

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

In the Matter of the Application of Pacific Gas
and Electric Company for Approval of its
Electric Vehicle Infrastructure and Education
Program.

A.15-02-009
(Filed February 9, 2015)

(U 39 E)

**PACIFIC GAS AND ELECTRIC COMPANY'S (U 39 E)
ELECTRIC VEHICLE CHARGE NETWORK
QUARTERLY REPORT, FOURTH QUARTER, 2020**

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Dated: March 23, 2021

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QUARTERLY REPORT, FOURTH QUARTER, 2020**

Pursuant to Ordering Paragraph 20 of D.16-12-065, Pacific Gas and Electric Company (PG&E) hereby submits the attached EV Charge Network Pilot Program Quarterly Report for Fourth Quarter, 2020. Per D.16-12-065, the Report is being served on the service list for A.15-02-009 as well as the members of the Program Advisory Council.

Respectfully Submitted,

CHRISTOPHER J. WARNER

By: /s/ Christopher J. Warner

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Together, Building
a Better California

Pacific Gas and Electric Company EV Charge Network Quarterly Report

Report Period: October 1 – December 31, 2020



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1. Executive Summary

1.1 EV Charge Network Program Overview

PG&E's EV Charge Network (EVCN) program was approved on December 15, 2016 through a unanimous vote of the California Public Utilities Commission (Commission).¹ The purpose of the program is to increase access to charging for electric vehicles (EV) within PG&E's service territory. The program forecasted to install up to 7,500 charging ports over a three-year period focusing on two key market segments: workplaces and multi-unit dwellings. The program includes deployment targets of 15% of ports in Disadvantaged Communities (DACs) as well as 20% in Multi-Unit Dwellings (MUDs).² These targets aid in facilitating market entry for previously underserved communities and market segments. For participating site hosts, the program is organized into two ownership options: "EV Charge Owner" and "EV Charge Sponsor."

EV Charge Owner: The majority of the electric vehicle service equipment (EVSE) will be owned by site hosts who are PG&E non-residential customers that have EV charging stations installed on their property. All site hosts may choose to participate under this program option. For these installations, PG&E will install and maintain the EV service connection (make-ready infrastructure) to support their use. The site host will be responsible for buying and installing the EV charging stations. At these locations, rebates will be offered to site hosts for the EV charging stations. The rebates will be paid after the charging stations are installed and operational.

EV Charge Sponsor: At the discretion of the individual site host, PG&E may be requested to install, own, and maintain up to 35% of the EV charging stations originally forecasted to be deployed. These EV charging stations will be installed in a turnkey operation to maximize site host convenience. EV Charge Sponsor site hosts must be MUDs or workplaces located in disadvantaged communities (DACs).

1.2 Summary for Quarter

The following section provides a brief summary of the milestones and actions performed throughout the quarter. This includes EV adoption in PG&E's service territory, a summary of the Program Advisory Council (PAC) meeting, program milestones, and key barriers to implementation.

EV Adoption in PG&E Service Territory

The EV Charge Network program intends to support the adoption of EVs in PG&E territory by providing the infrastructure to support adequate charging and remove obstacles to adoption.

PG&E offers two residential EV rates for customers who own an EV. Both rates are time-of-use (TOU) rates and will vary based on time of day. The EV-2A rate combines the customer's EV electricity use with the main household consumption on the same meter whereas the EV-B rate tracks EV electricity consumption separately from household use through a new meter dedicated to the charging equipment. At the end of Q4 2020, 67,392 PG&E customers were enrolled in the EV rates.³

1. The Commission approved the EV Charge Network in D 16-12-065.

2. Disadvantaged Communities are defined as the top 25% most impacted census tracts within PG&E's service territory per the CalEnviroScreen3.0, or the latest version.

3. The EV rate numbers includes customers enrolled in EV-A, EV-B, and EV-2A rate. The EV-2A rate is replacing the EV-A rate with new TOU rates and off-peak charging times.



PG&E also offers two electric vehicle rate plans for business customers with on-site EV charging. These rates are specifically designed for customers with separately metered EV charging at locations such as workplaces, multi-unit dwellings, and retail as well as sites with fleets and fast charging stations. The rates are Business Low Use EV Rate (BEV1) for EV charging installations with a connected load up to and including 100 kilowatts (kW), which are best suited for smaller workplaces and multi-unit dwellings, and Business High Use EV Rate (BEV2) for EV charging installations with a connected load of 100 kilowatts (kW) and above.

Program Participation Interest

PG&E officially launched the EV Charge Network program in January 2018 (however, the program operated under a soft launch since late October 2017 when the online application was made available). PG&E experienced steady interest from customers applying for participation in the EVCN program.

PG&E stopped accepting new applications in Q2 2019 since the program was fully subscribed. However, customers are able to submit their interest in future EV infrastructure offerings through [interest list form](#) on the website.

As of December 31, 2020, PG&E had received 816 applications. At the close of Q4 2020, 198 sites representing 4,898 ports had signed agreements with customers; this excludes applications that were waitlisted or cancelled. More details on submitted applications can be found in Section 2 and on approved/in-progress sites in Section 5 of this report.

Program Advisory Council (PAC)

Beginning in 2018, PG&E expanded the focus of the PAC meeting to address broader clean transportation programs and initiatives, creating the Clean Transportation Program Advisory Council. On January 27, 2021, PG&E held the Q4 2020 Program Advisory Council meeting to provide an update on the EV Charge Network program, the SB350 programs (Fleet, Fast Charge, Priority Review Projects), the Schools & Parks programs, and the Phase 2 Launch of the Business EV Rate.

