STATE OF CALIFORNIA

GRANT REQUEST FORM (GRF)

CEC-270 (Revised 12/2019) CALIFORNIA ENERGY COMMISSION

A) New Agreement # ARV-22-002 (to be completed by CGL office)

B) Division	Agreement Manager:	MS-	Phone
600 Fuels and Transportation Division	Kyle Corrigan	6	916-776-7195

C) Recipient's Legal Name	Federal ID #
Ecology Action of Santa Cruz	94-2584236

D) Title of Project
Multifamily EV Accelerator Initiative

E) Term and Amount

Start Date	End Date	Amount
09 / 14 / 2022	08 / 30 / 2025	$ 2,999,801

F) Business Meeting Information

☐ ARFVTP agreements $75K and under delegated to Executive Director

Proposed Business Meeting Date 09 / 14 / 2022 ☐ Consent ☒ Discussion

Business Meeting Presenter Kyle Corrigan Time Needed: 5 minutes

Please select one list serve. Altfuels (AB118- ARFVTP)

Agenda Item Subject and Description:
Ecology Action of Santa Cruz. Proposed resolution approving Agreement ARV22-002 with Ecology Action of Santa Cruz for a $2,999,801 grant, and adopting staff's determination that this action is exempt from CEQA. This project will install 375 EV charging ports at an estimated 76 sites, serving 3,800 residential dwellings to demonstrate the viability and scalability of a low-cost, low-power direct installation model for the equitable deployment of EV supply equipment in Northern California's multi-family residential properties. (Clean Transportation Program Funding) Contact: Kyle Corrigan (Staff Presentation: 5 minutes)

G) California Environmental Quality Act (CEQA) Compliance

1. Is Agreement considered a "Project" under CEQA?

   ☒ Yes (skip to question 2) ☐ No (complete the following (PRC 21065 and 14 CCR 15378)):

   Explain why Agreement is not considered a "Project":

   Agreement will not cause direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment because .

2. If Agreement is considered a "Project" under CEQA:

   a) ☐ Agreement **IS** exempt.

   ☐ Statutory Exemption. List PRC and/or CCR section number:

☒ Categorical Exemption. List CCR section number: Cal. Code Regs., Title 14, Sec. 15301 provides that projects which consist of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, and which involve negligible or no expansion of existing or former use, are categorically exempt from the provisions of the California Environmental Quality Act. This project involves installation of at least 375 charging ports at approximately 76 multifamily housing properties in Northern California,

including an average of 5 charging ports per site (approximately 251 level 1 smart outlets and 124 level 2 charging stations). Specifically, the charging equipment to be installed is approximately the size of a payphone. The electric vehicle charging stations will be installed on existing pavement and connected to existing electrical infrastructure in locations where customers already park their cars to access commercial and retail businesses. The project involves negligible or no expansion of existing or former use of the existing retail sites. Therefore, the project falls within section 15301 and will not have a significant effect on the environment.

Cal. Code Regs., Title 14, Sec. 15303 provides that projects which consist of construction and location of limited numbers of new, small facilities or structures; installation of small new equipment and facilities in small structures; and the conversion of existing small structures from one use to another where only minor modifications are made in the exterior of the structure, are categorically exempt from the provisions of CEQA. This project consists of installation of new small equipment to existing sites. Specifically, the charging equipment to be installed is approximately the size of a pay phone. All the equipment will be installed in existing pavement. Therefore, the project falls within section 15303 and will not have a significant effect on the environment.

Cal. Code Regs., Title 14, Sec. 15304 provides that projects which consist of minor public or private alterations in the condition of land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees except for forestry and agricultural purposes are categorically exempt from the provisions of CEQA. In this project, minor trenching and directional boring may be necessary to lay conduit from the existing or new electrical infrastructure (transformer, switchgear, etc.) to the charging equipment. The trenching/boring will take place on currently paved ground, will not involve the removal of any trees, and surface will be restored. Therefore, the project falls within section 15304 and will not have a significant effect on the environment.

This project does not involve impacts on any particularly sensitive environment; any cumulative impacts of successive projects of the same type in the same place that might be considered significant; does not involve unusual circumstances that might have a significant effect on the environment; will not result in damage to scenic resources within a highway officially designated as a state scenic highway; the project site is not included on any list compiled pursuant to Government Code section 65962.5, and the project will not cause a substantial adverse change in the significance of a historical resource. Therefore, none of the exceptions to categorical exemptions listed in CEQA Guidelines section 15300.2 apply to this project and this project will not have a significant effect on the environment.

☐ Common Sense Exemption. 14 CCR 15061 (b) (3) Explain reason why Agreement is exempt under the above section:

b) ☐ Agreement **IS NOT** exempt. (consult with the legal office to determine next steps)

Check all that apply

☐ Initial Study
☐ Negative Declaration
☐ Mitigated Negative Declaration
☐ Environmental Impact Report

☐ Statement of Overriding Considerations

H) List all subcontractors (major and minor) and equipment vendors: (attach additional sheets as necessary)

Legal Company Name:	**Budget**
GRID Alternatives North Valley, Inc.	$ 48,750.00
Self-Help Enterprises	$ 48,750.00
GRID Alternatives Bay Area, Inc.	$ 48,750.00
GRID Alternatives (Vendor)	$ 259,375.00
Bottom Line Utility Solutions, Inc (Vendor)	$ 259,375.00
Low Power EV Charging, Inc. (Vendor)	$ 86,458.00
TBD (Vendor)	$ 86,458.00
TBD (Vendor)	$ 80,458.00
ChargerHelp Inc. (Vendor)	$ 46,200.00

I) List all key partners: (attach additional sheets as necessary)

Legal Company Name:
Central Coast Community Energy
Silicon Valley Clean Energy
Marin Clean Energy
Peninsula Clean Energy
San Joaquin Valley Air Pillution Control District
Monterey Bay Air Pollution Control District
Sacramento Metropolitan Air District
Sacramento Municipal Utility District

J) Budget Information

Funding Source	**Funding Year of Appropriation**	**Budget List Number**	**Amount**
ARFVTP	FY 20/21	601.118M	$2,999,801
Funding Source			$
Funding Source			$
Funding Source			$
Funding Source			$

