

Pre-application Questions and Answers for Solicitation GFO-17-304:

Programmatic Approach to Existing Buildings Research,
Development and Demonstration Program

Written for:

Solicitation GFO-17-304 Applicants

Written By:

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California Energy Commission

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Table of Contents

Administrative Questions:	3
Application Process	3
Match	6
Terms and Conditions	7
General Administrative Questions	8
Disadvantaged Communities	8
Technical Questions:	8
Distributed Energy Resources (DERs)	8
Measurement and Evaluation (M&E)	9
“Programmatic” requirements and expectations of the GFO	11
General Technical Questions	14

Note: All responses are solely in regard to GFO-17-304. Any requirements stated in responses are in addition to requirements listed in the GFO-17-304 solicitation manual and attachments.

Administrative Questions:

Application Process

Q.1	Must the submission include any Board resolutions or is the signed Letter of support/commitment enough at this time? (e.g. Board Resolution only after NOPA ?)
A.1	Resolutions are needed for governmental agencies but must be submitted prior to approval of the agreement at an Energy Commission business meeting. The governmental agency must provide a resolution containing the information indicated in Section IV.B.2 of the solicitation manual.
Q.2	Can either the Applicant's Project or Program manager (who might be a sub-consultant) perform the online submission, or does the actual submission need to be performed by the Prime (or main applicant who will sign the contract?)
A.2	The prime must submit the application.
Q.3	Please clarify the project term with any expectations for intermediate products or project deployment progress, etc.
A.3	There is an expectation that there be intermediate products and demonstration of project progress during the term of the agreement. Please refer to Attachment 6, Scope of Work Template for the required products for Tasks 1, TBD-1, TBD-2 and TBD-3. As indicated on page 42 of the PowerPoint pre-bid presentation, there should be at least one product per technical task in the Scope of Work. The project progress and satisfactory completion of products will be considered during the invoice approval process for requested grant funds.
Q.4	Do you have any preferences for the (Prime) Applicant organization as a type, or could an individual be the lead?
A.4	No preference, but the prime applicant must be technically competent to oversee the work of its team. Please see the details regarding team composition and organization that will be considered under Scoring Criterion 4, Team Qualifications, Capabilities, and Resources (see Section IV.F. of the solicitation manual and Attachment 4, item 4).
Q.5	If one is not submitting under the "Disadvantaged Communities" may they skip over the submission requests that seem applicable only to that category?
A.5	Applicants must follow the format in Attachment 4 when submitting the proposal and if the sections regarding disadvantaged communities do not apply, then indicate this in your response so we know that it is not an omission. For instance, if item 8 in Attachment 4 doesn't apply, then state this in your response.
Q.6	I heard Commission personnel state at the pre-bid workshop that CA-based entities requirements do not apply to this solicitation. If this is accurate, how does the statement align with the fact that the submitter needs to be based in Southern or Northern California?
A.6	"California-based entity" is a reference to the specific preference requirements and definition in Public Resources Code section 25620.5(h). Because this is a <u>non-EPIC</u> statute, the Commission does not have to follow it for its EPIC solicitations, like this one. For this solicitation, applicants must meet prime contractor requirements stated in Section 1.F., which are different than the preference requirements and definition in Public Resources Code section 25620.5(h). This is the distinction stated during the pre-bid conference for Slide 49.

