**GRANT FUNDING OPPORTUNITY**

**Energy Efficiency and Load Flexibility in Industrial and Commercial Cold Storage Facilities**

**EPIC Program**



Added language appears in **bold underline**, and deleted language appears in [~~strikethrough~~] and within square brackets.

**GFO-23-301 Addendum 2**[**~~1~~**]

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

**State of California**

**California Energy Commission**

[~~August~~] [**~~October~~**] **November** 2023

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| **Attachments**   | Attachment Number | Title of Section | | --- | --- | | 1 | Application Form ***(requires signature)*** | | 2 | Executive Summary | | 3 | Project Narrative | | 4 | Project Team | | 5 | Scope of Work | | 6 | Project Schedule | | 7 | Budget | | 8 | CEQA Compliance Form | | 9 | References and Work Product | | 10 | Commitment and Support Letters ***(require signature)*** | | 11 | Project Performance Metrics | | 12 | Applicant Declaration ***(require signature)*** | | 13 | Special Terms and Conditions for California Native American Tribes and Tribal Organizations with Sovereign Immunity | |

# I. Introduction

## Purpose of Solicitation

The purpose of this solicitation is to demonstrate and deploy advanced energy efficiency and load reduction technologies in industrial and commercial cold storage facilities. The goals are to reduce greenhouse gas emissions, enable load shifting capabilities to benefit the grid, and gather real-world energy data to help existing and planned cold storage and refrigeration facilities reduce energy use and costs.

Refrigeration accounts for an estimated one-third of the total electricity usage for the food processing industry.[[1]](#footnote-2). The United States Department of Food and Agriculture (USDA) estimated that as of 2021, California had 396 million cubic feet[[2]](#footnote-3) of cold storage space consisting of warehouses that are artificially cooled for 30 or more days, including fruit houses; dairy manufacturing plants; frozen fruit, fruit juice, and vegetable processors; and poultry and meat packing plants. Using an average of 24-foot ceiling height[[3]](#footnote-4) and an energy density of 50 kilowatt-hours per square foot per year[[4]](#footnote-5), the annual energy usage of this sector is estimated to be 825 GWh.

Demand for cold storage is expected to increase. At least two industries are driving this trend: online grocery sales and pharmaceutical industry distribution. The market for online grocery sales[[5]](#footnote-6) is expected to grow at a compound annual rate of 11.7 percent,[[6]](#footnote-7) creating a demand for additional cold storage. Since 2019, the need for more temperature-controlled pharmaceutical storage capacity has been increasing, at least partially due to the temperature control requirements of advanced mRNA vaccines as well as other pharmaceuticals.[[7]](#footnote-8) In California, the pharmaceutical industry is among the largest consumers of industrial electricity.[[8]](#footnote-9)

In 2015, Lawrence Berkeley National Lab (LBNL) assessed to potential for the refrigeration sector to help reduce electrical grid stress. Their analysis suggests that refrigeration warehouses have the following demand characteristics well-suited to shifting or shedding electrical loads[[9]](#footnote-10):

* Facilities have significant power demand, especially during utility net peak periods.
* Refrigeration load accounts for a significant portion of a typical facility's total energy usage.
* The number of processes for a typical facility is limited, and refrigerated products are generally not sensitive to short-term (two to four hours) power reductions.
* The thermal mass of stored product in insulated spaces can often facilitate several hours of reduced cooling without risking product quality.
* Past success on load management strategies in commercial buildings could be transferred to refrigerated warehouses.

The development of this solicitation is guided by the California Energy Commission Electric Program Investment Charge 2021 Interim Investment Plan. This solicitation pertains to the research Initiative 2, Energy Efficiency and Demand Response in Industrial, Agricultural, and Commercial Cold Storage. This solicitation seeks projects developing and deploying innovative technologies and solutions that must fall within one of the following project groups:

* **Group 1**: Industrial Refrigerated Warehouses
* **Group 2**: Commercial Cold Storage Facilities

Please refer to the Section I.B for definitions of **Industrial Refrigerated Warehouse** and **Commercial Cold Storage Facility**.

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

Prospective applicants looking for partnering opportunities for this funding opportunity should register on the California Energy Commission’s Empower Innovation website at [www.empowerinnovation.net](http://www.empowerinnovation.net)

## Key Words/Terms

| **Word/Term** | **Definition** |
| --- | --- |
| Applicant | The entity that submits an application to this solicitation. |
| Application | An applicant’s written response to this solicitation. |
| Authorized Representative | *Authorized Representative*, the person signing the application form who has authority to enter into an agreement with the CEC. |
| **CAISO** | ***California Independent System Operator.* CAISO manages the flow of electricity on high-voltage power lines, operates a wholesale energy market, and oversees infrastructure planning.** |
| CAM | *Commission Agreement Manager,* the person designated by the CEC to oversee the performance of an agreement resulting from this solicitation and to serve as the main point of contact for the Recipient. |
| CAO | Commission Agreement Officer |
| CAPEX | Capital Expenditure. CAPEX are funds required to obtain equipment. |
| CBO | Community Based Organization. A public or private nonprofit organization of demonstrated effectiveness that:   1. Has an office in the region (e.g., air basin or county) and meets the demographic profile of the communities they serve. 2. Has deployed projects and/or outreach efforts within the region (e.g., air basin or county) of the proposed disadvantaged or low-income community. 3. Has an official mission and vision statements that expressly identifies serving disadvantaged and/or low-income communities. 4. Currently employs staff member(s) who specialized in and are dedicated to – diversity, or equity, or inclusion, or is a 501(c)(3) non-profit. |
| CEC | State Energy Resources Conservation and Development Commission, or the California Energy Commission. |
| CEQA | California Environmental Quality Act, California Public Resources Code Section 21000 et seq. |
| Commercial Cold Storage | A refrigerated space less than 3,000 square feet constructed for storage or handling of products with a space temperature of 55°F or less. |
| Days | *Days* refers to calendar days*.* |
| Disadvantaged Community | These are communities designated pursuant to Health and Safety Code section 39711 as representing the top 25% scoring census tracts from CalEnviroScreen along with other areas with high amounts of pollution and low populations as identified by the California Environmental Protection Agency. (https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40) |
| DR | Demand Response |
| Energy Equity | The fair distribution of benefits and burdens from energy production and consumption. |
| EPIC | *Electric Program Investment Charge,* the source of funding for the projects awarded under this solicitation. |
| GHG emissions | Greenhouse Gas emissions |
| Industrial Refrigerated Warehouse | A refrigerated space greater than or equal to 3,000 square feet constructed for storage or handling of food, pharmaceuticals, and other products with a space temperature of 55°F or less. |
| IOU | *Investor-owned utility,* an electrical corporation as defined in in California Public Utilities Code section 218. For purposes of this EPIC solicitation, it includes Pacific Gas and Electric Co., San Diego Gas and Electric Co., and Southern California Edison Co. |
| **Load Flexibility** | ***Load flexibility,* also called demand flexibility, is the practice of adjusting load (or energy usage) to match the supply of electricity. Electricity customers with smart devices can automatically shift their energy usage to when electricity is cheaper and cleaner and use less energy when the grid is under stress or running polluting power plants. For additional information*:* https://www.energy.ca.gov/programs-and-topics/topics/load-flexibility** |
| Low Income Community | *Low-income Communities* are defined as communities within census tracts with median household incomes at or below 80 percent of the statewide median income or the applicable low-income threshold listed in the state income limits updated by the Department of Housing and Community Development. (https://www.hcd.ca.gov/grants-funding/income-limits/state-and-federal-income-limits.shtml) |
| NOPA | *Notice of Proposed Award,* a public notice by the CEC that identifies award recipients. |
| Net Peak | *Net Peak*, or net load or net demand peak is the difference between energy required by the CAISO to serve demand at its highest level of the day and the supply of renewable electricity. It is the variance between total demand and the amount of electrical resources needed when renewable resources may no longer be generating and varies through the year. For additional information: [gross-and-net-load-peaks-fact-sheet.pdf (caiso.com)](http://www.caiso.com/Documents/gross-and-net-load-peaks-fact-sheet.pdf). |
| Off-Peak Time | Time of day when grid electricity is the lowest and varies by electric utility. |
| OPEX | Operating Expenses. Expenses related to maintaining and operating equipment. |
| Pre-Commercial Technology | *Pre-commercial Technology* means a technology that has not reached commercial maturity or been deployed at scales sufficiently large and in conditions sufficiently reflective of anticipated actual operating environments to enable the appraisal of operational and performance characteristics, or of financial risks. |
| Pilot Test | *Pilot test* means small scale testing in the laboratory or testing on a small portion of the production line of the affected industry. Pilot tests help to verify the design and validity of an approach, and adjustments can be made at this stage before full-scale demonstrations |
| Principal Investigator | The technical lead for the applicant’s project, who is responsible for overseeing the project; in some instances, the Principal Investigator and Project Manager may be the same person. |
| Project Manager | The person designated by the applicant to oversee the project and to serve as the main point of contact for the CEC. |
| Project Partner | An entity or individual that contributes financially or otherwise to the project (e.g., match funding, provision of a test, demonstration or deployment site), and does not receive CEC funds. |
| Recipient | An entity receiving an award under this solicitation. |
| ROI | Return On Investment. The ROI calculation will take the total or marginal cost of installation and equipment and divide it by the annual energy/cost savings. |
| Simple Payback | Simple payback = (equipment cost + installation cost + additional maintenance costs) ÷ (annual energy cost savings + demand cost savings) |
| Solicitation | This entire document, including all attachments, exhibits, any addendum and written notices, and questions and answers (“solicitation” may be used interchangeably with “Grant Funding Opportunity”). |
| State | State of California |
| TOU | Time of use is a metering method of measuring and charging a utility customer's energy consumption based on when the energy is used. Utility companies charge more during the time of day when electricity use is higher. |
| TRL | Technology readiness levels are a method for estimating the maturity of technologies during the acquisition phase of a program.  Source: U.S. Department of Energy, “Technology Readiness Assessment Guide”. <https://www2.lbl.gov/dir/assets/docs/TRL%20guide.pdf> |
| Ultra-low GWP | Ultra-low Global Warming Potential refrigerant. For the purposes of this solicitation, ultra-low GWP refers to GWP of less than 2. |