R&D Program Area: Select Program Area TOTAL: $2,999,801

Explanation for “Other” selection

Reimbursement Contract #: Federal Agreement #:

K) Recipient’s Contact Information

1. **Recipient’s Administrator/Officer**

Name: Sherry Bryan

Address: 877 Cedar Suite 240

City, State, Zip: Santa Cruz, CA, 95060

Phone: (831) 515-1314

E-Mail: sherry.bryan@ecoact.org

City, State, Zip: Santa Cruz, CA 95060

2. Recipient's Project Manager

Name: Mahlon Aldridge

Address: 877 Cedar Suite 240

Phone: (831) 515-1316

E-Mail: Mahlon.aldridge@ecoact.org

L) Selection Process Used

☒ Competitive Solicitation Solicitation #: GFO-21-603

☐ First Come First Served Solicitation Solicitation #: - -

M) The following items should be attached to this GRF

1.	Exhibit A, Scope of Work		☒ Attached
2.	Exhibit B, Budget Detail		☒ Attached
3.	CEC 105, Questionnaire for Identifying Conflicts		☒ Attached
4.	Recipient Resolution	☒ N/A	☐ Attached
5.	CEQA Documentation	☐ N/A	☒ Attached

Agreement Manager **Date**

Office Manager **Date**

Deputy Director **Date**

Exhibit A
SCOPE OF WORK

TECHNICAL TASK LIST

Task #	CPR	Task Name
1		Administration
2		Technical Assessment of Multifamily Properties
3	X	Construct EV Charging Stations
4		Quality Control and Operation
5		Operations and Maintenance
6		Resident Engagement
7		Data Collection and Analysis
8		Project Fact Sheet

KEY NAME LIST

Task #	Key Personnel	Key Subcontractor(s)	Key Partner(s)
1	Sherry Lee Bryan Kirsten Liske Mahlon Aldridge Kathleen Steffanic		
2	Sherry Lee Bryan Frank Deniz Richard Ma		(Multifamily (MFH) Property Operators Central Coast Community Energy Silicon Valley Clean Energy Marin Clean Energy Peninsula Clean Energy San Joaquin Valley Air Pollution Control District (Valley Air) Monterey Bay Air Pollution Control District Sacramento Metropolitan Air District Sacramento Municipal Utility District

3	Gary Eberhart Sherry Bryan Frank Deniz		MFH Property Operators
4	Sherry Bryan		MFH Property Operators
5	Sherry Bryan Sabrina Delk Sarah Seward Heather Henricks	Self-Help Enterprises; GRID Alternatives Bay Area; GRID Alternatives North Valley	MFH Property Operators
6	Sherry Bryan John Webb		
7	Sherry Bryan Mahlon Aldridge		

GLOSSARY

Specific terms and acronyms used throughout this scope of work are defined as follows:

Term/ Acronym	**Definition**
Affordable housing	Multifamily apartment communities with a rent or mortgage payment that is no more than 30% of the monthly household income for a “low-income” household as per CALIFORNIA HCD state income limits.
Assigned EV charging	An electrified parking space that is not available to the general public. An EVSE and associated parking space is reserved for the exclusive use of an individual driver or vehicle or for a group of drivers or vehicles, such as employees, tenants, or residents of a common interest development.
CAM	Commission Agreement Manager
CAO	Commission Agreement Officer
CARB	California Air Resources Board
CEC	California Energy Commission
CTP	Clean Transportation Program
CPR	Critical Project Review
FTD	Fuels and Transportation Division
DI	Direct Installation
EV	Electric Vehicle
EVSE	Electric Vehicle Supply Equipment
EVSP	Electric Vehicle Service Provider

kW	Kilowatt
L1	Level 1 EV Charging: electric vehicle charging at 110/120 volts and between 12–16 amps of power (1.92 kW maximum).
L2	Level 2 EV Charging: electric vehicle charging at 208/240 volts and between 16–40 amps of power (3.84–9.6 kW).
Make-ready costs	Material and labor costs associated with installing the electrical infrastructure necessary to supply power to EV charging stations.
MFH	Multifamily housing
Multifamily property operator	The organizational entity (or entities) who are responsible for management of a multifamily property and/or authorized by the owner to enter into legal contracts for site improvements.
Recipient	Ecology Action of Santa Cruz
Smart Outlet	A 120 v or 240 v networked NEMA receptacle that allows access control, energy consumption monitoring, and energy usage monetization. Smart outlets conform to UL 508 (industrial control equipment).
V2X	Vehicle-to-grid technology: enables energy to be delivered back to the power grid from the battery of an electric car.
ZEV	Zero Emission Vehicle which includes both Battery Electric Vehicles (BEVs) and Plug-in Hybrid Electric Vehicles (PHEVs)

Background

Assembly Bill (AB) 118 (Núñez, Chapter 750, Statutes of 2007), created the Clean Transportation Program. The statute authorizes the California Energy Commission (CEC) to develop and deploy alternative and renewable fuels and advanced transportation technologies to help attain the state's climate change, clean air, and alternative energy policies. AB 8 (Perea, Chapter 401, Statutes of 2013) re-authorizes the Clean Transportation Program through January 1, 2024. The Clean Transportation Program has an annual budget of approximately $100 million and provides financial support for projects that:

- Reduce California's use and dependence on petroleum transportation fuels and increase the use of alternative and renewable fuels and advanced vehicle technologies.
- Produce sustainable alternative and renewable low-carbon fuels in California.
- Expand alternative fueling infrastructure and fueling stations.
- Improve the efficiency, performance and market viability of alternative light-, medium-, and heavy-duty vehicle technologies.
- Retrofit medium- and heavy-duty on-road and non-road vehicle fleets to alternative technologies or fuel use.
- Expand the alternative fueling infrastructure available to existing fleets, public transit, and transportation corridors.
- Establish workforce training programs and conduct public outreach on the benefits of alternative transportation fuels and vehicle technologies.

