**ORDER NO. 90036**

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| In the Matter of the Petition of the Electric Vehicle Work Group for Implementation of a Statewide Electric Vehicle Portfolio | * * * * * * * * | BEFORE THE PUBLIC SERVICE COMMISSION OF MARYLAND<br><br>CASE NO. 9478 |

# ORDER APPROVING, IN PART, MODIFICATIONS TO THE STATEWIDE ELECTRIC VEHICLE CHARGING PILOT PROGRAM

Before: Jason M. Stanek, Chairman
Michael T. Richard, Commissioner
Anthony J. O'Donnell, Commissioner
Obi Linton, Commissioner
Mindy L. Herman, Commissioner

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## I. INTRODUCTION

1. This matter comes before the Commission on the mid-course program evaluation reports and Q1/Q2 2021 semi-annual progress reports submitted by Baltimore Gas and Electric Company ("BGE"), Potomac Electric Power Company ("Pepco"), Delmarva Power & Light Company ("Delmarva"), The Potomac Edison Company ("Potomac Edison"), and Southern Maryland Electric Cooperative ("SMECO") (collectively the "Utilities"), which pertain to the implementation of their approved electric vehicle ("EV") charging program offerings.

2. The Utilities filed their reports in accordance with the Commission's directive in Order No. 88997. In their mid-course evaluation reports, the Utilities propose for Commission approval specific modifications and enhancements to their EV charging programs, based on approximately two years of learnings and, in some cases, successes—for a combined total of 34 proposals. The proposed enhancements span four different program areas, including residential, multifamily, public, and fleet and workplace charging. Additionally, four utilities seek authorization to increase their customer education and outreach ("E&O") budgets.

3. The Commission received numerous stakeholder comments in response to the Utilities' proposals and conducted a legislative-style hearing on the mid-course review of the EV programs to consider their progress and the Utilities' proposed modifications. For the reasons that follow, the Commission approves, in part, and denies, in part, the Utilities' proposed modifications.

## II. BACKGROUND

### A. Procedural Background

4. On January 14, 2019, the Commission issued Order No. 88997 in this case ("2019 EV Order"), approving, in part, and denying, in part, a Petition for Implementation of a Statewide Electric Vehicle Portfolio ("Portfolio").[1] The approved Portfolio consisted of a suite of utility-administered EV charging pilot programs for BGE, Pepco, Delmarva, and Potomac Edison (collectively the "Investor-Owned Utilities" or "IOUs"), further divided into residential; non-residential, multi-unit dwelling (or multifamily); public charging; and technology sub-portfolios (collectively the "EV Pilot").

5. On August 1, 2019, the Commission approved a separate EV pilot application submitted by SMECO, further expanding the public charging program of the EV Pilot.[2]

6. In the 2019 EV Order, the Commission established a reporting and hearing schedule for the EV Pilot, directing the Utilities to file with the Commission semi-annual progress reports, with a Q1/Q2 report due on August 1st and a Q3/Q4 report due on February 1st of the following year, and a mid-course EV program evaluation report due on September 15, 2021.[3] The Commission noted that it would conduct a legislative-style hearing for the mid-course program review in October-November 2021 to examine the progress of the EV Pilot.[4]

7. In accordance with the schedule, the Utilities began filing their semi-annual progress

[1] Maillog No. 223588 ("2019 EV Order").
[2] Maillog No. 226304, Letter Order to SMECO Approving Application (August 1, 2019). SMECO's EV pilot application focused solely on public charging equipment and did not include a residential or non-residential component. *See* Maillog No. 225269, SMECO Application for Public Electric Vehicle Charging Station Pilot Program (May 14, 2019).
[3] 2019 EV Order at 74.
[4] *Id.*

reports in August 2019,[5] and have since covered the reporting period from August 2019 through August 2021. The Commission addressed and noted the Utilities' semi-annual filings at subsequent Administrative Meetings from September 2019 through March 2021.

8. At the March 17, 2021 Administrative Meeting, the Commission directed the Utilities to file their Q1/Q2 2021 semi-annual reports at the same time as their mid-course program evaluation reports, on or before September 15, 2021.

9. On August 17, 2021, the Commission issued a Notice of Virtual Mid-Course EV Pilot Hearing and Comment Period, establishing a virtual, legislative-style hearing on October 13, 2021, to consider the Utilities' anticipated mid-course EV pilot evaluation reports and Q1/Q2 2021 semi-annual reports, and also providing an opportunity for public comment.[6]

10. On September 15, 2021, the Utilities filed their Q1/Q2 semi-annual reports and mid-course evaluation reports.[7] The Utilities also jointly filed a Mid-Course Evaluation, Measurement and Verification Report that same day.[8] Contemporaneous with those filings, the PC44 EV Work Group Leader filed a separate Summary of Mid-Course EV Pilot Review Activities, describing the Utilities' efforts to examine the progress of the EV Pilot and discuss

[5] *See* Maillog No. 226310, Baltimore Gas and Electric Company, Potomac Electric Power Company and Delmarva Power Light Company, Joint Utilities Semi-Annual Progress Report Pursuant to Order No. 88997 (August 1, 2019); Maillog No. 226303, The Potomac Edison Company, Semi-Annual Progress Report for the period of January 14, 2019 through June 30, 2019 (August 1, 2019). SMECO filed its first semi-annual progress report on January 31, 2020. Maillog No. 228398, SMECO Semi-Annual Progress Report (January 31, 2020).

[6] Maillog No. 236675, Notice of Virtual Mid-Course EV Pilot Hearing and Comment Period (Aug. 17, 2021).