## Project Focus

The following lists eligible technologies for consideration in this solicitation. Requests to add other technologies must be submitted by the deadline for Written Questions indicated in Section I.E. Written responses will be provided in the “Questions and Answers” document referenced in Section I.E. **Please refer to the latest iteration of the “Questions and Answers” document for additional eligible technologies located at: *https://www.energy.ca.gov/solicitations/2023-08/gfo-23-301-energy-efficiency-and-load-flexibility-industrial-and-commercial.***

Eligible technologies for this solicitation include:

1. Advanced dehumidification technologies that reduce refrigeration loads
2. Defrosting and frost build-up prevention technologies (e.g., coatings)
3. Integrated thermal energy storage technologies, such as dedicated ice storage, brine cold storage that enables operational flexibility, and electric load shifting
4. Retrofits that enable waste heat recovery and reuse (for instance, conversion of concrete slab heating from electricity to heating with heat transfer fluid, enabling reuse of compressor waste heat)
5. Advanced controls enabling operations scheduling **for cooling and non-cooling loads. Examples can include** [~~and~~] pre-cooling during off-peak times, optimizing defrosting cycles in response to grid conditions, operating electric motors and pumps, **operating forklifts, and other plant loads**. [~~ect~~]

The solicitation seeks projects at technology readiness levels (TRLs) from 7 to 8 at the beginning of the project that will do one or more of the following:

* Reduce net energy use and/or costs
* Enable [~~permanent~~] load shifting capabilities that benefit the grid
* Reduce on-site and/or grid GHG emissions

The objective is to advance technologies to TRL 9 and yield market-ready technologies and approaches by the end of the projects. This solicitation focuses on [~~projects~~] **technologies and approaches** that will result in [~~permanent~~] **improved energy efficiency** and/or **load flexibility projects that shift load out of CAISO’s net peak demand hours** [~~load reduction and does not seek projects that target emergency load reduction~~].The following research targets and metrics are applicable to all projects, compared to the baseline operations at the demonstration site facility:

* [~~GHG emissions reduction (at least 20 percent) annually~~] **Reduce grid GHG emissions by at least 20 percent for the technology(ies) demonstrated when compared to the currently installed technology.**
* Simple payback (less than 5 years, or 10 years for slab retrofits) **for each technology funded and based on the facility’s IOU electricity tariff and other customer incentives**

In addition to the metrics listed above, load flexibility projects must be able **to shift load out of CAISO net peak demand hours driven by the respective IOU’s electricity tariff or other incentive programs available at the time of the project demonstration. Energy efficiency projects must reduce annual electricity usage (kWh) by at least 20 percent compared to the baseline equipment.** [~~permanently (non-emergency) load shift from peak hours to off-peak hours, as defined by the respective IOU’s electricity tariff at the time of the project demonstration (at least 20 percent of electric power (kW) shifted). Energy efficiency projects must reduce annual electricity usage (kWh) by at least 20 percent.~~]

All applicable research targets and metrics must be supported by independent third-party measurement and verification for at least 12 months after project deployment and **for** at least 12 months of pre-deployment baseline measurements. **Meter data may be used for estimating pre-deployment baseline energy use. This baseline should reflect representative pre-project operations so that it can accurately be compared to post-project operations.**

Demonstrations must be at an existing facility located in an electric IOU service territory.

All demonstration projects must provide a Measurement and Verification plan. If a project includes the deployment of multiple technologies, the applicant must provide a Measurement and Verification plan that specifies research targets and respective metrics that describe the performance of each individual technology as well as the integrated technologies under expected operational strategies. The purpose of reporting individual performance is to improve empirical understanding of the savings potential of each technology. See also section II.B.4 of this solicitation manual.

1. Group 1: Industrial Refrigerated Warehouses

Industrial Refrigerated Warehouses must meet the definition indicated in Section I.B. The Project Narrative (Attachment) must discuss the following in the sections identified:

* Demonstrations must be at an existing industrial cold storage facility located in an electric IOU service territory. Applicants must provide at least one site and a backup site and include demonstration site descriptions in the Technical Approach section.
* Applicants must include one or more of the eligible technologies and provide justification within the Technical Merit section on why the proposed technology is applicable for this funding opportunity.
* Applicants must provide justification for how the proposed technology(ies) will meet or exceed the required and other proposed research targets, that they are technically and economically feasible, and that they have potential for commercial deployment by similar facilities beyond the term of the grant in the Technical Merit section.
* **Projects that include load shifting capability will receive preference.**
* For projects that target [~~permanent~~] load shifting:
  + In the Technical Merit section, applicants must explain how the load flexibility projects will ~~load~~ shift **load** and the corresponding hourly GHG savings for each shift.
  + Applicants must evaluate cost savings and GHG emission and load reductions based on an annual 8760 hour model **that uses** [~~such as Energy Plus~~~~[[10]](#footnote-11)~~~~using the~~] actual rates and GHG factors [~~of~~] **from** the respective electric IOU. For example, if a project shifts a 500 kW load from 5 pm to [~~3~~] **9** pm, [~~the~~] **an** energy model must **accurately** [~~be able to~~] calculate the marginal GHG difference and provide a cumulative savings **based on pre- and post-installation energy use**. The model must **accurately** [~~be able to~~] evaluate the kWh and kW energy and cost impacts, for each hour of the year, and report them as hourly impacts as well as summarize these impacts and customer costs, reflecting the current electric tariffs of the applicable electric IOU. If multiple tariff options are available to customers, the model should compare costs across those different options.
    - Applicants must provide a description and summary of the model results, including assumptions and references for the hourly load reductions and cost impact during the net peak period, in the Technical Approach section.
* In the Technical Merit section, describe the adaptability of the technology to respond to changes in electricity rate structures and grid needs (e.g., as storage capacity increases; new renewable capacity comes online; new renewable sources, such as offshore wind, come online).
* In the Disadvantaged & Low-Income Communities section, indicate if the project location(s) are in disadvantaged, low-income, or tribal communities. If the project benefits these communities, indicate specific benefits it will provide to the communities. Include information on past and planned community engagement activities.

**Group 2**: Commercial Cold Storage Facilities

The purpose of this group is to reduce GHG emissions in cold storage facilities found in commercial buildings such as grocers, institutional facilities (schools, hospitals, government), and retail. Projects funded by this group will ideally provide energy efficiency, demand flexibility, cost savings, and other benefits. The Project Narrative (Attachment) must discuss the following in the sections identified:

* Demonstrations must be at an existing cold storage facility located in an electric IOU service territory. Applicants must provide at least two sites and a backup site and include demonstration site descriptions in the Technical Approach section.
* Applicants must include one or more of the eligible technologies and provide justification within the Technical Merit section on why the proposed technology is applicable for this funding opportunity.
* In the Technical Merit section, applicants must provide justification for how the proposed technology(ies) will meet or exceed the required or other proposed research targets, are technically and economically feasible, and have potential for commercial deployment by similar facilities beyond the term of the grant.
* **Projects that include load shifting capability will receive preference.**
* Projects that target [~~permanent~~] load shifting must provide evaluation of cost savings and GHG emissions and load reduction based on an 8760 hour model **that uses** [~~such as Energy Plus using the~~] actual rates and GHG factors [~~of~~] **from** the respective electric IOU. **For example, if a project shifts a 500 kW load from 5 pm to 9 pm, an energy model must accurately calculate the marginal GHG difference and provide a cumulative savings based on pre- and post-installation energy use.** The model must [~~be able to~~] **accurately** evaluate the kWh and kW energy and cost impacts, for each hour of the year, and be reported as hourly impacts as well as summary impacts and customer costs reflecting current electric tariffs for the respective IOU. If multiple tariff options are available to customers, costs should be compared across those different options. Provide description, including assumptions and references, in the Technical Approach section.
* In the Technical Merit section, describe the adaptability of the technology to respond to changes in electricity rate structures and grid needs (e.g., as storage capacity increases; new renewable capacity comes online; new renewable sources, such as offshore wind, come online).
* In the Disadvantaged & Low-Income Communities section, indicate if the project locations are in disadvantaged, low-income, or tribal communities. If the project benefits these communities, indicate specific benefits it will provide to the communities. Include information on past and planned community engagement activities.

## Funding

1. **Amount Available and Minimum/ Maximum Funding Amounts**

There is **up to $**10 million available for grants awarded under this solicitation. The total, minimum, and maximum funding amounts for each project group are listed below.

| Project Group | Available funding | Minimum award amount | Maximum award amount | Minimum match funding  (% of EPIC Funds Requested) |
| --- | --- | --- | --- | --- |
| Group 1: Industrial Refrigerated Warehouses | $7,000,000 | $1,000,000 | $3,500,000 | 20% |
| Group 2: Commercial Cold Storage Facilities | $3,000,000 | $500,000 | $3,000,000 | 20% |

1. **Match Funding Requirement**

Match funding is required in the amount of at least **20%** of the requested project funds.

For the definition of match funding, see Section I K.

