# **Questions and Answers**

**GFO-23-303**

**A Decision Tool to Electrify Homes with Limited Electrical Panel Capacity**

**February 22, 2024**

**Disclaimer**

The following answers are based on California Energy Commission (CEC) staff’s interpretation of the questions received. It is the Applicant’s responsibility to review the Solicitation Manual and to determine whether their proposed project is eligible for funding by reviewing the Eligibility Requirements within the solicitation. The CEC cannot give definitive advice as to whether a particular project is eligible for funding, because not all proposal details are known.

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**General/Administrative**

**Q1.** Will there be a recording posted of the pre-application workshop?

**CEC:** Yes. The recording for the pre-application workshop is posted on the following CEC webpage: <https://www.energy.ca.gov/event/funding-workshop/2024-01/pre-application-workshop-gfo-23-303-decision-tool-electrify-homes>

**Q2.** Can the CEC provide the link to the innovation portal?

**CEC:** Yes. Prospective applicants looking for partnering opportunities should register on the CEC’s Empower Innovation website: <https://www.empowerinnovation.net/en/custom/funding/view/41116>

**Q3a.** Can the CEC say how soon it expects the CEC Direct Install solicitation to be released?

**CEC:** The Equitable Building Decarbonization program is administered by a separate Division at the CEC. Parties interested in this program are encouraged to check the related website and subscribe to the email list to stay updated on the program. More information is available at: <https://www.energy.ca.gov/programs-and-topics/programs/equitable-building-decarbonization-program>

**Q3b.** Would participation in this solicitation preclude a bidder from participating in the Equity Building Decarb one?

**CEC:** No, participating in the Equity Building Decarbonization Program does not preclude participation in this solicitation.

**Q4.** Are applicants required to have signed up 100 households to the project before submitting a proposal?

**CEC:** No; applicants do not have to sign up 100 or more homes before submitting the proposal. However, strong evidence that demonstrates the applicant's ability to recruit 100 or more homes quickly and effectively will be scored favorably during the evaluation process. For example, submitting letters of support from entities such as utilities or community-based organizations (CBOs) that demonstrate sufficient recruitment opportunities could benefit an application. You may also submit letters of support that demonstrate the commitment from 100 homes at the time of the proposal if available.

**Q5.** For the 100+ and 50+ single family homes, does the proposal need to have commitment letters from each of these homes? The RFP seems to imply that is the case.

**CEC:** No, please see the answer to Q4.

**Funding**

**Q6.** If part of the matching funding is coming from the CEC's own programs, or IRA/HOMES, do we still need a commitment letter from CEC or DOE?

**CEC:** No other CEC awards can be used for match funds. Commitment letters are needed from entities such as DOE to be counted toward match funding at the time of application submittal.

**Q7.** Would a percentage of organizational staff time be an acceptable expense under this award, or could this only be covered through match funding?

**CEC:** Yes, staff time spent on the project is an acceptable expense under this award. Additionally, if you are referring to indirect overhead cost, it is allowed as well. Please refer to the scoring criteria 7 because the percentage proposed may impact the score.

**Q8.** How will funding be split between different projects? Or will only one project be chosen?

**CEC:** CEC may decide to fund 1-2 projects depending on the requested funds and the ranking of proposals. A single applicant cannot submit multiple proposals.

**Q9.** Can EPIC funds be used to pay the installation labor costs of an off the shelf heat pump while other funds (such as matching funds) pay for the equipment cost to buy the off the shelf heat pump equipment?

**CEC:** Yes. As part of the demonstration project, EPIC funds can be used to pay for the labor costs of installing off-the-shelf equipment. Match funds must be used to pay for the off-the-shelf equipment itself.

**Q10.** Is there an expectation to have $100K cash investment or it could be through the work equity, that is a number of hours devoted to building the tool without taking in the grant money?

**CEC:** Cash match is preferred, but match funding may include in-kind contributions such as goods or services that are not reimbursed with CEC funds, such as labor (if reasonable and justified), donated space, existing equipment, existing supplies, services provided by a third-party or subrecipient, and other expendable property in support of the project. The match funding minimum requirement is 20%.

**Eligibility**

**Q11.** In general, is there a preference for awarding the grant to specific businesses of a certain size or revenue, or it can be awarded to young businesses?