Q.7	Must a team include a conventional research institution such as an academic organization?
A.7	It is up to the applicant to propose the team that will meet the objectives of the solicitation. The purpose of the programmatic solicitation is to bring together an interdisciplinary team of various experts to overcome barriers to existing building retrofits. Section I.A identifies objectives and the kinds of resources needed. Section II.B.2. identifies potential collaboration partners.
Q.8	Can a public agency serve as a prime, lead applicant or sub?
A.8	Yes, a public agency can be a prime, lead applicant or sub-contractor. However, the prime must be technically capable of overseeing the work of subcontractors. See also response to Question 1 for requirements for public agency applicants.
Q.9	Are there any rules against multiple proposals from a single institution?
A.9	No. A single institution can submit multiple proposals, but the Commission will only make one award per entity for this solicitation. See Section II.B.3.
Q.10	Can you be prime on one proposal and a subcontractor on another?
A.10	Yes.
Q.11	Can you be a subcontractor on multiple proposals?
A.11	Yes.
Q.12	If we do electronic submission online, do we also need to submit a hardcopy and memory stick copy?
A.12	No.
Q.13	Can an entity based in Northern California, but has offices in Southern California apply for the Southern California group?
A.13	The Southern CA office must apply for Group 1, Southern California. The Northern CA office cannot apply for Group 1 but it can apply for Group 2.
Q.14	Does the PI need to be located in the particular office?
A.14	If you are applying for Group 1, then the PI and most of the staff doing the work should come from Southern CA. The purpose of the Northern and Southern California designation is to show broader distribution of funds throughout the state.
Q.15	Are there California Small Business or Disabled Veterans Business Enterprise (DVBE) requirements for this solicitation?
A.15	No.
Q.16	Can a subcontractor participate on multiple teams and multiple groups?
A.16	Yes.
Q.17	Will it be possible to submit questions after the official Q&A is released?
A.17	As stated in Section I.I of the solicitation manual, all technical questions must be received by the deadline listed in the manual which was September 20 th . Technical questions received after the deadline may be answered at the Energy Commission's discretion. Non-technical questions (e.g., questions concerning application format requirements or attachment instructions) may be submitted to the Commission Agreement Officer (CAO) at any time prior to the application deadline. Please refer to Section I.I for questions that address an ambiguity, conflict, discrepancy, omission, or other error in the solicitation.
Q.18	Is the University of California one entity and only eligible to receive one award?
A.18	Each campus of the University of California is considered an entity. Refer to the definition of "Entity" in Section I.B.

Q.19	Do we understand correctly that the 2/3 portion of a grant that goes towards “Deployment...” can cover BOTH soft and hard (materials and labor) construction costs of the actual energy efficiency measures installed over the 300,000 sqft? (For example: A/E design, materials, programming of controls, entitlements/permits, construction management, project management, building commissioning, energy management/data collection/ troubleshooting, operational setup testing and balancing, etc.?) Please clarify.
A.19	Yes, the technology, demonstration and deployment portion of the grant can cover soft and hard costs, excluding permits per Attachment 6, Scope of Work, Subtask 1.8, of the Solicitation Manual. However, the research funds should not be used exclusively to pay for soft and hard costs as described by the question. As discussed in Section II.B.2 of the solicitation manual, the intent of this solicitation is to fund multiple approaches, with the goal of building a portfolio of proven strategies that can be used to tailor projects to the individual needs and capacities of building owners, and thus dramatically expand the efficiency retrofit market. The projects should demonstrate the potential for the portfolio of retrofit approaches to be deployed broadly in the future without further EPIC funding. This section further states that the research funding should be used to support development, testing and refinement of business models for engaging customers, evaluating the opportunities for efficiency improvements that meet customer needs, developing lower cost retrofit strategies, and increasing uptake. It would be incumbent on the applicant to provide sufficient justification for how additional EPIC funding of the retrofits themselves (as opposed to research-related program management and coordination, data collection, evaluation, skills training, contractor support, etc.) during both the Applied Research and Technology Demonstration and Deployment phases would lead to more widespread deployment. Please discuss this in Attachment 4, item 1.b., Technical Merit and Need.
Q.20	If a design engineer is a team member, can their portion of the budget for the actual design and construction documentation for the deployment in the buildings, including energy auditing or data logging be considered to be covered in the “2/3 deployment” portion of the funding?
A.20	Yes.
Q.21	Can some of the budget be preserved as a general allowance or contingency, in particular, to engage other sub-consultants , trade associations, non-profits, or other community organizations, who might only be identified once we begin the R&D phase of the work as we flesh the program out and to give input to the program development?
A.21	It is allowable to allocate some budget items as To Be Determined (TBD) in the budget (Attachment 7 of the solicitation manual). For instance, you can list some staff (direct labor), materials, equipment, travel, and subcontractor as TBD but you cannot lump multiple items as contingency). For instance, it is ok to indicate the staff name or company name as TBD, but you must specify the classification and/or list them as Electrical Contractor (TBD) with an estimated amount. The roles, tasks and specifications for TBD budget line items must be connected to specific research tasks in the Scope of Work (Attachment 6 of the solicitation manual) and described in appropriate detail in the Project Narrative, Attachment 4, item 4. For all TBD items, Energy Commission approval is required prior to vendor, subcontractor, and materials/equipment selection and to fill TBD positions.