1. **Change in Funding Amount**

Along with any other rights and remedies available to it, the California Energy Commission (CEC) reserves the right to:

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

## Key Activities Schedule

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

| ACTIVITY | DATE | TIME[[11]](#footnote-12) |
| --- | --- | --- |
| Solicitation Release | August 18th 2023 |  |
| **Pre-Application Workshop** | **September 14th 2023** | **10:00 a.m.** |
| **Deadline for Written Questions[[12]](#footnote-13)** | **November 17th** [**~~November 3~~~~rd~~**][**~~October 6~~~~th~~**] **2023** | **5:00 p.m.** |
| Anticipated Distribution of Questions and Answers (*date should be at least two weeks after the Deadline for Written Questions)* | **December 1st**  [**~~November 15~~~~th~~**]  [~~October 20th~~] 2023 |  |
| **Deadline to Submit Applications** | **February 2nd 2024** | **11:59 p.m.** |
| Anticipated Notice of Proposed Award Posting Date | April 4th 2024 |  |
| Anticipated Energy Commission Business Meeting Date | July 10th 2024 |  |
| Anticipated Agreement Start Date | August 2024 |  |
| Anticipated Agreement End Date | March 31, 2027 |  |

## Notice of Pre-Application Workshop

CEC staff will hold one Pre-Application Workshop to discuss the solicitation with potential applicants. Participation is optional but encouraged. The Pre-Application Workshop will be held remotely. Applicants may attend the workshop via the Internet (Zoom, see instructions below), or via conference call on the date and at the time and location listed below. Please refer to the CEC's website at [www.energy.ca.gov/contracts/index.html](http://www.energy.ca.gov/contracts/index.html) to confirm the date and time.

**Date and time:** September 14th, 2023, at 10:00 AM

**Zoom Instructions:**

To join the Zoom meeting, go to <https://zoom.us/join> and enter the Meeting ID below and select “join from your browser.” Participants will then enter the meeting password listed below and their name. Participants will select the “Join” button.:

**Meeting ID:** 826 2500 1563

**Meeting Password:** meeting@10

**Topic:** Pre-Bid Workshop: Energy Efficiency and Load Flexibility in Industrial and Commercial Cold Storage Facilities

**Telephone Access Only:**

Call **1-888 475 4499** (Toll Free) or **1-877 853 5257** (Toll Free). When prompted, enter the meeting number above. International callers may select a number from the Zoom International Dial-in Number List at: https://energy.zoom.us/u/adjzKUXvoy. To comment, dial \*9 to “raise your hand” and \*6 to mute/unmute your phone line.

**Access by Mobile Device:**

Download the application from the Zoom Download Center, https://energy.zoom.us/download.

**Technical Support:**

* For assistance with problems or questions about joining or attending the meeting,

please call Zoom Technical Support at **1-888-799-9666 ext. 2.** You may also contact the CEC’s Public Advisor’s Office at publicadvisor@energy.ca.gov, or (916) 957-7910.

* System Requirements: To determine whether your computer is compatible, visit:

https://support.zoom.us/hc/en-us/articles/201362023-System-requirements-for-Windows-macOS-and-Linux.

* If you have a disability and require assistance to participate, please Erica Rodriguez by e-mail at [Erica.Rodriguez@energy.ca.gov](mailto:Erica.Rodriguez@energy.ca.gov) at least five days in advance.

## Questions

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

Natalie Johnson, Commission Agreement Officer

California Energy Commission

715 P Street

Sacramento, California, 95814

E-mail: [Natalie.johnson@energy.ca.gov](mailto:Natalie.johnson@energy.ca.gov)

Applicants may ask questions at the Pre-Application Workshop and may submit written questions via email. However, all **technical** questions must be received by the deadline listed in the “Key Activities Schedule” above. Questions received after the deadline may be answered at the CEC'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 5:00 p.m. of the application deadline date.

The questions and answers will also be posted on the Commission’s website at: https://www.energy.ca.gov/funding-opportunities/solicitations

If an applicant discovers a **conflict, discrepancy, omission, or other error** in the solicitation at any time prior 5:00 p.m. of the application deadline date, the applicant may notify the CEC in writing and request modification or clarification of the solicitation. The CEC, at its discretion, will provide modifications or clarifications by either an addendum to the solicitation or by written notice to all entities that requested the solicitation. At its discretion, the CEC may, in addition to any other actions it may choose, re-open the question/answer period to provide all applicants the opportunity to seek any further clarification required.

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

## Applicants’ Admonishment

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

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

## Additional Requirements

* Time is of the essence. Funds available under this solicitation have encumbrance deadlines as early as June 30, 2025.  This means that the CEC must approve proposed awards at a business meeting (usually held monthly) prior to June 30, 2025, to avoid expiration of the funds. Prior to approval and encumbrance, the CEC must comply with the California Environmental Quality Act (CEQA). To comply with CEQA, the Commission must have CEQA-related information from applicants and sometimes other entities, such as local governments, in a timely manner. Unfortunately, even with this information, the Commission may not be able to complete its CEQA review prior to the encumbrance deadline for every project. For example, if a project requires an Environmental Impact Report, the process to complete it can take many months. For these reasons, it is critical that applicants organize project proposals in a manner that minimizes the time required for the Commission to comply with CEQA and provide all CEQA-related information to the Commission in a timely manner such that the Commission is able to complete its review in time for it to meet its encumbrance deadline.
* Reservation of right to cancel proposed award. In addition to any other right reserved to it under this solicitation or that it otherwise has, if the CEC determines, in its sole and absolute discretion, that the CEQA review associated with a proposed project would not likely be completed prior to the encumbrance deadline referenced above, and that the Commission’s ability to meet its encumbrance deadline may thereby be jeopardized, the CEC may cancel a proposed award and award funds to the next highest scoring applicant, regardless of the originally proposed applicant’s diligence in submitting information and materials for CEQA review. Examples of situations that may arise related to CEQA review include but are not limited to:
* Example 1: If another state agency or local jurisdiction, such as a city or county, has taken the role of lead agency under CEQA, the CEC’s review may be delayed while waiting for a determination from the lead agency.
* Example 2: If the proposed work is part of a larger project for which a detailed environmental analysis has been or will be prepared by another state agency or local jurisdiction, the CEC’s review may be delayed as a result of waiting for a supplemental or initial analysis, respectively, from the other agency.
* Example 3: If the nature of the proposed work is such that a project is not categorically or otherwise exempt from the requirements of CEQA, and an initial study or other detailed environmental analysis appears to be necessary, the CEC’s review, or the lead agency’s review, may take longer than the time available to encumber the funds. If an initial study or environmental impact report has already been completed by another state agency or a local jurisdiction, serving as the lead agency, the applicant must ensure that such an analysis covers the work in the proposed project, or must obtain a revised analysis and determination from the lead agency reviewing the proposed project.
* Example 4: If the proposed project clearly falls under a statutory or categorical exemption or is project for which another state agency or local jurisdiction has already adopted a CEQA finding that the project will cause no significant effect on the environment, the project will likely have greater success in attaining rapid completion of CEQA requirements.

The above examples are not exhaustive of instances in which the CEC may or may not be able to comply with CEQA within the encumbrance deadline and are only provided as further clarification for potential applicants. Please plan project proposals accordingly.

## Background

1. **Electric Program Investment Charge (EPIC) Program**

This solicitation will award projects funded by the EPIC, an electricity ratepayer surcharge established by the California Public Utilities Commission (CPUC) in December 2011.[[13]](#footnote-14) The purpose of the EPIC program is to benefit the ratepayers of three investor-owned utilities (IOUs), including Pacific Gas and Electric Co., San Diego Gas and Electric Co., and Southern California Edison Co. The EPIC funds clean energy technology projects that meet the guiding principles of (1) improving safety, (2) increasing reliability, (3) increasing affordability, (4) improving environmental sustainability, and (5) improving equity, all as related to California's electric system.[[14]](#footnote-15) In addition to providing IOU ratepayer benefits, funded projects must lead to technological advancement and breakthroughs to overcome the barriers that prevent the achievement of the state’s statutory energy goals.[[15]](#footnote-16) The EPIC program is administered by the CEC and the IOUs.

* **Program Areas, Strategic Objectives, and Funding Initiatives**

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

* Applied research and development;
* Technology demonstration and deployment; and
* Market facilitation.

In addition, projects must fall within one of the general focus areas (**“strategic objectives”**) identified in the CEC’s EPIC Investment Plans[[16]](#footnote-17)[[17]](#footnote-18) [[18]](#footnote-19) and within one or more specific focus areas (**“funding initiatives”**) identified in the plan. This solicitation targets the following program area, strategic objective, and funding initiative:

**Electric Program Investment Charge Interim Investment Plan 2021**

* **Program Area**: Technology Demonstration and Deployment
* **Strategic Objective** Decarbonization, and Resilience and Reliability
  + **Funding Initiative** 2: Energy Efficiency and Demand Response in Industrial and Commercial Cold Storage

**Reference Document**

* **Amarnath, Ammi, Andrea Mammoli, Angela Chuang, David Showunmi, Don Shirey, Colin Lee, Alekhya Vaddiraj, and Steve Hoffman. 2022. *Develop and Field Test Flexible Demand Response Control Strategies for Water Pumping Station and Industrial Refrigeration Plant*. California Energy Commission. Publication Number CEC-500-2023-060.[[19]](#footnote-20)**

## Match Funding

* **“Match funds”** includes cash or in-kind (non-cash) contributions provided by the applicant, subcontractors, or other parties including pilot testing, demonstration, and/or deployment sites (e.g., test site staff services) that will be used in performance of the proposed project.

