Electric Vehicle Trends & Key Issues

More Than 1.27 Million EVs Are on the Road in the U.S.

Sources: InsideEVs.com and HybridCars.com

KEY FACTS

- More than 1.27 million EVs are on the road in the U.S. as of June 30, 2019.
- In Q2 2019, approximately 85,000 EVs were sold in the U.S.
- Q2 2019 sales increased 23% over Q2 2018 sales.

EV and PHEV Ownership Costs Were Less than Conventional Vehicles in 2018

KEY FACTS

- Plug-in hybrid electric vehicles (PHEVs) cost 38 percent less to fuel and EVs cost 60 percent less to fuel than a medium-sized gasoline-powered sedan.
- PHEVs cost 13 percent less to maintain and EVs cost 11 percent less to maintain than a medium-sized gasoline-powered sedan.

STATE REGULATION

✓ Approved
On June 4, 2019, the Delaware Public Service Commission approved Delmarva Power’s Plug-in Vehicle Plan, which represents that state’s first approved electric transportation program by an investor-owned electric company. The $475,000 pilot includes: a mandatory EV-only time-of-use rate for residential customers who install second meters, and the installation of two company-owned Level 2 charging stations in selected neighborhoods and two DC Fast Charging (DCFC) stations along main transportation corridors. The approval also requires a newly established working group to evaluate data from the pilot, and to examine EV issues, market conditions, and new initiatives for future programs. (Docket No. 17-1094)

✓ Approved
On June 21, 2019, the Minnesota Public Utilities Commission verbally approved Xcel Energy’s Residential EV Subscription Pilot, in which customers pay a monthly fee – yet to be determined – for unlimited EV charging during off-peak hours. Customers also have the option to have 100 percent of their electricity for EV charging come from renewable resources. (Docket No. 19-186)

Proposal
On June 28, 2019, Georgia Power Company filed for recovery of EV charging program investments that have been made since 2014. The $6 million filing includes recovery of costs associated with ownership of Level 2 and DCFC stations at 11 company-owned facilities and 25 public charging “islands;” rebates to residential and commercial customers for the installation of EV charging stations; and an EV education and awareness campaign. (Docket No. 42516)

Proposal
As part of a general proceeding in Minnesota, Minnesota Power, Otter Tail Power, and Xcel Energy were required to file a Transportation Electrification Plan (TEP) with the Commission identifying EV-related initiatives under consideration. Program- and rate-specific filings will be submitted to the Commission throughout 2019 and 2020. Highlights of each company’s filing are listed below. (Docket No. 17-879)

» Minnesota Power will address the following: options for residential customers who don’t want to install a second meter for their EV; the associated costs of deploying charging stations and supporting infrastructure; increasing customer education and awareness and developing a trade ally network; and providing fleet services for medium- and heavy-duty trucks and buses.

» Otter Tail Power (OTP) identified the following: a residential at-home managed charging program; providing Level 2 charging equipment to customers, including a device with native sub-metering and telecommunication capabilities; develop three company-owned public charging DCFC hubs along travel corridors; work with multi-unit dwelling owners to encourage EV-ready construction practices; and develop two DCFC rates – one for charging stations owned by OTP and one for customer-owned stations.

» Xcel Energy is considering the following initiatives: converting the Residential EV Pilot to a standard offer and designing a Commercial EV Charging rate; developing a demonstration project to test an electric school bus as an energy grid resource; and add electric bus charging infrastructure to a bus garage and provide fleet services to Metro Transit.

Commission Decision
Arizona Corporation Commissioners voted on July 10, 2019 to move forward on the EV Policy Implementation Plan, which provides guidelines for electric company EV pilot programs. These guidelines address a range of topics, including: infrastructure, education, and outreach; the location of charging stations; best practices/consumer protections; rate design; incentives/rebates; and cost recovery. Electric companies were directed to submit EV pilot programs to the Commission for review. (Docket No. RU-00000A-18-0284)
**STATE POLICY**

On June 20, 2019, Oregon’s Governor signed legislation expanding the Department of Transportation’s OReGO program, a voluntary road usage program that charges motorists based on miles traveled rather than fuel taxes. Drivers of any vehicle that gets 20 miles per gallon (mpg) or better can enroll in the program. Vehicles that get more than 40 mpg and electric vehicles will have to choose between enrolling in the OReGO program or paying higher registration fees in 2020. The registration fees will increase to $76 for 40 mpg vehicles and to $153 for EVs, starting in 2020. The expansion reflects the state’s efforts to make up for a gap in fuel tax revenues as vehicles become more efficient.