Individuals from over 30 organizations, representing stakeholders from industry, government, and non-profits, attended online. The meeting objective was to inform an external audience on the progress of the various infrastructure programs authorized by the CPUC. More details on the Q4 2020 PAC meeting can be found in Section 7 and the Appendix of this report.



2. Customer Interest, Outreach, and Education

2.1 EV Charge Network Applications

Since launching the EV Charge Network program website and online application in Q3 2017, PG&E received a total of 816 applications through Q2 2019 when the program stopped accepting new applications. Figure 2.1 shows the total number of applications received and the number of applications in each stage at the end of Q4 2020.⁴

FIGURE 2.1 SUMMARY OF APPLICATION STATUS THROUGH Q4 2020

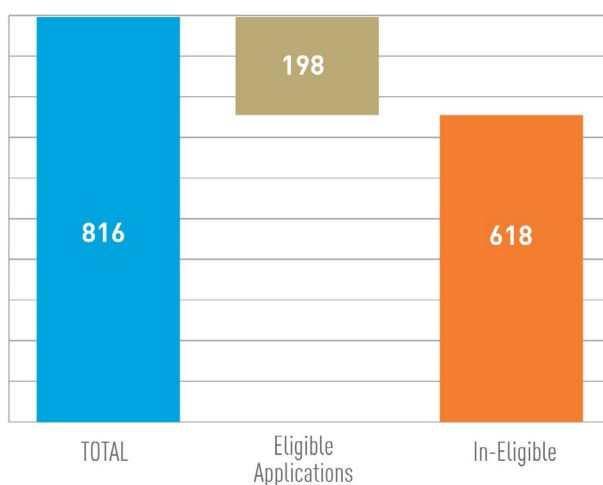


Table 2.2 shows the breakdown of property type, disadvantaged community status, and program participation across all applications received through Q4 2020.

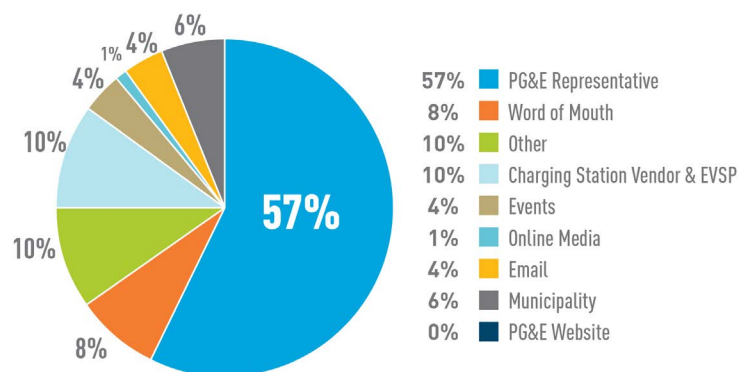
TABLE 2.2 APPLICANT PROFILE THROUGH Q2 2020

	NUMBER OF APPLICATIONS	PERCENT OF APPLICATIONS
PROGRAM PARTICIPATION		
EV Charge Owner	629	77%
EV Charge Sponsor	187	23%
PROPERTY TYPE		
MUD	220	27%
Workplace	596	73%
DISADVANTAGED COMMUNITY STATUS		
Disadvantaged Community (DAC)	209	26%
Other PG&E Territory	607	74%

CROSS-SECTION (Applications)	DAC (% of Grand Total)	NOT IN DAC (% of Grand Total)
MUD	46 (6%)	174 (21%)
WORKPLACE	163 (20%)	433 (53%)
Subtotal	209	607

Applicants reported hearing about the EVCN program from various sources. In Q2 2019, PG&E's Sales team wrapped up their outreach. Over the course of the program's outreach, the PG&E Sales team represented the largest source of incoming lead generation, bringing in over 55% of program applications through Q2 2019. Figure 2.3 depicts how applicants reported hearing about the EVCN program on the online application.

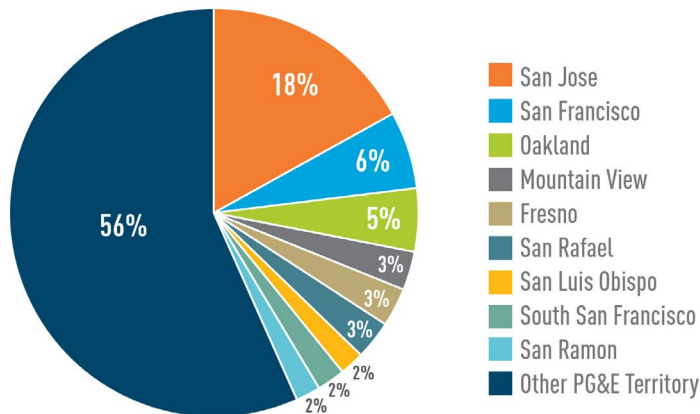
FIGURE 2.3 EVCN PROGRAM APPLICANT SOURCE OF PROGRAM KNOWLEDGE THROUGH Q2 2019



4. While the program has stopped accepting new applications, the number of eligible projects may change as projects are either canceled or are accepted into the program off the waitlist.

Figure 2.4 depicts the geographic areas of applicants who submitted applications to EVCN, halting in Q2 2019.

FIGURE 2.4 EVCN PROGRAM APPLICANT PROFILE
BY GEOGRAPHIC AREA THROUGH Q2 2019



Note: "Other PG&E Territory" represents counties with fewer than 10 applications submitted. PG&E received applications from over 150 cities in total.

Approximately 76% of submitted applications were cancelled through the end of Q2 due to the program reaching full subscription. PG&E has shared additional resources with these sites to support their desire to install EV charging, such as the following:

Other external rebates available:

- [CEC CALeVIP](#) – The California EV Infrastructure Project.
- [BAAQMD Charge!](#) – Bay Area air district charging station rebate.
- [SJAPCD Charge Up!](#) – San Joaquin air district charging station rebate.
- CCA Rebates – Check with your local Community Choice Aggregator, such as [MCE](#), for additional rebates.
- [Electrify America](#) – An alternate EV charging infrastructure program.

