

Pacific Gas & Electric

Electric Vehicle Infrastructure and Education Program

Pacific Gas & Electric Company (PG&E) has applied to the California Public Utilities Commission (CPUC) for approval to implement an Electric Vehicle Infrastructure and Education Program. PG&E proposes a 5-year program to deploy, own and maintain approximately 25,000 Level 2 plug-in electric vehicle (PEV) charging stations and 100 DC fast chargers across northern and central California. The program aims to increase EV adoption in PG&E's service territory and help California meet critical clean air and greenhouse gas reduction goals. A broad customer education and outreach effort will complement charging station deployments to expand consumer understanding about the benefits of PEVs. If approved, this program would be the largest deployment of PEV charging stations in the country.

Key Features

- The chargers would be located at commercial and public locations, including multi-family dwellings, retail centers, and workplaces, deployed in banks of 10 chargers per site. PG&E proposes to offer “turnkey” charging infrastructure installations that cover upfront site-host costs and direct responsibilities related to the purchase, installation, operation and maintenance of PEV chargers.
- PG&E will own the PEV electric distribution infrastructure, including the chargers. PG&E will contract with PEV service providers for operations and maintenance of the charging stations. The service provider will purchase electricity from PG&E and resell it to PEV drivers at time-of-use rates approved by the CPUC.
- PG&E estimates that it will incur capital costs of \$551 million and operating expenses of \$103 million over the program's five-year term, a total of \$654 million. The program would increase electric rates by less than one percent for the typical residential customer.
- The program's scope covers 25% of the anticipated need for charging infrastructure by 2020. This supports the Governor's goal of having the infrastructure to support 1 million PEVs state-wide by 2020.
- PG&E is expressly limiting its participation in the PEV charging market in order to encourage participation by non-utility, third-party PEV services providers to stimulate a sustained market. PG&E anticipates that its partnerships with non-utility PEV services providers will catalyze the entry of non-utility market providers and investors in the PEV charging market.
- PG&E will install approximately 10 percent of the proposed PEV charging infrastructure in disadvantaged communities. The program also requests \$5 million to facilitate the development of innovative programs in these communities to help reduce barriers to entry into the EV market.
- PEV charging infrastructure will support the delivery of CPUC-approved time-of-use pricing, and will create a platform for future smart charging programs that support integration of increased intermittent renewable energy on the state's electric power grid.

- The program's consumer education and outreach initiative is intended to spur demand for PEV charging infrastructure and facilitate PEV adoption by increasing consumer understanding and awareness. This program component is also designed to inform PEV charging station site hosts and drivers about the benefits of owning a PEV and installing PEV charging stations.

Benefits

- Accelerates PEV adoption to help meet critical state goals for clean transportation and greenhouse gas reduction.
- Stimulates consumer demand for PEVs by reducing range anxiety and increasing charging solutions for an expanded pool of prospective PEV purchasers.
- Increases California's energy security and creates local jobs by substituting clean, locally produced electricity for imported petroleum-based fuels. PG&E's electricity generation portfolio is over 50% greenhouse gas free.
- Grows the market for 3rd-party infrastructure and charging service providers directly through the build-out, operation and maintenance of PG&E's deployment and indirectly through growing PEV adoption.
- Puts downward pressure on electricity rates as large-scale EV adoption spreads fixed system costs over a larger volume of kWh throughput.
- Brings the benefits of PEVs to disadvantaged communities by deploying charging infrastructure and working collaboratively to develop innovative programs such as EV car-sharing and van-pooling.

Status

PG&E submitted its application to the CPUC in February 2015. A procedural schedule has not yet been issued.

Link to PG&E's Application to the CPUC: http://bit.ly/PGE_EV_App