“Match funds” do not include: CEC awards, EPIC funds received from other sources, future/contingent awards from other entities (public or private), the cost or value of the project work site, or the cost or value of structures or other improvements **that do not provide value to the project**. [ ~~affixed to the project work site permanently or for an indefinite period of time (e.g., photovoltaic systems)~~ ]

Definitions of “match funding” categories are listed below:

* + - **“Cash”** **match** means funds that are in the recipient’s possession or proposed by match partner and clearly identified in a support letter, and are reserved for the proposed project, meaning that they have not been committed for use or pledged as match for any other project. Cash match can include funding awards earned or received from other agencies for the proposed technologies or study (but not for the identical work). Proof that the funds exist as cash is required. Cash match will be considered more favorably than in-kind contributions during the scoring phase.
    - **“In-Kind”** **match** is typically in the form of the value of personnel, goods, and services, including direct and indirect costs. This can include equipment, facilities, and other property as long as the value of the contribution is based on documented market values or book values, prorated for its use in the project, and depreciated or amortized over the term of the project using generally accepted accounting principles (GAAP).
* Match funds must be spent only during the agreement term, either before or concurrently with EPIC funds. Match funds also must be reported in invoices submitted to the CEC.
* All applicants providing match funds must submit commitment letters, **including prime and subcontractors**, that: (1) identify the source(s) of the funds; (2) justify the dollar value claimed; (3) provide an unqualified (i.e., without reservation or limitation) commitment that guarantees the availability of the funds for the project; and (4) provide a strategy for replacing the funds if they are significantly reduced or lost. Please see Attachment 11, Commitment and Support Letter Form. Commitment and support letters must be submitted with the application to be considered.
* Any match pledged in Attachment 1 must be consistent with the amount or dollar value described in the commitment letter(s) (e.g., if $5,000 “cash in hand” funds are pledged in a commitment letter, Attachment 1 must match this amount). Only the total amount pledged in the commitment letter(s) will be considered for match funding points.

Examples of preferred match share:

* + - **“Travel”** refers to all travel required to complete the tasks identified in the Scope of Work. Travel includes in-state and out-of-state, and travel to conferences. EPIC funds are limited to lodging and any form of transportation (e.g., airfare, rental car, public transit, parking, mileage). Use of match funds for out-of-state travel is encouraged, as the CEC discourages and may not approve the use of its funds for such travel. If an applicant plans to travel to conferences, including registration fees, they must use match funds. Applicants shall adhere to travel restrictions of using state funds to travel to certain other states pursuant to AB 1887 (2016) and codified at California Government Code Section 11139.8. All applicants are encouraged to consider the Attorney General’s website https://oag.ca.gov/ab1887 for a current list of states subject to travel restrictions. Awarded Grants under this solicitation shall not contain travel paid for with Commission funds (applicants can instead use match funds) to the listed states unless the Commission approves in writing that the trip falls within one of the exceptions under the law.
    - **“Equipment” is** an item with a unit cost of at least $5,000 and a useful life of at least one year. **Purchasing equipment with match funding is encouraged,** as there are no disposition requirements at the end of the agreement for such equipment. Typically, grant recipients may continue to use equipment purchased with CEC funds if the use is consistent with the intent of the original agreement.
    - **“Materials”** under Materials and Miscellaneous are items under the agreement that do not meet the definition of Equipment (unit cost of at least $5,000 and a useful life of at least one year). **Using match funds for purchasing items such as laptops, notebooks and/or personal tablets is encouraged, as Energy Commission funds for these purchases is not allowed.**

## Funds Spent in California

* Only CEC reimbursable funds counts towards funds spent in California total.
* "Spent in California" means that:
  + (1) Funds in the "Direct Labor category and all categories calculated based on direct labor (e.g., fringe benefits, indirect costs and profit) are paid to individuals that pay California state income taxes on wages received for work performed under the agreement. Payments made to out-of-state workers do not count as “funds spent in California.” However, funds spent by out-of-state workers in California (e.g., hotel and food) can count as “funds spent in California.”; AND
  + (2) Business transactions (e.g., material and equipment purchases, leases, and rentals) are entered into with a business located in California.
  + (3) Total should include any applicable subcontractors.
* Airline ticket purchases for out-of-state travel and payments made to out-of-state workers are not considered funds “spent in California.” However, funds spent by out-of-state workers in California (e.g., lodging) and airline travel originating and ending in California are considered funds “spent in California.” A business located in California means: 1) businesses registered with Secretary of State AND 2) transaction is with a location in California that is directly related to the grant project (e.g., direct purchase of material and equipment to be used in the grant) and results in the support of California business and jobs.
  + Example 1: Grant funds will be spent on temperature sensors.  The temperature sensors are manufactured in Texas. The recipient orders the temperature sensors directly from a CA based supply house.  The invoice shows that the transaction occurred with the CA based supply house. This transaction is eligible and can be counted as funds spent in CA.
  + Example 2: Grant funds will be spent on temperature sensors. The temperature sensors are manufactured in Texas. The recipient orders the temperature sensors directly from Texas.  The manufacturer has training centers in CA that instructs purchasers on how to use the sensors. The invoice shows that the transaction occurred in Texas. This transaction is not eligible and cannot be counted as funds spent in CA.

# II. Eligibility Requirements

## Applicant Requirements

1. **Eligibility**

This solicitation is open to all public and private entities with the exception of local publicly owned electric utilities.[[20]](#footnote-21) In accordance with CPUC Decision 12-05-037, funds administered by the CEC may not be used for any purposes associated with local publicly owned electric utility activities.

1. **Terms and Conditions**

Each grant agreement resulting from this solicitation will include terms and conditions that set forth the recipient’s rights and responsibilities. By signing the Application Form (Attachment 1), each applicant agrees to enter into an agreement with the CEC to conduct the proposed project according to the terms and conditions that correspond to its organization, without negotiation: (1) University of California and California State University terms and conditions; (2) U.S. Department of Energy terms and conditions; (3) special terms and conditions for Tribes and tribal corporations; or (4) CEC’s / the State of California’s standard terms and conditions. All terms and conditions are located at http://www.energy.ca.gov/research/contractors.html, with the exception of special terms and conditions for California Native American Tribe (Tribe) or a California Tribal Organization (Tribal Organization), which will be posted on this GFO website. Please refer to the applicable EPIC Grant terms and conditions. Failure to agree to the terms and conditions by taking actions such as failing to sign the Application Form or indicating that acceptance is based on modification of the terms will result in **rejection** of the application. Applicants **must** **read** the terms and conditions carefully.The CEC reserves the right to modify the terms and conditionsprior to executing grant agreements.

If a Tribe or Tribal Organization with sovereign immunity is listed as a proposed awardee in the Notice of Proposed Awards (NOPA), CEC staff must receive the following before bringing the proposed award to a Business Meeting:

1. A resolution or other authorizing document by the governing body of the Tribe or Tribal Organization authorizing the Tribe or Tribal Organization to enter into the proposed agreement, including accepting the Special Terms and Conditions for California Native American Tribes and California Tribal Organizations with Sovereign Immunity (see Attachment 13).

2. A limited waiver of sovereign immunity in the form and manner required by tribal law; and

3. A resolution or other authorizing document delegating authority to execute the agreement to an appropriate individual.

The above requirements may be provided in one or more documents. The document(s) will be included as an exhibit to the resulting grant agreement.

Delay in award. Any delay in the Tribe or Tribal Organization’s ability to provide such documentation may result in delayed award of the grant agreement.

1. **California Secretary of State Registration**

All corporations, limited liability companies (LLCs), limited partnerships (LPs) and limited liability partnerships (LLPs) that conduct intrastate business in California are required to be registered and in good standing with the California Secretary of State prior to its project being recommended for approval at an CEC Business Meeting.  If not currently registered with the California Secretary of State, applicants are encouraged to contact the Secretary of State’s Office as soon as possible to avoid potential delays in beginning the proposed project(s) (should the application be successful).  For more information, contact the Secretary of State’s Office via its website at www.sos.ca.gov.  Sole proprietors using a fictitious business name must be registered with the appropriate county and provide evidence of registration to the CEC prior to their project being recommended for approval at an CEC Business Meeting.

1. **Disadvantaged & Low-income Communities**

At least 25% of available Electric Program Investment Charge (EPIC) technology demonstration and deployment funding must be allocated to project sites located in, and benefiting, disadvantaged communities; and an additional minimum 10% of funds must be allocated to projects sites located in and benefiting low-income communities.[[21]](#footnote-22) The Energy Commission in administering EPIC must also take into account adverse localized health impacts of proposed projects to the greatest extent possible,[[22]](#footnote-23) and give preference for funding to clean energy projects that benefit residents of low-income or disadvantaged communities.[[23]](#footnote-24)

Disadvantaged Communities are those designated pursuant to Health and Safety Code section 39711 as representing the 25% highest scoring census tracts in CalEnviroScreen or other areas with high amounts of pollution and low populations as identified by CalEPA. Please see https://calepa.ca.gov/envjustice/ghginvest/ for the most current CalEPA designations.

“Low-income communities” are defined as communities within census tracts with median household incomes at or below either of the following levels:

1. Eighty percent of the statewide median income.
2. The applicable low-income threshold listed in the state income limits updated by the Department of Housing and Community Development and filed with the Office of Administrative Law pursuant to subdivision (c) of Section 50093 of the Health and Safety Code.