Other PG&E EV resources:

- [EV Savings Calculator](#) – Find the right EV for you with personalized incentives.
- [Clean Fuel Reward](#) – EV/PHEV purchasers can qualify for up to \$1,500 through this program.
- [EV Charging Rates](#) – Make sure you are on the best electric rate for EV charging.
- [yourprojects.pge.com](#) – Request new electric service for EV chargers if not selected for the EVCN program.

Q4 2020 Program Milestones

- **4,180 ports substantially complete since program inception**
- **Q4 Ports Substantially Complete:** October – 251 ports, November – 283 ports, December – 186 ports

Q4 2020 Challenges and Lessons Learned

In Q4 2020, we continued to be diligent about COVID-19 related safety protocols during construction related activities. We experienced project attrition related to economics, realized by more detailed accounting of costs as each project advanced through rigorous planning and evaluation stages.⁵ We are using lessons learned on these cancelled projects as a way to more accurately forecast project costs, earlier in the process.

We were also challenged in Q4 2020 by meter panel manufacturer defects which we worked closely with our vendor to identify and remedy. Permitting and easements continued to present themselves as challenges for some projects, which resulted in project delays during Q4 2020 as we worked with Authorities Having Jurisdiction (AHJ) and customers, respectively to mitigate concerns on both topics.

5. This project attrition will be reflected in the next quarterly report, as there is a time lag between the Q4 2020 cancellation of the projects and the processing of these cancellations.

2.2 Sales and Marketing

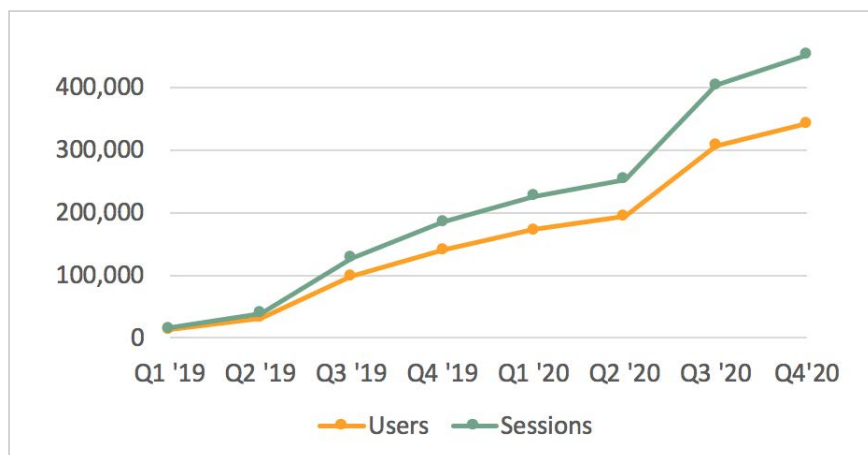
In Q2 2019, PG&E halted marketing and customer acquisition due to the large influx of applications. PG&E continues to work with our partners to communicate project status and program subscription levels through the quarter. Partners, especially on a local level, are key stakeholders that serve as advocates for the program. Sample partners include local non-profits/working groups, community choice aggregators, local governments, and trade associations. They can be very helpful in providing venues for PG&E to discuss EV charging opportunities with their constituents, offering additional funding sources that further bring down costs for customers, and, in some cases, become customers themselves.

2.3 Online Tools & Resources

As of the end of Q4 2020, the EV Charge Network program website has the following tools and resources to assist customers in their decision-making process.

- Through Q4 2020, the [EV Savings Calculator](#) has received 342,000 unique visitors and logged over 452,000 sessions, resulting in >15,000 hours of total platform engagement.
- Our Net Promoter Score⁶ in Q4 was 33, with 614 respondents, which we consider “great.”

FIGURE 2.5 EV SAVINGS CALCULATOR CUMULATIVE UNIQUE SESSIONS THROUGH Q4 2020



The goal of the EV Savings Calculator is to reduce EV ownership cost research time by providing residential customers with a tool that is quick, easy to use, and provides an accurate cost breakdown of owning an EV. The tool captures total cost of ownership, available EV incentives, and a match score to help users find the right EV for them.

PG&E launched the tool at the end of 2018 and launched a new rate comparison tool in July 2019 to help customers find the best electric rate for their EV, home location, and charging behavior. In Q1 2020, PG&E added enhancements which enable users to compare two EVs side-by-side, and a variety of map enhancements such as a trip planner, vehicle range radius, and nearby EV dealers. The tool is available at ev.pge.com.

6. <https://www.retently.com/blog/good-net-promoter-score>



Browse available EVs:

Refine Match Score

ROUNDTRIP COMMUTE
30 Miles







BUDGET AFTER INCENTIVES
\$24,000
[Personalize Incentives](#)

MINIMUM SEATS
4 seats

HOME CHARGING AVAILABILITY (?)
Level 2

[Help me choose](#)

Sort By Match Score

<p>Chevrolet Bolt EV</p>  <p>Electric Range MSRP</p> <p>238 miles \$36,420</p> <p>AFTER INCENTIVES \$25,620</p> <p>MATCH SCORE 97</p>	<p>Nissan LEAF</p>  <p>Electric Range MSRP</p> <p>150 miles \$29,990</p> <p>AFTER INCENTIVES \$16,190</p> <p>MATCH SCORE 97</p>	<p>Volkswagen e-Golf</p>  <p>Electric Range MSRP</p> <p>125 miles \$30,495</p> <p>AFTER INCENTIVES \$19,695</p> <p>MATCH SCORE 95</p>
<p>Ford Focus Electric</p>  <p>Electric Range MSRP</p> <p>115 miles \$29,120</p> <p>AFTER INCENTIVES \$18,320</p> <p>MATCH SCORE 94</p>	<p>Hyundai Ioniq Electric</p>  <p>Electric Range MSRP</p> <p>124 miles \$29,500</p> <p>AFTER INCENTIVES \$18,700</p> <p>MATCH SCORE 94</p>	<p>Kia Soul EV</p>  <p>Electric Range MSRP</p> <p>111 miles \$33,950</p> <p>AFTER INCENTIVES \$23,150</p> <p>MATCH SCORE 93</p>

Filter

FUEL (?)

