

2.11 California Energy Commission Grant Application for Flexible Residential Transportation Electrification Connections for a Vehicle-to-Home Bi-directional Charging Pilot.

Recommendation:

Adopt a resolution authorizing the City Manager or her designee, to file an application with the California Energy Commission for its Grid-Supportive Transportation Electrification grant; and if awarded, negotiate and execute a grant agreement and related documents for up to \$2,500,000 from the California Energy Commission and up to \$625,000 in City matching funds for a total pilot program cost of up to \$3,125,000 to install 100 bi-directional residential electric vehicle chargers and pilot their use over a three year period, commencing upon the date of the California Energy Commission's approval of award and the parties' mutual execution of the approved agreement, with the pilot to end by no later than December 31, 2027.

CEQA: Not a Project, File No. PP17-004, Government Funding Mechanism or Fiscal Activity with no commitment to a specific project which may result in a potentially significant physical impact on the environment; and File No. PP17-003, Agreements/Contracts (New or Amended) resulting in no physical changes to the environment. (Energy)



Memorandum

TO: HONORABLE MAYOR
AND CITY COUNCIL

FROM: Lori Mitchell

SUBJECT: SEE BELOW

DATE: March 4, 2024

Approved

Date

3/12/24

SUBJECT: CALIFORNIA ENERGY COMMISSION GRANT APPLICATION FOR FLEXIBLE RESIDENTIAL TRANSPORTATION ELECTRIFICATION CONNECTIONS FOR A VEHICLE-TO-HOME BI-DIRECTIONAL CHARGING PILOT

RECOMMENDATION

Adopt a resolution authorizing the City Manager, or her designee, to file an application to the California Energy Commission for its Grid-Supportive Transportation Electrification grant; and if awarded, negotiate and execute a grant agreement and related documents for up to \$2,500,000 from the California Energy Commission and up to \$625,000 in City matching funds for a total pilot program cost of up to \$3,125,000 to install 100 bi-directional residential electric vehicle chargers and pilot their use over a three year period, commencing upon the date of the California Energy Commission's approval of award and the parties' mutual execution of the approved agreement, with the pilot to end by no later than December 31, 2027.

SUMMARY AND OUTCOME

Approval of the recommendation enables the City, if awarded, to accept funding from the California Energy Commission's Grid-Supportive Transportation Electrification grant opportunity to create a pilot program to install bi-directional electric vehicle charging infrastructure for 100 residential customers, test vehicle to home discharge in response to grid conditions, and explore the opportunity to lower resource adequacy costs. San José Clean Energy would commit to provide up to \$625,000 in order to be eligible to receive up to \$2,500,000 from the California Energy Commission. If awarded, the City Manager, or her designee, would be required to enter into a grant award agreement(s) with the California Energy Commission under the terms and conditions incorporated into the grant program solicitation, and the pilot would end

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no later than December 31, 2027. San José Clean Energy would install at least 25 of the chargers in homes in state-defined disadvantaged communities as well as an additional 10 in low-income communities.¹

This action enables the City Manager, or her designee, to apply for funding and execute grant documents required by the California Energy Commission if the City's application is successful. Awarded grant funds then would be appropriated in the San José Clean Energy Fund.

BACKGROUND

In 2023, 42.4% of new vehicle sales in Santa Clara County were electric. In August 2022, the California Air Resources Board established the Advanced Clean Cars rule that will rapidly scale down the availability of new cars that run on gas, and by 2035, only zero-emission new cars and light trucks will be for sale in California.² As electric vehicle adoption grows, demand for electricity for vehicle charging also grows. San José Clean Energy is focused on programs to manage customers' electric vehicle charging load, including shifting charging to the middle of the day to reduce the strain on the grid, lower costs, help ensure abundant clean solar resources are fully utilized and, as technology matures, discharging vehicle batteries onto buildings or the grid to provide resiliency and help meet demand when electricity supply is strained.

In January 2024, the California Energy Commission issued the Grid-Supportive Transportation Electrification grant opportunity as part of the Electric Program Investment Charge 2021-2025 (EPIC 4) Investment Plan. EPIC 4 funds support technology demonstration and deployment projects to increase the value proposition of distributed energy resources to customers and the grid. This grant is an opportunity for successful applicants to test vehicle-to-home technology in real-world conditions to inform future deployment. The application is due March 29, 2024. The California Energy Commission is expected to issue awards in the third quarter of calendar year 2024. Successful applicants will seek reimbursement for the California Energy Commission's cost share by documenting all expenditures and submitting receipts on a quarterly basis.

ANALYSIS

The pilot would install bi-directional chargers for 100 homes in San José with an existing electric vehicle that would allow customers to power their home using energy from the battery in their electric vehicle. The bi-directional chargers would allow customers to use their battery on a daily basis to reduce their cost of energy by charging the battery from the grid during low-cost hours and discharging into the home during high-cost hours, as well as by taking advantage of load reduction or load shifting incentives. The bi-directional chargers would also allow the battery in

¹ [Map of disadvantaged and low-income communities as designated by the State of California](#). Census tracts are considered disadvantaged based on pollution burden. Low-income census tracts are those with median household incomes under 80% of statewide median income.

² [California Air Resources Board Press Release August 25, 2022](#)

the customer's vehicle to serve as a backup power source in the event of a grid outage. Similar to some of the battery storage programs that the Energy Department is developing, the shifts in energy use from the pilot can be leveraged to reduce San José Clean Energy's energy procurement costs related to resource adequacy.

The Energy Department would submit the response by March 29, 2024. The Energy Department would also contract with an implementer to administer the pilot. The implementer would be responsible for managing the relationship with the bi-directional charger company, the equipment installer, and the distributed energy resource management platform to control the charger. The implementer would also be responsible for ensuring that all agencies are abiding by the California Energy Commission grant rules.

Upon authorization from City Council by this action's resolution, the City Manager, or her designee, will file an application and execute documents, committing to provide an amount not-to-exceed \$625,000 from the San José Clean Energy Fund, provided that the City is awarded matching funding in an amount of \$2.5 million, as well as confirming the City's commitment to enter into a grant award agreement subject to the requirements of the California Energy Commission's Grid-Supportive Transportation Electrification grant opportunity solicitation document, a copy of which is included in the **Attachment**. The solicitation document incorporates the California Energy Commission's standard terms and conditions³ and is to be incorporated by reference into any final grant award agreement. By providing the authorizations and certifications under the solicitation document, the City would also commit to agree to enter into an agreement with the California Energy Commission to conduct the proposed project according to those standard terms and conditions without negotiation.⁴

EVALUATION AND FOLLOW-UP

Staff will issue an information memorandum if awarded the grant by the California Energy Commission.

COST SUMMARY/IMPLICATIONS

To receive the full funding amount, the City of San José will need to submit an application to the California Energy Commission confirming its commitment to expend approximately \$625,000 on the program (contingent upon the award of matching funds). This will then allow the City of San José to be eligible to receive approximately \$2,500,000 in matching California Energy Commission reimbursement funds. The California Energy Commission is expected to issue awards in the third or fourth quarter of calendar year 2024, with the pilot launching around October. If the grant is awarded, recommended budget adjustments in the San José Clean Energy

³ The California Energy Commission reserves the right to modify those terms and conditions prior to executing grant award agreements.

⁴ The California Energy Commission reserves the right to negotiate with applicants to modify the project scope, the level of funding, or both.

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Fund will be brought forward for City Council consideration as part of the 2023-2024 Annual Report process. The pilot will serve approximately 100 residential customers and is not expected to exceed the grant funding amount.

COORDINATION

This memorandum has been coordinated with the City Attorney's Office and the City Manager's Budget Office.

PUBLIC OUTREACH

This memorandum will be posted on the City's Council Agenda website for the March 26, 2024 City Council meeting.

COMMISSION RECOMMENDATION AND INPUT

No commission recommendation or input is associated with this action.

CEQA

Not a Project, File No. PP17-004, Government Funding Mechanism or Fiscal Activity with no commitment to a specific project which may result in a potentially significant physical impact on the environment.

PUBLIC SUBSIDY REPORTING

This item does not include a public subsidy as defined in section 53083 or 53083.1 of the California Government Code or the City's Open Government Resolution.

/s/

LORI MITCHELL
Director, Energy

For questions, please contact Kate Ziemba, Senior Environmental Program Manager, Energy Department at kate.ziemba@sanjoseca.gov.

ATTACHMENT - California Energy Commission's Grid-Supportive Transportation Electrification Grant Opportunity Solicitation

GRANT FUNDING OPPORTUNITY

Grid-Supportive Transportation Electrification

EPIC Program



GFO-23-306

<https://www.energy.ca.gov/funding-opportunities/solicitation>

State of California

California Energy Commission

January 2024

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ATTACHMENTS

Attachment Number	Title of Section
1	Executive Summary Form
2	Project Narrative Form
3	Project Team Form
4	Scope of Work Template
5	Project Schedule
6	Budget
7	CEQA Compliance Form
8	Past Projects Information Form
9	Commitment and Support Letters Form <i>(requires signature)</i>
10	Project Performance Metrics
11	Applicant Declarations <i>(requires signature)</i>

I. Introduction

A. PURPOSE OF SOLICITATION

The purpose of this solicitation is to fund technology demonstration and deployment projects that support the approved Electric Program Investment Charge 2021–2025 (EPIC 4) Investment Plan’s strategic objective to increase the value proposition of distributed energy resources to customers and the grid. This solicitation’s research topics fall under the EPIC 4 Transportation Electrification Initiative.¹

As California’s transportation sector transitions to zero-emission plug-in electric vehicles (PEVs), PEV charging demand on the electricity grid will grow. The 2022 Integrated Energy Policy Report² (IEPR) estimates an annual transportation electricity demand for light-duty (LD) and medium- and heavy-duty (MDHD) vehicles of over 60,000 gigawatt-hours (GWh) in 2035, assuming full compliance with recent California Air Resources Board (CARB) regulations including Advanced Clean Cars II³ and Advanced Clean Fleets.⁴

As of mid-2023, California had installed and energized over 94,000 public and shared chargers (including Level 1, Level 2, and DC fast charging equipment) to meet the electricity demand of LD and select MDHD on-road and off-road electric vehicles. Over 1.1 million PEV chargers are forecast to be needed to meet the full demand of the transportation sector.⁵ The growing number and size of energization projects has overwhelmed existing interconnection processes and has contributed to delays in completing requests.⁶ In addition to delays, facilities and homes installing charging equipment and other connected clean resources are requiring extensive and costly electrical upgrades to accommodate the additional load. The California Public Utilities Commission (CPUC) Electrification Impacts Study conducted by Kevala in May 2023, projected that by 2035, an estimated \$51 billion would be required for utility distribution grid upgrades to meet the growing electricity demand from PEVs if measures are not taken to reduce costs and manage load.⁷ Another study conducted by Cal Advocates predicted a lower, but still substantial, investment of \$26 billion in utility distribution grid upgrades to support PEV growth.⁸ This study closely aligned with the CEC’s IEPR peak load forecast, which assumed PEV charging loads were flexible and could be distributed throughout the day.

