

PUBLIC SERVICE COMMISSION OF MARYLAND

Electric Vehicle Charging Pilot Progress Report

Pursuant to the 2020 Session Joint Chairmen's Report

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I. Introduction

On January 14, 2019, the Maryland Public Service Commission (“PSC”) approved the implementation of an electric vehicle (“EV”) charging pilot for the electric investor-owned utilities (“IOUs”)¹ with Order No. 88997 (hereinafter “EV Charging Pilot”). The Joint Chairmen’s Report (“JCR”) published in April 2020 by the Chairmen of the Senate Budget and Taxation Committee and House Appropriations Committee (collectively “Committees”) requested information on the status of the IOUs’ EV pilot. Specifically, the JCR requested that the PSC report on the status of IOU-installed public charging stations and “provide information on the status of installation by IOU including the location of the installations, the cost by IOU for the utility and for the ratepayers, the cost for use of the recharging station, and information on benefits to the State and ratepayers from these installations.” This document contains the PSC’s response to the Committees’ request.

The IOUs provide semi-annual reports to the PSC in compliance with Order No. 88997. The information in this report is from the IOUs’ semi-annual reports filed on August 3, 2020, and includes data through June 30, 2020.² This constitutes the first year of pilot data as most of the IOUs began operating their EV Charging Pilot programs on July 1, 2019. The IOUs will file their next semi-annual reports by February 1, 2021.

¹ The IOUs are Baltimore Gas and Electric Company (“BGE”), Delmarva Power and Light Company (“DPL”), The Potomac Edison Company (“PE”), and Potomac Electric Power Company (“Pepco”).

² Maillog No. 231347, The Potomac Edison, Semi-Annual Progress Report of The Potomac Edison Company Regarding Implementation of Approved Electric Vehicle Charging Program Offerings (Aug. 3, 2020).

Maillog No. 231350, Baltimore Gas and Electric Company, Potomac Electric Power Company, and Delmarva Power & Light Company, Semi-Annual Progress Report of Baltimore Gas and Electric Company, Delmarva Power & Light Company, and Potomac Electric Power Company Regarding Implementation of Approved Electric Vehicle Charging Program Offerings (Aug. 3, 2020).

II. Summary of Data

The utility-owned public EV charger program is one of several offerings within the EV Charging Pilot approved by Order No. 88997 for the IOUs. The IOUs are permitted to install a specified number of publicly accessible “smart” Level 2 (“L2”) chargers or Direct Current Fast Chargers (“DCFCs”). The property on which these chargers are installed must be leased, occupied, or owned by a local, municipal, or state government entity (*e.g.*, libraries, parks, train stations). BGE, DPL, and Pepco have been accepting applications for public charging stations since July 1, 2019.³ PE has been accepting applications since December 17, 2019.⁴

The table below provides an overview of the total number of utility-owned public EV chargers approved by the Commission to be installed by the IOUs, the total EV chargers installed through the first half of 2020, and the applications in the pipeline. As of June 30, 2020, the IOUs have installed a total of 67 public chargers, or approximately seven percent of the maximum number of approved EV chargers. If the applications under review or under construction are completed by their projected completion dates, then the utilities will install approximately one third of the approved EV chargers by the end of 2020. Appendix A includes a detailed breakdown of the chargers installed by utility, location, and charger type.

Table 1 Utility-Owned Public EV Charger Program Summary^{5,6}

Utility	Maximum Chargers	Installed Through Q2 2020	Under Review or Construction
BGE	500	58	147
DPL	100	0	20
PE	59	3	16
Pepco	250	6	49
Pilot Total	909	67	232

³ BGE, Pepco, and DPL at 4 and 34.

⁴ PE at 9.

⁵ PE at Appendix C.

⁶ BGE, Pepco, and DPL at Appendix C and Appendix N.

III. Costs

In Order No. 88997, the PSC directed the IOUs to recover the costs of the EV Charging Pilot through future rate case proceedings. All incurred program costs are placed into a regulatory asset that can be incorporated into rate base at the conclusion of future rate cases. The table below shows the costs of the IOUs' utility-owned public EV charging programs through June 30, 2020. Approximately \$5 million has been spent statewide. This represents approximately 14 percent of the total projected costs for the utility-owned public EV charger programs.

Table 2 Costs of Utility-Owned Public EV Charger Programs through June 30, 2020^{7,8}

	Public Charging Material	Public Charging Labor	Public Charging Network	Public Charging Pilot Total
BGE	\$2,550,176	\$1,239,488	\$169,700	\$3,959,364
DPL	\$19,794	\$164,780	\$7,500	\$192,074
PE	\$115,389	\$229,653	\$6,160	\$351,202
Pepco	\$51,377	\$467,367	\$7,950	\$526,694
Pilot Total	\$2,736,736	\$2,101,288	\$191,310	\$5,029,334

The utility-owned public chargers have charging rates based on the type of charger that a customer is utilizing. The charging rates for L2 chargers are less than those for DCFCs due to the difference in charging speeds between the two charger types. The IOUs maintain the charging rates on their websites and in the associated tariffs. The charging rates are currently uniform across each IOU's service territory and are designed to be market based. The table below illustrates the rates for the utility-owned public chargers through the end of 2020.

⁷ PE at Appendix B.

⁸ BGE, Pepco, and DPL at Appendix B and Appendix L.