All-Electric

Plug-in Hybrid

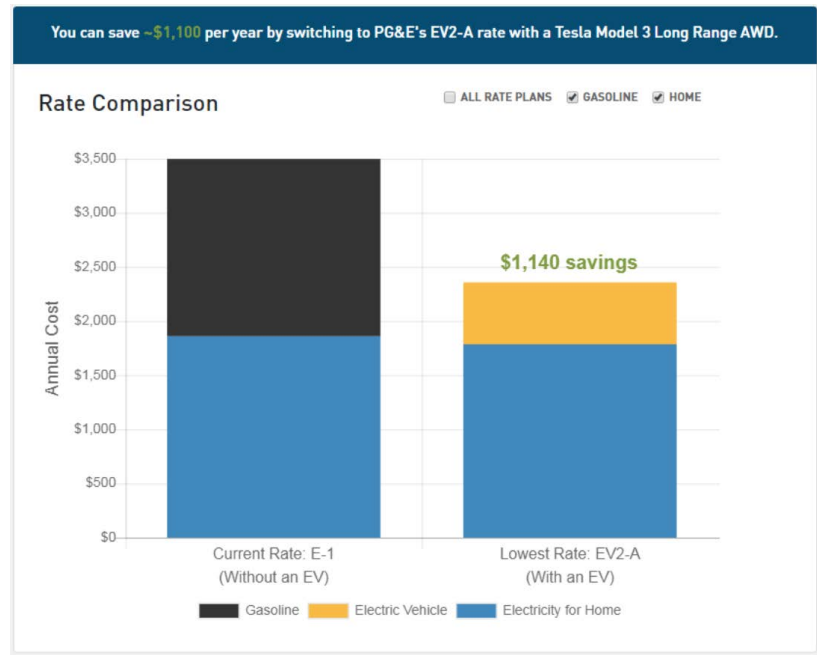
TYPE

Sedan Hatchback

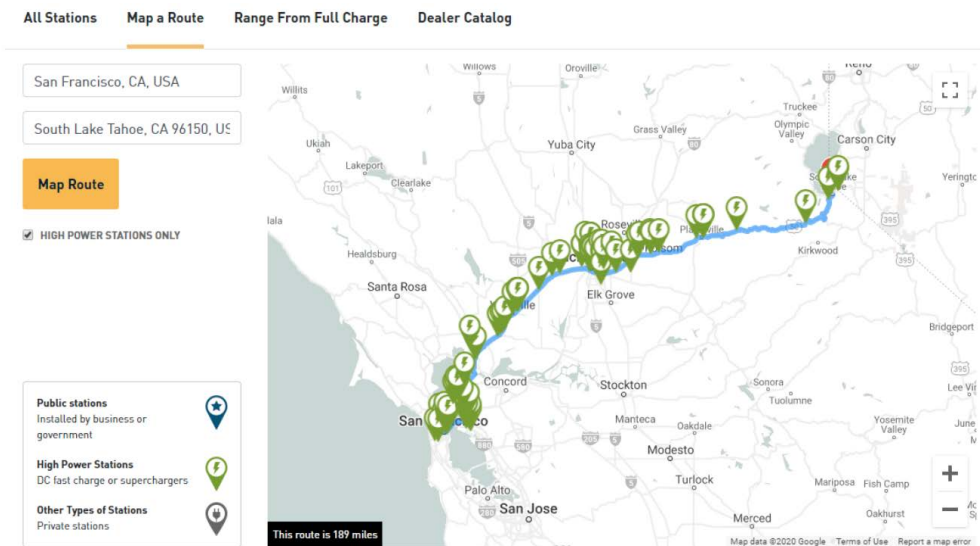
Coupe Crossover

Minivan SUV

Discover the best electric rate:



Map a route and see public chargers or find a nearby car dealer:



2.4 Customer Experience and Satisfaction

PG&E issues a customer satisfaction survey to program participants after project completion. PG&E has received survey responses from 33 customers through Q4 2020. Survey respondents rated PG&E well on “Likelihood to Recommend” and “Value to Organization,” and the “Overall Process” rating has steadily increased through program deployment.



3. Electric Vehicle Supply Equipment Procurement

3.1 Procurement Process

PG&E conducted a Request for Qualification (RFQ) and Request for Proposal (RFP) process to determine eligible EVSE packages that will be available to customers through the EV Charge Network program. The RFQ qualifies EV charging station vendors for the EV Charge Owner option and occurs on a quarterly basis. Per the last PAC meeting decision, the EV Charge Network program will no longer qualify vendors through quarterly RFQs. PG&E leveraged the RFP to qualify EV charging station vendors for the EV Charge Sponsor option, for which PG&E will own the charging equipment.

EVSE packages are inclusive of EVSE hardware, software, and network services. PG&E has halted the quarterly vendor RFQ process due to the program reaching full subscription.