Flexible load solutions – such as PEV integration with distributed energy resources (DERs), managed charging, and participation of PEVs in grid services – coupled with dynamic monitoring and signaling of available grid capacity can reduce distribution upgrades by utilizing existing grid infrastructure. Efficient charging solutions that reduce the amount of energy loss during the power

¹ [The Electric Program Investment Charge 2021-2025 Investment Plan](#), page 111.

² [2022 Integrated Energy Policy Report Update](#), page 66.

³ [Advanced Clean Cars II](#). Requires all new passenger vehicles sold in California to be zero emissions by 2035.

⁴ [Advanced Clean Fleets](#). Requires drayage fleets, government fleets, and high-priority fleets to transition to zero-emission vehicles over the next two decades.

⁵ [Electric Vehicle Charging Infrastructure Assessment - AB 2127](#).

⁶ [Draft 2023 Integrated Energy Policy Report](#), chapter 1.

⁷ [Electrification Impacts Study Part 1: Bottom-Up Load Forecasting and System-Level Electrification Impacts Cost Estimates, Kevala+](#)

⁸ [Distribution Grid Electrification Model Study and Report, The Public Advocates Office](#)

conversion process can complement load flexibility by reducing overall strain on grid infrastructure. It will be especially important to implement replicable, flexible, and efficient charging solutions in disadvantaged and/or low-income communities facing grid capacity constraints with the intention of increasing equitable access to clean energy resources and ensuring communities receive the accompanying resiliency, health, low-cost, and zero-emission benefits.

This solicitation will support development and demonstration of dynamic charge management solutions that enable quick energization of PEV chargers responsive to distribution grid conditions; efficient and scalable high-power charging stations that enable streamlined DER integration; and innovative opportunity charging solutions that shift charging loads to grid-supportive locations and times while meeting PEV operational requirements. Demonstration projects that address disadvantaged and/or low-income community needs with strong community engagement and support will be prioritized.

Projects must fall within the following project groups:

- **Group 1:** Technology Enablers for Flexible Transportation Electrification Connection;
- **Group 2:** DC Hubs for Efficient and Scalable High-Power Charging; and
- **Group 3:** Innovative Opportunity Charging Solutions.

See Section II of this solicitation for eligibility requirements. Applications will be evaluated as described in Section IV of this solicitation.

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 technical 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

B. KEY WORDS/TERMS

Word/Term	Definition
Applicant	An entity that submits an application to this solicitation.
Application	An applicant's written response to this solicitation.
Authorized Representative	The person submitting the application who has authority to enter into an agreement with the CEC.
California Native American Tribe	A Native American Tribe located in California that is on the contact list maintained by the Native American Heritage Commission for the purposes of Chapter 905 of the Statutes of 2004 (Pub. Resources Code, § 21073).
California Tribal Organization	A corporation, association, or group controlled, sanctioned, or chartered by a California Native American tribe that is subject to its laws, the laws of the State of California, or the laws of the United States.
CAM	<i>Commission Agreement Manager</i> , 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 grant recipient.
CAO	<i>Commission Agreement Officer</i> , the person designated by the CEC to oversee the internal administrative processes and to serves as the main point of contact for solicitation applicants.
CBO	<i>Community Based Organization</i> , a public or private nonprofit organization of demonstrated effectiveness that: <ul style="list-style-type: none"> a) Has deployed projects and/or outreach efforts within the region (e.g., air basin or county) of the proposed disadvantaged or low-income community or similar community. b) Has an official mission and vision statements that expressly identifies serving disadvantaged and/or low-income communities. c) 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.
CEC funds	<i>CEC funds</i> are EPIC grant funds awarded under this solicitation. Also referred to as grant funds.
CEQA	California Environmental Quality Act, California Public Resources Code Section 21000 et seq.
Days	<i>Days refers to calendar days.</i>
Disadvantaged Community	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

Word/Term	Definition
	Environmental Protection Agency. (https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40)
Energy Equity	The fair distribution of benefits and burdens from energy production and consumption.
EPIC	<i>Electric Program Investment Charge</i> , the source of funding for the projects awarded under this solicitation.
IOU	<i>Investor-owned utility</i> , an electrical corporation as defined in California Public Utilities Code section 218. For purposes of this solicitation, it includes Pacific Gas and Electric Co., San Diego Gas and Electric Co., and Southern California Edison Co.
Low Income Community	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-and-funding/income-limits)
Major Subrecipient	A Subrecipient that is budgeted to receive \$100,000 or more of CEC funds, not including any equipment or match funds that may be provide by the Subrecipient.
NOPA	<i>Notice of Proposed Award</i> , a public notice by CEC staff that identifies proposed grant recipients.
Pre-Commercial Technology	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	Small scale testing in a laboratory or testing on a small portion of the production line of the affected industry. Pilot tests help 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	A person or entity 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	A person or entity receiving a grant award under this solicitation. “Recipient” may be used interchangeably with “grant recipient”.
Solicitation	This entire document, including all attachments, exhibits, addenda, written notices, and questions and answers (“solicitation” may be used interchangeably with “Grant Funding Opportunity” or “GFO”).

Word/Term	Definition
Subrecipient	A person or entity that receives grant funds directly from a grant Recipient and is entrusted to make decisions about how to conduct some of the grant’s activities. A Subrecipient’s role involves discretion over grant activities and is not merely just selling goods or services.
Sub-Subrecipient	Has the same meaning as a Subrecipient except that it receives grant funds from a Subrecipient or any lower tier level of a Sub-Subrecipient.
State	State of California
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
Vendor	A person or entity that sells goods or services to the grant Recipient, Subrecipient, or any lower-tiered level of Sub-Subrecipient, in exchange for some of the grant funds, and does not make decisions about how to perform the grant’s activities. The Vendor’s role is ministerial and does not involve discretion over grant activities.

C. PROJECT FOCUS

Project requirements for all Groups:

Projects are required to advance technologies from TRL 5-6 to TRL 7-8 (unless otherwise noted below)⁹ through demonstrations and deployments in real-world conditions.

This solicitation is open to all PEV types and classes. However, EPIC funds cannot be used to purchase or lease PEVs for the proposed project. Applicants may use match funds to purchase or lease PEVs (See section I.K for more information on Match Funds).

The CEC previously released a statement, updated in November 2023, describing charging interoperability challenges, the CEC’s vision for charging interoperability, and actions to support accessible and easy charging.¹⁰ Projects are encouraged to develop or incorporate interoperable

⁹ [DOE Technology Readiness Levels \(TRLs\)](#)

¹⁰ [CEC Statement on Charging Interoperability](#)

hardware and software products that will support CEC’s vision of a future in which any driver with any PEV can easily charge at any charger on any network.

Projects are encouraged to engage broad project partners including but not limited to automotive and charging equipment manufacturers, charging service providers and aggregators, and electric utilities as relevant for the specific technology, demonstration, and target markets.

Projects are required to partner with at least one community-based organization (CBO). In the project narrative, identify the CBO(s), and describe their role in the project and the benefits their partnership will bring. The project budget should include CBO(s) participation in the project.

AB 841 (Ting, 2020) added Public Utilities Code section 740.20,¹¹ which requires all electrical vehicle charging infrastructure funded or authorized, in whole or in part, by the CEC to be installed by someone with an Electric Vehicle Infrastructure Training Program (EVITP) certification beginning on or after January 1, 2022, subject to certain exceptions. EVITP requirements apply to projects awarded under this GFO. Therefore, all electric vehicle charging infrastructure and equipment located on the customer side of the electrical meter shall be installed by a contractor with the appropriate license classification, as determined by the Contractors’ State License Board, and at least one electrician on each crew, at any given time, who holds an EVITP certification. Projects that include installation of a charging port supplying 25 kilowatts or more to a vehicle must have at least 25 percent of the total electricians working on the crew for the project, at any given time, who hold EVITP certification. One member of each crew may be both the contractor and an EVITP certified electrician. The requirements stated above do not apply to any of the following:

- Electric vehicle charging infrastructure installed by employees of an electrical corporation or local publicly owned electric utility.
- Electric vehicle charging infrastructure funded by moneys derived from credits generated from the Low Carbon Fuel Standard Program (Sub article 7 (commencing with Section 95480) of Article 4 of Subchapter 10 of Chapter 1 of Division 3 of Title 17 of the California Code of Regulations).
- Single-family home residential electric vehicle chargers that can use an existing 208/240-volt outlet.

Group 1: Technology Enablers for Flexible Transportation Electrification Connection

Group 1 projects must develop and demonstrate technologies that dynamically manage residential or commercial charging loads to avoid or defer both customer and distribution grid upgrades. Projects must demonstrate technologies capable of 1) setting charging load limits to accommodate limited capacity of an electric service consistent with relevant codes and standards such as the National Electric Code Article 625.42¹² and 2) beneficially and dynamically adjusting the charging load limit, time, and rate based on distribution grid conditions while meeting customer driving needs. In addition, projects may also demonstrate dynamic management of vehicle-to-building (V2B) and/or vehicle-to-grid (V2G) discharge in response to distribution grid conditions. Commercial and multi-family residential demonstrations must include at least one commercial customer (e.g., fleet, workplace, public access charging site) or multi-family residential service.