Visit the California Department of Housing & Community Development site for the current HCD State Income Limits at: http://www.hcd.ca.gov/grants-funding/income-limits/index.shtml. Disadvantaged communities are defined as areas representing census tracts scoring in the top 25% in CalEnviroScreen. For more information on disadvantaged communities and to determine if your project is in a disadvantaged community, use the California Communities Environmental Health Screening tool (CalEnviroScreen) at:

https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40

Another resource is the Healthy Places Index Tool for California, located at: https://healthyplacesindex.org/

## Project Requirements

1. **Technology Demonstration and Deployment Stage**

Projects must fall within the “technology demonstration and deployment” stage, which involves 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 operational and performance characteristics and of financial risks.**[[24]](#footnote-25)**

1. **Ratepayer Benefits, Technological Advancements, and Breakthroughs**

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

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

EPIC's mandatory guiding principle is to provide ratepayer benefits, which are defined as (1) improving safety, (2) increasing reliability, (3) increasing affordability, (4) improving environmental sustainability, and (5) improving equity, all as related to California's electric system.[[25]](#footnote-26)

Accordingly, the Project Narrative Form (Attachment) and the “Goals and Objectives” section of the Scope of Work Template (Attachment) must describe how the project will: (1) benefit California electric IOU ratepayers by improving safety, increasing reliability, increasing affordability, improving environmental sustainability, and improving equity, all as related to California's electric system; and (2) lead to technological advancement and breakthroughs to overcome barriers to achieving the state’s statutory energy goals. Any estimates of energy and water savings or GHG impacts must be calculated as described in Section II.

1. **Technology Transfer Expenditures**

To maximize the impact of EPIC projects and to promote the further development and deployment of EPIC-funded technologies, a minimum of 5 percent of CEC funds requested should go towards technology transfer activities. Appropriate technology transfer activities for this solicitation are listed in the Scope of Work Template (Attachment). The Budget Forms (Attachment) should clearly distinguish funds dedicated for technology transfer.

1. Measurement and Verification Plan

The Project Narrative (Attachment) must include a Measurement and Verification Plan that describes how actual project benefits will be measured and quantified, such as by identifying measurable and quantifiable project benefit metrics that are applicable to the project groups as indicated in Section I.C. For example, energy efficiency load reduction projects may identify pre- and post-project energy use (kilowatt hours, kilowatt), cooling capacity, energy cost, and other benefits. [~~Energy and cost savings must be based on Time Dependent Valuation.[[26]](#footnote-27)~~] The activities proposed in the Measurement and Verification Plan must be included in the “Technical Tasks” section of the Scope of Work Template (Attachment)

# III. Application Organization and Submission Instructions

## Application Format, Page Limits, and Number of Copies

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

The CEC may have waived the requirement for a signature on application materials for this solicitation. If a notice regarding CEC’s waiver of the signature requirement appears here: https://www.energy.ca.gov/funding-opportunities/solicitations, the waiver applies to this solicitation. In the event of a conflict between the notice and any language in this solicitation regarding signatures, the notice will govern.

|  |  |
| --- | --- |
| **Format** | * **Font:** 11-point, Arial (excluding Excel spreadsheets, original template headers and footers, and commitment or support letters) * **Margins:** No less than one inch on all sides (excluding headers and footers) * **Spacing:** Single spaced, with a blank line between each paragraph * **Signatures**: Wet signatures only (i.e., not electronic) * **File Format:** MS Word version 2007 or later (.doc or .docx format), excluding Excel spreadsheets and commitment or support letters (PDF files are acceptable for the letters) * **File Storage:** Electronic files of the application must be submitted on a USB memory stick when submitting via **hard copy.** |
| **Maximum Page Limit Recommendations** | * **Executive Summary** (Attachment): **two** pages * **Project Narrative Form** (Attachment): **twenty** pages excluding documentation for CEQA * **Project Team Form** (Attachment): **two** pages for each resume * **Reference and Work Product Form** (Attachment): **one** page for each reference, **two** pages for each project description * **Commitment and Support Letter Form** (Attachment): **two** pages, excluding the cover page * **Scope of Work** (Attachment): **thirty** pages * **Project Schedule** (Attachment): **four** pages * There are no page limits for the following:   + **Application Form** (Attachment)   + **Budget Forms** (Attachment)   + **CEQA Compliance Form** (Attachment)   + **Project Performance Metrics** (Attachment) |

## Method For Delivery

The only method of submitting applications to this solicitation is the CEC Grant Solicitation System (GSS), available at: https://gss.energy.ca.gov/. This online tool allows applicants to submit their electronic documents to the CEC prior to the date and time specified in this solicitation. Electronic files must be in Microsoft Word XP (.doc format) or newer and Excel Office Suite formats unless originally provided in the solicitation in another format.  Attachments requiring signatures may be scanned and submitted in PDF format.  Completed Budget Forms, (Attachment), must be in Excel format.

The deadline to submit grant applications through the CEC’s GSS is 11:59 p.m. The GSS system automatically closes at 11:59 pm. If the full submittal process has not been completed before 11:59 p.m., your application will not be considered. NO EXCEPTIONS will be entertained.

The CEC strongly encourages Applicants to upload and submit all applications by 5:00 p.m. because CEC staff will not be available after 5:00 p.m. or on weekends to assist with the upload process. And please note that while we endeavor to assist all would-be applicants, we can’t guarantee staff will be available for in-person consultation on the due date, so please plan accordingly.

Please give yourself ample time to complete all steps of the submission process: do not wait until right before the deadline to begin the process. Due to factors outside the CEC’s control and unrelated to the GSS system, upload times may be much longer than expected. For example, some past applicants experienced unexpected issues on their end, causing long delays that prevented timely submission. They spent significant time and resources on applications the CEC will not consider. Please plan accordingly. For instructions on how to apply using the GSS system, please see the How to Apply document available on the CEC website at: https://www.energy.ca.gov/media/1654.

First time users must register as a new user to access the system. Applicants will receive a confirmation email after all required documents have been successfully uploaded. A tutorial of the system will be provided at the pre-application workshop, and you may contact the Commission Agreement Officer identified in the Questions section of the solicitation for more assistance.

## Application Content

Below is a general description of each required section of the application. Please reference each individual attachment for a detailed description of the information requested by that attachment. Completeness in submitting all the information requested in each attachment will be factored into application scoring.

1. Application Form (Attachment 1)

This form requests basic information about the applicant and the project. The application must include an original Application Form that includes all requested information. The Application Form must be signed by an authorized representative of the applicant’s organization or will be failed as indicated in Section IV.E.

The CEC may have waived the requirement for a signature on application materials for this solicitation. If a notice regarding CEC’s waiver of the signature requirement appears here: https://www.energy.ca.gov/funding-opportunities/solicitations, the waiver applies to this solicitation. In the event of a conflict between the notice and any language in this solicitation regarding signatures, the notice will govern.

1. Executive Summary Form (Attachment 2)

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

1. Project Narrative Form (Attachment 3)

This form will include the majority of the applicant’s responses to the Scoring Criteria in Section IV, including the following which must be addressed for both Applied Research & Technology Demonstration projects:

* 1. **Group Specific Questions** 
     + Include required group specific information (see Section I.C.) in the specified sections.
  2. **Project Readiness**
     + Include information about the permitting required for the project and whether or not the permitting has been completed. If complete, provide appropriate documentation. If local jurisdiction CEQA review and project approval is not complete, applications must include information documenting progress towards and a schedule for achieving compliance under CEQA within the timeframes specified in this solicitation (see Section I.E). All supporting documentation must be included in Attachment 8.

1. Project Team Form (Attachment 4)

Identify by name all key personnel[[27]](#footnote-28) assigned to the project, including the project manager and principal investigator (if applicable), and individuals employed by any major subcontractor (a major subcontractor is a subcontractor receiving at least 25% of Commission funds or $100,000, whichever is less). Clearly describe their individual areas of responsibility. Include the information required for each individual, including a resume (maximum two pages, printed double-sided).

1. Scope of Work Template (Attachments 5)

Applicants must include a completed Scope of Work for each project, as instructed in the template. The Scope of Work identifies the tasks required to complete the project. See requirements in section III.A.

Electronicfiles for the Scope of Work must be in **MS Word** file format**.**

1. Project Schedule (Attachment 6)

The Project Schedule includes a list of all products, meetings, and due dates. All work must be scheduled for completion by the “Key Dates” section of this solicitation manual.

Electronic files for the Project schedule must be in MS Excel file format.

1. Budget Forms (Attachment 7)

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

1. All project expenditures (match share and reimbursable) must be made within the approved agreement term. Match share requirements are discussed in Part I of this solicitation. The entire term of the agreement and projected rate increases must be considered when preparing the budget.
2. The budget must reflect estimates for **actual** costs to be incurred during the agreement term. The CEC may only approve and reimburse for actual costs that are properly documented in accordance with the grant terms and conditions. Rates and personnel shown must reflect the rates and personnel the applicant would include if selected as a Recipient.
3. The proposed rates are considered capped and may not change during the agreement term. The Recipient will only be reimbursed for **actual** rates up to the rate caps.
4. The budget must NOT include any Recipient profit from the proposed project, either as a reimbursed item, match share, or as part of overhead or general and administrative expenses (subcontractor profit is allowable, though the maximum percentage allowed is 10 % of the total subcontractor rates for labor, and other direct and indirect costs as indicated in the Category Budget form). Please review the terms and conditions and budget forms for additional restrictions and requirements.
5. The budget must allow for the expenses of all meetings and products described in the Scope of Work. Meetings may be conducted at the CEC or by conference call, as determined by the Commission Agreement Manager.
6. Applicants must budget for permits and insurance. Permitting costs may be accounted for in match share. Permit costs and the expenses associated with obtaining permits are not reimbursable under this Agreement with CEC funds, with the exception of costs incurred by University of California recipients.
7. The budget must NOT identify that EPIC funds will be spent outside of the United States or for out-of-country travel.  However, match funds may cover these costs if there are no legal restrictions.
8. All applicants should go to the Attorney General’s website https://oag.ca.gov/ab1887 for a current list of states subject to travel restrictions. Grants awarded under this solicitation shall not contain travel paid for with Commission funds (applicants can instead use match funds) to the listed states unless the Commission approves in writing that the trip falls within one of the exceptions under the law.
9. **Prevailing wage requirement:** Projects that receive an award of public funds from the CEC often involve construction, alteration, demolition, installation, repair or maintenance work over $1,000. For this reason, projects that receive an award of public funds from the CEC are likely to be considered public works under the California Labor Code. See Chapter 1 of Part 7 of Division 2 of the California Labor Code, commencing with Section 1720 and Title 8, California Code of Regulations, Chapter 8, Subchapter 3, commencing with Section 16000.