**CEC:** No. There is no preference for businesses of a certain size or revenue.

**Q12.** Will a successful bidder on GFO 23-303 be precluded from participation on a bidder team for the upcoming Equitable Building Decarbonization solicitation, either as a prime or subcontractor?

**CEC:** No, please see answer to Q3.

**Q13.** Can Public Utilities also take part in this solicitation? Since they could co-fund/match the grants and have access to data in their territories?

**CEC:** Publicly Owned Utilities (POUs) cannot receive EPIC funds, but they can participate as a match partner.

**Q14.**  Do I need to be a permanent resident of US to apply for this project?

**CEC:** As long as an applicant can legally work in the United States, said applicant is eligible to apply. Applicants also need to register with the California Secretary of State.

**Q15.** Can the 100+ participants come from a single IOU territory, or must they be split evenly across all IOUs? If so, does this include SoCalGas?

**CEC:** The participants could be located in one or more Investor Owned Utility (IOU) territories. However, having all participants in a single IOU territory may limit the impact and benefit to IOU ratepayers, which is one of the scoring criteria. There is also a requirement that the homes have both heating and cooling loads. Homes must be located in electric IOUs' service territories (PG&E, SCE, and SDG&E).

**Q16.** Are townhomes with individual electrical panels and similar electrical load profiles as single-family homes allowed?

**CEC:** Yes, townhomes with individual electrical panels are considered single-family homes. Please see Addendum 1 for an updated definition of “single-family homes on the following webpage: <https://www.energy.ca.gov/solicitations/2023-12/gfo-23-303-decision-tool-electrify-homes-limited-electrical-panel-capacity>

**Q17.** Why are multifamily buildings (condominiums) with individual electric meters not allowed to be included in the demonstration?

**CEC:**  Multifamily buildings are not considered for this solicitation.

**Q18.** Can homes like prebuilt homes, mobile homes, etc. qualify for the 100 homes count? These types of homes are more common in low-income regions and more commonly have smaller panel sizes.

**CEC:** No. Pre-built or mobile homes are not considered for this solicitation.

**Technical**

**Q19.** Is there an expectation for a specific delivery medium such as WebApp, Mobile App or a Standalone application for the tool?

**CEC:** There is no expectation of the type of medium. However, the selection of the type of medium may affect the impact of the proposed tools.

**Q20.** Will the CEC accept a Proof of Concept / Working Prototype of the tool as part of the submission?

**CEC:** Yes. As long as it meets the requirements of the solicitation.

**Q21.** Page 9 of the solicitation manual describes the features of the AI-based decision tool and also states that "AI algorithms should generate personalized recommendations." These sections of the solicitation imply a requirement that AI be used. Please confirm that this is optional since other techniques may be more appropriate.

**CEC:** Artificial Intelligence (AI) is a recommended feature for the tool, but not required. Please see Addendum 1 of the solicitation manual for clarification on this topic on the following webpage:<https://www.energy.ca.gov/solicitations/2023-12/gfo-23-303-decision-tool-electrify-homes-limited-electrical-panel-capacity>

**Q22.** Page 7 of the solicitation manual states that "an energy usage calculator that will create a load profile for each home." This is a broad description. What was the CEC’s primary goal or intention for this usage analysis? Different goals might result in different types of tools for different users. For example, such a calculator could be used for resident education, contractor education, NEC Load calcs, TOU rate design for utilities,TOU rate analysis for residents and/or contractors, or grid impact analysis for utilities. If the CEC had one particular use case in mind, please clarify so applicants can refine the scope.

**CEC:** The primary goals of creating energy (gas and electric) load profiles for each home is to understand how energy consumption and demand is being used in the home over time. This data can provide homeowners with information on how efficiently their electricity is being used, provide recommendations on reducing energy costs, energy consumption, and electricity demand, and provide data needed for the tool to perform NEC load calculations. The information gained from the energy load profile analysis can be used for educational purposes and training materials and to inform utilities and CCAs on customer needs related to electrification.

**Q23.** We believe a single complex software tool developed to satisfy all the requirements of this GFO would inhibit market adoption. Would a proposal that involved a consortium developing a number of distinct open-source software modules be welcomed, or is there a strong requirement or preference for a single software tool from a single vendor to satisfy all needs? For example, one module might be an open database of electrification devices; another to do load calcs; another for contractor selection; another to help residents with rebates/incentives/costing.