¹¹ [AB 841, Section 740.20](#)

¹² [Article 625 Electric Vehicle Charging System](#)

Single-family residential demonstrations must include multiple customers that share utilization of common distribution grid components such as a distribution transformer. Projects must quantify benefits including but not limited to reduced energization time and avoided customer and distribution grid costs.

The Project Narrative (Attachment 2) must discuss the following in the sections identified:

- Describe the technical specifications of the proposed solution, including but not limited to management and control capabilities; installation process; standards and communication protocols utilized; and user interface.
 - Explain how specifications align with the beachhead and target markets identified in technology commercialization plans.
 - Describe how technology will monitor and respond to distribution grid conditions.
- Describe any pre-demonstration testing and validation of the proposed solution completed to date and proposed to complete through the project, including but not limited to:
 - The ability of the proposed solution to avoid electrical circuit overload in load management and export mode (if applicable).
 - The ability of the proposed solution to avoid thermal overloading of grid components such as distribution transformers.
- Identify demonstration site(s) located in a California IOU service territory.
 - Describe how the site(s) was selected, if the site(s) is in a low-income and/or disadvantaged community, and any communication with the community to determine site needs.
 - Describe the customer segment(s) being represented, load requirements of the site(s) including installed or planned PEV chargers, type of installed or planned PEV chargers including bidirectional capabilities (if applicable), and any current or future load management challenges.
 - Identify the number and type of PEVs that will access the site(s) and any site modifications required to enable charging of these vehicles. Also describe PEV bidirectional capabilities (if applicable).
 - Identify what DERs will be integrated and managed onsite (if applicable).
- Describe a measurement and verification plan detailing demonstration activities and steps to validate performance.
 - At a minimum, the measurement and verification plan must describe how the following data will be collected and reported: capacity of electric service; number, type/class, and make of vehicles used; reduction in peak from PEV flexible load (kW); and customer reduced or deferred grid infrastructure upgrade costs (\$).
 - Describe how the data collected will inform scalable and consistent criteria for technology adoption, including through future infrastructure planning, utility programs or incentive requirements, and emerging standards.

- Describe technology’s ability to increase utilization of existing grid infrastructure and lower customer and ratepayer costs at scale.
- Describe technology’s ability to cut energization timelines.
- Describe a plan for equitable workforce development, including additional training needed for operation and maintenance of the charging station(s) and efforts to include a local and diverse workforce.

Group 2: DC Hubs for Efficient and Scalable High-Power Chargers

Group 2 projects must develop and demonstrate DC hub architectures for high-power PEV charging where the AC-DC conversion is centralized (i.e., using a medium voltage converter, such as a solid state silicon carbide-based transformer, connected to utility distribution and a DC bus) to achieve higher efficiencies, a smaller equipment footprint, and streamlined DER integration compared to conventional AC hub architectures (i.e., using line frequency transformers to provide utility secondary service to the charging site). Projects must conduct a real-world demonstration with a commercial customer and have a total site charging capacity of at least 1 MW. Projects that integrate DERs and demonstrate DC microgrid capabilities will be highly encouraged and may start from a lower TRL of 3-6 instead of the solicitation requirement of TRL 5-6.

The Project Narrative (Attachment 2) must discuss the following in the sections identified:

- Describe the technical specifications of the proposed solution, including but not limited to system efficiency; predicted reliability; cooling strategy; max number of charge ports and power level; protection schemes against overvoltage, short circuits, and circuit overloads; integration of DERs (if applicable); equipment, installation, and predicted maintenance costs; site footprint; installation timeline; and standards and communication protocols utilized.
- Describe the technical and cost advantages of the proposed DC-hub power conversion architecture and site configuration compared to established AC-hubs.
- Describe any pre-demonstration testing and validation of the proposed solution completed to date and proposed to complete through the project.
- Identify demonstration site(s) located in a California IOU service territory.
 - Describe how the site(s) was selected, if the site(s) is located in a low-income and/or disadvantaged community, and any communication with the community to determine site needs.
 - Describe the customer segment(s) being represented (for example, large public LD charging stations, depot charging for fleets, public truck charging stations) and the load requirements of the site(s), including installed or planned PEV chargers and type of installed or planned PEV chargers including bidirectional capabilities (if applicable).
 - Identify what PEVs will access the site. Also describe bidirectional capabilities of the PEVs (if applicable).
- Describe a measurement and verification plan detailing demonstration activities and steps to validate performance.

- At a minimum, the measurement and verification plan must describe how the following data will be collected and reported: number, type/class, and make of vehicles used; power (kW) delivered over time; cumulative energy (kWh) delivered to vehicles; system and component-level efficiency (%) from the medium-voltage utility line to dispenser; and reliability and uptime of major station components (%).
- Describe how reliability and resilience will be monitored and any strategies implemented to improve uptime.
- Describe how the data collected will inform future infrastructure planning and emerging standards
- Describe a plan to evaluate short-term and long-term business models for scalability and roles and responsibilities of participating entities (e.g., electricity service and charging providers).
- Describe a plan for equitable workforce development, including additional training needed for operation and maintenance of the charging station(s) and efforts to include a local and diverse workforce.

Group 3: Innovative Opportunity Charging Solutions

Group 3 projects must develop and demonstrate innovative opportunity charging solutions to enable shifting of PEV charging loads and PEV adoption for challenging duty cycles. Innovative opportunity charging solutions include pre-commercial technologies that provide greater grid-supportive benefits than incumbent technologies. For example, these charging solutions could be more flexibly sited in locations along a vehicle's duty cycle and route to enable off peak charging with minimal deviation from that duty cycle or route, or they could enable deferral of electrical upgrades or enhance operational efficiency. Technologies that also integrate with DERs and/or load management systems are highly encouraged. Projects must conduct a real-world demonstration. Examples of innovation include, but are not limited to:

- Interoperable dynamic or static wireless charging solutions;
- Curbside charging that leverages existing electrified systems such as streetlights, utility distribution poles, or buildings;
- Mobile charging strategies with integrated energy storage, high-efficiency power electronics, and lightweight and portable materials to reduce energy consumption during transportation to sites; and
- Smart battery swap stations that enable idle batteries to provide value as energy storage to the grid and schedule swap times to account for fleet battery state of charge, state of health, and range needed.

The Project Narrative (Attachment 2) must discuss the following in the sections identified:

- Describe use cases (i.e., public transit, port drayage, construction equipment, ridesharing) that would benefit from the proposed opportunity charging solution and the reason(s) why.
- Describe the technical specifications and grid-supportive benefits of the proposed solution, including but not limited to charging power level; number of vehicles that can

be accommodated at one time; bidirectional capability (if applicable); installation procedure and timeline; integration with DERs (if applicable); system efficiency; and equipment, installation, and maintenance costs.

- Describe the technical and cost advantages of the proposed opportunity charging solution compared to business-as-usual charging.¹³
- Describe any pre-demonstration testing and validation of the proposed solution completed to date and proposed to complete through the project.
- Identify PEVs that will participate in demonstration of the proposed opportunity charging solution. Describe operational requirements (for example, number of shifts, routes, location of worksite, fueling time limits) that the proposed solution will accommodate.
- Identify demonstration site(s) located in a California IOU service territory.
 - Describe how the site(s) was selected, if the site(s) is in a low-income and/or disadvantaged community, and any communication with the community to determine site needs.
 - Describe the customer segment(s) being represented (for example, rideshare, public transit, public street parking, drayage).
- Describe a measurement and verification plan detailing demonstration activities and steps to validate performance.
 - At a minimum, the measurement and verification plan must describe how the following data will be collected and reported: number, type/class, and make of vehicles used; power (kW) delivered over time; cumulative energy (kWh) delivered to vehicles; charging system efficiency (%); and charging system reliability and uptime (%).
 - Describe how the data collected will inform future infrastructure planning and emerging standards for non-traditional charging solutions to enable interoperability, incentive program inclusion, and scaled deployment.
- Describe a plan to quantify and validate customer and grid benefits for the demonstration use case and scale-up scenarios (e.g., charging load shifted to daytime, bill savings, increased opportunities for participation in grid services).
- Describe a plan for equitable workforce development, including additional training needed for operation and maintenance of the charging station(s) and efforts to include a local and diverse workforce.

D. FUNDING

1. Amount Available and Minimum/ Maximum Funding Amounts

There is up to **\$21,000,000** available for grants awarded under this solicitation. The total, minimum, and maximum funding amounts for each project group are listed below.

¹³ Business-as-usual charging is defined as charging with commercially available Level 1, Level 2, and DC fast EVSE (for example, charging overnight with Level 2 chargers or charging between shifts with DC fast chargers).

Project Group	Available CEC funding	Minimum CEC award	Maximum CEC award	Minimum match funding (% of CEC funds requested)
Group 1: Technology Enablers for Flexible Transportation Electrification Connection	\$5,000,000	\$1,500,000	\$2,500,000	25%
Group 2: DC Hubs for Efficient and Scalable High-Power Charging	\$8,000,000	\$2,000,000	\$4,000,000	25%
Group 3: Innovative Opportunity Charging Solutions	\$8,000,000	\$2,000,000	\$4,000,000	25%

2. Match Funding Requirement

Match funding is required in the amount of at least 25% of the requested CEC funds.

The match funding requirement is reduced to at least 10% of the requested CEC funds for projects located in and benefiting a California Native American Tribe, Disadvantaged Community, and/or Low Income Community. **Please identify the site location and benefits in the Executive Summary (Attachment 1). The Executive Summary will be used to qualify applications for the reduced minimum match requirement.**

For the definition of match funding see Section I K.