[7] Maillog No. 237048, Baltimore Gas and Electric Company – Semi-Annual Progress Report and Mid-Course Program Evaluation Report (Sept. 15, 2021) ("BGE Report"); Maillog No. 237050, The Potomac Edison Company – Semi-Annual Progress Report for the Period of January 1, 2021 Through June 30, 2021 (Sept. 15, 2021) ("Potomac Edison Report"); Maillog No. 237055, Southern Maryland Electric Cooperative, Inc. – Semi-Annual Progress Report for the Period of January 1, 2021 Through June 30, 2021 (Sept. 15, 2021) ("SMECO Report"); Maillog No. 237059, Potomac Electric Power Company – Delmarva Power & Light Company – Semi-Annual Progress Report for the Period of January 1, 2021 Through June 30, 2021 (Sept. 15, 2021) ("PHI Report").

[8] Maillog No. 237041, Baltimore Gas and Electric Company – Joint Utilities Mid-Course Evaluation, Measurement and Verification Report (Sept. 15, 2021) ("Guidehouse Report").

potential proposals for the Commission's consideration ("Work Group Summary").[9] The Work Group Summary covered activities that took place between May 2021 and August 2021.[10]

11. In response to the Utility filings, the Commission received 19 written comments from interested parties and stakeholders through October 22, 2021.[11]

12. The Commission held the virtual legislative-style hearing on October 13, 2021 ("October Hearing"). Interested parties and stakeholders who appeared before the Commission included: the Utilities, WeaveGrid, Inc.; Greenlots; FreeWire Technologies, Inc. ("FreeWire"); EVgo Services LLC ("EVgo"); ChargePoint, Inc.; Guidehouse Inc.; Paul Verchinski (consumer); Lynn Parsons (consumer); Lanny Hartmann (consumer); the Maryland Office of People's Counsel ("OPC"); and the Commission's Technical Staff ("Staff").

### B. Proposed Mid-Course Program Enhancements

13. The Utilities request authorization to modify their EV programs in one or more areas. While the majority of these proposals relate to the Commission-approved sub-portfolio

[9] Maillog No. 237040, Comments by PC44 EV Work Group Leader (Sept. 15, 2021) ("Work Group Summary").
[10] *Id.* at 2-3.
[11] Maillog No. 237248, Comments by ZEEVIC (Oct. 1, 2021) ("ZEEVIC Comments"); Maillog No. 237266, Comments by Members of the Board of Directors of the Electric League of Maryland (Oct. 4, 2021) ("ELM Comments"); Maillog No. 237282, Comments by Lyft, Inc. (Oct. 4, 2021) ("Lyft Comments"); Maillog No. 237306, Comments by Paul Verchinski (Oct. 6, 2021) ("Verchinski Comments"); Maillog No. 237310, Comments by MD Volt, Inc. ("MD Volt Comments"); Maillog No. 237316, Comments by ChargePoint, Inc. (Oct. 6, 2021) ("ChargePoint Comments"); Maillog No. 237321, Comments by EVgo Services LLC (Oct. 6, 2021) ("EVgo Comments"); Maillog No. 237322, Comments by Alliance for Transportation Electrification (Oct. 6, 2021) ("ATE Comments"); Maillog No. 237325, FreeWire Technologies, Inc. (Oct. 6, 2021) ("FreeWire Comments"); Maillog No. 237327, Comments by WeaveGrid, Inc. (Oct. 6, 2021) ("WeaveGrid Comments"); Maillog No. 237330, Comments by EnergyHub Inc. (Oct. 6, 2021) ("EnergyHub Comments"); Maillog No. 237331, Comments by Office of Staff Counsel (Oct. 6, 2021) ("Staff Comments"); Maillog No. 237332, Comments by Greenlots (Oct. 6, 2021) ("Greenlots Comments"); Maillog No. 237333, Comments by Office of People's Counsel (Oct. 6, 2021); Maillog No. 237349, Corrected Comments by OPC (Oct. 7, 2021) (referred together with Maillog No. 237333 as "OPC Comments"); Maillog No. 237336, Comments by Edison Electric Institute (Oct. 7, 2021 ) (utility-specific comments hereinafter referred to as "EEI BGE Comments", "EEI PHI Comments", and "EEI PE Comments"); Maillog No. 237339, Comments by Greater Washington Region Clean Cities Coalition (Oct. 7, 2021) ("GWRCCC Comments"); Maillog No. 237340, Comments by EVNoire (Oct. 7, 2021) ("EVNoire Comments"); Maillog No. 237369, Comments by Cinemark on behalf of Six Customer Signatories (Oct. 12, 2021) ("Cinemark Signatories Comments"); Maillog No. 237536, Comments by Alliance for Automotive Innovation (Oct. 22, 2021) ("AAI Comments").

categories of residential, multifamily, and public charging, several proposals fall into a relatively novel category of fleet and workplace charging.[12]

14. The Utilities' proposed offerings are summarized here, along with the general positions of the interested parties who filed comments in this proceeding either supporting or opposing, in whole or in part, the utility proposals.

### 1. BGE

15. BGE proposes 14 program enhancements across its residential, multifamily, public, and fleet sub-portfolios, as well as one E&O modification. BGE also requests the extension of certain COMAR waivers previously granted in the 2019 EV Order, along with additional COMAR waivers, to allow the Utilities to continue using smart Level 2 ("L2") chargers as submeters. In total, BGE's proposed enhancements require a budget increase of approximately $22 million[13] over its current budget of approximately $24 million.[14]

#### *a. Residential*

16. BGE's residential enhancements consist of three rebate-related proposals that require a program budget increase of approximately $1.82 million.[15] First, BGE requests an additional 2,500 residential rebates, at $300 per rebate, for electric vehicle supply equipment ("EVSE")—specifically, smart L2 chargers—in light of the fact that the company has oversubscribed its allotted number of residential rebates.[16] The additional rebates could also be applied to EVs with embedded vehicle telematics.[17]

[12] Currently, BGE is the only utility to offer an approved fleet incentive, which consists of a 25 percent discount for fleet customers on Commission-approved tariff rates to use BGE's public DCFC network.
[13] BGE Report, Appendix N - Mid-Course Program Review Proposals at 1.
[14] BGE Report, Appendix B - BGE EVsmart Program Budget at 1.
[15] BGE Report, Appendix N at 1.
[16] BGE Report at 25.
[17] Oct. 13 Hr'g Tr. at 19 (Fleischmann Groncki).