If the answer to question is yes above, it would be welcomed, then such a proposal would lead to open-source modules that would be incorporated by various software vendors into their proprietary tools, leading to greater market adoption. Would such a strategy involving potentially overlapping proprietary tools utilizing the grant-funded open-source modules be considered an acceptable strategy to satisfy requirements?

**CEC:** Yes.As long as there is a single interface for the user, a combination of tools could be proposed.

**Q24.** How does the CEC define artificial intelligence for the purposes of this solicitation?

**CEC:** The solicitation seeks an AI agent that would perform the required and recommended features list in the solicitation Section I.C.

**Q25.** Does the CEC require or expect any specific technologies? (for example, are linear/logistic regressions or support vector machines acceptable?)

 **CEC:** The solicitation does not require any specific technology.

**Q26.** Are there specific datasets that the CEC is targeting to use, which will be enabled by these technologies?

**CEC:** Some specific datasets are to be targeted, such as smart meter data for household energy consumptions. Applicants should consider other datasets if needed to help meet the goals and objectives of the solicitation.

**Q27.** The solicitation manual says applicants can’t use off the shelf products for metering. Are applicants able to use sensors available on the market and create hardware for tracking/storing the data or those sensors too need to be original and innovative?

**CEC:** Yes, sensors and other hardware used to collect data, monitor equipment, store data, etc can be paid for with EPIC funds.

**Q28.** Does the CEC consider appliance upgrades in the tool as a way to avoid panel upgrades, or as a general set of energy efficiency recommendations?

**CEC:** Yes, appliance upgrades in the tool would be considered as a pathway to avoid panel upsizes. A general set of energy efficiency recommendations could be included as long as the applicant can articulate that project meets the goals and objectives of the solicitation.

**Q29.** This GFO could be addressed via a number of disparate tools targeting different users and tasks. Is there a requirement for a single tool to satisfy all needs?

**CEC:** Pleasesee answer to Q23.

**Q30.** To the question of 'off the shelf' can the CEC define that further? Some of the panel optimization strategies like circuit splitters can be technically bought 'off the shelf' and used but are emerging technologies. Some of the cold climate heat pumps or variable capacity heat pumps are also emerging technologies.

**CEC:** Off-the shelf appliances are products that is not custom made, factory packaged, readily available for sale to contractors or to the general public, and above Technology Readiness Level (TRL) 8. TRLs are a method for estimating the maturity of technologies during the acquisition phase of a program. According to the Department of Energy (DOE), TRL 8 is defined as an actual system/process completed and qualified through test and demonstration. Off-the-shelf is above this TRL. Circuit splitters and cold climate heat pumps are not off-the-shelf. Please see Addendum 1 of the solicitation manual for a revised definition on the solicitation webpage: <https://www.energy.ca.gov/solicitations/2023-12/gfo-23-303-decision-tool-electrify-homes-limited-electrical-panel-capacity>

**Q31.** Will the application be given extra weight if the applicant has already created the proposed tool and successfully deployed it at various customer locations?

**CEC:** The proposal will be scored based on the criteria provided in Section IV.F. in the solicitation.

**Q32.** Can the CEC define "off-the shelf"? does that mean we should only test non-market ready appliances? should these all be lab tested only?

 **CEC:** Please see answer Q28.

**Q33.** Does the CEC envision be having the user come to a single decision or will it be okay to have a suite of recommendations?

**CEC:** The tool should provide different pathways for electrification based on the data and the homeowner’s input.

**Q34.** Are the objectives of the solicitation to develop a tool that allows contractor or homeowner to enter data one time into something and get answers out of it including feasible electrification plans and NEC load calculations that have low panel requirements? e.g. Plans that are often able to stay on a 100Amp panel or on 100 Amp service line.

 **CEC:** Yes.

**Q35.** Is speed valued in getting various project milestones completed before 2026? e.g. Early release of the public tool, early release of the study of 25 prior upsize, early release of the 100 plans.

**CEC:**  The proposal will be scored based on the criteria provided in section IV.F. in the solicitation.

**Q36.** Does the CEC envision the tool saving information for an extended period, so that homeowners can access their data as they add more electrification measures without reentering data?

 **CEC:** Yes.