3. Change in Funding Amount

Along with any other rights and remedies available to it, the CEC reserves the right to:

- Increase or decrease the available funding and the minimum/maximum grant 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
- Aggregate funds from multiple groups to fully fund the highest ranked passing applications, regardless of group.
- Reduce funding to an appropriate amount if the budgeted funds do not provide full funding for agreements. In this event, the proposed grant recipient and Commission Agreement Manager (CAM) will attempt to reach agreement on a reduced Scope of Work commensurate with available funding.

E. 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 ¹⁴
Solicitation Release	01/02/2024	
Pre-Application Workshop	01/18/2024	9:00 a.m.
Deadline for Written Questions¹⁵	01/26/2024	5:00 p.m.
Anticipated Distribution of Questions and Answers	02/09/2024	
Support for Application Submission in ECAMS	03/29/2024	5:00 p.m.¹⁶
Deadline to Submit Applications	03/29/2024	11:59 p.m.
Anticipated Notice of Proposed Award Posting Date	05/09/2024	
Anticipated Energy Commission Business Meeting Date	09/11/2024	
Anticipated Agreement Start Date	10/01/2024	
Anticipated Agreement End Date	10/01/2027	

F. NOTICE OF PRE-APPLICATION WORKSHOP

CEC staff will hold one Pre-Application Workshop to discuss this 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 to confirm the date and time. Please be aware that the meeting will be recorded.

Date and time: January 18th, 2024, from 9am to 11am PST.

Zoom Instructions:

¹⁴ Pacific Standard Time or Pacific Daylight Time, whichever is being observed.

¹⁵ This deadline does not apply to non-technical questions (e.g., administrative questions concerning application format requirements or attachment instructions), including questions regarding application submission in the ECAMS system or to questions that address an ambiguity, conflict, discrepancy, omission, or other error in the solicitation. Such questions may be submitted to the CAO listed in Section G at any time prior to 5:00 p.m. of the application deadline date. Please see Section G for additional information.

¹⁶ Please see Section I.G Questions and Section III.B Method for Delivery for more information.

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: 813 8486 5158

Meeting Password: 185181

Topic: Pre-Application Workshop – GFO-23-306 – Grid-Supportive Transportation Electrification

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 Pre-Application Workshop:

- 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 need a reasonable accommodation to participate, please Erica Rodriguez by e-mail at Erica.Rodriguez@energy.ca.gov or (916) 764-5705 at least five days in advance.

G. QUESTIONS

During the solicitation process, for questions only related to submission of application in the new ECAMS system, please contact ECAMS.SalesforceSupport@energy.ca.gov. Through that email address applicants will be able to access a team of technical assistants who can answer questions about application submission. Please also see Section III.B for additional information about the ECAMS system.

For all other questions, including all technical and administrative questions that are not related to submission of applications in the ECAMS system, please contact the Commission Agreement Officer listed below:

Natalie Johnson, Commission Agreement Officer
California Energy Commission
715 P, MS-18
Sacramento, California, 95814
E-mail: 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., administrative questions concerning application format requirements or attachment instructions) may be submitted to the CAO at any time prior to 5:00 p.m. of the application deadline date. Similarly, questions related to submission of applications in the ECAMS system may be submitted to ECAMS.SalesforceSupport@energy.ca.gov at any time prior to 5:00 p.m of the application deadline date.

The questions and answers will also be posted on the CEC’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 CAO 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 CEC 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.

H. APPLICANTS’ ADMONISHMENT

This solicitation contains application requirements and instructions. Applicants are responsible for **carefully reading** the entire 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 and Scoring Criteria and Grounds to Reject an Application or Cancel an Award** in Part IV, and the relevant EPIC Grant terms and conditions located at: <https://www.energy.ca.gov/funding-opportunities/funding-resources>.

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** and property of the State after the CEC posts the Notice of Proposed Award or the solicitation is cancelled. Only submit information you want made public. **Marking any portion of your application as confidential may result in disqualification. No portion of your application will be considered confidential.**

I. ADDITIONAL REQUIREMENTS REGARDING ENVIRONMENTAL REVIEW

- Time is of the essence. CEC funds available under this solicitation have encumbrance deadlines as early as June 30, 2027. This means that the CEC must approve proposed awards at a business meeting (usually held monthly) prior to June 30, 2027 in order to avoid expiration of the funds.
- Environmental Review. Prior to approval and encumbrance, the CEC must comply with the California Environmental Quality Act (CEQA) and other requirements. To

comply with CEQA, the CEC 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 CEC 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 applications in a manner that minimizes the time required for the CEC to comply with CEQA and provide all CEQA-related information to the CEC in a timely manner such that the CEC 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 CEC'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, Negative Declaration, Mitigated Negative Declaration, Environmental Impact Report, or similar document¹⁷ 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 completed its environmental review and adopted CEQA findings that the project will cause no significant effect on the

¹⁷ This catch-all refers to other types of environmental reviews, such as those prepared under the National Environmental Policy Act (NEPA).

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. Applicants are encouraged to contact potential lead and responsible agencies under CEQA as early as possible. Please plan applications accordingly.

J. BACKGROUND

1. Electric Program Investment Charge (EPIC) Program

This solicitation will award projects funded by EPIC, an electricity ratepayer surcharge established by the California Public Utilities Commission (CPUC) in December 2011.¹⁸ 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.¹⁹ 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.²⁰ 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 Plans²¹²² ²³ and within one or more specific focus areas

¹⁸ See CPUC "Phase 1" Decision 11-12-035, December 15, 2011, http://docs.cpuc.ca.gov/PublishedDocs/WORD_PDF/FINAL_DECISION/156050.PDF.

¹⁹ 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).

²⁰ California Public Resources Code, Section 25711.5(a), <http://www.leginfo.ca.gov/cgi-bin/displaycode?section=prc&group=25001-26000&file=25710-25712>.

²¹ 2018-20 EPIC Triennial Investment Plan, <https://www.energy.ca.gov/publications/2017/electric-program-investment-charge-proposed-2018-2020-triennial-investment-plan> as modified and approved by CPUC decision 18-01-008, July 11, 2018, <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M206/K319/206319491.PDF>.

²² California Energy Commission Proposed EPIC Interim Investment Plan 2021, <https://efiling.energy.ca.gov/GetDocument.aspx?tn=236882> and approved by CPUC decision 21-07-006, July 15, 2021, <https://docs.cpuc.ca.gov/SearchRes.aspx?docformat=ALL&docid=394265545>.

²³ 2021-2025 EPIC Investment Plan, <https://efiling.energy.ca.gov/GetDocument.aspx?tn=240609>.

(“**funding initiatives**”) identified in the plan. This solicitation targets the following program area, strategic objective, and funding initiative:

Electric Program Investment Charge 2021-2025 Investment Plan (EPIC 4)

- **Strategic Objective:** Increase the Value Proposition of Distributed Energy Resources to Customers and the Grid
 - **Funding Initiative:** Transportation Electrification
 - **Topic 20:** Efficient Transportation Electrification and Charging Technologies
 - **Topic 21:** Technology Enablers for Using Electric Vehicles as Distributed Energy Resources
 - **Topic 22:** Integrating Distributed Energy Resources for Grid-Supportive Vehicle Charging

Applicable Laws, Policies, and Background Documents

This solicitation addresses the energy goals described in the following laws, policies, and background documents.

Laws/Regulations

- **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.²⁴ The CEC in administering EPIC must also take into account adverse localized health impacts of proposed projects to the greatest extent possible,²⁵ and give preference for funding to clean energy projects that benefit residents of low-income or disadvantaged communities.²⁶

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:

- a) Eighty percent of the statewide median income.
- b) 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

²⁴ Public Resources Code § 25711.6.

²⁵ Public Resources Code § 25711.5.

²⁶ Public Resources Code § 25711.6.

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: <https://www.hcd.ca.gov/grants-and-funding/income-limits>. 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/>

- **Assembly Bill (AB) 32²⁷ - Global Warming Solutions Act of 2006**

AB 32 created a comprehensive program to reduce greenhouse gas (GHG) emissions in California. GHG reduction strategies include a reduction mandate of 1990 levels by 2020 and a cap-and-trade program. AB 32 also designates the California Air Resources Board (CARB) as the state agency charged with monitoring and regulating sources of greenhouse gas (GHG) emissions and requires CARB to develop a Scoping Plan that describes the approach California will take to reduce GHGs. CARB must update the plan at least once every five years.

Additional information:

https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=200520060AB32http://www.leginfo.ca.gov/pub/15-16/bill/sen/sb_0001-0050/sb_32_bill_20160908_chaptered.htm;

<https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan>

Applicable Law: California Health and Safety Code §§ 38500 et. seq.

- **Senate Bill (SB) 32 - California Global Warming Solutions Act of 2006: emissions limit**

SB 32 expands on AB 32 by requiring that CARB ensure statewide GHG emissions are reduced to 40% below the 1990 level by no later than December 31, 2030. SB 32 further requires that these emission reductions are achieved in a manner that benefits the state's most disadvantaged communities and is transparent and accountable to the public and the Legislature.

Additional information:

https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB32

Applicable Law: California Health and Safety Code § 38566.

- **Senate Bill (SB) 100 - The 100 Percent Clean Energy Act of 2018**

SB 100 requires that 100 % of retail sales of electricity to California end-use customers and 100 % of electricity procured to serve all state agencies come from eligible renewable energy resources and zero-carbon resources by December 31, 2045. The bill requires the CPUC and the CEC, in consultation with CARB to ensure that California's transition to a

²⁷ AB 32 (Statutes of 2006, chapter 488)

zero-carbon electric system does not cause or contribute to greenhouse gas emissions (GHG) increases elsewhere in the western grid.

Additional information:

https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201720180SB100

- **Senate Bill (SB) 1020 – Clean Energy, Jobs, and Affordability Act of 2022**

SB 1020 revises state policy to provide that eligible renewable energy resources and zero-carbon resources supply 90% of all retail sales of electricity to California end-use customers by December 31, 2035, 95% of all retail sales of electricity to California end-use customers by December 31, 2040, 100% of all retail sales of electricity to California end-use customers by December 31, 2045, and 100% of electricity procured to serve all state agencies by December 31, 2035, as specified.