On November 24, 2021, the CEC released a Grant Funding Opportunity (GFO) entitled "Reliable, Equitable, and Accessible Charging for multi-family Housing (REACH)." This competitive grant solicitation was to demonstrate replicable and scalable business and

technology models for large-scale deployment of electric vehicle (EV) charging infrastructure capable of maximizing access and EV travel for MFH residents. In response to GFO-21-603, the Recipient submitted application #01 which was proposed for funding in the CEC's Notice of Proposed Awards on May 11, 2022. GFO-21-603 and Recipient's application are hereby incorporated by reference into this Agreement in their entirety.

In the event of any conflict or inconsistency between the terms of the Solicitation and the terms of the Recipient's Application, the Solicitation shall control. In the event of any conflict or inconsistency between the Recipient's Application and the terms of CEC's Award, CEC's Award shall control. Similarly, in the event of any conflict or inconsistency between the terms of this Agreement and the Recipient's Application, the terms of this Agreement shall control.

Problem Statement:
Unlike energy or water retrofits, multifamily EV charging installations have little or no return on investment and therefore do not attract the time, money, and attention of the multifamily property owner. This lack of return on investment has resulted in negligible multifamily EV charging deployment and is a reason why private-sector electric vehicle supply equipment (EVSE) companies have avoided the multifamily market. Consequently, the lack of convenient on-site charging options for renters has resulted in low EV adoption rates in apartment communities.

Goals of the Agreement:
The goal of this Agreement is to accelerate EV ownership among low- and moderate-income apartment renters by installing EV charging stations in multifamily apartment resident parking areas and providing residents with EV purchase guidance and charging access support. The outcomes of this demonstration will be made publicly available for the benefit of all market participants.

Objectives of the Agreement:
The objectives of this Agreement are to:

- Install at least 375 EV charging ports at multifamily apartment communities, creating on-site EV charging opportunities for residents of approximately 3,800 dwelling units. Approximately 50% of properties will be selected from the Central Valley, 25% from the Central Coast, and 25% from the San Francisco Bay Area.
- Install approximately 75% of EV charging projects at affordable housing communities, exceeding the 50% grant minimum.
- Educate residents of the affordable housing communities where EV charging stations are installed about the benefits of EV ownership and how to access charging by canvassing approximately 2,850 dwelling units, coordinating in-person EV car show and charging demonstrations, and offering "affordable EV" webinars.

TASK 1 ADMINISTRATION

Task 1.1 Attend Kick-off Meeting

The goal of this task is to establish the lines of communication and procedures for implementing this Agreement. The Commission Agreement Manager (CAM) shall designate the date and location of this meeting and provide an agenda to the Recipient prior to the meeting.

The Recipient shall:

- Attend a "Kick-Off" meeting with the CAM, the Commission Agreement Officer (CAO), and a representative of the CEC Accounting Office. The Recipient shall bring their Project Manager, Agreement Administrator, Accounting Officer, and any others determined necessary by the Recipient or specifically requested by the CAM to this meeting.
- Provide a written statement of project activities that have occurred after the notice of proposed awards but prior to the execution of the agreement using match funds. If none, provide a statement that no work has been completed using match funds prior to the execution of the agreement. All pre-execution match expenditures must conform to the requirements in the Terms and Conditions of this Agreement.
- Discuss the following administrative and technical aspects of this Agreement:
    - Agreement Terms and Conditions
    - Critical Project Review (Task 1.2)
    - Match fund documentation (Task 1.7) No reimbursable work may be done until this documentation is in place.
    - Permit documentation (Task 1.8)
    - Subawards needed to carry out project (Task 1.9)
    - The CAM's expectations for accomplishing tasks described in the Scope of Work
    - An updated Schedule of Products and Due Dates
    - Monthly Calls (Task 1.4)
    - Quarterly Progress Reports (Task 1.5)
    - Technical Products (Product Guidelines located in Section 5 of the Terms and Conditions)
    - Final Report (Task 1.6)

Recipient Products:

- Updated Schedule of Products
- Updated List of Match Funds
- Updated List of Permits
- Written Statement of Match Share Activities

Commission Agreement Manager Product:

- Kick-Off Meeting Agenda

Task 1.2 Critical Project Review (CPR) Meetings

CPRs provide the opportunity for frank discussions between the CEC and the Recipient. The goal of this task is to determine if the project should continue to receive CEC funding to complete this Agreement and to identify any needed modifications to the tasks, products, schedule or budget.

The CAM may schedule CPR meetings as necessary, and meeting costs will be borne by the Recipient.

Meeting participants include the CAM and the Recipient and may include the CAO, the Fuels and Transportation Division (FTD) program lead, other CEC staff and Management as well as other individuals selected by the CAM to provide support to the CEC.

The CAM shall:

- Determine the location, date, and time of each CPR meeting with the Recipient. These meetings generally take place at the CEC, but they may take place at another location or remotely.
- Send the Recipient the agenda and a list of expected participants in advance of each CPR. If applicable, the agenda shall include a discussion on both match funding and permits.
- Conduct and make a record of each CPR meeting. Prepare a schedule for providing the written determination described below.
- Determine whether to continue the project, and if continuing, whether or not modifications are needed to the tasks, schedule, products, and/or budget for the remainder of the Agreement. Modifications to the Agreement may require a formal amendment (please see section 8 of the Terms and Conditions). If the CAM concludes that satisfactory progress is not being made, this conclusion will be referred to the Lead Commissioner for Transportation for his or her concurrence.
- Provide the Recipient with a written determination in accordance with the schedule. The written response may include a requirement for the Recipient to revise one or more product(s) that were included in the CPR.

The Recipient shall:

- Prepare a CPR Report for each CPR that discusses the progress of the Agreement toward achieving its goals and objectives. This report shall include recommendations and conclusions regarding continued work of the projects. This report shall be submitted along with any other products identified in this scope of work. The Recipient shall submit these documents to the CAM and any other designated reviewers at least 15 working days in advance of each CPR meeting.
- Present the required information at each CPR meeting and participate in a discussion about the Agreement.

CAM Products:

- CPR Meeting Agenda
- Schedule for written determination
- Written determination

Recipient Product:

- CPR Report(s)

Task 1.3 Final Meeting

The goal of this task is to closeout this Agreement.

The Recipient shall:

- Meet with CEC staff to present the findings, conclusions, and recommendations. The final meeting must be completed during the closeout of this Agreement.