Q.22	Can you clarify which of the current Attachments need to be completed fully and submitted with this proposal by the November deadline? Some of them seem to be Scope of Work that could be covered by the actual awardee. For example, on Attachment 5, the project team form—a contractor might actually receive more than \$100,000 for a portion of the Deployment part of the work, but that contractor, in a Public bid process, can't be identified at this time to be included on the "Project Team Form"—and thus we would not have resumes, etc. Do you mean to exclude any consultants or contractors that would be later participating in the Deployment phase (that we don't know now) from this submission?
A.22	Section III.D. of the solicitation manual identifies all the attachments that applicants must include in their applications by the November deadline. Applicants must prepare a Scope of Work as indicated in Attachment 6. Task 1 and the TBD-1 and TBD-2 tasks are boiler plate. Starting with Task 2, identify the technical task to be completed in achieving the goals and objectives of the solicitation along with appropriate products. Please also see the required items to be included in the technical tasks as described in Section II.B.2 of the solicitation manual for Applied Research, Technology Demonstration and Deployment and Technology Transfer and Codes and Standards. While recognizing that critical project design choices may depend on interim research results, the level of detail describing the task(s) to be performed by major subcontractors (budgets > \$100,000) must be described in Attachment 4, item 4. Please also see response to question 21.
Match	
Q.23	Will installation of PV during the course of the project count as cost share, assuming it does not count against energy savings?
A.23	Installation of PV and other renewable energy generation, storage, demand response controls, natural gas to electric appliance fuel-switching and other technology strategies that meet state energy policy goals can be used as cost share. However, their impacts should be separated from efficiency savings for the purposes of meeting the project portfolio electric savings goals of 10% residential and 20% commercial as indicated in Section II.B.2. of the solicitation manual. However, proposals with project strategies that include DER subsidies (e.g., rebates) that may serve as a participation incentive must include explanations of how such an approach would meet the solicitation goal of being "used by private sector contractors to build viable, sustainable businesses and spur mass adoption and scale-up" in the absence of those subsidies.
Q.24	Can Bond funding or Prop. 39 funding be the sources of the Match funding?
A.24	If the bond or Prop 39 funds are awarded by the Energy Commission, then they cannot be used as Match funding. Match funding requirements have been added to the GFO; please see Addendum #1 at http://www.energy.ca.gov/contracts/epic.html#GFO-17-304 .
Q.25	Please provide information on the Match Funding obligations.
A.25	Match funding requirements have been added to the GFO; please see Addendum #1 at http://www.energy.ca.gov/contracts/epic.html#GFO-17-304 . Note that match funds must be fully expended during the project term and be reported in the invoices submitted to the Energy Commission.
Q.26	May one of the Investor Owned Utilities be a Match Funding provider?
A.26	IOUs can provide match funding if that funding is not from IOU EPIC funds or other Commission awards.

