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DO NOT DESIGN OR SUBMIT PROPOSALS ACCORDING TO THIS DRAFT
Comments are due Tuesday, July 13, 2021 at 5:00 p.m.

Reliable Rural Charging Solutions Draft Concept Document

Clean Transportation Program

Subject Area: Reliable Rural Charging Solutions

No proposals are being accepted at this time. This is a draft compilation of solicitation concepts. Do not design or submit proposals according to this DRAFT. The actual solicitation is subject to change.

Staff will take comments and questions submitted to the docket, by phone or by email prior to the workshop. Comments on this DRAFT will be discussed at a Pre-Solicitation Workshop on June 28, 2021. Comments are due by Tuesday, July 13, 2021 at 5:00 p.m. to the California Energy Commission (CEC) Dockets Unit. (See Section 13 of this document, and the Notice of Staff Workshop, for additional details on how to comment.)

http://www.energy.ca.gov/contracts/index.html
State of California
California Energy Commission
June 2021

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INTRODUCTION

This "draft solicitation concept" document details the concept under consideration for a competitive grant solicitation to be issued by the CEC's Clean Transportation Program. The Reliable Rural Charging Solutions solicitation will fund light-duty electric vehicle infrastructure projects that increase charging access for rural drivers in California. The purpose of this solicitation is to demonstrate replicable and scalable business and technology models that best support rural travel and expand the network of chargers.

The draft solicitation concept follows:

1. AVAILABLE FUNDING

$4.8 million is available to fund innovative zero-emission light-duty EV charging for rural drivers. The CEC reserves the right to increase or decrease the amount of funding available under this solicitation.

2. AWARD AMOUNTS AND PROJECT REGIONS

Applicants may request up to $1,600,000 per project region. A minimum of $500,000 per applicant is required for demonstration of large-scale EV infrastructure deployment. The CEC expects to award at least one project in each project region. Figure 1 and Table 1 show project regions under this solicitation. The CEC reserves the right to recommend a partial award based on available funding.

Figure 1: Map of Project Regions

Table 1: Project Regions

Project Region	Counties	Maximum Award Amount	Minimum Award Amount
Northern California	Del Norte, Siskiyou, Modoc, Humboldt, Trinity, Shasta, Lassen, Mendocino, Tehama, Plumas, Lake, Glenn, Colusa, Butte, Sierra, Nevada	Up to $1,600,000 per applicant	$500,000 per project
Central California	Yolo, Sutter, Yuba, Placer, El Dorado, Sacramento, San Joaquin, Amador, Alpine, Calaveras, Stanislaus, Tuolumne, Mono, Inyo, Merced, Mariposa, Madera, Fresno, Kings, Tulare	Up to $1,600,000 per applicant	$500,000 per project
Southern California	Santa Cruz, Monterey, San Benito, San Luis Obispo, Kern, Santa Barbara, Ventura, Riverside, San Bernardino, Imperial	Up to $1,600,000 per applicant	$500,000 per project

3. Number of Applications

Applicants may submit multiple applications. The minimum award amount applies to each project. The maximum award amount applies to each applicant, ***not*** each proposed project.

4. Eligible Applicants

This solicitation is open to all public and private entities for demonstration of technologies and business models that increase charging access for rural drivers.

Project teams ***must*** include one or more of the following entities:

- Community-based organization[1]
- California Native American Tribe
- City planning agency
- County planning agency
- Metropolitan planning organization or Regional transportation planning agency
- Joint power authorities

Team members may include, but are not limited to:

[1] A community-based organization (CBO) is an organization that (a) is place-based, with an explicit geographic focus area that includes the proposed Project Area, (b) Has staff members, volunteers, or Board members that reside in the community where the project is located, (c) has a demonstrated track record of at least one year providing services in the proposed Project Area (California Air Resources Board, September 2020, Clean Mobility Voucher Pilot Program).

- Electric vehicle service providers
- Automotive original equipment manufacturers
- Electric vehicle charging equipment manufacturers
- Community choice aggregators
- Consumer-owned utilities
- Non-profit organizations
- Environmental and environmental justice organizations
- Educational institutions

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 a CEC Business Meeting. If not currently registered with the California Secretary of State, applicants are encouraged to contact the Secretary of State's Office as soon as possible to avoid potential delays in beginning the proposed project(s) (should the application be successful). For more information, contact the Secretary of State's Office via its website at www.sos.ca.gov. Sole proprietors using a fictitious business name must be registered with the appropriate county and provide evidence of registration to CEC prior to their project being recommended for approval at a CEC Business Meeting.