- This meeting will be attended by, at a minimum, the Recipient and the CAM. The technical and administrative aspects of Agreement closeout will be discussed at the meeting, which may be two separate meetings at the discretion of the CAM.
- The technical portion of the meeting shall present an assessment of the degree to which project and task goals and objectives were achieved, findings, conclusions, recommended next steps (if any) for the Agreement, and recommendations for improvements. The CAM will determine the appropriate meeting participants.
- The administrative portion of the meeting shall be a discussion with the CAM about the following Agreement closeout items:
    - What to do with any equipment purchased with CEC funds (Options)
    - CEC request for specific "generated" data (not already provided in Agreement products)
    - Need to document Recipient's disclosure of "subject inventions" developed under the Agreement
    - "Surviving" Agreement provisions
    - Final invoicing and release of retention
- Prepare a schedule for completing the closeout activities for this Agreement.

Products:

- Written documentation of meeting agreements
- Schedule for completing closeout activities

Task 1.4 Monthly Calls

The goal of this task is to have calls at least monthly between CAM and Recipient to verify that satisfactory and continued progress is made towards achieving the objectives of this Agreement on time and within budget.

The objectives of this task are to verbally summarize activities performed during the reporting period, to identify activities planned for the next reporting period, to identify issues that may affect performance and expenditures, to verify match funds are being proportionally spent concurrently or in advance of CEC funds or are being spent in accordance with an approved Match Funding Spending Plan, to form the basis for determining whether invoices are consistent with work performed, and to answer any other questions from the CAM. Monthly calls might not be held on those months when a quarterly progress report is submitted, or the CAM determines that a monthly call is unnecessary.

The CAM shall:

- Schedule monthly calls.
- Provide questions to the Recipient prior to the monthly call.
- Provide call summary notes to Recipient of items discussed during call.

The Recipient shall:

- Review the questions provided by CAM prior to the monthly call
- Provide verbal answers to the CAM during the call.

Product:

- Email to CAM concurring with call summary notes.

Task 1.5 Quarterly Progress Reports

The goal of this task is to periodically verify that satisfactory and continued progress is made towards achieving the objectives of this Agreement on time and within budget.

The objectives of this task are to summarize activities performed during the reporting period, to identify activities planned for the next reporting period, to identify issues that may affect performance and expenditures, and to form the basis for determining whether invoices are consistent with work performed.

The Recipient shall:

- Prepare a Quarterly Progress Report which summarizes all Agreement activities conducted by the Recipient for the reporting period, including an assessment of the ability to complete the Agreement within the current budget and any anticipated cost overruns. Progress reports are due to the CAM the 10th day of each January, April, July, and October. The Quarterly Progress Report template can be found on the ECAMS Resources webpage available at https://www.energy.ca.gov/media/4691.

Product:

- Quarterly Progress Reports

Task 1.6 Final Report

The goal of the Final Report is to assess the project's success in achieving the Agreement's goals and objectives, advancing science and technology, and providing energy-related and other benefits to California.

The objectives of the Final Report are to clearly and completely describe the project's purpose, approach, activities performed, results, and advancements in science and technology; to present a public assessment of the success of the project as measured by the degree to which goals and objectives were achieved; to make insightful observations based on results obtained; to draw conclusions; and to make recommendations for further projects and improvements to the FTD project management processes.

The Final Report shall be a public document. If the Recipient has obtained confidential status from the CEC and will be preparing a confidential version of the Final Report as well, the Recipient shall perform the following activities for both the public and confidential versions of the Final Report.

In addition to any other applicable requirements, the Final Report must comply with the Americans with Disabilities Act (ADA) of 1990 (42 U.S.C. 12101 et seq.), which prohibits discrimination on the basis of disability; all applicable regulations and guidelines issued pursuant to the ADA; Cal. Gov. Code sects. 7405 and 11135; and Web Content Accessibility Guidelines 2.0, or a subsequent version, as published by the Web Accessibility Initiative of the World Wide Web Consortium at a minimum Level AA success criteria.

The Recipient shall:

- Prepare an Outline of the Final Report, if requested by the CAM.

- Prepare a Final Report complying with ADA requirements and following the latest version of the Final Report guidelines which will be provided by the CAM. The CAM shall provide written comments on the Draft Final Report within fifteen (15) working days of receipt. The Final Report must be completed at least 60 days before the end of the Agreement Term.
- Submit one bound copy of the Final Report with the final invoice.

Products:

- Outline of the Final Report, if requested
- Draft Final Report
- Final Report

Task 1.7 Identify and Obtain Matching Funds

The goal of this task is to ensure that the match funds planned for this Agreement are obtained for and applied to this Agreement during the term of this Agreement.

The costs to obtain and document match fund commitments are not reimbursable through this Agreement. Although the CEC budget for this task will be zero dollars, the Recipient may utilize match funds for this task. Match funds must be identified in writing and the associated commitments obtained before the Recipient can incur any costs for which the Recipient will request reimbursement.

The Recipient shall:

- Prepare a letter documenting the match funding committed to this Agreement and submit it to the CAM at least 2 working days prior to the kick-off meeting. If no match funds were part of the proposal that led to the CEC awarding this Agreement and none have been identified at the time this Agreement starts, then state such in the letter. If match funds were a part of the proposal that led to the CEC awarding this Agreement, then provide in the letter a list of the match funds that identifies the:
    - Amount of each cash match fund, its source, including a contact name, address and telephone number and the task(s) to which the match funds will be applied.
    - Amount of each in-kind contribution, a description, documented market or book value, and its source, including a contact name, address and telephone number and the task(s) to which the match funds will be applied. If the in-kind contribution is equipment or other tangible or real property, the Recipient shall identify its owner and provide a contact name, address and telephone number, and the address where the property is located.
- Provide a copy of the letter of commitment from an authorized representative of each source of cash match funding or in-kind contributions that these funds or contributions have been secured. For match funds provided by a grant a copy of the executed grant shall be submitted in place of a letter of commitment.
- Discuss match funds and the implications to the Agreement if they are reduced or not obtained as committed, at the kick-off meeting. If applicable, match funds will be included as a line item in the progress reports and will be a topic at CPR meetings.
- Provide the appropriate information to the CAM if during the course of the Agreement additional match funds are received.