Q.27	Is it correct that any proposed Commercial Building energy efficiency plan/proposal will not be considered absent Match Funding?
A.27	The 25% match funding requirement applies to the Grant as a whole, not individual tasks or budgets. The Application form (Attachment 1) and the budget must indicate the match funding amount and signed commitment letters must be provided in Attachment 11.
Q.28	Can Match Funding be provided by the contribution of a reduced billing fee for the work to be performed by the proposer? For example, if a standard rate for professional services is \$100, and the provider agrees to a \$75 rate for the proposal, will the provider be credited with a 25% Matching Fund contribution?
A.28	Yes, but the full rate must be represented in the budget under "Maximum Labor Rate", with the proportions allocated to the EPIC grant and Match listed in the appropriate columns. The applicant must also be able to prove it regularly charges the rate it is reducing. Applicants cannot fabricate match by creating higher rates for these projects just to reduce them.
Q.29	Will installation of PV during the course of the project count as cost share, assuming it does not count against energy savings?
A.29	Yes, see response to question 23.
Q.30	Will there be an addendum related to the match funding prior to release of the Q&A?
A.30	The addendum on match funding was posted September 25, 2017; please see the updated version of the Solicitation Manual, Section I.F.2. at http://www.energy.ca.gov/contracts/GFO-17-304/ Please see response to question 17 regarding responding to questions after the September 20 th deadline.

Terms and Conditions

Q.31	Please list your products for the grant, with any intermediate deadline expectations.
A.31	<p>It is the applicant's responsibility to identify the specific products resulting from the grant. The major purposes of the products are to 1) document the learning that takes place so that the knowledge gained can be made available to others, and 2) to provide documentation of how the ratepayer funds have been spent. Each task and subtask in the Scope of Work (Attachment 6) must have an associated product, and while some may be full reports, others may be simple memorandums that document an activity. For grants resulting from this solicitation, a major interim report is expected that covers the "identification of strategies" resulting from the Applied R&D portion of the project.</p> <p>The Scope of Work template (Attachment 6) and schedule template (Attachment 6a) includes standard required products for Tasks 1, TBD-1, TBD-2 and TBD-3, such as monthly reports, CPR reports, and the Final Report. In addition, intermediate products from the technical tasks (starting with Task 2) are a function of the specific project and generally include major findings from data collection or pilot-testing activities or document demonstration or deployment efforts. The applicant must identify, list and describe these products in the Scope of Work and Schedule to be submitted with the application. Please also see response to question 22.</p>

Q.32	How will progress payments be accomplished? Is this to be directly addressed by the application process or is there a standard policy that the CEC uses that must be addressed?
A.32	Expenses under EPIC grants are reimbursed in arrears and are subject to a 10% retention requirement. Please see the "Payment of Funds" section of the Terms and Conditions that apply to your entity at: http://www.energy.ca.gov/research/contractors.html : Section 8 for the Standard T&Cs, Section 15 for UCs, and Section 1 for DOE.
Q.33	Are there any restrictions on the party that may provide support for a program pilot?
A.33	All test, pilot and demonstration sites must be located within the service territory of one of the California Investor-Owned electric utilities (Section IV.E, Scoring Criteria 6). Other requirements can be found in the Solicitation Manual in Section II., Eligibility Requirements.

General Administrative Questions

Q.34	If a demo site is in IOU territory but gets power from an independent provider is that ok?
A.34	Participants must be IOU electricity customers. Customers of Community Choice Aggregators are considered IOU customers for the purposes of this solicitation. See the definition in Section 1.B. of the Solicitation Manual.
Q.35	Does a potential participant have to be a contributing member of the Public Purpose Programs and only in an Investor Owned Utility (IOU) or will eligibility be determined by geographic locality?
A.35	Participants must be IOU electricity customers. Customers of Community Choice Aggregators are considered IOU customers for the purposes of this solicitation. See the definition in Section 1.B. of the Solicitation Manual.

Disadvantaged Communities

Q.36	Our proposal will be to Project Group 1 (Southern CA), but due to our connection/relationships with disadvantaged communities in the region, we would like to make that a point of emphasis. Would it be advantageous from a scoring perspective to do this? Or are there no advantages to focusing on underserved communities as Project Group 1 (or 2) because of the Project Group 3 opportunity?
A.36	An addendum will be released that will delete Scoring Criteria 9 (Section IV.F). No extra points for Group 1 and Group 2 proposals will be provided for projects located in and benefiting disadvantaged communities.