5. ELIGIBLE PROJECTS

All projects must demonstrate technologies or business models that increase charging access for rural drivers. Projects should demonstrate the ability to achieve the following objectives:

- Support daily rural travel and charging behavior, particularly for rural drivers in low-income and disadvantaged communities, and
- Expand the network of chargers, and
- Increase EV adoption by rural drivers, and
- Prove deployment replicability for rural areas

All demonstrations must be installed for public or shared-private[2] use and must demonstrate how the technology and business model could be deployed at scale in the future and become commercially viable.

A minimum of 50% of funded EV chargers must be installed within disadvantaged communities and/or low-income communities.

[2] Shared-private chargers include workplace chargers shared among employees and visitors, multi-unit dwelling chargers shared among tenants and visitors, and fleet chargers shared among vehicles in a fleet.

Projects must accrue benefits to drivers residing in rural areas ***and*** may not be located within densely populated cities and counties. DC fast charging project sites are strongly encouraged to be at least 10 miles from an existing or planned DC fast charging site. Please refer to Plugshare (https://www.plugshare.com/) and the Department of Energy's Alternative Fuels Data Center (https://afdc.energy.gov/stations/#/find/nearest) for up to date existing and planned charger site information.

The United States Census Bureau delineates urban areas. Rural areas include all population, housing, and territory that is not included within an urban area.[3] The U.S. Census Bureau provides map shapefiles for rural census blocks. These are available at https://www.census.gov/cgi-bin/geo/shapefiles/index.php?year=2010&layergroup=Blocks.

Projects may be located outside of rural census blocks along travel corridors to support daily travel by rural drivers. However, projects may not be located within ineligible cities and counties. Table 2 lists ineligible project areas. Ineligible project areas include principal cities of metropolitan statistical areas and counties with a high degree of urban areas.

Table 2: List of *Ineligible* Project Areas

Principal City Name		
Anaheim	Madera	San Diego
Arcadia	Merced	San Francisco
Bakersfield	Milpitas	San Jose
Berkeley	Modesto	San Luis Obispo
Burbank	Mountain View	San Mateo
Camarillo	Napa	San Rafael
Carlsbad	Newport Beach	San Ramon
Carson	Oakland	Santa Ana
Chico	Ontario	Santa Barbara
Chino	Orange	Santa Clara
Chula Vista	Oxnard	Santa Cruz
Corcoran	Palm Desert	Santa Maria
Corona	Palo Alto	Santa Monica
Costa Mesa	Pasadena	Santa Rosa
Cupertino	Petaluma	South San Francisco
El Centro	Pleasanton	Stockton
El Paso de Robles	Poway	Sunnyvale
Folsom	Rancho Cordova	Temecula
Fountain Valley	Redding	Thousand Oaks

[3] U.S. Census Bureau. About Urban and Rural Areas. Available at https://www.census.gov/programs-surveys/geography/guidance/geo-areas/urban-rural.html.

Fresno	Redlands	Torrance
Gardena	Redwood City	Tustin
Glendale	Riverside	Vallejo
Hanford	Roseville	Visalia
Irvine	Sacramento	Walnut Creek
Livermore	Salinas	Watsonville
Long Beach	San Bernardino	West Sacramento
Los Angeles	San Buena	Yuba City
County Name		
Alameda County	Napa County	San Mateo County
Contra Costa County	Orange County	Santa Clara County
Los Angeles County	San Diego County	Solano County
Marin County	San Francisco County	Sonoma County

Source: United States Census Bureau March 2020 Principal cities of metropolitan and micropolitan statistical areas. Available at https://www.census.gov/geographies/reference-files/time-series/demo/metro-micro/delineation-files.html.

Projects must include deployment of chargers and may include deployment of renewable distributed energy resources (DER) or energy storage systems for supplying power to EVs or EV chargers.