17. Second, BGE proposes to revise its rebate structure to include a $50 annual credit for customers keeping their EV charger or vehicle enrolled in the EVsmart program.[18] This credit is in addition to the EVSE rebate and would continue for the remainder of the EV Pilot, provided that the customer remains enrolled in BGE's EV-only time-of-use ("TOU") rate or, if ineligible for the rate, remains connected to the data platform and meets specific charging requirements.[19]

18. Third, BGE proposes to offer limited-income customers an expanded rebate incentive, up to $1,000, toward the purchase and installation of a smart EV charger.[20] To qualify for this larger rebate, the limited-income customer must have a gross income of $50,000 or less in a one-person household, or $96,122 or less in a 2+ person household.[21]

*b. Multifamily*

19. BGE requests four multifamily modifications, which require approximately $3.7 million in additional budget. First, the company seeks approval to install, own, and operate 100 L2 chargers on multifamily properties, adding to the 40 L2 chargers previously approved for BGE in March 2021.[22] A percentage (e.g., 10-20 percent) of these chargers would be installed at multifamily locations with a high concentration of low-to-moderate income ("LMI") residents.[23] Residents would pay the same charging rate as BGE's public charging network.[24]

20. Second, BGE proposes to expand the eligibility for its existing multifamily rebates to include private charging companies toward installing new, public-facing direct-current fast charger ("DCFC") stations with 24/7 access at locations within one mile of at least 100

[18] BGE Report at 26.
[19] *Id.* at 26-27.
[20] *Id.* at 37.
[21] *Id.* at 27.
[22] *Id.* at 28.
[23] *Id.* at 29.
[24] *Id.* at 28-29.

multifamily residential units.[25] BGE also seeks to increase the maximum site incentive under the rebate from $25,000 to $30,000 per site to accommodate up to two DCFCs per site.[26]

21. Third, BGE proposes that multifamily residents receive a 25 percent discount on BGE's Commission-approved tariff rates to use BGE's EVsmart public DCFCs ("Multifamily Rate"). This Multifamily Rate aims to provide multifamily property residents with access to charging "at a cost more comparable, though not equal, to costs for homeowners who have the ability to install and utilize L2 chargers at their own homes."[27]

22. Fourth, BGE requests approval to establish a carsharing program at 15 distinct multifamily properties serving LMI customers in BGE's service territory. The company would partner with a carshare company to provide one EV and one L2 EV charger at each of the properties; BGE would not own or operate the EVs.[28]

*c. Public*

23. BGE is proposing three enhancements to its public charging sub-portfolio. First, BGE requests $1 million for an enhanced maintenance and repair services contract with Greenlots for the remainder of the EV Pilot, to better ensure the reliability of BGE's public charging network by a factor of 98 percent or higher. Greenlots commits to provide BGE with any necessary EV charger parts, software expertise, and full-time electrician support.[29]

24. Second, BGE seeks Commission approval to convert 100 of its L2 chargers to DCFCs and shift its L2:DCFC ratio from 80:20 to 60:40, thereby enabling BGE to offer more 50kW DCFCs while maintaining the same program total of 500 approved public chargers.[30]

[25] *Id.* at 29-30.
[26] *Id.* at 30.
[27] *Id.*
[28] *Id.* at 32.
[29] *Id.* at 34.
[30] *Id.* at 35.

25. Third, if the Commission approves its DCFC conversion request, BGE requests authorization to install 100 higher-powered 150 kW DCFC chargers in lieu of the 50 kW units.[31] BGE's combined incremental budget request for its two DCFC-related proposals is $11 million.[32]

*d. Fleet and Workplace*

26. BGE proposes four fleet- and workplace-related modifications. BGE's first fleet request is for $100,000 to launch a web-based "Fleet Calculator Tool" on BGE's website for fleet customers considering a transition to fleet electrification.[33] This tool will help fleet customers understand the costs and feasibility of electrifying their fleets by providing information on available EVs, charging equipment, and charging rates.

27. BGE's second request is for authorization to provide 100 technical assessments to support fleets through an advisory service from beginning to end of the electrification journey. The assessments will help fleet managers gain a deeper understanding of the full total cost of ownership ("TCO") for an electrified fleet as well as greenhouse gas emissions reductions and other savings.[34]

28. Third, BGE proposes to offer fleet and workplace rebates to lower the upfront costs of electrification, which continue to be a major barrier for many fleets. The fleet rebate will adopt the same rebate structure as BGE's multifamily rebate, with a maximum incentive per location capped at $30,000.[35]

29. Fourth, BGE recommends that the Commission convene an EV Working Group subgroup to discuss, strategize, and develop future EV fleet offerings.

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[31] *Id.*
[32] BGE Report, Appendix N at 1.
[33] BGE Report at 37.
[34] *Id.* at 38.
[35] *Id.* at 39.

*e. Other Requests*

30. In addition to the sub-portfolio enhancements, BGE seeks to increase its customer E&O budget from the current five percent of its total EV program budget to 10 percent.[36] Using BGE's existing program budget of $24 million, this enhancement would require an additional $1.1 million. The increased budget will enable BGE to engage different customers beyond early EV adopters and educate them on charging behavior.[37]

31. Lastly, BGE requests a continuation of the COMAR waivers granted in the 2019 EV Order, which allow the Utilities to utilize the "smart" features of EV chargers and treat them as electric submeters.[38] BGE further asks the Commission to grant additional waivers for COMAR Sections 20.25.01.04C, 20.25.01.04I, 20.25.01.04J(1), and 20.25.01.04J(2) to reflect the lack of industry standards for testing EV chargers for submetering accuracy.[39] BGE requests that these waivers continue for the duration of the EV Pilot.