- Notify the CAM within 10 days if during the course of the Agreement existing match funds are reduced. Reduction in match funds must be approved through a formal amendment to the Agreement and may trigger an additional CPR meeting.

Products:

- A letter regarding match funds or stating that no match funds are provided
- Copy(ies) of each match fund commitment letter(s) (if applicable)
- Letter(s) for new match funds (if applicable)
- Letter that match funds were reduced (if applicable)

Task 1.8 Identify and Obtain Required Permits

The goal of this task is to obtain all permits required for work completed under this Agreement in advance of the date they are needed to keep the Agreement schedule on track.

Permit costs and the expenses associated with obtaining permits are not reimbursable under this Agreement. Although the CEC budget for this task will be zero dollars, the Recipient may budget match funds for any expected expenditures associated with obtaining permits. Permits must be identified in writing and obtained before the Recipient can make any expenditure for which a permit is required.

The Recipient shall:

- Prepare a letter documenting the permits required to conduct this Agreement and submit it to the CAM at least 2 working days prior to the kick-off meeting. If there are no permits required at the start of this Agreement, then state such in the letter. If it is known at the beginning of the Agreement that permits will be required during the course of the Agreement, provide in the letter:
    - A list of the permits that identifies the:
        - Type of permit
        - Name, address and telephone number of the permitting jurisdictions or lead agencies
    - The schedule the Recipient will follow in applying for and obtaining these permits.
- Discuss the list of permits and the schedule for obtaining them at the kick-off meeting and develop a timetable for submitting the updated list, schedule and the copies of the permits. The implications to the Agreement if the permits are not obtained in a timely fashion or are denied will also be discussed. If applicable, permits will be included as a line item in the Progress Reports and will be a topic at CPR meetings.
- If during the course of the Agreement additional permits become necessary, provide the appropriate information on each permit and an updated schedule to the CAM.
- As permits are obtained, send a copy of each approved permit to the CAM.
- If during the course of the Agreement permits are not obtained on time or are denied, notify the CAM within 5 working days. Either of these events may trigger an additional CPR.

Products:

- Letter documenting the permits or stating that no permits are required

- A copy of each approved permit (if applicable)
- Updated list of permits as they change during the term of the Agreement (if applicable)
- Updated schedule for acquiring permits as changes occur during the term of the Agreement (if applicable)
- A copy of each final approved permit (if applicable)

Task 1.9 Obtain and Execute Subawards

The goal of this task is to ensure quality products and to procure subrecipients required to carry out the tasks under this Agreement consistent with the Agreement Terms and Conditions and the Recipient's own procurement policies and procedures.

The Recipient shall:

- Manage and coordinate subrecipient activities.
- If requested by the CAM, submit a draft of each subaward required to conduct the work under this Agreement to the CAM for review.
- If requested by the CAM, submit a final copy of the executed subaward.
- If Recipient intends to add new subrecipients or change subrecipients, then the Recipient shall notify the CAM.

Products:

- Letter describing the subawards needed, or stating that no subawards are required
- Draft subcontracts (if requested)
- Final subcontracts (if requested)
-

TECHNICAL TASKS

TASK 2 TECHNICAL ASSESSMENT OF MULTIFAMILY PROPERTIES

The goal of this task is to evaluate approximately 150 multifamily properties for technical eligibility and cost-effective installation, conduct a technical assessment of prequalified sites and secure agreements with sites.

The Recipient shall:

- Conduct technical assessment services based on a multifamily property's location in an AB 1550 low-income community or census tract that scored within the top 25% of CalEnviroScreen 4.0.
- Select properties to receive technical site assessment services based on the following attributes, all of which affect a contractor's ability to install EVSE within the program's budget range.

    - Prior implementation of energy efficiency upgrades in common areas.
    - Physical characteristics of the parking area(s) including lighting, drainage, and safety hazards.
    - Trenching distance for conduit runs from common area panel(s) to parking area(s).
    - The condition of the property's existing electrical infrastructure.
- Conduct phone and online surveys of multifamily property operators to collect data that will be used to inform technical site assessments. The survey will capture:
    - The number of units
    - Number of existing residents who are EV owners
    - Previous inquiries from current and prospective residents about EV charging availability
    - Age of property
    - Availability of engineered line drawings and load calculations
    - Date and type of past or planned energy efficiency projects completed in common areas.
- Conduct virtual and in-person site assessments to identify barriers and opportunities for installation. For each property, prequalification activities will identify the following:
    - Parking spaces within a reasonable distance from a common area panel or sub-panel(s) where dedicated circuits for EVSE could be installed.
    - Location, maximum bussing rating, and main circuit feeder ratings of common-area panel or sub-panel(s).
    - Loads on existing circuit breakers and number of circuit breaker spaces available.
    - PG&E utility meter(s) associated with house panels evaluated to supply power for EV charging.
- Maintain and update a database of properties selected for prequalification, ranking properties in the following order:
    - #1 – Site is likely to have the capacity to install 5 or more EVSE with no barriers (recent energy efficiency project, electrical upgrades, newer construction). Move on to the next step, electrical load assessment.
    - #2 – Site is likely to have the capacity to install 2–4 EVSE with no barriers. Move on to the next step, electrical load assessment.
    - #3 – Site is likely to have the capacity to install 1–2 EVSE units or site has significant barriers that may increase installation costs. Hold until more cost information can be gathered.
    - Disqualified – Site does not meet electrical code requirements or has significant barriers that may increase installation costs.
- Determine the available power for EV charging from common area electrical panels at multifamily properties that have been prequalified and have capacity available to power level 1 or level 2 EV charging stations by one of three methods:
    - Using original engineers' load calculations, approved by the authority with jurisdiction when available.
    - Using National Electrical Code values for existing loads.
    - Conducting a 7-day load study of one or more representative house/common area panels.
- Conduct meetings with property operators and facility managers to present technical findings and discuss Ecology Action's recommendations for site-specific EV charging solutions that meet facility managers' operational needs.
- Coordinate with Direct installation program contractors to obtain construction estimates for each MFH project site.
- Design the scope of work for each MFH project site

- Customize project agreement proposals for each MFH site. Each project agreement will include:
  - A map of EV charging port location(s).
  - Project scope of work, including make-ready tasks, quantity and type of EVSE to be installed, and specifications for additional LED lighting (if necessary).
  - Contractor construction estimate for the scope of work.
  - Total construction match cost, if any, paid by the property owner.
- Present property operators with project agreement proposals and secure signatures from property owners.
- Develop a *Site Assessment Report* that includes but is not limited to, for each site:
  - A copy of the phone and online surveys
  - A table of property locations with status of prequalification.
  - A table listing property locations and status of electrical panel assessments
  - A table listing property locations and status of project agreement signatures

Products:

- Site Assessment Report
- Copies of signed project agreements for each MFH project site

TASK 3 CONSTRUCT EV CHARGING STATIONS

The goal of this task is to install at least 375 charging ports at approximately 76 MFH properties in Northern California, including an average of 5 charging ports per site (approximately 251 level 1 smart outlets and 124 level 2 charging stations).