Projects deemed to be public works require among other things the payment of prevailing wages, which can be significantly higher than non-prevailing wages.

By accepting this grant, Recipient as a material term of this agreement shall be fully responsible for complying with all California public works requirements including but not limited to payment of prevailing wage. Therefore, as a material term of this grant, Recipient must either:

(a) Proceed on the assumption that the project is a public work and ensure that:

1. prevailing wages are paid; and
2. the project budget for labor reflects these prevailing wage requirements; and
3. the project complies with all other requirements of prevailing wage law including but not limited to keeping accurate payroll records, and complying with all working hour requirements and apprenticeship obligations;

or,

(b) Timely obtain a legally binding determination from the Department of Industrial Relations or a court of competent jurisdiction before work begins on the project that the proposed project is not a public work.

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

The CEC requires the information on this form to facilitate its evaluation of proposed activities under CEQA (California Public Resources Code Section 21000 et. seq.), a law that requires state and local agencies in California to assess the potential environmental impacts of their proposed actions. The form will also help applicants to determine CEQA compliance obligations by identifying which proposed activities may be exempt from CEQA and which activities may require additional environmental review. If proposed activities are exempt from CEQA (such as paper studies), the worksheet will help to identify and document this. This form must be completed regardless of whether the proposed activities are considered a “project” under CEQA.

Failure to complete the CEQA process in a timely manner after the CEC’s Notice of Proposed Award may result in the cancellation of a proposed award and allocation of funding elsewhere, such as to the next highest-scoring project.

1. Reference and Work Product Form (Attachment 9)
   * 1. Section 1: Provide applicant and subcontractor references as instructed.
     2. Section 2: Provide a list of past projects detailing technical and business experience

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

1. Commitment and Support Letter Form (Attachment 10)

A commitment letter commits an entity or individual to providing the service or funding described in the letter. A support letter details an entity or individual’s support for the project. Commitment and Support Letters must be submitted with the application. Letters that are not submitted by the application deadline will not be reviewed and counted towards meeting the requirement specified in the solicitation.

* + 1. Commitment Letters

Applicants must submit a **match funding** commitment letter signedby eachrepresentative of the entity or individual that is committing to providing match funding. The letter must: (1) identify the source(s) of the funds; and (2) guarantee the availability of the funds for the project.

* If the project involves **demonstration/deployment** activities, the applicant must include a site commitment letter signed by an authorized representative of the proposed demonstration/deployment site. The letter should: (1) identify the location of the site (street address, parcel number, tract map, plot map, etc.) which must be consistent with Attachments 1 and 8. and (2) commit to providing the site for the proposed activities.
* **Project partners** that are making contributions other than match funding or a demonstration/deployment site, and are not receiving CEC funds, must submit a commitment letter signed by an authorized representative that: (1) identifies how the partner will contribute to the project; and (2) commits to making the contribution.
  + 1. Support Letters

All applicants must include at least one support letter from a project stakeholder (i.e., an entity or individual that will benefit from or be involved in the project) that: (1) describes the stakeholder’s interest or involvement in the project; (2) indicates the extent to which the project has the support of the relevant industry and/or organizations; and (3) describes any support it intends (but does not necessarily commit) to provide for the project, such as funding or the provision of a demonstration/deployment site.

The CEC may have waived the requirement for a signature on application materials for this solicitation. If a notice regarding CEC’s waiver of the signature requirement appears here: https://www.energy.ca.gov/funding-opportunities/solicitations, the waiver applies to this solicitation. In the event of a conflict between the notice and any language in this solicitation regarding signatures, the notice will govern.

1. Project Performance Metrics (Attachment 11)

The purpose of this questionnaire is to identify and document 5-7 performance targets for the project. The performance targets should be a combination of scientific, engineering and techno-economic metrics that provide the most significant indicator of the research or technology’s potential success.

1. Applicant Declaration (Attachment 12)

This form requests the applicant declare that they: are not delinquent on taxes nor suspended by the California Franchise Tax Board; are not being sued by any public agency or entity; are in compliance with the terms of all settlement agreements, if any, entered into with the Energy Commission or another public agency or entity; are in compliance with all judgments, if any, issued against the Applicant in any matter to which the Energy Commission or another public agency or entity is a party; are complying with any demand letter made on the Applicant by the Energy Commission or another public agency or entity; and are not in active litigation with the Energy Commission regarding the Applicant’s actions under a current or past contract, grant, or loan with the Energy Commission. The declaration must be signed under penalty of perjury by an authorized representative of the applicant’s organization.

The CEC may have waived the requirement for a signature on application materials for this solicitation. If a notice regarding CEC’s waiver of the signature requirement appears here: https://www.energy.ca.gov/funding-opportunities/solicitations, the waiver applies to this solicitation. In the event of a conflict between the notice and any language in this solicitation regarding signatures, the notice will govern.

1. Special Terms and Conditions for California Native American Tribes and Tribal Organizations with Sovereign Immunity (Attachment 13)

This attachment contains special terms and conditions and must be completed by California Native American Tribes and Tribal Organizations with Sovereign Immunity.

# IV. Evaluation and Award Process

## Application Evaluation

Applications will be evaluated and scored based on responses to the information requested in this solicitation and on any other information available, such as on past performance of CEC agreements. To evaluate applications, the CEC will organize an Evaluation Committee that consists primarily of CEC staff. The Evaluation Committee may use technical expert reviewers to provide an analysis of applications. Applications will be evaluated in two stages:

1. **Stage One: Application Screening**

The Contracts, Grants, and Loans Office and/or the Evaluation Committee will screen applications for compliance with the Screening Criteria in **Section E** of this Part. **Applications that fail any of the screening criteria will be rejected.**The Evaluation Committee may conduct optional telephone **Clarification Interviews** with applicants during the screening process to clarify and/or verify information submitted in the application. However, these interviews may not be used to change or add to the content of the original application. Applicants will not be reimbursed for time spent answering clarifying questions.

1. **Stage Two: Application Scoring**

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

* The scores for each application will be the average of the combined scores of all Evaluation Committee members.
* Clarification Interviews: The Evaluation Committee may conduct optional telephone interviews with applicants during the evaluation process to clarify and/or verify information submitted in the application. However, these interviews may not be used to change or add to the content of the original application. Applicants will not be reimbursed for time spent answering clarifying questions.
* **A minimum score of 70 points** is required for criteria 1-7 to be eligible for funding. In addition, the application must receive a minimum score of **52.50 points for criteria 1−4** to be eligible for funding.

## Ranking, Notice of Proposed Award, and Agreement Development

1. **Ranking and Notice of Proposed Award**

Applications that receive at least the minimum required score for all criteria will be ranked according to their score.

* CEC staff will post a **Notice of Proposed Award (NOPA)** that includes: (1) the total proposed funding amount; (2) the rank order of applicants; and (3) the amount of each proposed award. The CEC will post the NOPA at its headquarters in Sacramento and on its website, and will mail it to all entities that submitted an application. Proposed awards must be approved by the CEC at a business meeting.
* **Debriefings:** Unsuccessful applicants may request a debriefing after the release of the

NOPA by contacting the Commission Agreement Officer listed in Part I. A request for debriefing must be received **no later than 30 calendar days** after the NOPA is released.

* In addition to any of its other rights, the CEC reserves the right to:
  + Allocate any additional funds to passing applications, in rank order; and
  + Negotiate with successful applicantstomodify the project scope, schedule, project team entity that will receive the award, location and/or level of funding.

1. **Agreements**

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

* **Agreement Development:** The Contracts, Grants, and Loans Office will send the Recipient a grant agreement for approval and signature. The agreement will include the applicable terms and conditions and will incorporate this solicitation and the application by reference. The CEC reserves the right to modify the award documents (including the terms and conditions) prior to executing any agreement.
* **Failure to Execute an Agreement:** If the CEC is unable to successfully execute an agreement with an applicant in a timely manner, it reserves the right to cancel the pending award and use the funds elsewhere, such as to fund the next highest-ranked, eligible application.

## Grounds to Reject an Application or Cancel an Award

Applications that do not pass the screening stage will be rejected. In addition, the CEC reserves the right to reject an application and/or to cancel an award for any reason, including any of the following:

* The application contains false or intentionally misleading statements or references that do not support an attribute or condition contended by the applicant.
* The application is intended to erroneously and fallaciously mislead the State in any way.
* The application does not comply or contains caveats that conflict with the solicitation, and the variation or deviation is material.
* The applicant has previously received funding through an EPIC or Public Interest Energy Research (PIER) agreement, has received the royalty review letter (which the CEC annually sends out to remind past recipients of their obligations to pay royalties), and has not responded to the letter or is otherwise not in compliance with repaying royalties.
* The applicant has received unsatisfactory agreement evaluations from the CEC or another California state agency.
* The applicant is a business entity required to be registered with the California Secretary of State and is not in good standing.
* The applicant has not demonstrated that it has the financial capability to complete the project.
* The applicant fails to meet CEQA compliance within sufficient time for the CEC to meet its encumbrance deadline or any other deadlines, as the CEC in its sole and absolute discretion may determine.
* The applicant has included a statement or otherwise indicated that it will not accept the terms and conditions, or that acceptance is based on modifications to the terms and conditions.
* The application contains confidential information or identifies any portion of the application as confidential.