3.2 RFQ – EV Charge Owner Options

PG&E halted the quarterly vendor RFQ process due to program reaching full subscription. The approved EVSE packages, including hardware, software, and network services are presented on PG&E's website to inform customers of vendor options, along with vendor contact information for further inquiry. Appendix C details the criteria all approved EVSE approved packages must meet.

The following are currently approved program vendors:

- ABM
- Andromeda Power LLC
- BTC Power (Broadband Telcom Power, Inc.)
- ChargePoint
- Electric MotorWerks, Inc.
- EV Connect
- EVBox
- EV Charge Solutions
- EVoCharge LLC
- EVSE LLC
- Greenlots
- Kitu Systems
- Liberty Plug-ins
- National Car Charging
- Op Connect
- Open Access Technology International, Inc. (OATI)
- PowerCharge
- PowerFlex Systems
- SemaConnect, Inc.
- Siemens
- Shell New Energies
- Tellus Power Inc.
- Verdek
- Video Voice Communications



3.3 RFP – EV Charge Sponsor Options

Vendors approved through the first RFQ in 2017 were eligible for the RFP. The RFP was designed to select vendor(s) for the EV Charge Sponsor portion of the program. Under this option, program participants may request PG&E to install, own, and maintain up to 35% of the EV charging ports originally forecasted. The RFP process evaluated competitive price proposals for vendor EVSE packages to be offered under the EV Charge Sponsor option of the program. Vendors for the RFP had to meet PG&E's minimum requirements for the RFQ process and were evaluated on criteria including, but not limited to, price, quality of bid, supplier diversity, environmental commitment, and financial stability. PG&E has selected two vendors, through the RFP, EVBox and ChargePoint. Eligible Charge Sponsor site hosts have been offered a choice of the two EVSE vendors.

3.4 Procurement Next Steps

PG&E has halted the quarterly vendor RFQ process due to the program reaching full subscription. PG&E has completed and closed the RFP process for Charge Sponsor vendor selection.

4. Charger Utilization and Load Management

4.1 Charger Utilization

At the end of Q4 2020, a total of 166 sites were fully activated for driver use. The final construction and activation as of Q4 2020 brought the total MUD sites to 55, representing 33% of activated ports. Table 4.1 shows the summary of all active sites through Q4 2020.

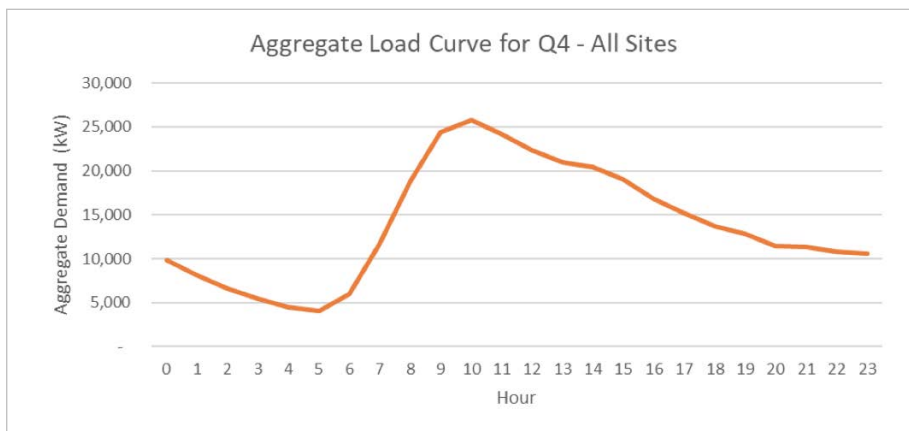
TABLE 4.1 SUMMARY OF ACTIVATED SITES THROUGH Q4 2020

	NUMBER OF SITES	NUMBER OF PORTS	PERCENT OF PORTS
PROGRAM PARTICIPATION			
EV Charge Owner	114	2,480	66%
EV Charge Sponsor	52	1,280	34%
PROPERTY TYPE			
MUD	55	1,229	33%
Workplace	111	2,531	67%
DISADVANTAGED COMMUNITY STATUS			
Disadvantaged Community (DAC)	46	1,233	33%
Other PG&E Territory	120	2,527	67%
CROSS-SECTION (Sites/Ports)			
MUD	12/505 (13%)		43/724 (19%)
Workplace	34/728 (19%)		77/1,803 (48%)
	SUBTOTAL	46/1,233	120/2,527

PG&E continues to work with EV Service Providers (EVSPs) on collecting driver utilization data from activated sites. From the data collected thus far, PG&E can share the aggregate load profile for 152 activated sites.⁷ The aggregate load curve for these 152 sites is shown in Figure 4.2. These curves were developed based on cumulative PG&E meter data for all sites from October 1, 2020 through December 31, 2020. The data shown does not represent any particular day but rather cumulative hourly data for all sites in the entire quarter, which provides a shape that is representative of charging patterns on a daily basis.

7. The sites represented in these load data are those sites that have been activated and where the EVSP has registered the site with PG&E.

FIGURE 4.2 AGGREGATED LOAD CURVE FOR Q4 2020 CHARGER UTILIZATION



The average kWh utilization per port shown in Figure 4.3 is calculated as the total kWh delivered during a given month to all ports that were fully activated in that given month, divided by the number of fully activated ports for that given month. The below figure covers 2019 through Q4 of 2020.⁸ Overall, this shows the increasing utilization of sites prior to early 2020, followed by a reduction in utilization due to COVID-19 shutdown restrictions, resulting in less charging of vehicles.

