked by national laboratories? Government entity? Non-profit? Private company? We can be classified in any of those ways as GO-CO's.

National laboratories are classified as "government entities."

176. Are PIs and researchers able to participate in future funding efforts that could come forth from the research results?

Yes.

177. Can an applicant modify the tech transfer task in the scope of work?

The technology/knowledge transfer task is a mandatory task (Task TBD-2). You may add more items but you cannot eliminate items.

178. Is Attachment 8 (environmental compliance form) required as part of the abstract submittal (it is referenced on the application form) OR not until the full applications are submitted?

Attachment 8 is due in the Proposal stage (Stage Two).

179. Can the wording of the questions that are currently in the Project Narrative Form be renamed/shortened to read as headings/topics?

No.

180. Is the detailed budget (attachment 7) required in Stage 1?

No. The detailed budget template is only required for Stage 2.

181. Are wet signatures required on all 9 of the application submittals?

- No. Wet signatures are only required on the original submission document.
- 182. Who screens and evaluates the proposals?
 - As specified in Part IV, Section A of the PON, "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."
- 183. Chair Weisenmiller's letter dated November 7, 2013 written to CPUC President Peevey, the CPUC commissioners and copying Assembly member Steven Bradford states that "The Energy Commission is committed to increasing the participation of women, minorities, and disabled veterans under its implementation of the EPIC program." The letter further states a number of potential approaches the Commission can utilize including compliance with CPUC order 156. Considering that the current EPIC offering does not reference MBE participation, was this an oversight? If not, how would qualified firms with MBE status go about participating? If so, we would respectfully request that the CEC amend the offering to include those with MBE status and score participants accordingly.

Due to legal restrictions, this solicitation does not distinguish applicants based on MBE status. The Energy Commission is conducting activities to encourage broader participation in its solicitations, such as efforts to widely publicize solicitations and to provide applicants with guidance regarding the application process.

184. Is the Project Manager the person who is supposed to sign each application or can a manager sign on their behalf?

The signature on the Application form (Attachment 1) must be from an authorized representative of the applicant who can legally execute an agreement with the California Energy Commission. This does not necessarily have to be the Project Manager.

Terms and Conditions

185. If a prime is a general applicant and a sub is a national lab, are the T&Cs for the entire project the T&Cs for the general applicant?

As specified in Section 7 of the terms and conditions, if the subcontractor is a National Lab, the recipient may use the terms specifically negotiated with the National Labs by the Energy Commission.

186. My organization, which is a federally funded research and development center, is interested in applying for the Program Opportunity Notice (PON-13-301). Our guidelines typically require advance payment (before work begins), is that available with this call?

The UC and DOE/National lab terms and conditions are under negotiation. They will include payment provisions.

187. How are we paid during the term of the project?

Under the standard Terms and Conditions, payments are made in arrears. For example, work completed in January is invoiced to the Energy Commission in February (usually on a monthly or quarterly basis).

188. I am reviewing the subject solicitation to determine the eligibility for a U.S. DOE National Laboratory to participate. As part of that review I am trying, albeit unsuccessfully, to locate and download the terms and conditions for a National Laboratory (per II. Eligibility Requirements A. Applicant Requirements 2. Terms and Conditions (reference (2) National Laboratories). Are you able to provide a little more direction to help me get to these on your website?

See the response to question 186.

189. When can we expect to learn the terms and conditions for national lab participation? Time is short to turn in an abstract and we'd like to know the terms and conditions soon.

As the Energy Commission is awaiting responses from both UC and the National Labs on the proposed terms and conditions, an expected release date cannot be estimated at this time.

190. What are the restrictions on rebudgeting once a grant has been signed?

Procedures for amending the agreement are discussed in the terms and conditions (www.energy.ca.gov/contracts/pier.html#epicterms). The Commission Agreement Manager or Agreement Officer will provide the Recipient with guidance regarding the level of Commission approval required for a proposed change.

Budget

191. Are there any limitations on the size & location of a subcontractor?

A "major subcontractor" is any subcontractor receiving at least 25% of the Commission funds or \$100,000 (whichever is less). A "minor subcontractor" is any subcontractor receiving less than 25% or \$100,000 (whichever is less). There are no limitations on the location of subcontractors but keep in mind that at least 60% of the funds must be "Spent in California" to receive points under Part IV, section G, item 6. Please refer to the Attachment 7 budget instructions tab for more information.

192. UCLA overhead rate is 54%. We would like to know what is the rate that we should use in the budget for this application. (Would it be 25% or different) the application doesn't mention a rate.

Please consult with your legal and/or accounting department to determine the appropriate rate.

193. Will funding be provided for technology/knowledge transfer activities?

Yes. Please refer to Attachment 6, Scope of Work template, Task TBD-2. Technology/knowledge transfer activities must be budgeted in the budget forms in the Stage 2 proposal.

194. The instructions for the budget state that applicants must report labor. If a major subcontractor is only providing equipment, do we still need to include labor?

No, only report labor if it applies to the project.

195. We are having a little bit of trouble with calculating the correct Administrative rate.

Based on past opportunities the F&A rate used was 25%. Since there is no specific number in the guidelines, is the 25% rate is still current or has it changed?

Please consult with your legal and/or accounting department to determine the appropriate rate.

196. Please explain the scoring of loaded vs. unloaded rates.

The purpose of scoring criterion 7 (page 30) is to provide higher points for those applicants that have low overhead costs. Scoring criteria 7 compares the direct labor and fringe benefits with the sum of these costs, plus the indirect costs and profit. The information is derived from Attachment B-2 using this formula:

Ratio = (DL+FB)/(DL+FB+Total Indirect)

Where: DL = direct labor

FB = fringe benefits

Total direct = general and administrative costs+overhead+ profit

The score will automatically calculate based on information from Attachment B-2. Projects with lower direct costs (Direct Labor, Fringe Benefits) and higher overhead costs (G&A, Indirect Overhead, and Profit) will receive a lower score. Please refer to the Attachment 7 budget Instructions tab for more information.