San Francisco
Water Power Sewer
Services of the San Francisco Public Utilities Commission

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EV CHARGE SF

New Construction Program Handbook

For CleanPowerSF and Hetch Hetchy Power Customers

Program rules and incentives for projects permitted January 2018 to December 2022

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1. EXECUTIVE SUMMARY

1.1. Introduction

EV Charge SF is an electric vehicle (EV) Infrastructure Program (Program) designed and operated by the San Francisco Public Utilities Commission (SFPUC). Through EV Charge SF's incentives for new construction projects, the SFPUC is encouraging the deployment of EV Supply Equipment (EVSE) and EV charging infrastructure for Newly Constructed Buildings and Major Alterations that exceed minimum EV requirements contained in the San Francisco EV Readiness Code.

Program eligibility is limited to CleanPowerSF and Hetch Hetchy Power customers. The Program is currently available to commercial and residential New Construction Projects that trigger the San Francisco EV Readiness Code and are served under a Qualifying Electric Rate. Newly Constructed Buildings that complied with the Code also are eligible for Program incentives.

The Program offers assistance and incentives to customers on a first come first served basis:

- Financial incentives for installing EVSE
- Financial incentives for adding EV charging infrastructure
- EV Action Plan template
- Optional technical assistance for most projects

1.2. Benefits of Participation

Building owners and tenants are eligible for financial incentives up to a maximum of $100,000 per site address ($120,000 for affordable housing projects) for EVSE and EV Infrastructure that exceed the requirements of the San Francisco EV Readiness Code.

Participation in the Program can bring additional benefits including greater convenience for occupants, increased property value, tenant attraction and retention, and avoided retrofit costs if wishing to install EVSE in the future. [3]

[1] *All capitalized terms are defined in Section 3, Definitions.*

[2] *A project being served under temporary "construction power" may enroll in the Program by committing to becoming a CleanPowerSF or Hetch Hetchy Power account in the EV Charge SF Enrollment Agreement.*

[3] *The SFPUC makes no warranty or guaranty, express or implied, that any of the listed benefits, results, or cost savings to be derived from participation in the EV New Construction Program will occur.*

2. PROGRAM OVERVIEW

2.1. About SFPUC Power Services

For over 100 years, Hetch Hetchy Power has generated 100% greenhouse gas-free electricity for San Francisco. As the City's municipally-owned electric utility operated by the SFPUC, Hetch Hetchy Power provides power to municipal services such as MUNI and San Francisco General Hospital, redeveloped neighborhoods like The Shipyard, and some large developments such as the Salesforce Transit Center. Hetch Hetchy Power is proud to provide nearly 20% of the City's electricity with 100% greenhouse gas-free electricity. To inquire about service, please contact hhpower@sfwater.org.

CleanPowerSF is San Francisco's community choice energy program for electric customers that obtain service from Pacific Gas & Electric Company (PG&E). Operated by the SFPUC, CleanPowerSF is a local solution to the climate crisis and provides renewable, affordable, and accessible energy to more than 380,000 customers. CleanPowerSF empowers residents and businesses to choose a more sustainable future, today.

2.2. San Francisco EV Readiness Code Applies for 2018-to-2022 Building Permits

Transportation is the leading cause of greenhouse-gas (GHG) emissions in San Francisco. To help fight global warming, San Francisco is working to reduce reliance on cars and to electrify those that stay on the roads. Reducing transportation emissions requires the development of EV Infrastructure and EVSE that are readily available, particularly in large commercial, residential, and municipal buildings.

Since January 2018, San Francisco's EV Readiness Code has required New Construction Projects consisting of residential, commercial, and municipal buildings, and Major Alterations to such buildings, to have:

- Sufficient electrical service capacity to simultaneously charge EVs at Level 2 charging in 20% of vehicle stalls, distributed as described below.
- Full circuits ready for easy installation of Level 2 EV charging stations (i.e., 40-amp circuits) installed at 10% of vehicle stalls. (Actual charging station installation not required.)
- Electrical panelboards with empty 240V breaker spaces, and installed raceways (e.g., conduits) for 10% of vehicle stalls (these vehicle stalls are in addition to the stalls with fully wired branch circuits noted above), and electrical capacity at the panel sufficient to provide 40 amps at that number of vehicle stalls.
- Planned space for electrical panelboards and conduit pathways for future branch circuits, including sleeves or raceways through floors and walls.

Beginning January 1, 2023, the 2022 California Green Building Standards Code, Title 24, Part 11 will supersede San Francisco's EV Readiness Code in most cases. EV Charge SF will continue to incentivize projects that exceed minimum code requirements for EV charging infrastructure and EVSE. EV Charge SF will calculate program incentives based on the "code baseline" of whichever EV-readiness code (i.e., pre- or post-1/1/23) applies to that project.