FIGURE 4.3 AGGREGATED KWH DELIVERED PER PORT IN 2019 AND Q1 - Q4 2020

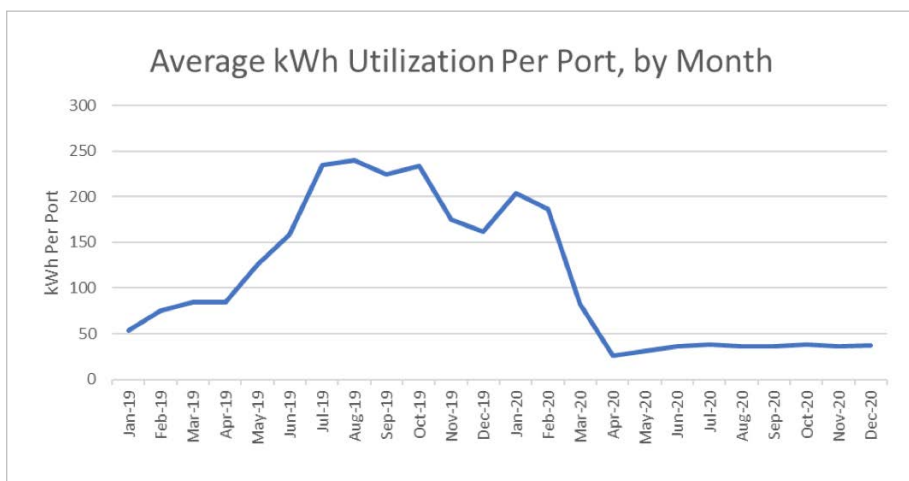


Chart shown here is updated relative to the data shown during the 1/27 PAC meeting in order to reflect the most accurate data.

8. Prior to 2019 there were a limited number of activated sites and ports, and this time period is therefore not included in this display.



5. Program Operations

5.1 Summary of Approved Sites

Prior to full subscription, once an application was received, PG&E reviewed the site for eligibility and evaluated site feasibility based on criteria including available electrical capacity, number of chargers to be installed, environmental risks, and estimated project costs on a per-port basis. If a site passed this eligibility review and a conceptual design of charger layout was approved by the program participant, it was approved for EVCN participation and moved into design and pre-construction phases.

198 projects were approved as eligible for EVCN program participation at the end of Q3 2020. The program is targeting at least 20% of installed ports to be at multi-unit dwellings (MUD) and at least 15% in disadvantaged communities. Table 5.1 depicts the breakdown of property type, disadvantaged community status, and program participation for applications approved through Q4 2020.

TABLE 5.1 PROGRAM PARTICIPANT PROFILE – APPROVED SITES THROUGH Q4 2020

	NUMBER OF SITES	NUMBER OF PORTS	PERCENT OF PORTS
PROGRAM PARTICIPATION			
EV CHARGE OWNER	126	2,865	58%
EV CHARGE SPONSOR	72	2,033	42%
PROPERTY TYPE			
MUD	73	1,872	38%
Workplace	125	3,026	62%
DISADVANTAGED COMMUNITY STATUS			
Disadvantaged Community (DAC)	58	1,864	38%
Other PG&E Territory	140	3,034	62%
CROSS-SECTION (Sites/Ports)			
MUD	18/928 (19%)		55/944 (19%)
Workplace	40/936 (19%)		85/2,090 (43%)
	SUBTOTAL	58/1,864	140/3,034

5.2 Construction

Once a project is approved for participation in the EV Charge Network program, PG&E assigns a Project Manager to connect with the customer and guide the site from design to activation. This includes coordinating with one of PG&E's competitively selected Engineer, Procure and Construct (EPC) vendors to complete the design, permitting, and construction for EV charging sites. At the end of Q4 2020, PG&E had a pipeline of 198 approved sites which represents 4,898 ports and provides a pipeline of construction through the end of the program.



5.3 Operational Metrics

Through the end of Q4 2020, PG&E had completed installation of 177 sites for the EVCN program. The following metrics reflect construction and installation of approved sites through December 31, 2020. Table 5.3 summarizes the number of approved and installed ports at the end of Q4. Figure 5.3 depicts the total number of ports installed by each EVSE primary vendor.

TABLE 5.3 SUMMARY OF NUMBER OF PORTS AND INSTALLATION

Number of total ports approved	4,898
Number of ports installed	4,180
Average number of ports approved per site	25
Average number of ports installed per site	24
Average Q4 total construction duration (in days)	69
Average Q4 total charger installation time* (in days)	8

*This is the duration of the installation of the chargers on top of the make-ready infrastructure.

5.4 Program Costs

In Q4 2020, PG&E spent roughly \$9.5 million for a total program spend of roughly \$105.6 million out of the \$130 million authorized budget. Figure 5.4 details Q4 2020 program spend for each of the categories: Engineering, Procurement, and Construction; Administration and Program Implementation; Marketing, Education, and Outreach; and IT Projects. Table 5.4 provides a summary of program costs to date, and percent of allocated budget spent.

TABLE 5.4 SUMMARY OF PROGRAM SPEND

	Program to Date Spend ⁹
Total Program Cost through Q4 2020	\$105,584,718
Total Completed Construction Cost	\$76,845,120
Average Cost per Port	\$18,384
Charger Cost per Port	\$2,186
Total Rebate Reserved	\$1,825,625