**2. Pepco and Delmarva ("PHI Companies" or "PHI")[40]**

32. The PHI Companies acknowledge that their progress to date on the EVsmart program has fallen short of expectations.[41] Despite the shortfalls, the PHI Companies have seen progress in advancing charging installations, particularly for the residential charging rebate program. They are also making significant improvements to their implementation and program management practices. The PHI Companies propose 11 program enhancements for their existing residential and multifamily programs. Additionally, the PHI Companies submit for consideration new fleet and workplace program proposals.[42] In total, these program enhancements require a budget

[36] *Id.* at 40.
[37] *Id.* at 41.
[38] *Id.* at 41-42.
[39] *Id.* at 42.
[40] In their filings, Pepco and Delmarva refer to themselves jointly as the "PHI Utilities."
[41] PHI Report at 3.
[42] *Id.* at 22.

increase of approximately $4.64 million[43] over the PHI Companies' current combined budget of approximately $21 million.[44]

*a. Residential*

33. The PHI Companies propose four residential enhancements for a combined budget increase of $207,000. Their first proposal is identical to BGE's E&O request—namely, to increase their E&O budgets from five percent of total program budget to 10 percent.[45]

34. The second proposal revises the $300 residential rebate program to allow customers with EVs capable of leveraging embedded metrology data to qualify for the EVSE rebate. This enhancement would bring the PHI's program into alignment with BGE's program.[46]

35. Third, the PHI Companies propose to offer the same $50 annual credit as BGE for their customers' continued enrollment and participation in the PHI EVsmart program.[47]

36. Lastly, the PHI Companies share BGE's proposal to offer a larger $1,000 rebate incentive for LMI customers.

*b. Multifamily*

37. The PHI Companies propose three enhancements to their multifamily charging programs at zero additional cost to ratepayers. First, the PHI Companies propose to decrease the target total number of multi-unit dwelling ("MUD") charging stations from 250 to 125, while increasing the incentive for make-ready installation costs and offering a 100 percent rebate for L2 charging stations.[48] The make-ready incentive amount would increase from $7,500 to $15,000 per L2 station.[49]

[43] Staff Comments at 20 (citing PHI Response to Staff DR 1-16).
[44] PHI Report, Appendix A - Delmarva Power and Pepco EVsmart Program Budgets at 43.
[45] PHI Report at 24.
[46] *Id.*
[47] *Id.* at 25.
[48] *Id.* at 23.
[49] *Id*.

38. Second, the PHI Companies share BGE's proposal to expand the eligibility for their existing MUD rebates to new, non-utility owned public DCFC stations located within one mile of at least 100 multifamily residential units.[50] Similarly, the PHI Companies also align with BGE to offer the same 25 percent discount to multifamily residents when using company-owned public DCFCs.[51]

*c. Fleet and Workplace*

39. The PHI Companies share the same four fleet and workplace proposals as BGE. These include the Fleet Calculator Tool for each of the PHI operating companies, the 100 technical assessments (total) as a turnkey advisory service, the fleet and workplace rebate incentive, and the EV Working Group fleet-specific subgroup request.[52] The total requested budget adjustment for these proposed modifications is $3.45 million.[53]

**3. Potomac Edison**

40. Potomac Edison offers six program modifications across four program categories, including one request for fleet action, for a total budget increase ranging from $410,000 to $1.13 million[54] over its current budget of approximately $6 million.[55] Unrelated to the mid-course review, Potomac Edison also proposes to update the charging rates at its company-owned and operated public charging stations.

*a. Residential*

41. Potomac Edison proposes two residential program modifications. First, Potomac Edison requests approval to increase its customer education and outreach budget, the same as BGE and

[50] *Id.* at 24.
[51] *Id.*
[52] *Id.* at 26-28.
[53] *See* Staff Comments at 23.
[54] Potomac Edison Report at 11-12.
[55] *Id.* at 19.

the PHI Companies.[56] This would require an incremental increase of $410,000.[57] Second, Potomac Edison proposes to continue its existing residential off-bill credit program in lieu of an EV-only TOU rate.[58] In the alternative, Potomac Edison requests approval for an additional $724,000 in funding to implement an EV-only TOU rate.[59]

*b. Multifamily*

42. Potomac Edison proposes one multifamily program enhancement, at no additional cost to ratepayers. Potomac Edison requests the ability to offer multifamily property owners the option for Potomac Edison to install, own and operate up to seven L2 chargers at their properties, in addition to offering rebates.[60] Each multifamily location would be limited to one separately metered, dual-port L2 charging station, which will apply the same charging rates as Potomac Edison's public charging network.[61]

*c. Public*

43. Potomac Edison proposes two revisions to its public charging program, also at no additional cost to ratepayers. First, Potomac Edison requests authorization to install three L2 chargers on gated government property parks—*i.e.*, parks that will temporarily close to the public for a certain number of hours at night.[62] Potomac Edison's second proposal asks the Commission to extend the company's EV pilot end date to match the end date for Potomac Edison's Urbana Park and Ride Energy Storage Pilot Project, as approved in Case No. 9619.[63] The EV extension would only apply to the Urbana location for the purpose of testing the

[56] *Id.* at 12.
[57] Staff Comments at 24.
[58] Potomac Edison Report at 11.
[59] *Id.* at 12-13.
[60] *Id.* at 13-14.
[61] *Id.*
[62] *Id.* at 14.
[63] *Id.*

integration of battery storage with EV charging. Potomac Edison also requests authorization to maintain the EVSE in working order for the duration of the storage pilot.[64]

*d. Fleet and Workplace*

44. Potomac Edison shares its only fleet proposal with BGE and the PHI Companies in recommending that the Commission create an EV Working Group fleet subgroup to further develop fleet and independent operator EV programs.[65]

**4. SMECO**

45. SMECO proposes two minor adjustments to its existing public charging program, at no additional cost to its members.[66] First, similar to Potomac Edison's gated charger proposal, SMECO requests that the Commission allow, on a case-by-case basis, flexibility for the Cooperative to place public L2 charging stations in park locations that close to the public for relatively short durations of the night.[67]

46. Second, SMECO requests the ability to install higher powered 150 kW DCFCs to meet the demands of the EV community and industry trends.[68] This request is similar to BGE's request for more powerful DCFCs, although SMECO proposes to absorb any increased costs within its existing budget.