Technical Questions:

Distributed Energy Resources (DERs)

Q.37	The GFO offers a unique question, but misses an opportunity in that other technologies should also be encouraged (renewables, energy storage, EV charging, gas-to-electric conversions), which are equally as challenging to implement in the many Existing Building environments. Will the Commission allow for non-efficiency technologies to be included that may also reduce GHG?
A.37	No. These are topics that are the subject of on-going research and future solicitations under the EPIC 2018--2020 Triennial Investment Plan. As indicated in the response to question 23, these other technologies can be included as match funds.

Measurement and Evaluation (M&E)

Q.38	Are we measuring cost savings, site energy, source energy or GHG?
A.38	The 10% residential and 20% commercial portfolio goals are in site electricity reduction, see Section II.B.2 of the Solicitation Manual.
Q.39	Cost effectiveness quantification? Is there a metric?
A.39	The metric for cost effectiveness used in this solicitation is as follows: Annual energy cost savings from the project pays for the equipment within the life of the equipment, based on energy savings.
Q.40	Are energy savings calculated from some code baseline or compared to a building being retrofitted?
A.40	For buildings included in the study, savings will be based on the building energy use prior to retrofit. Estimating potential impacts in the proposal will by necessity require the use of more general consumption estimates for the building population of interest. The method used must be described in detail in Attachment 4, item 1.f.
Q.41	Also how will water savings (or gas savings from say, de-carbonization of existing buildings) be taken into consideration in the selection process?
A.41	Gas savings and embedded energy in water (savings) will not be counted towards the 10 and 20% electricity reduction goals. These other savings will be considered during the scoring process, refer to scoring criterion 3.b. (Section IV.F.).
Q.42	After Measurement and Verification is completed in Phase 1 and a participant is rejected due to inability to reach required goals of the program can the intended benefits be transferred to a new participant or is the opportunity lost entirely? If lost how does this impact the program operators score with the CEC?
A.42	Yes, you can seek a new demonstration site, but it may not be necessary. It is expected that some technology approaches, implementation strategies and program designs being tested during the Applied Research phase will be less successful than others, and for virtually all approaches to require ongoing redesign, adjustment and improvement through both phases. The 10% and 20% electricity saving goals are intended to apply to the <i>portfolio of strategies and approaches</i> that result from the applicant's research proposal--that is, their expected impact going forward; the goals are NOT intended to be applied to each individual building. The 300,000 sqft portfolio goal is intended as a minimum project size for the TD&D portion of the program. Please see also the response to question 66.

Q.43	If we come up with some improvement technology that significantly reduces the cost and enables an end-user to have something they don't currently have such as air conditioning (increase in energy use if they didn't have it before), will this be considered?
A.43	Yes. The 10% and 20% annual electricity savings specified in the solicitation is for the applicant's portfolio of buildings and efficiency measures. If some buildings save less or none that is ok, as long as the average comes out to the intended percentage of the solicitation. We ask that all benefits of the projects, including qualitative such as lifestyle improvements and auxiliary savings such as water savings be well-documented including all assumptions. These benefits are considered positively especially if this helps underserved communities, and improves quality of life. Please see scoring criterion 3.e. in Section IV.F.
Q.44	Can gas savings be counted toward the 10% savings?
A.44	No, natural gas savings do not count toward the 10% electricity savings for homes, but will be considered a positive benefit in the scoring process. This applies to auxiliary saving such as water, or quality of life. Please see scoring criterion 3.b. in Section IV.F.
Q.45	On the improvement of compliance, is this specifically improved code compliance for existing building requirements (Section II.B.2.)?
A.45	Yes.
Q.46	Does fuel switching count under the definition of energy efficiency?
A.46	Fuel switching can be included as one of the strategies but as indicated in Section II.B.2. of the solicitation manual, the portfolio of strategies in each application must achieve a minimum 10 percent average (residential) and 20 percent average (commercial) reduction in on-site electricity use across the applicant's portfolio. Natural gas savings can also be included as additional benefits and it will be considered in the evaluation process under scoring criteria, 3.b. (Section IV.F).
Q.47	Regarding fuel switching, is it net consumption or is fuel switching out of question completely?
A.47	See response to question 46.
Q.48	Fuel switching is identified as a strategy in some of the commission's policy papers, so it would seem wrong if it wasn't included. (It would be nice if it was included.)
A.48	See response to question 46.
Q.49	How will water savings or gas savings from de-carbonization be taken into consideration in the selection process?
A.49	Ancillary (to electricity) savings such as water and natural gas would be considered in the scoring process. Please refer to scoring criterion 3b, Section IV.F.