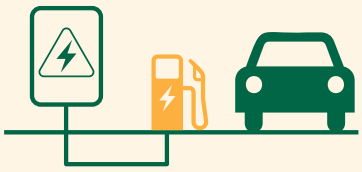
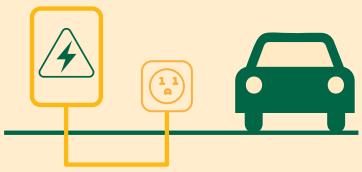
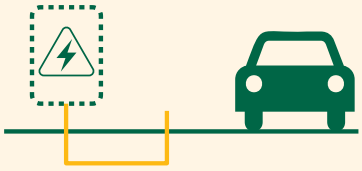
For projects with building permits beginning January 1, 2023, see the EV Charge SF website for updated program rules and incentive levels.

2.3. Program Goal

The Program's goal is to support early and strategic EV charging investments in new buildings by exceeding the minimum requirements of the San Francisco EV Readiness Code. While the San Francisco EV Readiness Code requires New Construction Projects to be "ready" for EV charging, it does not require installation of any Electric Vehicle Service Equipment. To leverage these buildings' EV-readiness, the Program aims to support at least some level of EV charging capability when these buildings first open. In addition, the program's EV Infrastructure Incentives seek to help builders to "futureproof" their new buildings. In the coming years, building users are expected to demand expanded EV charging; installing electrical conduits and related improvements during initial construction will avoid unnecessary construction costs and complexities in the future. In addition, the Program aims to help building owners and users understand that building code-required electrical capacity can be stretched to provide EV charging to many users. Program participants can see how to leverage that capacity through information resources provided in the EV Charge SF Workbook and related resources, available on the EV Charge SF webpage.

2.4. Program at a Glance

The graphic below illustrates EV Charge SF Program incentives for exceeding minimum San Francisco EV Readiness Code requirements. For further detail, see Sections 5 and 6 of this Program Handbook.

SF EV READY ORDINANCE	EXCEED CODE OPTION & EV CHARGE SF INCENTIVE[1]		
Code Requires		**Commercial & Residential**	**Affordable Housing**
EV Ready Vehicle Stalls Fully wired circuits for 10% of Total Vehicle Stalls	 Level 2 Electric Vehicle Supply Equipment (EVSE) fully installed	**Install Level 2 EV Chargers (EVSE)** **$2,000** per EVSE + $500 per additional Port *(for first 10% of stalls)* **$3,000** per EVSE + $500 per additional Port *(for each additional stall beyond the first 10%)*	**$2,400** per EVSE + $600 per additional Port *(for first 10% of stalls)* **$3,600** per EVSE + $600 per additional Port *(for each additional stall beyond the first 10%)*
Electrical Service & Conduit Electrical capacity and empty conduit for Level 2 charging at 10% of vehicle stalls[2]	 Upgradable Level 1 Outlet(s)	**Add Upgradable Level 1 Outlets** **$1,000** per vehicle stall *(for each additional stall beyond the first 10%)*	**$1,200** per vehicle stall *(for each additional stall beyond the first 10%)*
Conduit Pathway Space for future electric panel; sleeves through walls for future branch circuit raceways	 Conduit for future branch circuit(s)	**Add Empty Conduit for Future Branch Circuits** **$250** per vehicle stall *(above minimum)*	**$300** per vehicle stall *(above minimum)*

[1] Only one SFPUC Incentive per vehicle stall. Total incentives per building/project must not exceed $100,000, or $120,000 for Affordable Housing.

[2] Electrical capacity sufficient for simultaneous L2 EVSE charging at 20% of vehicle stalls.

2.5. Program Process for New Construction and Newly Constructed Buildings

Owners and design teams for New Construction Projects, as well as managers and individual Owners in Newly Constructed Buildings, are encouraged to contact a program representative to learn more about the program and to confirm that your account meets the program's eligibility requirements. Program applicants in Newly Constructed Buildings must follow the same steps that Owners and design teams follow for New Construction Projects, except as noted below.

Forms and instructions for EV Charge SF's new construction program are available on the SFPUC's website at www.sfpuc.org/evchargesf or by contacting an SFPUC program representative at (415) 554-0773 or PowerPrograms@sfwater.org.

Step 1: Enrollment Agreement

1. The Owner submits a completed Enrollment Agreement Form indicating interest in the program.

Step 2: Initial Meeting

1. The Owner and key design team members meet with SFPUC program staff to discuss the project scope, the current phase of design, the project's initial approach to EV charging, and detailed program offerings that may be useful to the project.

Step 3: EV Action Plan, Design Assistance, and Incentive Agreement

1. Each project will be required to complete an Incentive Agreement to secure incentives from the program.
2. For the Incentive Agreement, an EV Action Plan is required if applying for an incentive:
   - for an EVSE for more than 10% of vehicle stalls, or
   - for a Level 1 EV Charging Outlet for more than 50% of vehicle stalls, or
   - for Level 2 EV Ready Infrastructure.
3. The Owner's project team develops the EV Action Plan with the help of the EV Action Plan Template and Workbook. The EV Action Plan must describe the building's near-term and future plans to install and operate EV charging. (Note: All program participants are strongly encouraged to complete an EV Action Plan, even if not required for their application.)
4. The Owner's project team may request no-cost design assistance from the program for advice about EV charging options and about EV Action Plan inputs. In addition to assisting in Action Plan inputs, a program representative will review the proposed project and collaborate with the project team to recommend EV-charging design elements for the new construction project. The Owner is not required to accept or implement any recommendations resulting from the design review.