The Recipient shall:

- Install at least 375 EV chargers with a target of five (5) EV chargers on average per site at approximately 76 MFH properties.
- Ensure signage is posted (where required) and site lights illuminating EV charging areas are functional.
- Submit an AB 841 certification that verifies the project has complied with all AB 841 (2020) requirements specified in the Agreement terms and conditions or describes why the AB 841 requirements do not apply to the project. The certification shall be signed by the Recipient's authorized representative.
- Submit EVITP certification numbers of each Electric Vehicle Infrastructure Training Program-certified electrician who installed electric vehicle charging infrastructure or equipment. EVITP certification numbers are not required to be submitted if AB 841 requirements do not apply to the project.
- Develop a *Construction Report* that includes but is not limited to:
  - Proof of operational charging equipment including but not limited to:
    - Photographs of installed signage
    - Photographs of completed EV charging station installations.
    - Proof of charger availability for any public chargers via the Alternative Fuels Data Center Station Locator tool
  - Table with project site name and location, permit sign-off date, and AB 841 certification and EVITP certification numbers of certified electricians for each project.

Products:

- Construction Report
- AB 841 Certification and EVITP Certification Numbers

[CPR WILL BE HELD IN THIS TASK. See Task 1.2 for details]

TASK 4 QUALITY CONTROL AND OPERATION

TASK 4.1 Operational Performance Verification

The goal of this task is to ensure that EV charging ports will function optimally and that facility managers will be knowledgeable about how to locate equipment components, activate charging, and perform basic equipment troubleshooting tasks.

The Recipient shall:

- Include a *Project Close-Out Report*, for each property, that documents:
  - Testing of the functionality of each level 1 or level 2 EV charging unit by initiating a charge with an EV.
  - A spreadsheet of the serial number, parking space number or location, and utility meter number associated with each EV charging unit.
  - Circuits dedicated to EV charging units and cellular modems are labeled and facility managers understand the location of circuits that power charging and cellular modems.
  - EVSE warranty information provided to property operators.
  - Completion of contractor/vendor scope of work

Products:

- Project Close-Out Reports signed by site host representatives

TASK 4.2 Set-up Electric Vehicle Service Provider (EVSP) Software User Accounts

The goal of this task is to ensure that administrative accounts and systems are in place for community managers to make EV charging stations available to apartment community residents and staff.

The Recipient shall:

- Analyze utility rates for common meters associated with EV charging to set a rate per kWh, by the hour or a monthly parking rent fee. If the property owner elects to charge additional rent for access to an assigned EV charging space, the cost added to the unit's preexisting rent shall not exceed 10% of the cost to provide EVSE for a typical daily commute in the region where the EVSE is installed.
- Coordinate meetings with housing organization project teams to set up administration accounts with EVSPs to enable third-party billing.
- Develop an EVSP software service agreement for each property.
- Create step-by step instructions for each project site that explain how residents will submit a request to management to be assigned to an EV charging station(s), instructions for creating a user account with the EVSP, the price set for EV charging, and the community's rules concerning the use of parking spaces dedicated to EV charging.

Products:

- Copies of EVSP software service agreements for each property
- Copies of resident EV charging sign-up instructions for each property

TASK 5 OPERATIONS AND MAINTENANCE

The goal of this task is to ensure that the chargers installed in the project are operational at least 97 percent of a charging site's standard hours of operation for five years after commissioning.

Task 5.1 Operations

The Recipient shall:

- Operate the installed charging stations during the term of this agreement.
- Ensure that the chargers installed in the project are operational at least 97 percent of a charging site's standard hours of operation for five years after commissioning. Without limitation to other rights and remedies which the CEC may have, including but not limited to survival provisions specified in the Terms and Conditions of this agreement, this requirement to ensure operationality for five years after commissioning shall survive the completion or termination date of this agreement. In addition to other requirements in the Terms and Conditions of this agreement, all CEC-reimbursable expenditures must be incurred within the agreement term.

Task 5.2 Maintenance

The Recipient shall:

- Perform regular preventive maintenance, including visual inspection, performance testing, functional validation, and reporting.
- Monitor network performance.
- Dispatch maintenance technicians in a timely manner and address malfunctions and repairs within 48 hours of initial notice.
- Provide charging station users with 24/7 call center service that will assist users with any technical issues encountered at the stations.
- Utilize warranties for installed equipment when applicable
- Prepare a *Stations Operations Report* for each project site sent quarterly to the CAM after station commissioning through the term of this agreement. The report will include a summary of uptime measures, calculation of uptime, warranty information and number of dispatch events needed during the quarter.

Product:

- Stations Operations Reports delivered with the Quarterly Progress Reports described in Task 1.5

Task 5.3 Recordkeeping and Reporting

The Recipient shall:

- Keep and maintain a Records of The Standard Hours of Operation for each charging site, including any changes over the operational period.
- Keep and maintain detailed Records of Maintenance and Repairs for each charging site. Records shall include:
  - Whether the maintenance was scheduled preventive maintenance or response to an identified issue
  - Date and time the need for corrective maintenance was reported, if applicable
  - Date and time maintenance began
  - Date and time maintenance was completed
  - Narrative describing nature of maintenance required
  - Any component failures / replacements
- Keep and maintain a Records of the Operative Status of Each Connector from the time the equipment is commissioned until the end of the operational period defined by this agreement.