Q.50	Are we measuring the 10% or 20% based on cost savings, site energy, source energy, or GHG?
A.50	See response to question 38.
Q.51	Can you clarify whether fuel switching, which is a strategy identified in the SB350 staff paper, is allowed as a part of the grant if the projects meet all other savings requirements?
A.51	See response to question 46.
“Programmatic” requirements and expectations of the GFO	
Q.52	We are thinking of utilizing public K-12 school buildings and/or community college buildings as our existing building type deployment subject, and as such, may have to put out to public bid any of the actual “Deployment” work--- in this case, we may not know the actual costs of a participant in the Deployment (any installing, design or construction) until we are into the project, thus we will need to have large placeholders for the Deployment part of our budget— is this okay? Please advise.
A.52	Without sites, scope of work and budget, it will be difficult to evaluate your proposal against the scoring criteria in Section IV.E., and F. As this grant has a very limited time and must be completed by December 31, 2021, time spent on doing public bids could hamper your project’s ability to complete all the required tasks in the Scope of Work, including the required monitoring and verification and CEQA requirements. See also scoring criterion 1.e. in Section IV.F. See also response to question 55.
Q.53	With regard to the Programmatic approach to this solicitation will it be required to present a comprehensive list of all projects to be accomplished throughout the entire term of the application up front or can the projects be identified once the program is initiated?
A.53	The complete list of proposed projects can be determined later and should be a product in the Scope of Work. We expect the Applied Research phase of the project to begin immediately, thus, it is critical to identify as many sites as possible for this first phase of the project in the application. Because the details of TD&D phase of the project will depend on results from the Applied Research phase, identifying those sites in the application is less critical. This grant has a very limited time and must be completed by December 31, 2021. A clear plan for identifying the Applied Research and TD&D phase sites and assuring their compliance with CEQA in sufficient time to complete the work and meet the grant requirements must be discussed in Attachment 4, items 1 and 4. Please see also responses to questions 58 and 68.
Q.54	Can the program be constructed to target facilities use categories along with the expected measures that will be proposed including development of end use participants that are good candidates for the specific design measures?
A.54	Yes. But the demonstrations must be in actual facilities.

<p>Q.55</p>	<p>We heard that you do not want a proposal to focus solely on a program for hospitals/health care facilities, yet focusing on only single family homes seemed an acceptable breadth of scope application. Please clarify all possible combinations of building types (OR that singular building types) that would be acceptable to focus on. Obviously, a program that is applicable to Public buildings, say schools, is not necessarily applicable to Private sector commercial buildings. Of the 300,000 S.F. minimum desired deployment over existing buildings, MUST all proposals show a commitment of at least one building each in a Residential market sector AND in a NON-Residential (Commercial) sector? Conversely must all applications include both Private AND Public sector buildings? Specifically:</p> <ul style="list-style-type: none"> · Can a responsive proposal just focus on commercial high rise buildings? · Will a proposal that has deployment singularly in any ONE of the following building type-market sectors be responsive? <p>(a.) K-12 public schools (b.) Public higher education (c.) multi-family residential (d.) single family residential (e.) private higher education buildings (f.) government buildings</p>
<p>A.55</p>	<p>The objectives of this solicitation include developing portfolios of retrofit strategies and developing business models to enable the retrofit contracting industry to build viable businesses that maximize energy efficiency retrofit participation across the building sector (see Section I.A. in solicitation manual). Thus, the focus should be on developing, testing and refining approaches that can be expanded to large numbers of existing buildings and result in increased consumer uptake of efficiency retrofits in the absence of EPIC funding. The solicitation focus is <u>not</u> on funding high-cost efficiency demonstrations in a single or small number of buildings that have little potential of being repeated without continued EPIC or other research grant funding. Applications that focus on one specific sector are not prohibited (e.g., commercial high rise buildings, or items a, b, e and f from the above question). However, a narrowly-focused project would be unlikely to adequately address the overall purpose and objectives of this solicitation. Applications that focus on the following would more likely meet the objective of the solicitation: a) approaches that have potential for expansion to large numbers of buildings and customers, such as residential single and/or multifamily, where the potential for savings is great if the strategy proves successful, or b) strategic approaches that could apply across multiple sectors of commercial or public buildings (e.g., items a, b, e, f from the above question) that, collectively, would have high potential for uptake if the strategies prove successful. We acknowledge that hospitals and health care facilities have unique needs and potential for savings, and this sector of buildings could be included in a portfolio with other building types to demonstrate a more comprehensive approach.</p>