Step 4: Incentive Reservation

1. Upon SFPUC approval of the Owner's Application and Incentive Agreement, SFPUC will specify the Incentive Reservation Amount on a Reservation Notice provided to the Owner.
2. The Incentive Reservation Amount is valid for 24 months from the Reservation Letter date. Projects still under construction after 24 months can be extended two times for a maximum of twelve months each.

Step 5: Project Completion and Incentive Payments

1. Within 90 days from completion of Project construction, the Owner must notify the program that the EV charging improvements have been completed and submit the required Project completion documentation.
2. An SFPUC representative will verify the installation of the Project by review of Project documentation and an on-site verification. If the Project is constructed as set forth in the Incentive Reservation Agreement, and the Project otherwise meets all program requirements, the EV Charge SF incentive will be issued. Payments are made by check mailed to the address indicated on submitted IRS W-9 forms.

SFPUC encourages projects installing Electric Vehicle Service Equipment to take advantage of EV charging electric rates to maximize the financial and environmental benefits of your site's electric vehicles. See the SFPUC Rates Book for more information.

2.6. Affordable Property Reservation

The EV Charge SF program will earmark 30 percent of incentive funding in each new Program year for new affordable housing projects. Remaining earmarked funding shall be re-assessed at the end of each program year; unreserved funds may be re-allocated to serve market rate new construction properties in the new program year.

3. DEFINITIONS

Affordable Housing
Residential buildings that entirely consist of units below market rate and whose rents or sales prices are governed by local agencies to be affordable based on area median income.

Automated Load Management System (ALMS)
A system designed to manage load across one or more EVSE to share electrical capacity and/or automatically manage power at each connection point. [5]

Electric Vehicle (EV)
A broad category of vehicles that includes vehicles that are fully powered by an electric motor or electricity.

EV Charging Port/EV Additional Charging Port
An electrical service that includes dedicated electrical capacity and equipment required to charge an electric vehicle via a SAE J1772 connector. An Additional Charging Port allows a Level 2 EVSE to charge an additional electric vehicle via a SAE J1772 connector while sharing that first EVSE's dedicated electrical circuit.

Electric Vehicle Supply Equipment (EVSE)
EV charging stations, including the conductors - both ungrounded and grounded - and equipment grounding conductors, and the EV connectors, attachment plugs, and all other fittings, devices, power outlets, or apparatus installed specifically for the purpose of transferring energy between the premises' wiring and the EV (NFPA 70-2017, Article 625). Charging stations fall into three categories:

- Level 1 Charging Stations: This type of charging station uses a common household outlet of up to 120V. Level 1 chargers are relatively slow and are most appropriate for overnight or longer periods of charging.
- Level 2 Charging Stations: This type of charging station uses a 240V outlet and is considered medium speed.
- Direct Current: With a Direct Current charging station the current that flows in one direction and is similar to the power that would typically come from a battery. For this type of charging, the station uses an external charger and provides direct current, typically at 40 kW or higher.

EVSE Network Agreement
An EV service provider contract that provides for end-to-end EV charging and handles both the charging station operations as well as the driver experience. Connected to a central server, an EV service provider manages the software, communication and database interface that enables streamlined operation at the station.

EV Infrastructure
Generally includes the electrical capacity, panel boards, raceways and other equipment necessary to accommodate EV charging, except the EVSE. More specifically, equipment characteristics are based on terms included in San Francisco's EV Readiness Code, unless otherwise specified in program documents.

EV Infrastructure Incentives
The financial incentives for EV Charging Outlets and for installed empty conduits to future EVSE locations, other than the conduit required by code.

EV Charging Outlets
A full circuit for future electric vehicle charging, including dedicated electrical capacity, installed breakers and a suitable termination, such as a receptacle.

Incentive Reservation Amount
The amount of the applicant's estimated program incentive for the building based on the program's incentive structure and information as determined by SFPUC program staff, and calculated based on the information contained in the application form. SFPUC notifies the applicant of this amount through a Reservation Letter.

Level 2 Outlet/ EV Ready Infrastructure
A fully wired circuit suitable for a future Level 2 EVSE, where the conduit, circuit breaker and terminal box are sized for a 240V or 208V 40A circuit with either a receptacle or a terminated connection in a junction box.