The following requirements apply to all project sites:

- DC fast charging sites must have at least one backup Level 2 charger available to enable charging access for all plug-in electric vehicles on roads.
- Sites must be well-lit, highly visible, secure, and publicly available. Multi-unit dwellings and workplaces serving rural residents may have shared-private chargers where chargers would be available to all tenants, owners, employees, and guests (i.e., not assigned or dedicated to specific tenants or owners).

The following requirements apply to equipment:

- DC fast chargers must have a standard CCS connector. DC fast chargers may include CHAdeMO and Tesla connectors but at least one CCS connector must be available.
- Level 2 chargers must have a standard J1772 connector. Level 2 chargers may include Tesla connectors but at least one CCS connector must be available.
- Level 1 chargers must have a standard J1772 connector.

The following requirements apply for project implementation and operation:

- Applicants must install signage on site for easy identification of charging station locations. Signage must also be installed at the station to indicate that the parking spaces are for "EV charging use only."
- Applicants must provide customer service support via a toll-free telephone number at project sites during all hours of operation.
- Applicants must demonstrate their ability to have projects become operational no more than 2 years after agreement execution.
- Applicants must have a maintenance plan for projects.
- Applicants must maintain and operate all funded equipment for a minimum of 5 years.

AB 841 (Ting, 2020) added Public Utilities Code (PUC) section 740.20, which requires Electric Vehicle Infrastructure Training Program (EVITP) certification to install electric vehicle charging infrastructure and equipment for work performed on or after January 1, 2022, subject to certain exceptions. As a policy matter, the CEC is applying the EVITP certification requirements to project work resulting from this GFO, regardless of whether it might be performed prior to January 1, 2022, unless an exception applies.

Therefore, applying PUC 740.20 EVITP requirements to this GFO means that 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 in this paragraph do not apply to any of the following:

1. Electric vehicle charging infrastructure installed by employees of an electrical corporation or local publicly owned electric utility.
2. Electric vehicle charging infrastructure funded by moneys derived from credits generated from the Low Carbon Fuel Standard Program (Subarticle 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).
3. Single-family home residential electric vehicle chargers that can use an existing 208/240-volt outlet.

Each project that includes networked chargers must provide a minimum of 12 months of data collection on deployed infrastructure. Applicants shall describe in detail plans to ensure EVs will utilize their infrastructure and enable them to collect 12 months of data on charging events for deployed infrastructure, including but not limited to:

- Charge and session duration
- Energy delivered (kWh)

- Power delivered (kW)
- Cost of charging
- Payment method
- Type of vehicle that charged
- Number of unique vehicles and frequency of "repeat vehicles"
- Energy delivered back to grid or facility if a bidirectional charging use case (kWh)

In addition, the applicant should identify and develop a plan for providing other relevant data and information to the CEC throughout the duration of the funding agreement, including but not limited to:

- Lessons learned
- Best practices (e.g. permitting and installation processes)
- Potential job creation
- Economic development
- Increased state revenue

Examples of eligible project types include, but are not limited to:

- DC Fast Chargers widely distributed across a project region at gas stations, rest areas, travel centers, and/or truck stops along major rural corridors
- Level 2 Chargers at places where rural residents congregate, including at shopping plazas, "mom and pop" shops, healthcare facilities, educational institutions, and/or places of workshop
- Mobile chargers, including solar-powered chargers, at places that serve rural drivers
- Mixes of chargers at places that serve rural drivers, including at shared mobility hubs, including at existing neighborhood electric vanpooling, ridesharing, and car-sharing locations
- Chargers with DER or energy storage systems for supplying power to EVs or EV chargers.[4]

6. Match Funding Requirements

Applications must include at least 25 percent of total project costs as match share. Of this match share, at least 50 percent should be cash match.

Total project cost is defined as the CEC reimbursable amount plus match share amount. Cash match is defined as the net of any funds actually expended by the Applicant for the

[4] A DER system provides power to EVSE independent of the electric system to support rapid installation of charging in remote locations without reliable or available electrical capacity. This may include fuel cell systems operating with low-carbon renewable fuels. With these DERs, electrical grid interconnection of the charging system is optional.

project after any sort of discount or rebate is applied. Expenditures for Applicant's compensated labor hours, including allowable fringe benefit and overhead rates, travel, materials, supplies, equipment, subcontractor costs, and other miscellaneous expenditures may be claimed as cash match if the expenditures are included in the approved agreement budget, paid in full with funding sources other than grant funds, and supported with appropriate documentation, including proof of payment. For indirect overhead, backup documentation, such as a cost allocation plan based on actual expenditures incurred and paid, is required. Cost allocations must be reasonable and allocable to the proposed project.