Additional information: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB1020

Applicable Law: California Health and Safety Code §§ 38561 et. Seq.

- **Senate Bill (SB) 676 – Electric Vehicle Grid Integration**

SB 676 requires that CPUC establish strategies and quantifiable metrics to maximize the use of feasible and cost-effective electric vehicle grid integration and to consider vehicle grid integration in relevant proceedings regarding its potential to mitigate electrical system costs and increase economic, social, and environmental benefits. The bill requires reporting by IOUs and community choice aggregators of information related to vehicle grid integration strategies and programs implemented.

Additional Information:

https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202320240SB676

- **Senate Bill (SB) 410 – The Powering Up Californians Act**

SB 410 directs the CPUC to set reasonable average and maximum target time periods for grid connections and upgrades. The bill further directs the CPUC to require the utilities to take remedial actions necessary to achieve the established targets. Annual reporting will include data on interconnection requests that exceed established timelines. The bill requires CPUC ensures utilities have sufficient and timely recovery of energization costs.

Additional Information:

https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202320240SB410

- **Senate Bill (SB) 846**

Requires the California Energy Commission to develop a goal for shifting load to reduce net peak electrical demand and policies to increase demand response and load shifting, along with other actions necessary to support California’s clean energy transition and grid reliability.

Additional Information: <https://www.energy.ca.gov/publications/2023/senate-bill-846-load-shift-goal-report>

- **Assembly Bill (AB) 2127**

Requires the California Energy Commission to biennially assess the electric vehicle charging infrastructure needed to meet the state's goals of putting at least 5 million zero-emission vehicles on California roads by 2030 and reducing greenhouse gas emissions to 40% below 1990 levels by 2030.

Additional Information:

https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201720180AB2127

Policies/Plans

- **Integrated Energy Policy Report (Biennial)**

California Public Resources Code Section 25302 requires the CEC to release a biennial report that provides an overview of major energy trends and issues facing the state. The IEPR assesses and forecasts all aspects of energy industry supply, production, transportation, delivery, distribution, demand, and pricing. The CEC uses these assessments and forecasts to develop energy policies and provide recommendations for future research and analysis areas.

Additional information: <http://www.energy.ca.gov/energypolicy>

Applicable Law: California Public Resources Code § 25300 et seq.

- **Executive Order (EO) N-79-20**

Governor Newsom's Executive Order N-79-20 ordered several actions to combat the climate crisis including the establishment of new statewide targets to reach 100 percent sales of new passenger vehicles being zero emission by 2035, transition to 100 percent zero-emission drayage trucks by 2035, and 100 percent zero-emission medium- and heavy-duty vehicles by 2045 where feasible.

Additional information: <https://www.gov.ca.gov/wp-content/uploads/2020/09/9.23.20-EO-N-79-20-Climate.pdf>

Reference Documents

Refer to the link below for information about past CEC research projects and activities:

- <http://www.energy.ca.gov/research/>
- <https://www.energy.ca.gov/programs-and-topics/programs/electric-program-investment-charge-epic-program>
- <https://www.energy.ca.gov/showcase/energize-innovation>

K. MATCH FUNDING

“**Match funds**” includes cash or in-kind (non-cash) contributions provided by the applicant, subrecipients, 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 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 grant recipient’s possession or proposed by a 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** can be in the form of goods or services that are not reimbursed with CEC funds such as labor (if reasonable and justified), donated space, existing equipment, existing supplies, services provided by a third-party or subrecipient, and other expendable property in support of the project. The value of in-kind match is based on the fair market value of the goods and services provided at the time it is claimed as match. The value of existing equipment must be prorated for its use in the project, and depreciated or amortized over the term of the project using generally accepted accounting principles (GAAP). Labor rates for hours donated by non-employees who are not paid for their time must be consistent with those paid for similar work. Cost allocations must be reasonable and allocable to the proposed project. In-kind match share must be included in the agreement budget.

The grant recipient is expected to maintain appropriate documentation to support the fair market value of all in-kind match including match donated by third parties or major subrecipients.

- Match funds must be spent only during the agreement term, either before or concurrently with CEC funds or in accordance with an approved Match Fund Spending Plan. Match funds also must be reported in invoices submitted to the CEC.
- All applications that include match funds must submit commitment letters, **including applicant, subrecipients**, sub-subrecipients, and vendors 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 Commitment and Support Letters Form Attachment. Commitment and support letters must be submitted with the application to be considered.
- Any match pledged in an application must be consistent. For example, in the ECAMS system and in the Budget Attachment applicants will be asked to enter the project’s total match funding. The amounts listed in those places should 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, the match amounts entered in the ECAMS system and in the Budget must match this amount). If the amounts listed in an application are inconsistent, 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. CEC 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.

- **“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 CEC funds for these purchases is not allowed.**

L. FUNDS SPENT IN CALIFORNIA

Only CEC funds may count towards funds spent in California total. "Spent in California" means that:

- 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
- Business transactions (e.g., material and equipment purchases, leases, and rentals) are entered into with a business located in California.
- Total should include any applicable, subrecipients, sub-subrecipients, and vendors.

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: CEC funds will be spent on temperature sensors. The temperature sensors are manufactured in Washington. The grant 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: CEC funds will be spent on temperature sensors. The temperature sensors are manufactured in Washington. The grant recipient orders the temperature sensors directly from Washington. The manufacturer has training centers in CA that instructs purchasers on how to use the sensors. The invoice shows that the transaction occurred in Washington. This transaction is not eligible and cannot be counted as funds spent in CA.

M. CEC’S RIGHTS AND REMEDIES

Any process explained in this solicitation is in addition to, and does not restrict, any other rights and remedies available to the CEC.

II. Eligibility Requirements

A. APPLICANT REQUIREMENTS

1. Eligibility

This solicitation is open to all public and private entities with the exception of local publicly owned electric utilities.²⁸ 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.

2. Terms and Conditions

Each grant agreement resulting from this solicitation will include terms and conditions that set forth the grant recipient's rights and responsibilities. By submitting an application in the ECAMS system, 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 California Native American Tribes and Tribal Organizations with Sovereign Immunity in addition to the standard terms and conditions; or (4) standard terms and conditions. All terms and conditions are located at <https://www.energy.ca.gov/funding-opportunities/funding-resources>. 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 provide the required authorizations and certifications or indicating that acceptance is based on modification of the terms may result in **rejection** of the application. Applicants **must read** the terms and conditions carefully. The CEC reserves the right to modify the terms and conditions prior to executing grant agreements.

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

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

Reservation of right to cancel proposed award. Funds available under this solicitation have encumbrance deadlines which the CEC must meet in order to avoid expiration of the funds. In addition to any other rights reserved to it under this solicitation or that it otherwise has, the CEC

²⁸ A local publicly owned electric utility is an entity as defined in California Public Utilities Code section 224.3.

reserves the right to cancel a proposed award if it determines, in its sole and absolute discretion, that the documentation described above would likely not be provided prior to an encumbrance deadline, and that the CEC's ability to meet its encumbrance deadline may thereby be jeopardized. In this instance, the CEC may cancel the proposed award and award funds to the next highest scoring applicant.

3. 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 and project team members (e.g. subrecipients and even match fund partners) 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 proposed for funding). Applicants should provide the exact legal names of entities included in their applications, along with any fictitious business names. Fictitious business names must be currently valid, i.e., not expired with the Secretary of State. As part of the CEC's due diligence, particularly during the agreement development phase, CEC staff may request the supporting documentation regarding the above registration requirements.

For more information, contact the Secretary of State's Office via its website at www.sos.ca.gov. Sole proprietors do not have to be registered with the California Secretary of State. However, the local government may require a business license and if using a fictitious business name, registration of the name may be required. Sole proprietors must be able to provide evidence of required licenses and/or registration with the appropriate local government, or evidence that such licenses and/or registration is not required, to the CEC prior to the project being recommended for approval at a CEC Business Meeting.

4. Russia Sanctions

The budget must NOT identify that CEC 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. Recent legal restrictions may include Russian Sanctions as described below:

On March 4, 2022, Governor Gavin Newsom issued Executive Order N-6-22 (the EO) regarding Economic Sanctions against Russia and Russian entities and individuals. "Economic Sanctions" refers to sanctions imposed by the U.S. government in response to Russia's actions in Ukraine, as well as any sanctions imposed under state law. The EO directs state agencies to terminate contracts with, and to refrain from entering any new contracts with, individuals or entities that are determined to be a target of Economic Sanctions.

Accordingly, should the State determine Recipient is a target of Economic Sanctions or is conducting prohibited transactions with sanctioned individuals or entities, that shall be grounds for termination of this agreement. The State shall provide Recipient advance written notice of such termination, allowing Recipient at least 30 calendar days to provide a written response. Termination shall be at the sole discretion of the State.

B. 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.²⁹

2. 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 are to provide ratepayer benefits, which is 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.

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 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 using the References for Calculating Electricity End-Use, Electricity Demand, and GHG Emissions Attachment.

3. 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.

4. Community Based Organizations (applicable for TD&D using AB 523 Scoring Criteria)

For proposed projects located in and benefiting low-income and/or disadvantaged communities within IOU service territories, the project must allocate appropriate funding for CBO engagement for relevant tasks under the scope of work.

Community Based Organizations (CBO) should meet, and will be evaluated on the following criteria for this solicitation:

- Has deployed projects and/or outreach efforts within the region (e.g., air basin or county) of the proposed disadvantaged or low-income community or similar community.
- Have official mission and vision statements that expressly identifies serving disadvantaged and/or low-income communities.
- 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.

²⁹ 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.

III. Application Submission Instructions

A. APPLICATION FORMAT, PAGE LIMITS

All items listed below are required as part of the application package. Failure to provide any items may result in disqualification of the application. Attachment requirements are expanded and explained below in this section and in the attachments themselves.