Q.56	In the webinar this week it came across that the CEC would prefer projects that include multiple building types. If applying in Group Three would single family and multifamily be adequate? If not what other building types do you consider relevant to the Disadvantaged Communities category?
A.56	Yes, focusing on single and multifamily will be adequate.
Q.57	Does the CEC expect the R&D to be conducted at a portfolio scale?
A.57	Yes.
Q.58	Clarification on the 300,000 square feet requirement. If single family residential is part of the objective this would be difficult to provide. What is our responsibility to identify and detail all of the information for each site?
A.58	We anticipate that this project will be conducted in phases; that strategies and approaches will be developed and tested in the Applied Research phase, with the successful and/or modified strategies and approaches expanded during the Technology Demonstration and Deployment phase. The 300,000 square foot minimum is intended to apply across the entire portfolio for the Technology Demonstration and Deployment phase. As indicated in the responses to questions 53 and 68, the sites for the Applied Research phase should be identified to the degree possible in your application and the sites for the Technology Demonstration phase can be identified later. However, this grant has a very limited time and must be completed by December 31, 2021. A clear plan for identifying the additional Applied Research and TD&D sites and assuring their compliance with CEQA in sufficient time to complete the work and meet the grant requirements must be discussed in Attachment 4, items 1 and 4.
Q.59	Can a proposal have both single family and multifamily and commercial buildings, or a range of projects that cover this?
A.59	Yes, a range of different customers, buildings, sectors and strategies are encouraged.
Q.60	Does each proposal need to be applicable to multiple building types-- e.g. Residential AND commercial? Or can it focus on one sector (that could be similarly applied to other sectors of similar energy use?
Q.61	Do all proposals need to include multiple building types in their test site?
A.60-61	Applicants can target one particular sector in their applications. However, as one of the goals is to demonstrate different approaches for different sectors, we envision a more comprehensive approach. The major concern is that a narrowly-focused project will not adequately address the goal of developing strategies and approaches to increase consumer uptake of efficiency retrofits in the absence of EPIC subsidies. See response to question 55.
Q.62	Can we use technologies that are pre-commercial and have yet to be adopted by the market or do we have to invent new technologies?
A.62	Yes. Please also see response to question 66.