    - The record shall include any time the Recipient knows or is notified that a connector is incapable of delivering a charge, for example by observation, by receipt of a service call, by notice of power outage or telecommunications outage, or other means.
    - For any networked chargers, Recipient shall record the time and the operative status of each connector every 15 minutes.
        - For example, a central system using OCPP 1.6 could send TriggerMessage.req, 'requestedMessage' = 'StatusNotification' and record both the TriggerMessage.conf and StatusNotification.req sent by the charge point in response.
    - Excluded downtime shall be recorded, including any supporting documentation from an independent party, e.g., notice from an electric utility of a power outage or police report of vandalism. The record shall include an explanation of the cause of the downtime, why it should be considered excluded downtime, and the efforts made to minimize the downtime.
- Make these records available, in a standard electronic format of the CEC's choosing, to the CEC within 10 business days of a written request by the CEC.
- Without limitation to other rights and remedies which the CEC may have, including but not limited to survival provisions specified in the Terms and Conditions of this agreement, the requirements for recordkeeping and reporting under this Task shall remain in effect for five years after commissioning and shall survive the completion or termination date of this agreement. In addition to other requirements in the Terms and Conditions of this agreement, all CEC-reimbursable expenditures must be incurred within the agreement term.
- The requirements for recordkeeping and reporting under this Task are in addition to requirements specified in this Agreement's Terms and Conditions, section 18.b, Retention of Records, and any other applicable Terms and Conditions.

Products:

- Records of standard hours of operation
- Records of the operative status of each connector
- Records of maintenance and repairs

Task 5.4 Definitions

a) **Central System**: The central system that communicates with one or more chargers, for example, to authorize users, monitor charger status, and/or collect, transmit, record, and manage other information.
b) **Connector**: A connector is what is plugged into a vehicle to charge it.
c) **Charging Site**: A physical location with one or more chargers.
d) **Charger**: A device that safely supplies electrical power to an electric vehicle through connectors. Where a device has multiple connectors or can serve multiple parking spaces, the number of chargers is equal to the number of vehicles that can be simultaneously charged.
e) **Downtime**: Any period of time within the standard hours of operation in which a charger is not operational.
   For networked chargers, a period in which the charge point's response to the central system's request for notification of operative status indicates that the connector or charge point is in an inoperative state is downtime.

- For example, in OCPP 1.6 intervals when **StatusNotification.req** protocol data unit **Status Field** = 'Unavailable' or 'Faulted' OR **errorCode Field** = 'ConnectorLockFailure', 'GroundFailure', 'HighTemperature', 'InternalError', 'OverCurrentFailure', 'OverVoltage', 'PowerMeterFailure', 'PowerSwitchFailure', 'ReaderFailure', 'ResetFailure', or 'UnderVoltage' are "downtime."

f) **Excluded downtime**: A period of downtime, within the standard hours of operation, caused by any of the following:
   - **Electric Grid Power Loss:** Power supplied by the electric utility for a site is not supplied at levels required to for minimum function of chargers / station. This may include, but is not limited to, service outages due to utility equipment malfunction or public safety power shut-offs.
   - **Accident, Vandalism or Theft:** Physical damage to the charger for events such as vehicle collision with a charger, theft of charging cables, damage to connectors from mishandling, and damage to screens. Excluded downtime is limited to a maximum of 5 days for each event.
   - **Telecommunication Network Outages:** Loss of communication between a charger and a central system due to cellular or internet service provider system outages that are beyond the control of the Recipient.
   - **Planned Outage for Maintenance or Upgrade:** Any planned maintenance indicated in the funding Recipient's Operations and Maintenance Plan, submitted with application for funding, or an updated Plan approved by the CAM in advance of the planned outage.
   - **Extraordinary Events:** Unforeseeable events that would have been impossible to plan for using commercially reasonable methods.

g) **Operational**: A charging port is considered operational when its hardware and software are both online and available for use, or in use, and the charging port successfully dispenses electricity as expected.

h) **Uptime**: Uptime is calculated as:

$$\text{Uptime} = \frac{\text{Total Standard Hours of Operation} - \text{Downtime} + \text{Excluded Downtime}}{\text{Total Standard Hours of Operation}} * 100\%$$

TASK 6 RESIDENT ENGAGEMENT

The goal of this task is to develop outreach materials and conduct resident engagement activities to inform and educate MFH households about opportunities to access on-site EV charging as well as grants and rebates to lower the cost of EV ownership.

TASK 6.1 Develop Outreach and Educational Materials

The goal of this task is to develop and disseminate EV educational materials for resident outreach.

The Recipient shall:

- Develop templates for printed flyers that recognize CEC as the program funder and inform multifamily community residents of EV charging station availability, financial incentives for EV ownership, and EV educational events.
- Produce and conduct online and print resident surveys on EV ownership and interest. Residents may either request a printed survey at the community manager's office or complete a survey online by scanning a QR code or going directly to the survey URL link. The survey will allow the project team to collect the following data:

    - Contact information for existing and potential PEV owners who would like access to charging stations installed, and to notify residents of future EV educational events described in task 6.2
    - Resident prior experience with EVs
    - Availability of charging at residents' place of work
    - Make and model of battery electric or plug-in hybrid vehicles currently owned by apartment residents
    - Average daily commute of residents
    - Household size and income (necessary to determine qualification for grants and incentives)
- Create an "affordable EV" PowerPoint presentation" that provides an overview of EV models, EV charging, EV incentives for each project region (Bay Area, Central Coast, and Central Valley), and demonstrates how residents can apply for down-payment assistance grants through the Access Clean California Benefits Finder.
- Contact residents expressing interest in EV ownership and direct them to apply for CARB-funded down-payment grants and other regional incentives through the Access Clean California Benefits Finder.
- Canvas at least 2,850 locations including but not limited to: residential dwelling units, laundry rooms, community gathering rooms, mailbox areas, and management offices to:
    - Inform residents that EV charging will be available to them
    - Inform residents of operational charging when available
    - Inform residents of EV educational events
- Develop an *Outreach and Education Report* that includes but is not limited to:
    - Final copies of resident outreach flyers
    - Resident survey template
    - Copy of PowerPoint slides
    - Aggregated resident survey results
    - Resident outreach table to include:
        - MFH canvassing locations, number of dwelling units canvassed, and date(s) of canvassing events
        - The number of resident surveys received
        - The number of residents at each project site who were provided EV purchase guidance assistance through the Access Clean CALIFORNIA Benefits Finder

Products:

- Outreach and Education Report

Products:

TASK 6.2 EV Educational Events

The goal of this task is to coordinate and staff EV educational events. Events will inform residents about how to sign up for and access the EV charging units installed in their community and expose residents to the benefits and features of PEVs through webinars and/or in-person EV car show events in apartment community parking lots.