Item	Attachment Number	Page Limitation
Executive Summary	Attachment 1	Two pages
Project Narrative	Attachment 2	Twenty pages
Project Team	Attachment 3	Two pages for each resume
Scope of Work	Attachment 4	Thirty pages
Project Schedule	Attachment 5	Four pages
Budget	Attachment 6	None
CEQA Compliance Form	Attachment 7	None
Past Project Information	Attachment 8	Two pages for each project description
Commitment and Support Letters	Attachment 9	Two pages, excluding the cover page
Project Performance Metrics	Attachment 10	None
Applicant Declaration	Attachment 11	

B. METHOD FOR DELIVERY

The only method of submitting applications to this solicitation is Energy Commission Agreement Management System (ECAMS), available at: <https://ecams.energy.ca.gov>.

The CEC is providing a team of technical assistants to support applicants with this new process. Please email ECAMS.SalesforceSupport@energy.ca.gov for support.

ECAMS allows applicants to complete and submit their application to the CEC prior to the date and time specified in this solicitation. Files uploaded to the system 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, such as match funding commitment letters, may be scanned and submitted in PDF format. Completed Budget Forms, Attachment, must be in Excel format.

The deadline to submit applications through ECAMS system is 11:59 p.m. on the Deadline to Submit Applications date shown in the Key Activities Schedule. ECAMS 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.

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 ECAMS, upload times may be much longer than expected. For example, unexpected issues could occur, causing long delays that prevent timely submission. Please plan accordingly. For instructions on how to apply using the ECAMS system, please see the How to Apply document available on the CEC website at: <https://www.energy.ca.gov/funding-opportunities/funding-resources>, under General Funding Information, Energy Commission Agreement Management System (ECAMS).

First time users must register as a new user to access the system. There will be two types of user accounts to establish: 1) An organizational account, for the entity applying to the solicitation; and 2) user accounts for individuals who will be submitting the application on behalf of the organization.

Applicants will be required to upload all attachments marked "required" in the system in order for the application to be submitted.

C. 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. Executive Summary Form (Attachment 1)

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; **a description of benefits to community/communities if project site(s) is located in a California Native American Tribe, Disadvantaged Community, and/or Low Income Community**; and a description of the project tasks and overall management of the agreement.

2. Project Narrative Form (Attachment 2)

This form includes the majority of the applicant's responses to the Scoring Criteria in Section IV.

3. Project Team Form (Attachment 3)

Identify by name all key personnel³⁰ assigned to the project, including the projects that are employed by the applicant, a subrecipient or sub-subrecipient, including the project manager and principal investigator (if applicable), and individuals employed by any major subrecipient (a major subrecipient is a subrecipient receiving \$100,000 or more of Commission funds). Clearly describe their individual areas of responsibility. Include the information required for each individual, including a resume (maximum two pages).

4. Scope of Work Template (Attachment 4)

³⁰ "Key personnel" are individuals that are critical to the project due to their experience, knowledge, and/or capabilities.

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.

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

5. Project Schedule (Attachment 5)

The Project Schedule includes a list of all product, 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.

6. Budget Forms (Attachment 6)

Because this solicitation is utilizing the new ECAMS system for submitting applications, applicants have two options for uploading a budget:

- **Option 1: Prime Applicant’s budget is both keyed directly into ECAMS and uploaded as an MS Excel attachment; the Prime Major Subrecipient(s) budgets are uploaded as MS Excel attachments.** The new ECAMS system allows applicants to build the prime applicant’s budget directly into the system. At this time, there is no way to input major subrecipient budgets directly into the system. Instructions for inputting budget items into the ECAMS system are included at: <https://www.energy.ca.gov/funding-opportunities/funding-resources>.
- **Option 2: Upload all budgets (Prime and Major Subrecipients) as MS Excel attachments** and leave the ECAMS budget sections blank.

Instructions for completing the budgets can be found in Budget Category Guidance at the ECAMS Resources page. **Read the instructions tab on the MS Excel attachments Attachment 6 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.

- All project expenditures (match share and reimbursable) must be made within the Anticipated Agreement Start and End dates listed in the “Key Activities Schedule” of this solicitation manual. Match share requirements are discussed in Part I.D and I.K of this solicitation. The entire term of the agreement and projected rate increases must be considered when preparing the budget.
- 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 agreement terms and conditions. Rates and personnel shown must reflect the rates and personnel the applicant would include if selected as a Recipient.

- The rates proposed, except for Direct Labor and Fringe Benefits, are considered capped and may not change during the agreement term. Except for Direct Labor and Fringe Benefits, the grant recipient will only be reimbursed for actual rates and not to exceed the capped rates. The rates proposed for Direct Labor and Fringe Benefits are treated as estimates; a grant recipient can invoice at higher rates as long as it is only invoicing for actual expenditures it has made. If an applicant, by law, cannot agree to Direct Labor and Fringe Benefits rates being treated as estimates, the applicant can request to modify this term. This modification may be negotiated if the applicant is proposed for award. The CEC retains the sole right to refuse to agree to any requested modifications. The budget must NOT include any grant recipient profit from the proposed project, either as a reimbursed item, match share, or as part of overhead or general and administrative expenses (subrecipient profit is allowable, though the maximum percentage allowed is 10% of the total subrecipient rates for labor, and other direct and indirect costs as indicated in the Category Budget tab). Please review the terms and conditions and budget forms for additional restrictions and requirements.
- 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 CAM.
- 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 with CEC funds, with the exception of costs incurred by University of California grant recipients.
- The budget must NOT identify that CEC 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.
- **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, the 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, the grant recipient must either:

- 1) Proceed on the assumption that the project is a public work and ensure that:
 - prevailing wages are paid; and
 - the project budget for labor reflects these prevailing wage requirements; and
 - 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,
- 2) 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.

7. California Environmental Quality Act (CEQA) Compliance Form (Attachment 7)

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, in the CEC's sole discretion and without limiting any of the CEC's other rights and remedies, result in the cancellation of a proposed award and allocation of funding elsewhere, such as to the next highest-scoring project.

8. Past Projects Information (Attachment 8)

The Past Projects Information Form asks for information about the Applicant and its major subrecipients' past agreements with the CEC and other entities.

9. Commitment and Support Letter Form (Attachment 9)

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 from each entity that is committing to providing match funding. Each commitment letter must be signed by an authorized representative of the entity or by the individual that is making the commitment. A commitment letter must include all of the following: (1) identification of the source(s) of the funds; (2) a justification of the dollar value claimed; (3) an unqualified (i.e. without reservation or limitation) commitment that

guarantees the availability of the funds for the project; and (4) a strategy for replacing the funds if they are significantly reduced or lost.

- If the project involves demonstration activities, the applicant must include a site commitment letter signed by an authorized representative of the proposed demonstration 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 ECAMS and Attachment 8; and (2) unconditionally commit to providing the site for the proposed activities if recipient is awarded a CEC grant.
- **Project partners** that are making contributions other than match funding or a demonstration 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) unconditionally commits to making the contribution if Recipient is awarded a CEC grant.

2) 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 site.

10. Project Performance Metrics (Attachment 10)

The purpose of this questionnaire is to identify and document 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. The metrics should provide constructive targets for the performance of the technology or project and how the metric will be measured and evaluated, during the project and after the project is complete.

11. Applicant Declaration (Attachment 11)

This form requests the applicant make certain declarations under penalty of perjury. This form must be signed by an authorized representative of the applicant's organization

IV. Evaluation and Award Process

A. 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 past performance of CEC agreements. To evaluate applications, the CEC will organize an Evaluation Committee that consists of primarily, or all CEC staff. The Evaluation Committee may use additional technical expert reviewers to provide an analysis of applications.

1. Stage One: Application Screening

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.**

2. 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.
- **A minimum score of 105.0 points** is required for criteria 1-8 to be eligible for funding. In addition, the application must receive a minimum score of **52.50 points for criteria 1-4, and 70.00 points for criteria 1-7 and 35.00 points for criterion 8** to be eligible for funding.

B. 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 by group.

- 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 on its website, and will e-mail it to all entities that submitted an application. Proposed awards must be approved by the CEC at a business meeting.

Debriefings: Applicants that are not proposed for funding may request a debriefing after the release of the NOPA by e-mailing the CAO 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;
 - Aggregate funds from multiple groups to fully fund the highest ranked passing application(s), regardless of group. (if applicable); and
 - Negotiate with successful applicants to modify the project scope, schedule, project team entity that will receive the award, project location and/or level of funding.

2. Agreements

Applications recommended for funding in a NOPA will be developed into a proposed grant agreement to be considered at a CEC Business Meeting. Grant 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 grant recipient and the CEC).

- **Agreement Development:** The Contracts, Grants, and Loans Office will send the grant 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 project scope, level of funding and terms and conditions) prior to executing any agreement.
- **Performance Evaluation:** An applicant receiving an award under this solicitation is subject to evaluation of performance under the resulting agreement. The CEC reserves the right to utilize the performance evaluation to screen and score future funding applications.
- **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.

C. 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 award 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 performance 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. If an applicant, by law, cannot agree to certain terms and conditions, the applicant can request a modification. This modification may be negotiated if the applicant is proposed for award. The CEC retains the sole right to refuse to agree to any requested modifications.

D. 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 post an addendum on CEC's website at: <https://www.energy.ca.gov/funding-opportunities/solicitations>. The CEC will not reimburse applicants for application development expenses under any circumstances, including cancellation of the solicitation.

2. Modification or Withdrawal of Application

Applicants may recall or modify a submitted application within ECAMS before the deadline to submit applications. 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."

3. 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** and property of the State 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 unless the applicant clarifies in writing that marking the material as confidential was a mistake and the material can be made public.**

4. Solicitation Errors

If an Applicant discovers any ambiguity, conflict, discrepancy, omission, or other error in the solicitation at any time prior to 5:00 p.m. of the application deadline date, 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.

5. 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 an applicant proposed for funding from full compliance with solicitation requirements.

6. Tiebreakers

If the score for two or more applications are tied, the application with a higher score in the XX criterion will be ranked higher. If still tied, an objective tie-breaker (such as a random drawing) will be utilized.