## Miscellaneous

1. **Solicitation Cancellation and Amendment**

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

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

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

1. **Modification or Withdrawal of Application**

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

1. **Confidentiality**

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

1. **Solicitation Errors**

If an applicant discovers any ambiguity, conflict, discrepancy, omission, or other error in the solicitation, the applicant should immediately notify the CEC of the error in writing and request modification or clarification of the solicitation. The CEC will provide modifications or clarifications by written notice to all entities that requested the solicitation. The CEC will not be responsible for failure to correct errors.

1. **Immaterial Defect**

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

1. **Disposition of Applicant’s Documents**

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

## Stage One: Application Screening

| **Screening Criteria**  *The Application must pass ALL criteria to progress to Stage Two.* | **Pass/Fail** |
| --- | --- |
| 1. The application is received by the CEC’s Contracts, Grants, and Loans Office by the due date and time specified in the “Key Activities Schedule” in Part I of this solicitation and is received in the required manner (e.g., no emails or faxes). | Pass  Fail |
| 1. The application Form (Attachment 1) is signed where indicated. | Pass  Fail |
| 1. The Applicant Declaration Form (Attachment 12) is signed where indicated. | Pass  Fail |
| 1. The application addresses only one of the eligible project groups, as indicated on the Application Form. | Pass  Fail |
| 1. If the applicant has submitted more than one application for the same project group, each application is for a distinct project (i.e., no overlap with respect to the tasks described in the Scope of Work, Attachment).   *If the projects are not distinct and the applications were submitted at the same time, only the first application screened by the CEC will be eligible for funding. If the applications were submitted separately, only the first application received by the CEC will be eligible for funding.* | Pass  Fail |
| 1. The Application includes Commitment Letters that total the minimum of 20*%* in match share of the total requested CEC funds. | Pass  Fail |
| 1. *If the project involves technology demonstration/ deployment activities*  * The Application identifies one or more demonstration/ deployment site locations. * All demonstration/ deployment sites are located in a California electric IOU service territory (PG&E, SDG&E, or SCE). * The proposal includes a site commitment letter (Section III.C.10.) for each demonstration/ deployment site. | Pass  Fail |

The CEC may have waived the requirement for a signature on application materials for this solicitation. If a notice regarding CEC’s waiver of the signature requirement appears here: https://www.energy.ca.gov/funding-opportunities/solicitations, the waiver applies to this solicitation. In the event of a conflict between the notice and any language in this solicitation regarding signatures, the notice will govern.

## Stage Two: Application Scoring

Proposals that pass ALL Stage One Screening Criteria and are not rejected as described in Section IV.C. will be evaluated based on the Scoring Criteria on the next page and the Scoring Scale below (with the exception of criteria 6−7, which will be evaluated as described in each criterion). Each criterion has an assigned number of possible points, and is divided into multiple sub-criteria. The sub-criteria are not equally weighted. The Project Narrative (Attachment) must respond to each sub-criterion, unless otherwise indicated.

**Scoring Scale**

|  |  |  |
| --- | --- | --- |
| **% of Possible Points** | **Interpretation** | **Explanation for Percentage Points** |
| 0% | Not Responsive | Response does not include or fails to address the requirements being scored. The omission(s), flaw(s), or defect(s) are significant and unacceptable. |
| 10-30% | Minimally Responsive | Response minimally addresses the requirements being scored. The omission(s), flaw(s), or defect(s) are significant and unacceptable. |
| 40-60% | Inadequate | Response addresses the requirements being scored, but there are one or more omissions, flaws, or defects or the requirements are addressed in such a limited way that it results in a low degree of confidence in the proposed solution. |
| 70% | Adequate | Response adequately addresses the requirements being scored. Any omission(s), flaw(s), or defect(s) are inconsequential and acceptable. |
| 75% | Between Adequate and Good | Response better than adequately addresses the requirements being scored. Any omission(s), flaw(s), or defect(s) are inconsequential and acceptable. |
| 80% | Good | Response fully addresses the requirements being scored with a good degree of confidence in the applicant’s response or proposed solution. No identified omission(s), flaw(s), or defect(s). Any identified weaknesses are minimal, inconsequential, and acceptable. |
| 85% | Between Good and Excellent | Response fully addresses the requirements being scored with a better than good degree of confidence in the applicant’s response or proposed solution. No identified omission(s), flaw(s), or defect(s). Any identified weaknesses are minimal, inconsequential, and acceptable. |
| 90% | Excellent | Response fully addresses the requirements being scored with a high degree of confidence in the applicant’s response or proposed solution. Applicant offers one or more enhancing features, methods or approaches exceeding basic expectations. |
| 95% | Between Excellent and Exceptional | Response fully addresses the requirements being scored with a better than excellent degree of confidence in the applicant’s response or proposed solution. Applicant offers one or more enhancing features, methods or approaches exceeding basic expectations. |
| 100% | Exceptional | All requirements are addressed with the highest degree of confidence in the applicant’s response or proposed solution. The response exceeds the requirements in providing multiple enhancing features, a creative approach, or an exceptional solution. |

**Additional Screening Criteria for Past Performance**

| **Screening Criteria** |  |
| --- | --- |
| **Applicant Past Performance with Energy Commission**  The applicant—defined as at least one of the following: the business, principal investigator, or lead individual acting on behalf of themselves—received funds from the Energy Commission (e.g., contract, grant, or loan) and entered into an agreement(s) with the Commission and demonstrated **severe performance issues** characterized by significant negative outcomes including:   * Significant deviation from agreement requirements; * Termination with cause; * Demonstrated poor communication, project management, and/or inability, due to circumstances within its control, from materially completing the project; * Quality issues with deliverables including poorly written final report that prevents publishing; and * Severe unresolved negative audit findings. |  |
| **Must pass to continue with Scoring Criteria** | **Pass/Fail** |
| **Scoring CRITERIA**  **The Project Narrative (Attachment)** must respond to each criterion below. The responses must directly relate to the solicitation requirements and focus as stated in the solicitation. Any estimates of energy savings or GHG impacts should be calculated as specified in the References for Calculating Energy End-Use and GHG Emissions (Attachment), to the extent that the references apply to the proposed project. | |

| **Scoring Criteria** | **Maximum Points** |
| --- | --- |
| 1. **Technical Merit** 2. The proposed project provides a clear and concise description of the technological, scientific knowledge advancement, and/or innovation that will overcome barriers to achieving the State’s statutory energy goals. 3. Describes at what scale the technology has been successfully demonstrated, including size or capacity, number of previous installations, location and duration, results, etc. 4. Describes how the proposed demonstration will lead to increased adoption of the technology in California. 5. Provides information described in Section I.C. | **15** |
| 1. **Technical Approach** 2. Proposal describes the technique, approach, and methods to be used in performing the work described in the Scope of Work. 3. The Scope of Work identifies goals, objectives, and deliverables, details the work to be performed, and aligns with the information presented in Project Narrative. 4. Proposal identifies the reliability that the project and site recommendations as described will be carried out if funds are awarded. 5. Identifies and discusses factors critical for success, in addition to risks, barriers, and limitations (e.g. loss of demonstration site, key subcontractor). Provides a plan to address them. 6. Discusses the degree to which the proposed work is technically feasible and achievable within the proposed Project Schedule and the key activities schedule in Section I.E. 7. Describes the technology transfer plan to assess and advance the commercial viability of the technology. 8. Provides a clear and plausible measurement and verification plan that describes how energy savings and other benefits specified in the application will be determined and measured. 9. Provides information documenting progress towards achieving compliance with the California Environmental Quality Act (CEQA) by addressing the areas in Section I.I and Section III.C.3., and Section III.C.8. 10. Provides information described in Section I.C. | **25** |
| 1. **Impacts and Benefits for California IOU Ratepayers** 2. Explains how the proposed project will benefit California Investor-Owned Utility (IOU) ratepayers and provides clear, plausible, and justifiable (quantitative preferred) potential benefits. Estimates the energy benefits including:    * annual electricity reductions (kilowatt-hour), energy cost reductions, peak load reduction and/or shifting, infrastructure resiliency, and infrastructure reliability.   **In addition, estimates the non-energy benefits including:**   * greenhouse gas emission reductions, air emission reductions (e.g. NOx), water savings and cost reductions, and increased safety.  1. States the timeframe, assumptions with sources, and calculations for the estimated benefits, and explains their reasonableness. Include baseline or “business as usual” over timeframe. 2. Identifies the expected financial performance (e.g. payback period, ROI) of the demonstration at scale. 3. Identifies the specific programs which the technology intends to leverage. *(e.g. feed-in tariffs, IOU rebates, demand response, storage procurement) and extent to which technology meets program requirements.* | **20** |
| 1. **Team Qualifications, Capabilities, and Resources**   Evaluations of ongoing or previous projects including project performance by applicant and team members will be used in scoring for this criterion. This can include contacting references.   1. Identifies credentials of prime and any subcontractor key personnel, including the project manager, principal investigator and technology and knowledge transfer lead *(include this information in the Project Team Form).* 2. Demonstrates that the project team has appropriate qualifications, experience, financial stability and capability to complete the project. 3. Explains the team structure and how various tasks will be managed and coordinated. 4. Describes the facilities, infrastructure, and resources available that directly support the project. 5. Describes the team’s history of successfully completing projects in the past 10 years including subsequent deployments and commercialization. | **15** |
| **Total Possible Points for criteria 1− 4**  **(Minimum Passing Score for criteria 1− 4 is 70% or 52.50)** | **75** |
| 1. **Budget and Cost-Effectiveness** 2. Budget forms are complete for the applicant and all subcontractors, as described in the Budget instructions. 3. Justifies the reasonableness of the requested funds relative to the project goals, objectives, and tasks. 4. Justifies the reasonableness of direct costs (e.g., labor, fringe benefits, equipment, materials & misc. travel, and subcontractors). 5. Justifies the reasonableness of indirect costs (e.g., overhead, facility charges (e.g., rent, utilities), burdens, subcontractor profit, and other like costs). | **10** |
| 1. **CEC Funds Spent in California**   Projects that maximize the spending of CEC funds in California will receive points as indicated in the table below (see CEC Funds Spent in California section for more details).   |  |  | | --- | --- | | **Percentage of CEC funds spent in CA vs Total CEC funds requested**  (derived from budget Attachment ) | **Percentage of Possible Points** | | >60% | 20% | | >65% | 30% | | >70% | 40% | | >75% | 50% | | >80% | 60% | | >85% | 70% | | >90% | 80% | | >95% | 90% | | >98% | 100% | | **10** |
| 1. **Ratio of Direct Labor to Indirect Costs**   The score for this criterion will be calculated by the following formula:  This ratio will then be multiplied by the maximum possible points for this criterion and rounded to two decimal places.  NOTE: For the purposes of this criterion, the CEC will include the facility charges (e.g., rent, utilities, etc.), burdens and other like costs that are budgeted as direct costs into the indirect costs in the formula. | **5** |
| **Total Possible Points**  **(Minimum Passing Score for Criteria 1 – 7 is 70% or 70.00)** | **100** |