[5] *As defined in the California 2023 Title 24 Building Code Documents*

Major Alteration
Projects, including "gut-rehabs" that trigger the EV Readiness Code provisions, as determined by the local permitting agency. San Francisco's Department of Building Inspection's criteria include alterations and additions where interior finishes are removed and significant upgrades to structural and mechanical, electrical and/or plumbing systems, provided areas of such construction are 25,000 gross square feet or more in Group B, M, or R occupancies of existing buildings.

New Construction Project
Projects that are permitted as new construction by the local permitting authorities, meet all requirements set forth by State and local building codes, including projects that have begun construction if the primary building permit has not been closed.

Newly Constructed Building
Buildings which complied with the EV Readiness code requirements and are making EV infrastructure and EVSE improvements after the original building construction permit.

Owner
For New Construction Projects, the developer or other primary program applicant having the authority to direct the inclusion of EV Infrastructure in the building and to enter into an agreement with the SFPUC. For Newly Constructed Buildings, the CleanPowerSF or Hetch Hetchy Power customer of record, or its assigned agent per the Incentive Agreement, including, for example, a property management company, HOA, individual condo owner or tenant.

Owner's Application and Incentive Agreement
The EV Charge SF form in which the applicant: specifies which incentivized beyond-code equipment is being included in the Project; and agrees to the associated Program terms and conditions.

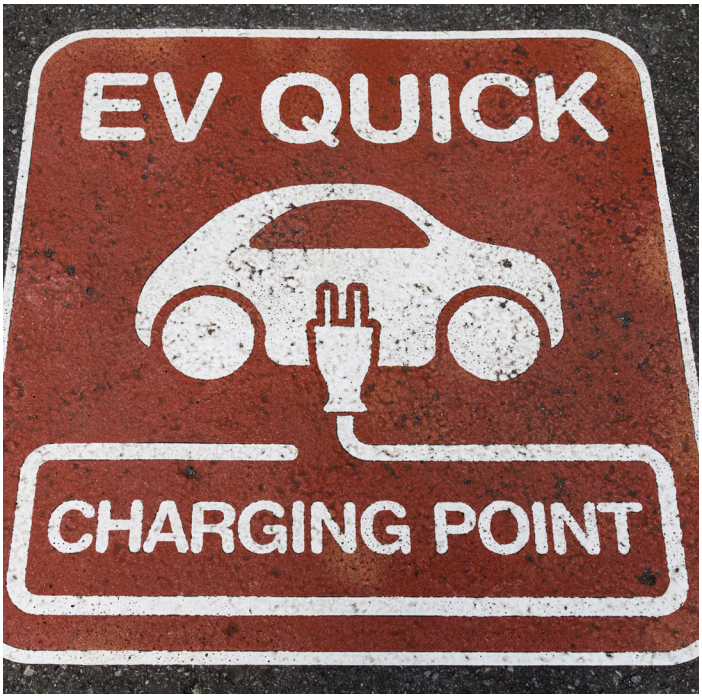
Qualifying Electric Rates
Qualifying Electric Rates are CleanPowerSF and Hetch Hetchy Power residential, commercial and industrial rate schedules, per the SFPUC Rates Book, as well as enterprise municipal rates. General Use Municipal rates, such as CG- and IG rate schedules, are not Qualifying Electric Rates.

San Francisco EV Readiness Code
San Francisco's Green Building Code, sections 4.106 & 5.106.

SFPUC
The San Francisco Public Utilities Commission, Power Enterprise. SFPUC operates two utility operations for the City and County of San Francisco: Hetch Hetchy Power is the City's publicly owned utility (POU), and CleanPowerSF is the City's community choice aggregation (CCA) program.

Single-family, Duplexes, and Townhomes with Separate Garages
New one-and-two-family dwellings and townhouses, as defined in the San Francisco Building Code, with attached or adjacent private garages.

Upgradable Level 1 Outlet
An EV Charging Outlet where the conduit, circuit breaker space and terminal box are sized for a 240V or 208V 40A circuit appropriate for a Level 2 EV charger, and where the wiring of the circuit and receptacle may be suitable for a 120V 20A circuit appropriate for Level 1 EV charging. Projects may substitute wiring for a 240/208V 20A circuit, provided the conduit and breaker space are sized for 40A. The Level 2-sized components will simplify the future upgrade of the circuit for a load-managed Level 2 charger, to meet future demand for a higher-performing EVSE.



4. PROGRAM REQUIREMENTS

The EV Charge SF program is currently available to customers that meet the following criteria:

4.1. Location

The property must be located in San Francisco, California, or served by Hetch Hetchy Power outside of San Francisco.

4.2. Customer Type

The property must receive electric service from CleanPowerSF or Hetch Hetchy Power and must be on qualifying Residential, Commercial, Industrial, and Enterprise Municipal electric rates. (General Use Municipal rates served by Hetch Hetchy Power are not eligible. See definition of Qualifying Electric Rates.)

Note: Projects served by temporary construction power from PG&E may enroll in EV Charge SF while their service from CleanPowerSF or Hetch Hetchy Power is pending. However, before receiving an EV Charge SF incentive, the Owner must have a CleanPowerSF-enrolled or Hetch Hetchy Power-enrolled electricity account.