The Recipient shall:

- Conduct online affordable EV webinars at least once every six months with breakout groups for each region, Central Valley, Monterey Bay, and Bay Area. The EV webinars will be open to residents and staff of all project sites and will explain the benefits of PEV ownership, provide relevant consumer information on PEVs including available vehicles and total cost of ownership, and introduce the Access Clean California benefits finder.

Webinars will be recorded, and links will be provided via a QR code on flyers posted near EV charging ports.

- Prepare *Agendas and Recordings of Webinars*.
- Conduct at least one EV car show for residents that will:
  - Display at least one EV or PHEV
  - Demonstrate how to initiate an EV charging session
  - Demonstrate how to create an account with the EVSE third-party provider
  - Demonstrate how to navigate the Access Clean California Benefits Finder
  - Show tools for finding the locations of other public EV charging stations.
- Respond to residents who could not participate in webinars or in-person events to inform them of how to create an account with an EVSP to access EV charging ports.
- Generate a *Table with a List of Event Dates, Locations, and Number of Event Participants.*

Products:

- Agendas and Recordings of Webinars
- Table with a List of Event Dates, Locations, and Number of Event Participants.

TASK 7 DATA COLLECTION AND ANALYSIS

The goal of this task is to collect operational data from the project, to analyze that data for economic and environmental impacts, and to include the data and analysis in the Final Report.

The Recipient shall:

- Develop data collection plan for deployed charging equipment.
- Troubleshoot any issues identified.
- Collect and provide the following data:
  - Number, type, date, and location of chargers installed.
  - Nameplate capacity of the installed equipment, in kW for chargers.
  - Number and type of outlets per charger.
  - Location type, such as street, parking lot, hotel, restaurant, or multi-unit housing.
  - Total cost per charger, the subsidy from the CEC per charger, federal subsidy per charger, utility subsidy per charger, and privately funded share per charger.
  - EV adoption of residents in the MFH served by the project (before project begins until end of project).
  - Success rate of property recruitment.
  - Number of MFH units served by project.
    - Number of MFH units in disadvantaged or low-income communities.
    - Number of affordable housing units.
- Collect and provide 12 months of throughput, usage, and operations data from the project including, but not limited to:
  - Number of charging sessions
  - Number of charging sessions by residents of the MFH units served by this project
  - Average charger downtime

- Peak power delivered (kW)
- Duration of active charging, hourly
- Duration of charging session, hourly (e.g., vehicle parked but not actively charging)
- Average session duration
- Energy delivered (kWh)
- Average kWh dispensed
- Types of vehicles using the charging equipment
- Applicable price for charging, including but not limited to: electric utility tariff, EVSP service contract, or public charger price.
- Payment method for public charging
- Energy delivered back to grid or facility if a bidirectional charging use case (kWh)
- Normal operating hours, uptime, downtime, and explanations of variations
- Gallons of gasoline and/or diesel fuel displaced (with associated mileage information)
- Expected air emissions reduction, for example:
  - Non-methane hydrocarbons
  - Oxides of nitrogen
  - Particulate Matter
  - Formaldehyde

- Identify any current and planned use of renewable energy.
- Describe any energy efficiency measures used that may exceed Title 24 standards in Part 6 of the California Code of Regulations.
- Provide data on potential job creation, economic development, and increased state revenue as a result of the project and any expected future expansion.
- Provide a quantified estimate of the project's carbon intensity values for life-cycle greenhouse gas emissions.
- Compare any project performance and expectations provided in the proposal to CEC with actual project performance and accomplishments.
- Submit the data described above electronically in a quarterly progress report throughout the duration of the agreement.
- Collect data, information, and analysis described above and include in the Final Report.

Products:

- Data on charger installations and charging events will be submitted electronically in Quarterly Progress Reports.
- Data collection information and analysis will be included in the Final Report.

TASK 8 PROJECT FACT SHEET

The goal of this task is to develop an initial and final project fact sheet that describes the CEC-funded project and the benefits resulting from the project for the public and key decision makers.

The Recipient shall:

- Prepare an Initial Project Fact Sheet at start of the project that describes the project and the expected benefits. Use the format provided by the CAM.
- Prepare a Final Project Fact Sheet at the project's conclusion that describes the project, the actual benefits resulting from the project, and lessons learned from implementing the project. Use the format provided by the CAM.
- Provide at least (6) six High Quality Digital Photographs (minimum resolution of 1300x500 pixels in landscape ratio) of pre and post technology installation at the project sites or related project photographs.

Products:

- Initial Project Fact Sheet
- Final Project Fact Sheet
- High Quality Digital Photographs

RESOLUTION NO: 22-0914-08a

STATE OF CALIFORNIA

STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION

RESOLUTION: Ecology Action of Santa Cruz

RESOLVED, that the State Energy Resources Conservation and Development Commission (CEC) adopts the staff CEQA findings contained in the Agreement or Amendment Request Form (as applicable); and

RESOLVED, that the CEC approves Agreement ARV-22-002 with Ecology Action of Santa Cruz for a $2,999,801 grant. This project will install 375 EV charging ports at an estimated 76 sites, serving 3,800 residential dwellings to demonstrate the viability and scalability of a low-cost, low-power direct installation model for the equitable deployment of EV supply equipment in Northern California's multi-family residential properties; and

FURTHER BE IT RESOLVED, that the Executive Director or their designee shall execute the same on behalf of the CEC.

CERTIFICATION

The undersigned Secretariat to the CEC does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the CEC held on September 14, 2022.

AYE:
NAY:
ABSENT:
ABSTAIN:

Dated:

_____
Liza Lopez
Secretariat