FIGURE 5.3
NUMBER OF PORTS INSTALLED BY EVSE PRIMARY VENDOR

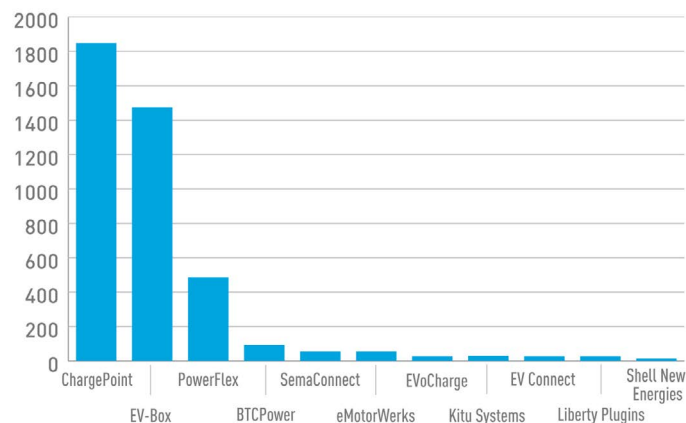
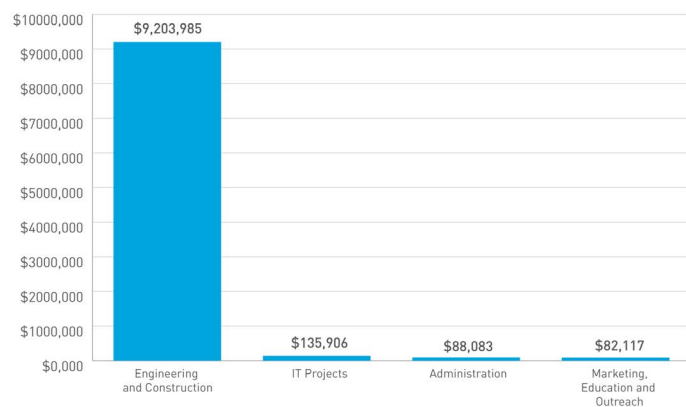


FIGURE 5.4 EVCN Q2 2020 PROGRAM SPEND



9. Total Completed Construction Cost & Average Cost per Port metrics include Design/Permits, Materials, To-the-Meter construction, Behind-the-Meter construction, Charger where applicable (EV Charge Sponsor sites), and Rebates where applicable (EV Charge Owner sites). Since full vendor invoices for some ports Substantially Completed during the quarter do not become available until after quarter-end, the Total Completed Construction Cost is an approximation using the number of Substantially Completed ports x Average Cost per Port. As a result, the quarter-to-quarter increase in Total Completed Construction costs may differ from the quarter-to-quarter increase in actual Total Program Costs through for the quarter. Charger Cost per Port is the charger cost alone, for EV Charge Sponsor sites that have full cost information as of quarter-end. Total Rebate Reserved is for all Substantially Complete projects as of quarter-end.

6. Supplier Diversity

PG&E is committed to diversity in the workplace and with the companies with which we do business. Our Supplier Diversity program provides vital opportunities for businesses owned by women, minorities, service-disabled veterans and lesbian, gay, bisexual and transgender (LGBT) individuals. Supplier diversity will be scored as part of the RFQ and RFP process for the EV Charge Program and will be incorporated in any contracts for services as part of this program.

7. Program Advisory Council Feedback

The fourth PAC meeting of 2020 was held on January 27, 2021 and included a diverse group of stakeholders. Over 30 organizations attended, including representatives from the EV charging station industry, non-profits, government entities and community choice aggregators. PG&E captured stakeholder comments during the meeting and also collected feedback by email submission after the meeting. PG&E has provided responses to the questions and comments in Appendix A.

8. Conclusion

At the end of Q4 2020 PG&E had completed construction of 177 sites representing a total of 4,180 ports installed. The program had a total of 198 approved applications, securing 4,898 ports that are supporting a construction pipeline through program end. The composition of the program's applicant and approved site pool represents a healthy pipeline in supporting the Commission's targets for Disadvantaged Communities, Multi-Unit Dwellings, and program ownership options. PG&E will continue to identify opportunities for process improvement while ensuring a positive customer experience.

PG&E values the feedback and input stakeholders have provided through the Program Advisory Council meetings and looks forward to continued collaboration with participants.

9. Appendix A

9.1 Summary of Program Advisory Council Comments and PG&E Response

The following PAC members provided comments during the meeting regarding the EV Charge Network program:

PAC MEMBER NAME	PAC MEMBER ORGANIZATION
Fidel Leon Diaz	CPUC Public Advocates Office
Audrey Neuman	CPUC Energy Division
Brant Arthur	Sonoma County Transportation Authority
Ziga Ivanic	Energetics
Jessie Denver	East Bay Community Energy

QUESTION	PG&E RESPONSE
How many of these sites would have been infeasible without load management?	There were 1–2 sites that would have been Infeasible due to physical constraints. This has also helped to lower the cost of several other projects.
Why do MUDs see a higher level of load reduction than workplaces?	This is due to MUDs mostly charging overnight and there are more hours you can engage in load management. There is a higher dwell time compared to the workplace which will only offer 5–8 hours.
What is the frequency of the maintenance and networking fees?	Maintenance fees are captured annually and networking fees as well annually per port.
All of these sites for aggregate load curve have TOU pricing, correct?	All the sites should be TOU. Technically customers are able to enroll in any rate available to them, but we are seeing most of the sites on a TOU.
Was any load management required for any host sites for workplaces on the TOU?	Last count, 25 –30 customers have enrolled in the demand response program. We haven't been able to calculate baseline usage due to COVID because usage has been so flat lined.
How hard would it be to make this tool statewide? How big of a lift would it be to adapt it to another utilities incentives?	We did a lot of work with our vendor ZappyRide. A lighter weight version of this tool does exist as well. In addition we worked with Veloz to offer a statewide tool for vehicles, incentives and more.
EVCN is limited to 35% Sponsor. Are there enough Owner sites in the pipeline to keep PG&E under this cap?	The PG&E EVCN decision allows up to 7,500 ports and we are targeting that 35% of the originally allowed 7,500 Charge Sponsor ports.