7. Clarification Interviews

The Evaluation Committee may conduct optional Clarification Interviews with applicants 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.

8. Opportunity to Cure Administrative Errors

The CEC understands and appreciates the significant time and expense applicants spend preparing applications. An administrative error that prevents an applicant from submitting a complete application frustrates both the CEC and applicants. The purpose of this process is to reduce the number of applications screened out or receiving a significantly reduced score for administrative errors while maintaining a fair competition. This process also ensures better competition and thus better projects to benefit California.

After the application deadline, an applicant might identify, or the Evaluation Committee may find what reasonably appears to be, an administrative error. For purposes of this solicitation only, an administrative error is defined as an applicant's inadvertent mistake that prevents materials in existence as of the application deadline from appearing in its submitted application. Examples include, but are not limited to, accidentally:

- Scanning and submitting every other page in a document instead of every page.
- Submitting the wrong document.
- Leaving out a document.

If the Evaluation Committee find what reasonably appears to be an administrative error, they can communicate with the applicant to confirm. If an applicant finds an administrative error in its application, it should immediately contact the Commission Agreement Officer listed in the "Contact Information/Questions" section of this solicitation.

If an administrative error has been identified and communicated to the Commission Agreement Officer, the CEC may, but is not required to, allow the applicant a period of time to provide the missing materials. Reasons why the CEC might NOT allow an applicant to fix an administrative error include, but are not limited to:

- The funds have a deadline that does not allow time to fix the error.
- The application has been screened out or does not receive a passing score for reasons unrelated to the administrative error, making irrelevant any efforts to fix the error.
- The applicant brings the error to the CEC's attention too late in the solicitation process (e.g., after awards have been approved at a Business Meeting).

If the Evaluation Committee allows an applicant the opportunity to fix an administrative error, the Commission Agreement Officer will communicate in writing to the applicant's project manager listed the deadline by which the applicant must provide the missing materials. Reasonable efforts will be made to confirm receipt of the notice, but actual notice cannot be guaranteed and the obligation is on the applicant to ensure the proper contact(s) are listed and available to respond. The Evaluation Committee will not consider any materials submitted after the deadline.

This process only allows applicants to submit materials in existence as of the application deadline. This process does NOT allow applicants to submit material created or modified after the application deadline. The CEC has sole discretion to determine whether materials submitted are eligible for consideration by the Evaluation Committee under this opportunity to cure.

Applicants must include the following certification along with the materials it submits to fix an administrative error and must explain why the materials were not provided due to an inadvertent administrative error:

“I certify on behalf of the applicant that the materials provided herein existed at the time of the application deadline, have not been modified since, and were not originally provided due to an inadvertent administrative error as described herein.”

The Evaluation Committee is not responsible for finding, or communicating with the applicant about, any errors in an application. Applicants remain solely responsible for submitting applications, including any material submitted to fix an administrative error, that meet all solicitation requirements.

E. STAGE ONE: APPLICATION SCREENING

<p style="text-align: center;">SCREENING CRITERIA</p> <p><i>The Application must pass ALL criteria to progress to Stage Two.</i></p>	<p style="text-align: center;">Pass/Fail</p>
<p>1. The application is received by the CEC 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).</p>	<p><input type="checkbox"/> Pass <input type="checkbox"/> Fail</p>
<p>2. The application addresses only one of the eligible project groups, as indicated by the information the Applicant enters into the ECAMS system.</p>	<p><input type="checkbox"/> Pass <input type="checkbox"/> Fail</p>
<p>3. 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 technical tasks described in the Scope of Work, Attachment).</p> <p><i>The CEC may conduct a clarification interview with an applicant to clarify and/or verify information in its applications to help CEC determine whether each application is for a distinct project. The final determination shall be made solely by CEC.</i></p>	<p><input type="checkbox"/> Pass <input type="checkbox"/> Fail</p>
<p>4. The Application includes Commitment Letters that total the minimum of 20% in match share of the total requested CEC funds.</p>	<p><input type="checkbox"/> Pass <input type="checkbox"/> Fail</p>
<p>5. If the project involves technology pilot demonstration/ demonstration/ deployment activities</p> <ul style="list-style-type: none"> ○ 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). 	<p><input type="checkbox"/> Pass <input type="checkbox"/> Fail</p>

SCREENING CRITERIA FOR PAST PERFORMANCE

Screening Criteria	
<p>Applicant Past Performance with Energy Commission</p> <p>An applicant may be disqualified under this solicitation due to severe performance issues under one or more prior or active CEC agreements. This past performance screening criterion does not apply to applicants that do not have any active or prior agreements with the CEC.</p> <p>The applicant—defined for the purpose of this past performance screening criterion 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:</p> <ul style="list-style-type: none"> • Significant deviation from agreement requirements that were caused by factors that are, or should have been, within applicant’s control; • Termination with cause; • Demonstrated poor communication, project management, and/or inability, due to circumstances within applicant’s control, or which should have been within applicant’s control, from materially completing the project; • Deliverables were not submitted to the CEC or were of significantly poor quality. For example, applicant delivered poorly written reports that required significant rework by staff prior to acceptance or publication; and • Severe audit findings not resolved to CEC’s satisfaction. Severe audit findings may include but are not limited to: incomplete or unsatisfactory deliverables; grant funds used inappropriately (i.e., other than as represented); or questioned costs. 	
Must pass to continue with Scoring Criteria	Pass/Fail

F. STAGE TWO: APPLICATION SCORING

Applications 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 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	Description
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.
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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	Possible Points
<p>1. Technical Merit</p> <ul style="list-style-type: none"> a. 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. b. Describes the competitive advantages of the proposed technology over state-of-the-art (e.g., efficiency, emissions, durability, cost). c. Provides the proposed technical specifications and describe how the project will meet or exceed the technical specifications by the end of the project. d. Describes the technology readiness level (TRL) the proposed technology has achieved and the expected TRL by the end of the project. e. Describes at what scale the technology has been successfully demonstrated, including size or capacity, number of previous installations, location and duration, results, etc. f. Describes how the proposed demonstration will lead to increased adoption of the technology in California. g. Provides information described in Section I.C. 	15
<p>2. Technical Approach</p> <ul style="list-style-type: none"> a. The application describes the technique, approach, and methods to be used in performing the work described in the Scope of Work. b. The Scope of Work identifies goals, objectives, and deliverables, details the work to be performed, and aligns with the information presented in Project Narrative. c. The application identifies the reliability that the project and site recommendations as described will be carried out if funds are awarded. d. Identifies and discusses factors critical for success, in addition to risks, barriers, and limitations (e.g. loss of demonstration site, key subrecipient). Provides a plan to address them. e. 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. 	25

Scoring Criteria	Possible Points
<ul style="list-style-type: none"> f. Describes the technology transfer plan to assess and advance the commercial viability of the technology. g. 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. h. 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.7. i. Provides information described in Section I.C. 	
<p>3. Impacts and Benefits for California IOU Ratepayers</p> <ul style="list-style-type: none"> a. 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: <ul style="list-style-type: none"> • annual electricity and energy cost reductions, peak load reduction and/or shifting, infrastructure resiliency, and infrastructure reliability. <p>In addition, estimates the non-energy benefits including:</p> <ul style="list-style-type: none"> • greenhouse gas emission reductions, air emission reductions (e.g., NOx), and/or increased safety. b. States the timeframe, assumptions with sources, and calculations for the estimated benefits, and explains their reasonableness. Include baseline or “business as usual” over timeframe. c. Identifies the expected financial performance (e.g. payback period, ROI) of the demonstration at scale. d. Identifies the specific programs which the technology intends to leverage. <i>(e.g., feed-in tariffs, IOU rebates, demand response, storage procurement) and extent to which technology meets program requirements.</i> 	20
<p>4. Team Qualifications, Capabilities, and Resources</p> <p>Evaluations of ongoing or previous projects including project performance by applicant and team members will be used in scoring for this criterion.</p> <ul style="list-style-type: none"> a. Identifies credentials of applicant and any subrecipient and sub-subrecipient key personnel, including the project manager, principal investigator and technology and knowledge transfer lead <i>(include this information in the Project Team Form Attachment).</i> b. Demonstrates that the project team including Community Based Organization has appropriate qualifications, experience, financial stability and capability to complete the project. c. Explains the team structure and how various tasks will be managed and coordinated. 	15

Scoring Criteria	Possible Points																				
<ul style="list-style-type: none"> d. Describes the facilities, infrastructure, and resources available that directly support the project. e. Describes the team’s history of successfully completing projects in the past 10 years including subsequent deployments and commercialization. 																					
<p>Total Possible Points for criteria 1– 4 (Minimum Passing Score for criteria 1– 4 is 70% or <u>52.50</u>)</p>	75																				
<p>5. Budget and Cost-Effectiveness</p> <ul style="list-style-type: none"> a. Budget forms are complete for the applicant and all subrecipients, including the Community Based Organization, as described in the Budget instructions. b. Justifies the reasonableness of the requested funds relative to the project goals, objectives, and tasks. c. Justifies the reasonableness of direct costs (e.g., labor, fringe benefits, equipment, materials & misc. travel, and subrecipients). d. Justifies the reasonableness of indirect costs (e.g., overhead, facility charges (e.g., rent, utilities), burdens, subrecipient profit, and other like costs). 	10																				
<p>6. CEC Funds Spent in California</p> <p>Projects that maximize the spending of CEC funds in California will receive points as indicated in the table below (see Funds Spent in California section for more details).</p> <table border="1" data-bbox="285 1446 1156 1789"> <thead> <tr> <th>Percentage of CEC funds spent in CA vs Total CEC funds requested (derived from Budget Attachment)</th> <th>Percentage of Possible Points</th> </tr> </thead> <tbody> <tr><td>>60%</td><td>20%</td></tr> <tr><td>>65%</td><td>30%</td></tr> <tr><td>>70%</td><td>40%</td></tr> <tr><td>>75%</td><td>50%</td></tr> <tr><td>>80%</td><td>60%</td></tr> <tr><td>>85%</td><td>70%</td></tr> <tr><td>>90%</td><td>80%</td></tr> <tr><td>>95%</td><td>90%</td></tr> <tr><td>>98%</td><td>100%</td></tr> </tbody> </table>	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
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>98%	100%																				
<p>7. Ratio of Direct Labor to Indirect Costs</p>	5																				