4.3. Project Type

The program serves two project types:

1. A New Construction Project must be a new structure or Major Alteration (see Definitions) project permitted after January 1, 2018, which is required to comply with San Francisco's EV Readiness Code, and that has not yet received its final building inspection permit sign-off.
2. A Newly Constructed Building must be a current SFPUC CleanPowerSF or Hetch Hetchy Power customer in a building permitted after January 1, 2018, that complied with San Francisco's EV Readiness Code during its construction, and is on a Qualifying Electric Rate.

4.4. Prerequisite Performance

Projects must meet or exceed the **San Francisco EV Readiness Code** requirements to qualify for EV Charge SF incentives.

4.5. Incentive Layering

Projects may combine EV Charge SF incentives with other available EV charging funding programs, except if SFPUC is the funding source of the other program incentive. In particular, only one category of EV Charge SF incentive may apply to the same vehicle stall.

When customers are combining incentives from other sources, the total provided incentives from all programs may not exceed 100% of EV-charging project costs, as described in Section 7.2. That is, after accounting for non-SFPUC incentives for a site, SFPUC will adjust the EV Charge SF incentive amount such that total incentives are no more than 100% of the EV-charging project cost.

4.6. Labor Requirements

All work carried out on the projects participating in the Program shall be performed by contractor companies that are licensed by the State of California.

4.7. Special Conditions and Alternate EV Codes

1. Projects subject to **Cal-Green** or other EV readiness codes or EV codes other than the San Francisco EV Readiness Code may be eligible for the EV Charge SF program. Application of the EV Charge SF program to the non-San Francisco-based code will be based on the code-mandated baseline conditions of such codes, and subject to the discretion of SFPUC.

   Similarly, for projects subject to other EV-charging-related codes that substantively change the baseline conditions for the project, such as **San Francisco's Commercial Garage Electric Vehicle Charging Ordinance**, application of the EV Charge SF program will be based on the code-mandated baseline conditions of such codes, and subject to the discretion of SFPUC.
2. Special Circumstances
   Under special or unique circumstances, the SFPUC, at its sole discretion, may waive certain eligibility or other program rules. Any such waiver must be in writing.

5. PROGRAM STRUCTURE

5.1. Program Components

5.1.1. EV Action Plan and EV Action Plan Template and Workbook

The EV Action Plan: The EV Action plan should explain how the site will accommodate EV charging upon occupancy and in future years. That vision should build on the building's parking plan and should consider the equipment to be installed, equipment ownership, desired service level and electrical load management, business strategy to recoup electricity charges, and networking and service contracts.

The Owner's project team will develop the EV Action Plan with the help of the EV Action Plan Template and Workbook as well as related educational material accessed through the Program webpage or other industry sources. In most cases, the Program will offer technical assistance to help complete the Plan. The EV Action Plan Template provides a structure for developing the vision for how the building can meet EV charging needs in the near- and long-term. The EV Action Plan Workbook can aid the calculation of the Project's EV-related electric service requirements for code compliance, as well as incentive amounts for proposed beyond-code EV charging upgrades.

An EV Action Plan is required if applying for an EVSE incentive for more than 10% of vehicle stalls, or a Level 1 EV Charging Outlet for more than 50% of vehicle stalls or for Level 2 EV Ready Infrastructure. Even if not required for an application, SFPUC encourages all participating building Owners to develop an EV Action Plan to position their buildings for a future where EV charging is much more common than today.

5.1.2. Design Assistance (Optional)

The Owner's project team may request no-cost design assistance services. Design assistance consists of a general review of the project's EV-charging design approach and project plans and typically concludes with guidance on a site-specific EV Charging Action Plan. A program representative will review the proposed New Construction Project and collaborate with the design team to recommend EV-charging future-proofing design elements. Owners are not required to accept or implement any recommendations resulting from the design assistance.

Note: Design Assistance is optional and not a requirement for the receipt of EV Charge SF financial incentives. Applicants for Newly Constructed Buildings are eligible for design assistance only if they are applying for EVSE incentives for more than 10% of vehicle stalls.

To request design assistance please contact **powerprograms@sfwater.org**.

5.1.3. Electric Vehicle Supply Equipment (EVSE) Installation

The EV Charge SF program offers incentives for the installation of Level 2 EV charging equipment, i.e., EVSE, on site. The EVSE incentive is available even if Owners are not requesting any other EV Infrastructure Incentives (see below). Please refer to Section 7 for description of incentive rates.