Table 3 Utility-Owned Public Charger Rates through December 31, 2020^{9,10}

Utility	L2 Rate (\$/kWh)	DCFC Rate (\$/kWh)
BGE	\$0.18	\$0.34
DPL	\$0.18	\$0.34
PE	\$0.16	\$0.30
Pepco	\$0.18	\$0.34

IV. Benefits to the State and Ratepayers

With only one year of data available for the EV Charging Pilot, it is premature to determine its exact benefits. The PSC required the IOUs to file mid-pilot and final pilot evaluations in Order No. 88997 to regularly monitor the costs and benefits of the Pilot.

There are general benefits of EVs to owners, to ratepayers, and to the grid. The PSC was provided with testimony from various parties in Case No. 9478 on these potential benefits, as well as in the petition for approval to implement the EV Charging Pilot.¹¹ Individuals who elect to purchase an EV receive the direct benefits of lower operational costs and lower vehicle maintenance costs, whereas all utility customers receive the larger grid benefit of lower rates through increased utility sales.¹² With increased EVs on the road, the State will benefit from reduced air pollution and greenhouse gas emissions.¹³

⁹ https://www.firstenergycorp.com/help/saving_energy/electric-vehicles/maryland-ev/maryland-ev/pe-ev-rates.html

¹⁰ <https://www.bge.com/SmartEnergy/InnovationTechnology/Pages/EV-FAQs.aspx>
<https://www.delmarva.com/SmartEnergy/InnovationTechnology/Pages/FAQs.aspx>
<https://www.pepco.com/SmartEnergy/InnovationTechnology/Pages/FAQs.aspx>

¹¹ Maillog No. 218613, Leader of PC44 Electric Vehicle Work Group, Petition for Implementation of a Statewide Electric Vehicle Portfolio (Jan. 22, 2018).

¹² Increases in utility sales via EV charging will increase the total sales over which the utility can recover the fixed costs of the distribution grid. This results in decreases to the fixed distribution rates that all ratepayers pay on their bills.

¹³ Petition at 16-31.

V. Conclusion

The PSC appreciates the opportunity to provide an update on the EV Charging Pilot. The IOUs will continue to report their progress on a semi-annual basis, and the PSC will continue to monitor the EV Charging Pilot to ensure implementation continues as planned and to evaluate the benefits to ratepayers and the State.

Appendix A

Utility	Station Name	Address	City	County	L2 Chargers	DCFC	Date Commissioned
Pepco	Takoma Park - Morrison Park	Carroll & Ethan Allen Aves	Takoma Park	Montgomery	2	0	9/1/2019
	New Carrollton - Andrew Hanco Building	8511 Legation Rd	New Carrollton	Prince George's	2	0	2/1/2020
	Rockville - Thomas Farm Community Center	700 Fallsgrove Dr	Rockville	Montgomery	1	1	4/1/2020
BGE ¹⁴	Truxtun Park	273 Hilltop Ln	Annapolis	Anne Arundel	1	0	9/13/2019
	Carroll County Office Building/ Detention Center/ Sheriff's Office	225 Center St	Westminster	Carroll	1	1	12/10/2019
	Aberdeen City Center	11 Centennial Ln	Aberdeen	Harford	3	0	1/16/2020
	Howard County Library: Miller Branch	9421 Frederick Rd	Ellicott City	Howard	2	1	2/3/2020
	Carroll Community College	1601 Washington Rd	Westminster	Carroll	2	0	2/26/2020
	Eldersburg Library	6400 W Hemlock Dr	Sykesville	Carroll	3	0	3/2/2020
	Annapolis Library	1410 West St	Annapolis	Anne Arundel	2	1	3/13/2020
	Ripken Stadium	873 Long Dr	Aberdeen	Harford	7	2	3/30/2020
	North Carroll Branch Library	2255 Hanover Pike	Hampstead	Carroll	3	0	3/31/2020
	Howard County Library: Savage Branch	9525 Durness Ln	Laurel	Howard	2	0	4/24/2020
	Havre-de-Grace Park & Ride	816 Otsego St	Havre-de-Grace	Harford	3	0	4/28/2020
	Havre-de-Grace City Hall/ Police Station	711 Pennington Ave	Havre-de-Grace	Harford	2	1	4/28/2020
	Harford County Administrative Office	20 S Main St	Belair	Harford	0	2	5/5/2020
	Veronica Roni Chenowith Activity Center	1707 Fallston Rd	Fallston	Harford	4	0	5/5/2020
	Ascend One Building	8903 Standford Blvd	Columbia	Howard	3	2	6/25/2020
	Howard County Library: Glenwood Branch	2350 Roxbury Mills Rd	Cooksville	Howard	3	2	6/26/2020
	Carroll County Library: Finksburg Branch	2265 Old Westminster Pike	Finksburg	Carroll	2	1	6/29/2020
Washington Suburban Sanitary Commission	14501 Sweitzer Ln	Laurel	Howard	2	0	6/30/2020	

¹⁴ BGE and Baltimore City have agreed to a Memorandum of Understanding (“MOU”) to begin installing public chargers in Baltimore.

Appendix A

Utility	Station Name	Address	City	County	L2 Chargers	DCFC	Date Commissioned
PE	Frostburg- Parish Hall	16 Uhl St.	Frostburg	Allegany	1	0	3/23/2020
	Middletown Lot - Elm St.	119 Washington St.	Middletown	Frederick	1	0	4/3/2020
	Frederick - MARC Train	155 B and O Ave.	Frederick	Frederick	1	0	4/3/2020