Scoring Criteria	Possible Points
<p>The score for this criterion will be calculated by the following formula:</p> $\frac{\text{Total Direct Labor}}{\text{Total Direct Labor} + \text{Total Fringe} + \text{Total Indirect} + \text{Total Profit}}$ <p>This ratio will then be multiplied by the maximum possible points for this criterion and rounded to two decimal places.</p> <p>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.</p>	
<p>Total Possible Points for Criteria 1-7 (Minimum Passing Score for Criteria 1 – 7 is 70% or <u>70.00 points</u>)</p>	<p>100</p>
<p>8. Benefits to Disadvantaged/Low-Income Communities and Localized Health Impacts</p>	
<p>8.1 Benefits to Disadvantaged/Low-Income Communities</p> <ul style="list-style-type: none"> a) Identifies and describes the energy and economic needs of the community based on project location, and what steps the applicant has taken to identify those needs. b) Identifies and describes how the project will increase access to clean energy or sustainability technologies for the local community. c) Identifies and describes how the proposed project will improve opportunities for economic impact including customer bill savings, job creation, collaborating and contracting with micro-, local, and small-businesses, economic development, and expanding community investment. d) Identifies how the projects’ primary beneficiaries are residents of the identified disadvantaged/low-income community(ies) and describes how they will directly benefit from the project outcomes. 	<p>15</p>
<p>8.2 Community Engagement Efforts</p> <ul style="list-style-type: none"> a) Identifies how community input was solicited and considered in the design of the project. b) Identifies and describes how the impacted community will be engaged in project implementation. c) Identifies and describes how the applicant will disseminate educational materials and career information to best support community understanding and engagement as applicable (e.g., culturally appropriate and translated materials, translation services, and considerate scheduling of stakeholder events as needed). d) Identifies how the project, if successful, will build community capacity. 	<p>10</p>

Scoring Criteria	Possible Points
<p>8.3 Localized Health Impacts</p> <ul style="list-style-type: none"> a) Summarizes the potential localized health benefits and impacts of the proposed project and provides reasonable analysis and assumptions to support the findings. b) Identifies how the proposed project will reduce or not otherwise impact the community's exposure to pollutants and the adverse environmental conditions caused by pollution and/or climate change. If projects have no impacts in this criterion, provide justification for why impacts are neutral. c) Identifies health-related Energy Equity indicators and/or health-related factors in CalEnviroscreen 4.0³¹ that most impact the community and describes how the project will reduce or not otherwise impact the indicators or factors. 	10
<p>8.4 Technology Replicability</p> <ul style="list-style-type: none"> a) Identifies how the project, if successful, will lead to increased deployment of the technology or strategy in other disadvantaged or low-income communities. 	5
<p>8.5 Project Support Letters</p> <ul style="list-style-type: none"> a) Includes letters of support from community based organizations, environmental justice organizations, municipal partners, technology partners 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 community. 	10
<p>Total Possible Points for Criterion 8 (Minimum Passing Score for Criterion 8 is 70% or 35.00 points)</p>	50
<p><u>Total Possible Points</u></p>	<u>150</u>
<p>Preference Points Applications must meet all minimum passing scores (Scoring Criteria 1-4, 1-7, and 8 for TD&D solicitations) to be eligible for preference points.</p>	

³¹ <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40>

Scoring Criteria	Possible Points												
<p>9. Match Funds</p> <p>a. Cash match share is preferred; however, in-kind match 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:</p> <p style="text-align: center;">Cash Match Scoring Table</p> <table border="1" data-bbox="513 585 976 953"> <thead> <tr> <th>Percentage of Proposed Cash Match Funds</th> <th>Score</th> </tr> </thead> <tbody> <tr> <td>80 to 100%</td> <td>5</td> </tr> <tr> <td>60 to <80%</td> <td>4</td> </tr> <tr> <td>40 to <60%</td> <td>3</td> </tr> <tr> <td>20 to <40%</td> <td>2</td> </tr> <tr> <td>10 to <20%</td> <td>1</td> </tr> </tbody> </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
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<p>b. Additional points will be awarded to applications that exceed the minimum match requirements based on the percentage above minimum match using the Exceeds Minimum Match Scoring table:</p> <p style="text-align: center;">Exceeds Minimum Match Scoring Table</p> <table border="1" data-bbox="506 1236 984 1604"> <thead> <tr> <th>Percentage above Minimum Match (cash and in-kind)</th> <th>Score</th> </tr> </thead> <tbody> <tr> <td>≥ 80%</td> <td>5</td> </tr> <tr> <td>60 to <80%</td> <td>4</td> </tr> <tr> <td>40 to <60%</td> <td>3</td> </tr> <tr> <td>20 to <40%</td> <td>2</td> </tr> <tr> <td>10 to <20 %</td> <td>1</td> </tr> </tbody> </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
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RESOLUTION NO. _____

A RESOLUTION OF THE COUNCIL OF THE CITY OF SAN JOSE AUTHORIZING THE CITY MANAGER, OR HER DESIGNEE, TO FILE AN APPLICATION TO THE CALIFORNIA ENERGY COMMISSION FOR ITS GRID-SUPPORTIVE TRANSPORTATION ELECTRIFICATION GRANT; AND IF AWARDED, NEGOTIATE AND EXECUTE A GRANT AGREEMENT AND RELATED DOCUMENTS FOR UP TO \$2,500,000 FROM THE CALIFORNIA ENERGY COMMISSION AND UP TO \$625,000 IN CITY MATCHING FUNDS FOR A TOTAL PILOT PROGRAM COST OF UP TO \$3,125,000, TO INSTALL 100 BI-DIRECTIONAL RESIDENTIAL ELECTRIC VEHICLE CHARGERS AND PILOT THEIR USE OVER A THREE YEAR PERIOD, COMMENCING UPON THE DATE OF THE CALIFORNIA ENERGY COMMISSION'S APPROVAL OF AWARD AND THE PARTIES' MUTUAL EXECUTION OF THE APPROVED AGREEMENT, WITH THE PILOT TO END BY NO LATER THAN DECEMBER 31, 2027

WHEREAS, in August 2022, the California Air Resources Board established the Advanced Clean Cars rule that will rapidly scale down the availability of new cars that run on gas, and by 2035 only zero-emission cars and light trucks will be for sale in California; and

WHEREAS, in 2023, 42.4% of new vehicle sales in Santa Clara County were electric, and as electric vehicle adoption grows, demand for electricity for charging also grows; and

WHEREAS, San José Clean Energy ("SJCE") is focused on programs to manage customers' electric vehicle charging load, including shifting charging to the middle of the day to reduce the strain on the grid, lower costs, and help ensure abundant clean solar resources are fully utilized and, as technology matures, discharging vehicle batteries onto buildings or the grid to provide resiliency and help meet demand when electricity supply is strained; and

WHEREAS, in January 2024, the California Energy Commission (“CEC”) issued the Grid-Supportive Transportation Electrification grant opportunity, as part of the Electric Program Investment Charge 2021-2025 (EPIC 4) Investment Plan which supports technology demonstration and deployment projects to increase the value proposition of distributed energy resources to customers and the grid; and

WHEREAS, this grant is an opportunity to test vehicle-to-home technology in real-world conditions to inform future deployment through a pilot program that would install bi-directional chargers for 100 homes in San José with an existing electric vehicle, allowing customers to power their home using energy from the battery in their electric vehicle; and

WHEREAS, the bi-directional chargers would allow customers to use their battery on a daily basis to reduce their cost of energy by charging the battery from the grid during low-cost hours and discharging into the home during high-cost hours, as well as by taking advantage of load reduction or load shifting incentives, and would allow the battery in the customer’s vehicle to serve as a backup power source in the event of a grid outage; additionally, the shifts in energy use from the pilot program can be leveraged to reduce SJCE’s energy procurement costs related to resource adequacy; and

WHEREAS, if awarded, the City of San José (“City”) will enter into a grant award agreement(s) with the CEC under the terms and conditions incorporated into the grant program solicitation, the City would commit to provide up to \$625,000 from the San José Clean Energy Fund in order to be eligible to receive up to \$2,500,000 from the CEC, and the pilot program would end no later than December 31, 2027; and

WHEREAS, if awarded, the City would also hold a competitive procurement to select and contract with an implementer to administer the pilot that would be responsible for

managing the relationship with the bi-directional charger company, the equipment installer, and the distributed energy resource management platform to control the charger, and would also be responsible for ensuring that all agencies are abiding by the CEC grant rules; and

WHEREAS, the City desires to authorize the City Manager, or her designee, to apply for the CEC's Grid-Supportive Transportation Electrification grant funding and, if awarded, to negotiate and execute grant documents required by the CEC, in order to create a pilot program to install bi-directional electric vehicle charging infrastructure for 100 residential customers, test vehicle to home discharge in response to grid conditions, and explore the opportunity to lower resource adequacy costs;

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF SAN JOSE THAT:

The City Manager, or her designee, is hereby authorized to file an application to the California Energy Commission for its Grid-Supportive Transportation Electrification grant; and if awarded, negotiate and execute a grant agreement and related documents for up to \$2,500,000 from the California Energy Commission and up to \$625,000 in City matching funds for a total pilot program cost of up to \$3,125,000, to install 100 bi-directional residential electric vehicle chargers and pilot their use over a three year period, commencing upon the date of the California Energy Commission's approval of award and the parties' mutual execution of the approved agreement, with the pilot to end by no later than December 31, 2027.

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ADOPTED this _____ day of _____, 2024, by the following vote:

AYES:

NOES:

ABSENT:

DISQUALIFIED:

MATT MAHAN
Mayor

ATTEST:

TONI J. TABER, CMC
City Clerk