| **Scoring Criteria** | **Maximum Points** |
| --- | --- |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1. **Match Funds** 2. Cash match share is preferred; however, in-kind cost share is permitted and will be considered for solicitation match requirements. Points for this criterion will be evaluated based on the proposed cash match relative to the total match (cash + in-kind) contributions using the Cash Match Scoring Table:   **Cash Match Scoring Table**   | Percentage of Proposed Cash Match Funds | Score | | --- | --- | | 80 to 100% | 5 | | 60 to <80% | 4 | | 40 to <60% | 3 | | 20 to <40% | 2 | | 10 to <20% | 1 | | **5** |
| 1. Additional points will be awarded to applications that exceed the minimum match requirements based on the percentage amount above minimum using the Exceeds Minimum Match Scoring table:   **Exceeds Minimum  Match Scoring Table**   | Percentage above Minimum Match (cash and in-kind) | Score | | --- | --- | | 80% | 5 | | 60 to <80% | 4 | | 40 to <60% | 3 | | 20 to <40% | 2 | | 10 to <20 % | 1 | | **5** |
| **Preference Points:** For applications proposing projects located in and benefiting low-income and/or disadvantaged communities within IOU service territories. Applications must meet all minimum passing scores (Scoring Criteria 1-4, and 1-7) to be eligible for the additional points. | |
| 1. **Disadvantaged & Low-Income Communities**   In order to receive or qualify for additional points, the proposed project must demonstrate benefits to the disadvantaged and/or low-income community in order to receive additional points.   1. Proposal identifies how the target market(s) will benefit disadvantaged and/or low-income communities. 2. Identifies economic impact on low-income and disadvantaged communities including customer bill savings, job creation, partnering and contracting with micro- and small-businesses, and economic development. 3. Describes how the project will increase access to clean energy or sustainability technologies within disadvantaged and/or low-income communities and how the development will benefit the communities. 4. Applicants have letters of support from technology partners, community based organizations, environmental justice organizations, or other partners that demonstrate their belief that the proposed project will lead to increased equity, and is both feasible and commercially viable in the identified low-income and/or disadvantaged communities. | **5** |

1. https://www.energy.gov/sites/default/files/2013/11/f4/energy\_use\_and\_loss\_and\_emissions\_food.pdf [↑](#footnote-ref-2)
2. https://downloads.usda.library.cornell.edu/usda-esmis/files/x059c7329/kd17dw989/9p291c96d/rfwh0122.pdf [↑](#footnote-ref-3)
3. https://www.cbre.us/real-estate-services/real-estate-industries/industrial-and-logistics/industrial-and-logistics-research/us-marketflash---cold-storage-heating-up#:~:text=The%20U.S.%20currently%20has%20approximately,ft. [↑](#footnote-ref-4)
4. https://www.aceee.org/files/proceedings/2002/data/papers/SS02\_Panel3\_Paper09.pdf [↑](#footnote-ref-5)
5. <https://www.globest.com/2019/06/17/california-is-the-top-market-for-cold-storage/?slreturn=20220005162007> [↑](#footnote-ref-6)
6. https://www.avisonyoung.us/sightline/-/article/2021/08/26/rising-supply-demand-disparity-in-the-u-s-cold-storage-market [↑](#footnote-ref-7)
7. https://www.datexcorp.com/biologic-pharmaceuticals-and-cold-storage-warehousing/ [↑](#footnote-ref-8)
8. https://www.calmac.org/publications/California%20Ind%20EE%20Mkt%20Characterization.pdf [↑](#footnote-ref-9)
9. Aghajanzadeh, Arian, “2006-2015 Research Summary of Demand Response Potential in California Industry, Agriculture, and Water Sectors”, California Energy Commission, 2015.  
    [↑](#footnote-ref-10)
10. [ ~~https://energyplus.net/~~] [↑](#footnote-ref-11)
11. Pacific Standard Time or Pacific Daylight Time, whichever is being observed. [↑](#footnote-ref-12)
12. This deadline does not apply to non-technical questions (e.g., questions concerning application format requirements or attachment instructions) or to questions that address an ambiguity, conflict, discrepancy, omission, or other error in the solicitation. Such questions may be submitted to the Commission Agreement Officer listed in Section G at any time prior to the application deadline. Please see Section G for additional information. [↑](#footnote-ref-13)
13. See CPUC “Phase 1” Decision 11-12-035, December 15, 2011, http://docs.cpuc.ca.gov/PublishedDocs/WORD\_PDF/FINAL\_DECISION/156050.PDF. [↑](#footnote-ref-14)
14. CPUC Decision 21-11-028, Appendix A https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M425/K515/425515575.PDF (revising former guiding principles within CPUC “Phase 2” Decision 12-05-037, Ordering Paragraph 2 http://docs.cpuc.ca.gov/PublishedDocs/WORD\_PDF/FINAL\_DECISION/167664.PDF.). [↑](#footnote-ref-15)
15. California Public Resources Code, Section 25711.5(a), http://www.leginfo.ca.gov/cgi-bin/displaycode?section=prc&group=25001-26000&file=25710-25712. [↑](#footnote-ref-16)
16. 2018-2020 EPIC Triennial Investment Plan,

    https://docketpublic.energy.ca.gov/PublicDocuments/17-EPIC-01/TN217347\_20170428T145448\_The\_Electric\_Program\_Investment\_Charge\_Proposed\_20182020\_Trienn.pdf. [↑](#footnote-ref-17)
17. Electric Program Investment Charge Interim Investment Plan 2021, https://efiling.energy.ca.gov/GetDocument.aspx?tn=236882. [↑](#footnote-ref-18)
18. 2021-2025 EPIC Investment Plan, https://efiling.energy.ca.gov/GetDocument.aspx?tn=240609. [↑](#footnote-ref-19)
19. [https://www.energy.ca.gov/publications/2023/develop-and-field-test-flexible-demand-response-control-strategies-water-pumping](https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.energy.ca.gov%2Fpublications%2F2023%2Fdevelop-and-field-test-flexible-demand-response-control-strategies-water-pumping&data=05%7C01%7C%7C262d35aaf784409701bb08dbdbc647a7%7Cac3a124413f44ef68d1bbaa27148194e%7C0%7C0%7C638345416899958590%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=DwmNKmr7tPJVYorUFZXFbKZysXwUC%2FjB4F0%2B8iG73%2Bw%3D&reserved=0) [↑](#footnote-ref-20)
20. A local publicly owned electric utility is an entity as defined in California Public Utilities Code section 224.3. [↑](#footnote-ref-21)
21. Public Resources Code § 25711.6. [↑](#footnote-ref-22)
22. Public Resources Code § 25711.5. [↑](#footnote-ref-23)
23. Public Resources Code § 25711.6. [↑](#footnote-ref-24)
24. See CPUC “Phase 2” Decision 12-05-037 at pp. 39-40 and 90, http://docs.cpuc.ca.gov/PublishedDocs/WORD\_PDF/FINAL\_DECISION/167664.PDF. [↑](#footnote-ref-25)
25. CPUC Decision 21-11-028, Appendix A https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M425/K515/425515575.PDF (revising former guiding principles within CPUC “Phase 2” Decision 12-05-037, Ordering Paragraph 2 http://docs.cpuc.ca.gov/PublishedDocs/WORD\_PDF/FINAL\_DECISION/167664.PDF.). [↑](#footnote-ref-26)
26. [ ~~TDV or Time Dependent Valuation is a code compliance metric meant to incorporate the societal and environmental impacts into the cost of energy during a given hour of the year. This includes higher GHG emission rates and actual cost of electricity from peaker plants during high energy demand on the hottest days of the year. Source:~~ [~~What is Time Dependent Valuation (TDV)? - Western Cooling Efficiency Center (ucdavis.edu)~~](https://wcec.ucdavis.edu/resources/what-is-time-dependent-valuation-tdv/#:~:text=TDV%20is%20a%20code%20compliance,hottest%20days%20of%20the%20year.)] [↑](#footnote-ref-27)
27. “Key personnel” are individuals that are critical to the project due to their experience, knowledge, and/or capabilities. [↑](#footnote-ref-28)