At the Climate Mayors Summit on June 27, 2019, 127 cities across 38 states joined the Climate Mayors EV Purchasing Collaborative and committed to purchasing more than 2,100 EVs by the end of 2020. The commitment includes the purchase of electric transit buses, firetrucks, ambulances, police cars, and garbage trucks. The Collaborative also has announced plans to hold a competitive bid on electric school buses by the end of the year.

On July 9, 2019, 24 governors, representing more than half of the U.S. population, signed “The Nation’s Clean Car Promise,” which calls for one strong, national clean car standard and supports preserving state authority to protect residents from vehicle pollution. This letter comes as the Administration is finalizing a rule that would relax vehicle fuel efficiency and greenhouse gas standards. The governors promised to continue to pursue additional concrete action to fulfill the promise.

**OUR TAKE**

**PREPARING FOR ELECTRIC BUSES**

The electrification of buses is predicted to outpace the electrification of other vehicle segments, including passenger, commercial, and medium- and heavy-duty vehicles. By 2040, Bloomberg New Energy Finance estimates that electric buses will account for more than 80 percent of annual bus sales globally and will make up approximately 70 percent of bus fleets.\(^1\) In contrast, Bloomberg estimates electric passenger vehicles will make up 60 percent of passenger vehicle annual sales and 30 percent of passenger vehicles on the road globally by 2040.

There are approximately 65,000 transit buses on U.S. roads today. At the end of 2018, only 600 battery-electric and fuel cell buses, also known as zero-emission buses (ZEBs), were in operation. More than 1,500 ZEBs have been awarded through the Federal Transit Agency’s Low-No grant program, indicating that transit agencies are beginning to make commitments to electrify their fleets.\(^2\)

*Given the pace at which public transit is likely to convert to electric buses, with school districts expected to follow, it is critical for electric companies to engage in conversations with public transit agencies to prepare for the conversion to electric buses.*

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MEMBER SPOTLIGHT: ELECTRIC COMPANY-OWNED PUBLIC EV CHARGING STATIONS

Charging station incentives and make-ready infrastructure (infrastructure up to the charging station) have been the most widely approved investments by state regulatory commissions, while the electric company ownership model is less common. Even for companies that have received approval to own electric vehicle charging stations, there is variation in how the programs are designed. Below are some of the electric companies that have received approval to own EV charging stations and a brief description of their program components.

AVISTA UTILITIES

In Washington, Avista Utilities has completed the installation phase of its Electric Vehicle Supply Equipment Pilot Program in which it has installed 418 AC Level 2 ports at various residential, commercial, and public locations, and seven DC Fast Charging (DCFC) sites. Avista owns and maintains all charging stations, which are located behind the customer’s meter. In the case of the DCFC sites, Avista owns the infrastructure from the transformer to the charging station. Residential customers were provided a premise wiring reimbursement of up to $1,000 per port connection, and commercial customers received up to $2,000 per port connection. In exchange, the customer allows for data collection and load management by Avista. For public DCFC stations, users are charged $0.35/kilowatt-hour (kWh). Commercial customers pay for the electricity they use for charging based on their metered usage and rate. (Docket No. UE-160082)

KANSAS CITY POWER & LIGHT

Kansas City Power & Light (KCP&L) owns a network of more than 1,000 EV charging stations, known as the Clean Charge Network (CCN), throughout its territory in Kansas and Missouri. These charging stations are located at KCP&L-owned locations and host sites. In 2018, KCP&L received approval to charge $0.20/kWh for Level 2 charging and $0.25/kWh for DCFC. In Kansas, the company has the option to charge a session overstay fee up to $6.00/hour for customers who stay at the station after the vehicle has been charged. In both Kansas and Missouri, there is a cap on the number of charging stations that can be deployed as part of the CCN. (Docket Nos. 18-KCPE-480-RTS, ER-2018-0145, and ER-2018-0146)

LOUISVILLE GAS & ELECTRIC AND KENTUCKY UTILITIES

Louisville Gas and Electric Company and Kentucky Utilities Company have deployed 20 company-owned EV charging stations in various locations, including public parking lots, streets, and parks. Instead of paying a per kWh fee, EV drivers who use the charging stations pay $0.75/hour for the first two hours of charging and $1.00/hour for each additional hour. To encourage the expansion of the EV charging stations, non-residential customers also may host EV charging stations. They must agree to host the station for at least five years, pay for the cost of installing the station, and pay a monthly hosting fee. (Docket No. 2015-00355)