Q.63	Are behavioral measures considered as programmatic approaches? For example, widening the thermostat deadband (higher cooling setpoint), opening windows in favored times.
A.63	Behavioral measures, including measures that challenge traditional notions of thermal comfort, could be elements of but should not compose the entire portfolio. The term "programmatic" in the solicitation refers to the development of a research program that could include multiple research methods, multiple technologies, and multiple implementation approaches. The distinction between a "program" and a "project" is that a program would be structured in stages, and the results of earlier stages would inform subsequent stages.
General Technical Questions	
Q.64	Are district energy systems considered? They can be effective retrofit measures for urban districts (a groups/blocks of buildings) taking advantage of load diversity and heat recovery.
A.64	District heating/cooling systems could be included in a strategy, presuming the approach--if shown to be effective--could be applied to a significant portion of the market.
Q.65	Can software interconnection with EMS and programming design be considered part of particular "Deployment?"
A.65	Yes.
Q.66	It's a bit unclear whether you only want a "proof of concept" deployment at the 300,000 sqft scale in one market sector building type, PLUS a CONCEPT for the planning of a PROGRAM, (such as a "Roadmap" document; PLUS not only the conceptual planning for a Program, but an actual launch of the functioning program as the outcome (plus other written deliverables) of this grant. Please clarify.
A.66	The Applied Research phase will include development, planning, and testing of multiple strategies/approaches. Those strategies/approaches that show the most promise should be implemented on a broader scale in the Technology Development and Deployment (TD&D) phase. The combined total floor space of buildings involved in the TD&D phase must meet or exceed the 300,000 sqft. During the TD&D phase, the strategies/approaches should be continuously evaluated and improved to increase uptake and savings potential. The portfolio savings minimum of 10 percent average (residential) and 20 percent average (commercial) reduction in on site electricity use can reflect the savings achieved by the most successful program designs reached during the project. To be clear, there is no penalty for experiments on individual buildings in the applied research or TD&D phases that do not reach the savings targets; the verified distribution of savings across different building types/customer types achieved by the most effective approaches during the TD&D phase can be applied to buildings that were part of the less-successful experiments as if all the buildings treated during the project had used the most successful strategies. The distribution of savings attributable to the most successful strategies can be applied to the participating buildings in other samples that received less-effective treatments for purposes of estimating savings for the entire portfolio.

Q.67	What is your ultimate aspirational (such as clear ZNE ready-buildings to scale, paradigm shift in rapid adoption of Deep energy retrofits in at least one sector) outcome when this grant is fully expended?
A.67	Sustainable business models in multiple building sectors capable of expanding participation in building efficiency retrofits without continued EPIC funding.
Q.68	For certain market segments (i.e. single family residential) it seems impractical that 300,000 sf of projects would be identified at the time of the grant application. If a grant applicant shows fundamental understanding of the market segment and experience in procuring sites in that market segment, would that be sufficient to satisfy this requirement?
A.68	We expect the Applied Research phase of the project to begin immediately, thus, it is critical to identify as many sites as possible for this first phase of the project in the application. Because the details of TD&D phase of the project will depend on results from the Applied Research phase, identifying those sites in the application is less critical. This grant has a very limited time and must be completed by December 31, 2021. A clear plan for identifying the TD&D phase sites and assuring their compliance with CEQA, prevailing wage and other requirements will be completed in sufficient time to meet the grant requirements must be discussed in Attachment 4, items 1 and 2. See also responses to questions 53 and 58.
Q.69	Would it be sufficient to demonstrate large volumes of contractually committed demand for holistic ZNE improvements, given that full delivery for this demand may take longer than the award period allows for?
A.69	Demonstrations must occur within the time frame of the grant along with the required M&V.
Q.70	MUST each of the proposals utilize R&D on NEW technologies, or can that mean a particular approach to utilizing a combination of existing-but-pre-commercial (not scaled adoption) technologies to form a program strategy/approach?
A.70	The proposals can include innovative technologies as well as innovative strategies/approaches that utilize existing underutilized efficiency technologies. The combination must show some advancement over current practices or strategies.
Q.71	Can the innovative strategies include behavioral studies for applied research?
A.71	Behavioral approaches may be elements of the strategies developed, tested, and demonstrated. In fact, the fundamental question of how to engage potential retrofit customers and tailor retrofit packages to meet their needs implicitly requires some level of behavioral analysis. However, the challenge to focusing solely on behavioral responses to achieve energy savings (e.g. encouraging more efficient/less consumptive thermostat operation) is in documenting of the persistence of those types of approaches so should not be the main focus of a portfolio. See also response to question 63.

Q.72	[Our company] recently won an award for automated cloud based software system to upgrade university buildings. This technology cross-cuts many of the areas identified in this GFO. Is there any restriction to using this technology for other buildings and/or working with a prime that brings this to the marketplace?
A.72	This is acceptable; however, the work being conducted under another Energy Commission agreement cannot count as match.
Q.73	Is there a preference for the pre-commercial technology to be more focused on retrofit application vs new construction? Should the focus be on technologies that uniquely fit the retrofit environment?
A.73	The focus of the solicitation is existing buildings. Technologies should apply for use in existing buildings.