Level 2 EV Chargers (EVSE) must:

a. be designed and installed to operate on a dedicated 208V or 240V AC circuit with, at minimum, a 40 amp, 2 pole (2P) circuit breaker, delivering a charge of at least 6.2 kW.
b. be Energy Star certified and eligible for CALeVIP incentives.
c. be networked and include Open ADR 2.0 for utility communications
d. include and operations and maintenance contract, or vendor warranty for a minimum of three years.
e. include an EVSE Network Agreement for a 3-year period with standardized data reporting frequency established in the agreement, and network access to SFPUC[6]
f. be new equipment, installed for the first time
g. be UL or equivalent certified by a National Recognized Testing Laboratory
h. be hardwired on a wall or pedestal mounting
i. utilize the SAE J1772 charge coupler
j. include SFPUC branding for signage, if provided by SFPUC.
k. be operated for a minimum of three years.

[6] *In Single-family, Duplexes, and Townhouses with Separate Garage EVSE need only be network-capable (refer to 5.1.3 c above) and do not require an EVSE Network Agreement (refer to 5.1.3 e above).*

Note: The Program considers a "dual port EVSE," for which each port is served by a dedicated 40 amp circuit to be two EVSEs for the purpose of calculating an incentive.

Automated Load Management Systems may be used to optimize the available EV-dedicated electrical capacity at a facility. ALMS systems must supply a minimum of 1.4 kW during normal operation to each EV Charging Port. EV Charging Ports installed with ALMS qualify for program incentives as follows:

Panel-Shared Systems: Multiple Level 2 EVSE installed and controlled by a panel-shared ALMS each would qualify for the full EVSE incentive.

Circuit-Shared Systems: Where a Level 2 EVSE has Additional Charging Ports that are served by the same 40-amp circuit, the first EVSE would qualify for the full EVSE incentive, and each additional port would qualify for the Additional EV Charging Port incentive. Added ports must each serve an additional vehicle stall and utilize the SAE J1772 charge coupler.

Note: At SFPUC's discretion, Level 3 EVSE listed on California's CALeVIP Eligible Equipment list may substitute for Level 2 EVSE on a one-for-one basis. Participants must contact SFPUC program staff to discuss this option.

Owners are encouraged to consider the installation of ISO-15118 compliant chargers when selecting equipment. ISO-15118 provides a communication link to coordinate charging with local grid conditions and supports the exchange of data including estimated departure time, energy (kWh) needed by the vehicle, current electricity prices, current carbon intensity of local electricity, and other relevant information.

While not required, ISO-15118 compliance will enable participation in future load shifting, demand response and other programs offered through the SFPUC, PG&E and statewide.

5.1.4. EV Infrastructure Installation

The EV Charge SF program offers incentives for installing EV Infrastructure that exceeds the requirements of the San Francisco EV Readiness Code. The Program encourages installing electrical upgrades, such as added electrical panel capacity, raceways, and pre-wiring, that can facilitate immediate Level 1 (120 V 20A) charging capability and that can make the future installation of Level 2 EVSE easier and cost-effective.

EV Charge SF offers incentives for residential and commercial properties for both Upgradable Level 1 Outlets and Level 2 EV Ready Infrastructure, to provide immediate charging readiness. To be eligible, equipment must meet the following requirements:

a. EV Charging Outlets
    i. Upgradable Level 1 Outlet – Level 1 charging installation includes, for each vehicle stall, a complete and functional EV-dedicated electrical circuit with:
        i. 110/120V NEMA 5-20R, 2P, Single GFCI Receptacle (or a terminated connection in a junction box)
        ii. Circuit sized for a minimum 16 Amp output (i.e., 20 Amp circuit breaker, corresponding to 1.9 kW)
        iii. Conduit sized for a 40 Amp, 208/240V[8] circuit, taking conductor derating factors into account.
        iv. Sufficient space in the panel box to upgrade for a 40 Amp, 2P, 208/240V overcurrent protection device per branch circuit and labeled as an EV-charging circuit.
        v. Hardware must be new and meet indoor and outdoor California Electrical Code requirements
        vi. Equipment must operate for a minimum of three years
        vii. Outlets must be labeled as intended for EV charging, including SFPUC branding for signage, if provided by SFPUC.

NOTE 1: Projects may substitute a 20 Amp 208/240V circuit and matched receptacle or junction box if satisfying all other minimum requirements for this section.

NOTE 2: Residential and commercial employee parking may use the Upgradable Level 1 option. Commercial-retail parking must use the Level 2 Outlet option (see below) to qualify for the EV Charging Outlet incentive.

[8] *Note: Sizing conduit for the larger wiring of a 40A circuit simplifies future upgrades of the circuit to allow Level 2*

ii. Level 2 Outlet/ EV Ready Infrastructure including, for each vehicle stall, a complete and functional EV-dedicated electrical circuit with:
    i. NEMA 3R rated (outdoor rated hardware) minimum 208/240 V Receptacle (or a terminated connection in a junction box)
    ii. 40 Amp, 2P, circuit-breaker
    iii. Hardware must be new and must meet indoor and outdoor California Electrical Code requirement
    iv. Outlets must be labeled as intended for EV charging, including SFPUC branding for signage, if provided by SFPUC.
    v. If operated as an outlet for EV charging, equipment must operate for a minimum of three years.

b. Conduit for Future EV Branch Circuits
    i. Empty conduit run from future panel location to future EVSE locations, including the terminating junction box for each vehicle stall (beyond those stalls where raceways are required by code). Conduit should be sized to house wiring sufficient to supply Level 2 EVSE, taking conductor derating factors into account. Conduit intended to carry wiring for more than one branch circuit should be sized accordingly.