[64] *Id.* at 15.
[65] *Id.*
[66] SMECO's current EV program budget, as approved, is $3 million. SMECO Report, Appendix A - SMECO Public Charging Program Budget at 1.
[67] SMECO Report at 15.
[68] *Id.* at 16.

47. While not part of this mid-program review, SMECO advises the Commission that it intends to file two separate program proposals to implement a residential and multi-unit dwelling program for EV installation.[69]

### C. Interested Party and Stakeholder Positions

#### 1. OPC

48. OPC expresses concern regarding the future roles of the Commission, the Utilities, and ratepayers in the further deployment of EVs and charging infrastructure throughout the State.[70] OPC believes that investment in EVs and charging stations should be advanced by other State agencies as opposed to funding those increased investments and incentives solely with ratepayer dollars. According to OPC, most EV infrastructure investments should not be treated as PSC-regulated monopoly services.[71]

49. OPC offers specific comments for each of the Utilities' mid-course proposals, which the Commission will address in the appropriate sections of the Commission Decision discussion.

#### 2. Staff

50. Staff supports a number of the Utilities' proposed modifications and objects to others. Staff fully supports two proposals broadly shared among the Investor-Owned Utilities. First, Staff supports the IOUs' request to increase their E&O budgets by another five percent. Second, Staff supports the IOUs' proposal to create an EV work subgroup dedicated to fleet electrification. Staff also provides utility-specific comments and recommendations, which are

[69] *Id.* SMECO's residential program will consist of $300 EVSE rebates, structured after the other utility residential rebate programs, for a projected total program cost of $962,000. For the MUD program, SMECO will propose to install, own, and operate up to 35 L2 EVSEs at MUD locations, for a projected total program cost of $1,458,000. *Id.* at 16-17. Whereas neither proposal has been formally presented to the Commission, they are beyond the scope of this Order.

[70] OPC Comments at 1.

[71] *Id.* at 2-3. The Commission previously addressed OPC's legal concerns surrounding utility-ownership of EV charging equipment in the 2019 EV Order. *See* 2019 EV Order at 37-40. The Commission does not revisit the discussion here.

discussed for each proposal in the appropriate sections of the Commission Decision. If accepted, Staff's modifications would translate to the following budget increases: approximately $4.49 million for BGE;[72] approximately $1.76 million for Pepco;[73] approximately $1.33 million for Delmarva;[74] and approximately $1.134 million for Potomac Edison.[75]

### 3. Other Positions in Support

51. In addition to the above-mentioned parties, 12 stakeholders filed comments in support of the Utilities' mid-course review program enhancement proposals, including the Maryland Zero Emission Electric Vehicle Infrastructure Council ("ZEEVIC");[76] Members of the Board of Directors of the Electric League of Maryland ("ELM");[77] Lyft;[78] the Joint Signatories of Cinemark USA, Inc., Lowe's Companies Inc., Marriott International, Inc., Prologis, Verizon, and Staples, Inc. ("Cinemark Signatories");[79] Alliance for Transportation Electrification ("ATE");[80] FreeWire;[81] WeaveGrid;[82] EnergyHub;[83] Greenlots;[84] Edison Electric Institute ("EEI");[85] Greater Washington Region Clean Cities Coalition ("GWRCCC");[86] and the Alliance for Automotive Innovation ("AAI")[87] (collectively the "Supporters"). The Supporters represent a broad cross-section of the industry. For brevity, the Commission does not recite the entirety of each

[72] Staff Comments at 1-2.
[73] *Id.* at 20.
[74] *Id.*
[75] *See id.* at 24-25.
[76] ZEEVIC Comments at 1.
[77] ELM Comments at 1.
[78] Lyft Comment at 1.
[79] Cinemark Signatories Comments at 1.
[80] ATE Comments at 1.
[81] FreeWire Comments at 5, 7-8.
[82] WeaveGrid Comments at 2.
[83] EnergyHub Comments at 1-2.
[84] Greenlots Comments at 1.
[85] EEI BGE Comments at 1; EEI PHI Comments at 1; EEI PE Comments at 1.
[86] GWRCCC Comments at 1.
[87] AAI Comments at 1-2.

Supporter's position but will discuss their responsive comments to specific Utility proposals in the Commission Decision section.

52. In general, the Supporters observe that the Utilities' proposals reflect significant stakeholder input over the span of several months.[88] The Supporters continue to affirm the Utilities' role in facilitating the deployment of EV charging infrastructure in the State and believe that expanding the Utilities' current EV program offerings is consistent with State priorities and goals.[89] They observe that, as EV adoption grows and more EV models become available, it is critical for the success of the EV Pilot that the Utilities capture as much customer participation in the EV programs to gather reliable data on charging usage.[90] Several Supporters, in particular, endorse those enhancements that further target LMI and disadvantaged communities, including expanding utility-owned charging stations in those communities and increasing rebate incentives to multifamily and low-income customer segments.[91] They also support the Utilities' efforts to address barriers to fleet electrification.[92]

53. In addition to providing supportive comments, ELM and FreeWire offer additional recommendations for the EV Pilot. ELM supports investing in new, innovative processes for lessening the time required to charge vehicles. For example, ELM recommends exploring induction charging and billing for vehicle charging via the customer's existing electric meter.[93] FreeWire, a manufacturer of battery-integrated EVSE, recommends that the Commission incorporate energy storage technologies into the EV charging portfolio and require more detailed reporting of cost data related to EVSE deployment.[94]

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[88] *See* Greenlots Comments at 1; WeaveGrid Comments at 3; ATE Comments at 2; EEI BGE Comments at 2.
[89] AAI Comments at 3; ZEEVIC Comments at 1; EEI BGE Comments at 2.
[90] *See* ATE Comments at 1-2; EEI PHI Comments at 3; WeaveGrid Comments at 6; EnergyHub Comments at 2.
[91] Lyft Comments at 1; ELM Comments at 1; GWRCCC Comments at 1.
[92] Greenlots Comments at 4-5; ATE Comments at 2-6; EEI BGE Comments at 3; EEI PHI Comments at 3-4.
[93] ELM Comments at 1.
[94] FreeWire Comments at 8-9.