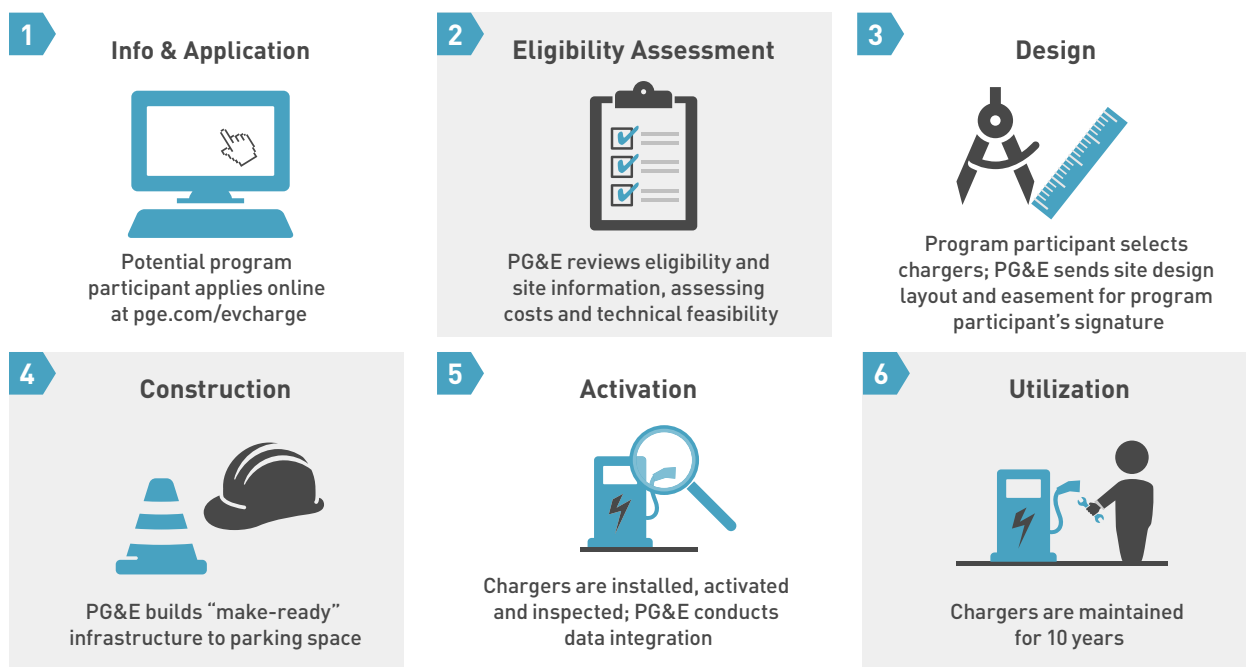


QUESTION	PG&E RESPONSE
<p>Are you looking at smaller sites and see where you can do load management?</p>	<p>Yes. We have found that it's possible, but it depends on site limitations.</p>
<p>We'd be interested in understanding better why the EVCN per port costs are in excess of \$18K while the per port cost through the CEC's CALeVIP program is much less (\$9-\$10K). This is essentially an 80% increase in cost. Is this primarily driven by line and transformer upgrades?</p>	<p>The CEC program is not an apples-to-apples cost comparison. PG&E costs will include additional costs not included in the CEC program. Even programs that ostensibly provide similar services can have nuanced differences and report costs in a manner that renders direct comparison difficult if not impossible.</p>

10. Appendix B

PG&E has established a six step process that guides customers through the EV Charge Network program.

- 1. Info & Application:** Potential program participants apply online at www.pge.com/evcharge.
- 2. Eligibility Assessment:** PG&E reviews eligibility and site information, assessing costs and technical feasibility.
- 3. Design:** If the site is approved, the program participant selects their chargers, and PG&E sends the site design layout and easement for signature. If the program participant is an EV Charge Owner, they submit their proof of purchase for the chargers; if an EV Charge Sponsor, they submit their participation payment.
- 4. Construction:** PG&E builds the “make-ready” infrastructure to the parking spaces.
- 5. Activation:** Once construction is complete, chargers are installed, activated and inspected, and PG&E conducts data integration. If the program participant is an EV Charge Owner, PG&E issues the rebate
- 6. Utilization:** The chargers are maintained for the life of the program (10 years) — by the program participant, in the case of EV Charge Owner; by PG&E, in the case of EV Charge Sponsor.



11. Appendix C

PG&E conducts a thorough review of all vendor applicants based on pre-determined criteria. All EVSE packages approved through the RFQ meet the following minimum requirements:

Hardware Requirements:

- Include a commercial-grade Level 2 EVSE.
- Must be able to supply an output current of at least 30 amps per port minimum at 208/240 volts.
- Include a charge connector compliant in SAE J1772.
- Compliant with NEC article 625.
- Rated for outdoor usage, NEMA 3R or better and an operating temperature range of: -22°F to 122°F.
- Shall be network ready — able to communicate with an EVSE management service and use Open Charge Point Protocol (OCPP 1.5 or later).
- ADA Compliant.

Software & Network Requirements:

- Software to control, operate, communicate, diagnose, and capture data.
- The vendor shall provide network services capable of tracking usage, collecting data, billing customers and managing electrical loads.
- The EVSE software shall be certified to receive an OpenADR 2.0b signal.

Vendor Requirements:

- The EVSE Package(s) must be inclusive of all hardware, software, and network services.
- Vendor is an authorized distributor or reseller of specified EVSE hardware and software and authorized to provide the required services.
- Vendor is regularly and continuously engaged in the business and have EVSE installed and operational in the United States for at least three years immediately preceding the bid due date.
- Vendor shall be able to service the entire PG&E Service Territory.