7. Eligible Project Costs

Costs incurred for the following are eligible for CEC's reimbursement or as the applicant's match share. Distribution grid or other equipment costs that are otherwise covered by programs or tariff rules of the electric utilities are excluded.

Examples of eligible costs include but are not limited to:

- EVSE
- Transformer
- Electric panels
- Conduit
- Wiring
- Meters
- Energy storage equipment to serve electric vehicle charging
- Photovoltaic solar panels separately metered for electric vehicle charging
- Installation costs
- Planning and engineering design costs
- Stub-outs
- Demand management equipment

The following are ***not*** eligible for CEC's reimbursement or as the applicant's match share:

- Vehicle Purchases
- Processes to comply with otherwise applicable legal requirements (e.g., permits from the local authority having jurisdiction (AHJ) and compliance with the Americans with Disabilities Act (ADA))
- Utility service upgrade costs covered by the utility

8. How Award Is Determined

Applicants passing administrative and technical screening will compete based on evaluation criteria and will be scored and ranked based on those criteria. Unless the CEC exercises any of its other rights regarding this solicitation (e.g., to cancel the solicitation

or reduce funding), applications obtaining at least the minimum passing score will be recommended for funding in ranked order until all funds available under this solicitation are exhausted.

If the funds available under this solicitation are insufficient to fully fund a grant proposal, the CEC reserves the right to recommend partially funding that proposal. In this event, the applicant / proposed awardee and Commission Agreement Manager (CAM) shall meet and attempt to reach an agreement on a reduced scope of work commensurate with the level of available funding.

9. Application Administrative Screening Criteria

Applications will be screened according to the following administrative criteria. Applications not meeting the following requirements will be disqualified and not eligible for funding:

- The application is received by the CEC's Contracts, Grants, and Loans Office by the due date and time specified.
- The applicant provides the required authorizations and certifications.
- The applicant has not included a statement that is contrary to the required authorizations and certifications.

10. Application Technical Screening

Applications will be screened according to the following technical criteria. Applications not meeting the following requirements will be disqualified and not eligible for funding:

- The applicant is eligible to apply.
- The project is an eligible project.
- The project meets the minimum match share requirement.

11. Application Evaluation Process

Applications will be screened according to the administrative and technical screening criteria. Applications that pass screening will be scored in accordance with the Application Evaluation Criteria.

The application evaluation process is as follows:

- Applications will be ranked according to final overall score.
- Final overall score for each application will be the average of the combined scores of all Evaluation Committee members.
- A minimum of 70% is required to be eligible for funding.

- If the score for two or more applications are tied, the application with a higher score in the Environmental and Economic Benefits to Rural, Low-Income, and Disadvantaged Communities criterion will be ranked higher. If still tied, the application with a higher score in the Project Readiness and Implementation criterion will be ranked higher. If still tied, an objective tie-breaker will be utilized.

- The CEC will recommend awards to the highest ranked projects until available funding for this solicitation has been exhausted. The CEC intends to award approximately 3 to 5 applicants.

12. Evaluation Criteria

Note: The following Evaluation Criteria are deliberative and subject to change. Do not design or submit proposals according to this draft evaluation criteria.

Application Evaluation Criteria

Scoring Criteria	Points
(1) Project Readiness and Implementation	25
(2) Project Innovation and Sustainability	20
(3) Environmental and Economic Benefits to Rural, Disadvantaged, and Low-Income Communities	35
(4) Team Qualifications	10
(5) Project Budget	10
TOTAL POSSIBLE POINTS:	**100**
Minimum Passing Score (70%)	**70**

(1) Project Readiness and Implementation: Applications will be evaluated based on the degree to which:

- The proposed project serves rural electric vehicle drivers.
- The Scope of Work is complete and demonstrates a clear path to successful implementation of the proposed project.
- Project goals and objectives are clearly defined, have milestones and completion dates, and can be quantified.
- The proposed project has an aggressive but achievable schedule for completing all tasks.
- The proposed project supports the local region's plans for electric vehicle readiness, if applicable.
- The proposed project will work with and engage a diverse range of stakeholders including, but not limited to, community-based organizations, nonprofits,

environmental and environmental justice organizations, educational institutions, local electric utilities, and air districts to ensure that the project accrues benefits to identified communities and progresses in a smooth and timely manner

- Support or commitment letters (from site hosts, project partners, match funding, or others) indicate strong levels of support or commitment for the proposed project.
- Preliminary site analysis is complete and preliminary site design is complete.
- The proposed project is prepared to address risks, barriers, and limitations that are critical for project success (e.g., loss of demonstration site).
- The proposed approach to collect, track and report on data is comprehensive, timely and transparent.

(2) Innovation and Sustainability: Applications will be evaluated based on the degree to which:

- The proposed project accelerates successful commercial deployment of innovative technologies and/or business models that serve rural drivers.
- The proposed project demonstrates a model that is replicable and may be further expanded.
- The proposed project provides advantages over conventional charging solutions for an identified rural community and built environment and use case.
- The proposed project produces high-quality data and analyzes it to evaluate the project and identify opportunities for improvement and expansion of the model.
- The proposed project will address limited distribution capacity and/or mitigate negative grid impacts.
- The proposed project will control and minimize operations and maintenance costs.
- The proposed project will minimize vandalism and theft.
- The proposed project leverages private investments and reduce public investments.

(3) Environmental and Economic Benefits to Rural, Disadvantaged, and Low-Income Communities: Applications will be evaluated based on the degree to which:

- The proposed project accrues benefits to rural residents across a project region.
- The proposed project implements innovative approaches to address, identify, and maximize benefits for rural residents within low-income, disadvantaged, and/or California Native American Tribes.
- The proposed project increases economic job creation targeting rural residents in low-income, disadvantaged, and/or tribal communities.
- The proposed project will accelerate the adoption of EVs by rural drivers needed to achieve the State's transportation goals.
- The proposed project improves resiliency of the State's grid and response to extreme weather events and other emergencies.
- The proposed project results in a low cost of charging and the assumptions utilized are documented and reasonable.

- The proposed project results in high benefit-cost score defined as the ratio of grams of CO2 equivalent reduction per dollar of CEC investment.

(4) Team Qualifications: Applications will be evaluated based on the degree to which:

- The qualifications, experience, capabilities, and credentials of the key team members are suitable to the tasks described in the proposed Scope of Work and will lead to the successful completion of the project.
- The proposed project incorporates collaborations with local and regional planning agencies, community-based organizations, California Native American Tribes, utilities, industries, site hosts, or others that will lead to the successful completion of the project.
- The applicant and team have demonstrated exceptional administrative and technical performance under existing or prior funding agreements (CEC and/or other public agencies).

(5) Project Budget: Applications will be evaluated based on the degree to which:

- The proposed project budget is justifiable and reasonable relative to the project goals, objectives, and tasks defined in the scope of work.
- The proposed project minimizes administrative and overhead costs for reimbursement.
- The proposed match funding commitments, if required, are documented, verifiable, and necessary to support the successful completion of the project.

13. Written and Oral Comments

Comments on this "draft solicitation concept" document are due by Tuesday, July 13, 2021 at 5:00 p.m.

Please submit comments to the CEC using the e-commenting feature by accessing the comment page for this docket at https://efiling.energy.ca.gov/Ecomment/Ecomment.aspx?docketnumber=20-TRAN-04. A full name, e-mail address, comment title, and either a comment or an attached document (.doc, .docx, or .pdf format) is mandatory. Please include "Reliable Rural Charging Solutions" in the comment title. After a challenge-response test is used by the system to ensure that responses are generated by a human user and not a computer, click on the "Agree & Submit Your Comment" button to submit the comment to the CEC's Docket Unit.

Please note that written comments, attachments, and associated contact information included within the documents and attachments (e.g., your address, phone, email, etc.) become part of the viewable public record. This information may become available via Google, Yahoo and any other search engines.

Interested stakeholders are encouraged to use the electronic filing system described above to submit comments. If you are unable to submit electronically, you may email your comments to: DOCKET@energy.ca.gov and include "Reliable Rural Charging Solutions" in the subject line.