### 4. Other Positions in Full or Partial Opposition

54. Seven stakeholder participants oppose the Utilities' mid-course enhancements, either in their entirety or with respect to one or more proposals. Their general positions are summarized below.

#### *a. ChargePoint*

55. ChargePoint partially supports the enhancements proposed by BGE and the PHI Companies (together the "Exelon Joint Utilities") but opposes several proposals. ChargePoint is concerned that certain elements of the proposed enhancements are inconsistent with the 2019 EV Order and will effectively delay the development of the competitive market for EV charging in Maryland.[95] ChargePoint offers specific comments and recommendations with respect to individual proposals, which are discussed in the Commission Decision section. In general, ChargePoint supports the Exelon Joint Utilities' efforts to address barriers to EV charging and EV adoption in a vendor-neutral manner.[96] ChargePoint does not, however, support modifications that would place a disadvantage on competitively-operated charging stations, such as any expansion of utility-owned charging stations.[97]

#### *b. EVgo*

56. EVgo requests that the Commission deny the Utilities' proposals to expand their budgets and, instead, direct them to develop a more complete, overarching framework for future transportation electrification investments.[98] EVgo supports a shared responsibility model for deploying charging infrastructure.[99] Hence, a utility plan should better account for ways to encourage third-party investments and other funding sources currently available at the State or

[95] ChargePoint Comments at 1.
[96] *Id.* at 7-8.
[97] *See id.* at 6.
[98] EVgo Comments at 2.
[99] *Id.* at 3.

federal level for deploying public charging infrastructure.[100] EVgo's specific comments and recommendations with respect to individual utility offerings are discussed in the Commission Decision section.

*c. MD Volt*

57. In its comments, MD Volt Inc. expresses concern regarding the reliability of utility-owned and operated charging stations in Maryland.[101] MD Volt alleges that some stations are chronically broken or remain unavailable for use. Where BGE's own filing suggests that reliability needs to be improved, MD Volt recommends that the Commission require reliability reports in the future to include details on charger uptime at utility-owned and operated stations.[102] Additionally, MD Volt suggests that the utilities install public L2 chargers that dispense more than 7 kW to take advantage of faster L2 charging speeds in vehicles coming to market.[103]

58. MD Volt commends SMECO and Potomac Edison for their EV parking control signage at public charging stations. The signs are consistent with the Federal Highway Administration's ("FHWA") Memorandum on Regulatory Signs for Electric Vehicle Charging and Parking Facilities.[104] MD Volt recommends that all Utilities follow the FHWA standards for parking control signs.[105]

*d. EVNoire*

59. EVNoire is concerned with the lack of charging station deployment in underserved, rural, and densely populated urban communities. EVNoire suggests that Maryland engage with

[100] *Id.* at 2.
[101] MD Volt Comments at 1.
[102] *Id.*
[103] *Id.*
[104] *Id.* at 2.
[105] *Id.*

communities before, during, and after infrastructure deployment to improve equitable distribution of charging infrastructure.[106]

*e. Paul Verchinski*

60. Mr. Verchinski focuses most of his comments on BGE's multifamily program. He favors turnkey EVSE solutions over multi-unit dwelling rebates and offers four specific recommendations related to multifamily proposals, as follows:[107]

> (1) allow the utilities to install and maintain one double plug L2 EVSE for each homeowners association and apartment complex in the State;
>
> (2) require utilities to survey and include any infrastructure upgrades needed to support the first L2 EVSE;
>
> (3) require utilities to provide the Commission with a grid impact assessment and cost estimate for any new/upgraded distribution lines or transformers needed to accommodate future L2 chargers at these locations; and
>
> (4) require utilities to build out the distribution system for future L2 chargers.[108]

*f. Lynn Parsons*

61. Ms. Parsons attended the October Hearing and expressed frustration regarding charging station reliability. She shared her concern with charger availability and the potential for conflict amongst neighbors competing for insufficient charging resources.[109] Ms. Parsons supports the continued utilization of L1 chargers and installing EVSEs at parks.[110]

[106] EVNoire Comments at 1.
[107] Verchinski Comments at 2.
[108] *Id.*
[109] Oct. 13 Hr'g Tr. at 246-47 (Parsons).
[110] *Id.* at 245 (Parsons).

*g. Lanny Hartmann*

62. Mr. Hartmann attended the October Hearing and commented on the reliability of public charging from an EV driver's point of view.[111] Mr. Hartmann, as a BGE ratepayer and EV driver, opposes BGE's request for $1 million to improve reliability of public charging from 95 percent to 98 percent uptime.[112] Mr. Hartmann is also concerned about using DCFCs as a substitute for Level 2 charging at multi-unit dwellings.[113]

## III. COMMISSION DECISION

63. The Commission supports several of the Pilot Utilities' program enhancements. As with the 2019 EV Order, the Commission must balance multiple considerations in addition to the overarching goals of these program enhancements, such as "the appropriate size of an EV charging program, the level of utility involvement, the ratepayer impacts, the cost-effectiveness of the program, the overall benefits to all Maryland ratepayers, and the potential impediments to competition by market participants."[114]

### A. Residential Program Proposals

#### 1. BGE – Additional Residential Rebates

64. BGE requests an additional 2,500 residential smart EV charger rebates because the company has already issued all of its allotted 1,000 residential rebates,[115] and another 165 customers are currently on a waitlist.[116] BGE notes that with more affordable EVs coming to market and the availability of more pre-owned EVs for purchase, it is important to engage new EV drivers and incentivize them to purchase smart EV chargers so that the company can monitor