All projects must comply with local electrical code requirements. All projects must show proof of sign-off from the San Francisco Department of Building Inspection (DBI). Note: Post-construction installation of EVSE in an existing Level 2 Outlet, such as is required under the San Francisco EV Readiness Code, does not require an electrical permit, as per **SFDBI Information Sheet #E-02**, "Electric Vehicle Charging Station Checklist". However, to qualify for an incentive under this Program a Level 2 EVSE must be a hardwired installation, which does require a permit. Contact your building inspector at (628) 652-3200 or **TechQ@sfgov.org** to request the applicable electrical code for your project.

Incentives are not retroactively available to projects where the equipment was purchased prior to the Incentive Reservation Notice.

EVSE with Automatic Load Management System(s).

[6] *See California Electrical Code section 310.15 (3) for conductor adjustment factors.*

5.2. EV Incentives Must Be for Beyond Code Work and Non-Duplicative

- EV Charge SF program incentives are limited to EV charging installation activities that exceed minimum code requirements and are not otherwise duplicative with other incentive payments for the same vehicle stall. (See Section 4.5)
- A full EVSE installation in the 10% of vehicle stalls required by code to be EV-Ready (i.e., with conduit and electrical circuit) qualifies for a reduced EVSE incentive because part of the installation occurs per the code.
- An EVSE incentive in a Newly Constructed Building will be reduced for vehicle stalls that already have their EV-ready full electrical circuit in place, whether it was installed at the time of original construction or subsequently.
- A vehicle stall receiving an EVSE incentive would not also qualify for an EV Infrastructure Incentive (i.e., conduit and/or electrical circuit), because those items are included in the EVSE incentive. Likewise, a vehicle stall receiving an incentive for an Upgradable Level 1 Outlet would not also qualify for an incentive for just the conduit.

5.3. Post-Construction Verification

1. Notification
Within 90 days from completion of Project construction, the Owner shall notify the program that the EV charging improvements have been completed, submit IRS W-9 forms, and submit the required Project completion documentation as listed in Section 6.1.4 of this Handbook. Project construction is complete when all the Project measures are installed and operational, including all hardware and software (if applicable), as specified in the Incentive Reservation Agreement. Owners may request one extension of up to 90 days for the filing of the project documentation, which will be granted to the discretion of the SFPUC.

2. Failure to Notify SFPUC
Failure to provide notification before the expiration date of the incentive reservation may result in the cancellation of the incentive agreements and loss of eligibility for the incentive payment.

3. SFPUC Verification
An SFPUC program representative verifies the installation of EVSE or EV Infrastructure by reviewing project documentation and conducting an on-site

verification. If the project is constructed as set forth in the Incentive Reservation Agreement, and the project meets all other Program requirements, the EV incentive will be issued. Payments will be made by check and mailed to the address indicated on submitted IRS W-9 forms.

4. Changed Post-Construction Conditions
If the completed project differs in any material respect from the Owner's Application and Incentive Agreement, the SFPUC may, in its sole discretion and judgment, adjust the amount of the incentive payment to reflect the revised building conditions.

6. DOCUMENTATION REQUIREMENTS

1. Program Enrollment Form (For Recently Constructed Buildings, this form includes digital photos of key locations at the site)

2. Incentive Reservation Agreement

3. EV Action Plan, including completed Template and Workbook, plus Attachments
(Note: Required when incentive application is for EVSEs in more than 10% of vehicle stalls, or for Level 1 EV Charging Outlets for more than 50% of vehicle stalls, or for Level 2 EV Ready Infrastructure)

- Project parking map
- Single line diagram of electrical wiring
- Other attachments noted in the EV Action Plan Template
- IRS W-9 for incentive payee, if possible

4. Verification Documentation (Post-Construction Phase)

- CleanPowerSF or Hetch Hetchy Power Account number
- EVSE purchase invoice (marked as paid)
- EVSE network agreement
- EVSE operation and maintenance contract/ agreement with vendor
- Photographs of the following:
  - Two or more photos of installed and operational EV charging stations, clearly displaying the cobranding label, if provided by SFPUC
  - Serial numbers of equipment installed
  - Electrical service panels
- Documents as needed for SFPUC's on-site verification of EV Infrastructure and EVSE. Documents must facilitate verification that the installed EV Infrastructure and or EVSE meets the equipment counts listed in the Incentive Reservation, including photographs of project site.
- IRS W-9 for incentive payee, if not previously provided

SFPUC reserves the right to request additional documentation as needed for demonstration of compliance with Program requirements and to audit customer documents and attestations at its sole discretion. Examples of additional installation verification documents that may be required to be submitted to SFPUC include:

- Purchase invoice (marked as paid) for electrical infrastructure upgrade (if applicable). The invoice must list the cost for panel upgrade separate from the cost of the rest of the electrical circuit.
- Invoice for design and engineering costs
- Copy of permits from local permitting agency, and (if applicable) utility permits/service orders
- Copy of electrical inspection reports including inspector sign-off
- Other specified documentation as per discretion of SFPUC

7. INCENTIVE STRUCTURE

7.1. Incentives

1. Level 2 EVSE Installed

The Program offers incentives for EVSEs for up to 100% of the total vehicle stalls based on the following incentive structure. (Note: SFPUC will consider substitutes of Level 3 EVSE on a one-for-one basis.)

a. Commercial, workspace, retail, other nonresidential: $2,000 per EVSE for first 10% of vehicle stalls, plus $500 for each Additional EV Charging Port; then $3,000 per EVSE serving vehicle stalls beyond the first 10%, plus $500 for each Additional EV Charging Port.

b. Market rate housing, except Single-family, Duplexes, and Townhouses with Separate Garages: $2,000 per EVSE for first 10% of vehicle stalls, plus $500 for each Additional EV Charging Port; then $3,000 per EVSE serving vehicle stalls beyond the first 10%, plus $500 for each Additional EV Charging Port.

c. Market rate Single-family dwellings, Duplexes, and Townhouses with Separate Garages: $1,000 per EVSE.

d. Affordable Housing: $2,400 per EVSE for first 10% of vehicle stalls, plus $600 for each Additional EV Charging Port; then $3,600 per EVSE serving vehicle stalls beyond the first 10%, plus $600 for each Additional EV Charging Port.

2. EV Infrastructure Upgrade

The Program offers incentives for EV Infrastructure upgrades for all vehicle stalls, except those vehicle stalls required by code to be EV-ready, based on the following incentive structure:

a. EV Charging Outlets (Upgradable Level 1 Outlet, Level 2 EV-Ready Infrastructure)
   i. Workspace, commercial, (not retail): $1,000 per outlet
   ii. Market rate housing, except Single-family, Duplexes, and Townhomes with Separate Garages: $1,000 per outlet
   iii. Affordable Housing: $1,200 per outlet

b. Conduit for Future EV Branch Circuits (other than code-required locations)
   i. Workspace, commercial, retail, other nonresidential: $250 per vehicle stall
   ii. Market rate housing: $250 per vehicle stall
   iii. Affordable Housing: $300 per vehicle stall

Please review Section 7.2 for information on eligible project costs and incentive caps.

7.2. Incentive Cap and Eligible Project Costs

Total incentives paid by this Program for a single utility service address may not exceed $100,000 for Projects (or $120,000 for affordable housing projects) for the lifetime of the Project. Project incentive caps are inclusive of all EV Charge SF incentive types (i.e., EVSE and EV Infrastructure).

For an individual Program application, the SFPUC will cap the incentives at 100% of costs incurred by the project for EV charging-related work, after accounting for funding from non-SFPUC incentive programs paid for this work. The project costs include only the out-of-pocket cost of eligible expenses that were required to install the EV Infrastructure and service equipment (EVSE) included within the project scope.

If the eligible project costs for EV charging-related work are less than the limits described in this section, the SFPUC may, in its sole discretion and judgment, adjust the amount of the Incentive payment to reflect the actual eligible project costs.

The Program reserves the right to require documentation of all costs to be submitted prior to paying final incentives. If required by SFPUC, participants must provide itemized invoices fully documenting the costs incurred on the project before SFPUC will issue incentive checks for the infrastructure and equipment.

[10] *The EVSE incentive is reduced to $2,000 to take into account, and reduce, the incentive where the EVSE is installed in an already-EV-ready vehicle stall – i.e., a stall that already has a complete 40 amp circuit. In New Construction Projects, this situation exists for the first 10% of vehicle stalls. This logic extends to Newly Constructed Buildings where the EVSE is being installed in a vehicle stall with an existing 40A circuit or an Upgradable Level 1 Outlet.*

The following costs will be considered eligible project costs when determining the incentive cap:

- Utility service upgrades
- Installation costs (includes material and labor)
- Electric Infrastructure upgrade costs (includes panel, wiring, conduit, etc.)
- Design and engineering services cost
- Cost of load management equipment (if applicable)
- Cost of ADA upgrades if due solely to Program requirements
- Network fee from vendor (if applicable)
- Service costs, warranty, and operations and maintenance contract costs up to three years (if applicable)

Program Contact Information

For assistance or to set up a consultation, contact SFPUC program staff.

Email: **PowerPrograms@sfwater.org**

Phone: (415) 554-0773

For more information, visit: **sfpuc.org/evchargesf**

sfpuc.org

San Francisco Water Power Sewer
Services of the San Francisco Public Utilities Commission