[111] *Id.* at 248 (Hartmann).
[112] *Id.* at 250-51 (Hartmann).
[113] *Id.* at 249-50 (Hartmann).
[114] 2019 EV Order at 37.
[115] BGE Report at 25.
[116] Oct. 13 Hr'g Tr. at 18 (Fleischmann Groncki). According to BGE, the Company averaged approx. 70 residential rebate applications per month. BGE Report at 25.

charging patterns and collect usage data.[117] This, in turn, will allow those customers to participate in the EV-only TOU rate and future managed charging programs to reduce distribution system load impacts.[118]

65. A number of industry stakeholders broadly support this request, including Lyft,[119] ELM,[120] ChargePoint,[121] ATE,[122] WeaveGrid,[123] EnergyHub,[124] and EEI.[125] They contend the rebates will reduce barriers to EV adoption by discounting the costs to purchase and install EV charging infrastructure at home.[126] EnergyHub further draws a high correlation between customers who received a residential rebate and their likely participation in BGE's EVsmart rates and programs.[127] WeaveGrid points out that BGE's request for another 2,500 rebates is not only reasonable but also smaller than other utility rebate programs approved in other states.[128]

66. OPC supports this proposal but is concerned about potential free ridership, given the nascent state of EV adoption in Maryland, the fact that BGE's rebate offering is already oversubscribed, and that current market participants tend to be wealthier and do not necessarily rely on rebates to motivate their EV purchases.[129] OPC therefore recommends two modifications to BGE's residential rebate request. First, the Commission should limit BGE's additional rebates to 1,000 and require an evaluation of free ridership.[130] Second, any additional rebates should be tiered based on the rebate applicant's income level and whether that individual will also receive

[117] BGE Report at 26.
[118] *Id.*
[119] Lyft Comments at 1.
[120] ELM Comments at 1.
[121] ChargePoint Comments at 2.
[122] ATE Comments at 1.
[123] WeaveGrid Comments at 5-6.
[124] EnergyHub Comments at 1.
[125] EEI Comments at 2-3.
[126] *See, e.g.*, ChargePoint Comments at 2.
[127] EnergyHub Comments at 2.
[128] WeaveGrid Comments at 5.
[129] OPC Comments at 9-10.
[130] *Id.* at 10.

funds from the Maryland Electric Vehicle Supply Equipment Rebate Program through the Maryland Energy Administration.[131] If BGE determines it is too administratively burdensome to adopt a tiered incentive structure, OPC recommends that the rebates be reduced from $300 to $200.[132]

67. Staff opposes BGE's request for additional residential rebates, observing that this proposal will cost BGE ratepayers an additional $900,000.[133] Staff remains unconvinced that smart charger rebates provide the most efficient and cost-effective means to increase EV adoption.[134] In fact, Staff notes that many EVs on the market include smart capability and advanced vehicle telematics that render smart chargers unnecessary.[135] Although BGE currently allows only Tesla owners to use their vehicles' telematics to measure kWh usage for BGE's EV TOU rates, BGE is exploring ways to allow more auto manufacturers to provide their charging data via telematics.[136]

68. EV technology has advanced considerably since the launch of the EV Pilot in 2019. With the 2019 EV Order, the Commission determined the appropriate incentive for encouraging EV adoption while, more importantly, enabling the collection of critical charging data for grid impact studies and future load management applications.[137] The Commission limited the number of available residential rebates to lower the overall cost to ratepayers.[138] The fact that BGE has exhausted and oversubscribed the residential rebate offering speaks to the high level of customer interest in the program offering, but it does not necessarily follow that expanding the rebates, at additional ratepayer cost, is the best way to incentivize EV adoption.

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[131] *Id.*
[132] *Id.*
[133] Staff Comments at 2.
[134] *Id.*
[135] *Id.*
[136] *Id.*
[137] 2019 EV Order at 46-47.
[138] *Id.* at 47.

69. While it is true that rebates can help lower costs to own and install an EV charger, the Commission must once again weigh the potential cost impact of BGE's request against the benefits, or in this instance, the need for additional rebates to achieve the same usage data purposes for which the program was designed. Smart chargers are more expensive than non-smart chargers. Where the rebates were intended to cover the price gap between smart and non-smart chargers, the Commission finds that use of a smart charger is becoming less relevant as more EVs enter the market with the capability of leveraging on-board telematics to not only capture the vehicle's charging data, but also program charging during specific times of the day, all without the need for a smart charger.[139] Here, there is an opportunity for the EV Pilot to pivot with technology. WeaveGrid points out that the Exelon Joint Utilities are utilizing embedded EV telematics to enable more residential customer participation in their programs, without installing specific chargers or onboard diagnostic devices, and encourage more off-peak charging.[140] This indicates that BGE and PHI need not depend on smart chargers to collect valuable EV usage data. Indeed, WeaveGrid conceded at the October Hearing that the most cost-effective solution in the near term is for utilities to leverage vehicle telematics. Therefore, the Commission does not find it in the public interest to use additional ratepayer funds in this manner, and BGE's request for additional residential rebates is denied.

### 2. BGE/PHI – Annual Credit for Continued EV Participation

70. The Exelon Joint Utilities request approval to offer an annual credit of $50 to those customers who currently participate in the residential EV program.[141] If approved, this proposal

[139] Notably, the Exelon Joint Utilities recently received approval from the Commission to pursue a smart charging project in partnership with the U.S. Department of Energy. Maillog No. 237311, Letter Order to BGE Accepting Request to Approve the Smart Charge Management Project (Oct. 6, 2021). One aspect of that project will examine managed EV charging control using vehicle telematics. Maillog No. 236855, Baltimore Gas and Electric Company – Request for Approval to Implement DOE Smart Charge Management Project (August 30, 2021).
[140] WeaveGrid Comments at 3-4.
[141] BGE Report at 26; PHI Report at 25.

would increase the residential budgets for BGE and the PHI Companies by $462,000 and $100,000, respectively.[142] The PHI Companies explain that after receiving the EVSE rebate, some rebate customers may disconnect from the EVsmart platform, thereby limiting the utility's ability to derive insights from charging activity.[143] According to BGE, the credit would further allow the company to incentivize and analyze customer charging behaviors and better assess grid impacts from electrification.[144]

71. EEI,[145] ATE,[146] WeaveGrid,[147] and EnergyHub[148] specifically recommend the Commission approve the proposed annual incentive for residential EV participants, explaining that increased device connectivity and reduced program attrition are critical for ensuring a consistent flow of reliable charge session data for both TOU billing purposes and to inform utility development of future EV programs.[149]

72. OPC supports this proposal but disagrees with applying the $50 annual credit to those customers who are currently enrolled in the EV-only TOU rate.[150] Rather, OPC recommends limiting the credit to customers who are either ineligible or otherwise not participating in the EV-only TOU rate.[151]

73. Staff generally agrees with the Exelon Joint Utilities that it is important to keep EV customers engaged in the TOU rates and to incentivize off-peak charging.[152] Staff recommends that BGE issue a $50 credit to all residential rebate customers and EV-only TOU customers who

[142] *See* Staff Comment at 3, 21.
[143] PHI Report at 25.
[144] BGE Report at 27.
[145] EEI Comments at 3.
[146] ATE Comments at 2.
[147] WeaveGrid Comments at 6
[148] EnergyHub at 3.
[149] ATE Comments at 2; EnergyHub Comments at 3.
[150] OPC Comments at 11, 23-24.
[151] *Id.* at 24.
[152] Staff Comments at 3.

actively participate in BGE's EV programs, up to 2,500 total customers, for the remaining two years of the EV Pilot.[153] This would reduce BGE's incremental budget increase to $250,000.[154] For the PHI Companies, Staff similarly recommends limiting the annual credit to the 1,000 residential rebate recipients allotted for PHI—specifically, 750 for Pepco and 250 for Delmarva—for a combined budget increase of $100,000.[155]

74. The Commission finds value in granting this program enhancement for the Exelon Joint Utilities, as modified by Staff. Generally, the Utilities must have sufficient charging data for the EV Pilot to be successful. The annual credit will incentivize active participation in the program and help shift customers to off-peak charging to the extent they are not currently enrolled in the EV-only TOU rate. BGE explains that as a condition of receiving the credit, non-TOU customers must keep their EVs connected to the EVsmart data platform for data-gathering purposes and charge their vehicles only between the hours of 9:00 PM and 7:00 AM for 90 percent of the time each year.[156] The Commission finds these conditions are reasonable.

75. BGE reports that residential customers who are signed up with WeaveGrid for the residential rebate charge on-peak on average of 19 percent of the time. However, customers who are also enrolled in the EV-only TOU rate are less likely to charge on peak—an average of six percent of the time.[157] As more customers participate in off-peak charging, other non-EV drivers will also benefit.

76. This incentive should help ensure that ratepayer funds will be applied toward a program that encourages EV charging in a way that more fully uses existing infrastructure to the benefit of all ratepayers, e.g., putting downward pressure on rates. The data collected from continued

[153] *Id.*
[154] *See id.* at 4.
[155] *See id.* at 21.
[156] BGE Report at 26-27.
[157] *Id.* at 27.

program enrollment should help the Exelon Joint Utilities analyze customer charging behavior and develop future demand response and managed charging offerings. Moreover, as EVs proliferate, further incentivizing off-peak charging may yield greater benefits to the distribution grid and limit O&M costs for the utility. While the exact benefits and cost savings remain unknown at this time, Staff believes an estimate of $50 per year is reasonable.[158] The Commission finds it appropriate to pass along those savings to participating customers.

### 3. BGE/PHI – Increase Limited-Income Customer Rebate

77. The Exelon Joint Utilities propose to expand the EVSE rebate up to $1,000 for limited-income customers to cover the purchase and installation of a smart EV charger.[159] During the EV Work Group design session, stakeholders expressed a need to provide additional incentives to limited-income customers to further reduce costs and encourage the switch to electrified transportation.[160] BGE explained at the October Hearing that limited-income customers may require more service work to older homes to accommodate EV charging.[161] To qualify for this additional rebate, a limited-income customer must have a gross income of $50,000 or less in a one-person household, or $96,122 or less in a 2+ person household.[162]

78. Several stakeholders specifically support providing additional rebates to low-income customers, including ZEEVIC,[163] ELM,[164] ChargePoint,[165] ATE,[166] EEI,[167] GWRCCC,[168] and

[158] Staff Comments at 4.
[159] BGE Report at 27.
[160] *Id.*
[161] Oct. 13 Hr'g Tr. at 20 (Fleischmann Groncki).
[162] BGE Report at 27.
[163] *See* ZEEVIC Comments at 1; ELM Comments at 1.
[164] ELM Comments at 1.
[165] ChargePoint Comments at 2, 6-7.
[166] ATE Comments at 2.
[167] EEI BGE Comments at 3; EEI PHI Comments at 3.
[168] GWRCCC Comments at 1.

WeaveGrid.[169] ChargePoint contends that this offering will further encourage and enable more limited-income customers to enjoy the benefits of owning and driving an EV.[170]

79. OPC objects to this proposal as premature, explaining that low-income customers face significant barriers to EV adoption due to higher upfront vehicle costs, lack of available EVs in the used-vehicle market, and EV pricing that is not expected to reach cost parity with internal combustion engine ("ICE") vehicles for low-income households until 2025-2030.[171] OPC recommends instead that the Exelon Joint Utilities should consult with organizations serving LMI communities to understand their charging needs before developing a proposal.[172] OPC also suggests that the Exelon Joint Utilities can consider make-ready incentive programs designed to reach low-income customers by lowering upfront costs of construction upgrades on the utility-side of the meter.[173] This approach would comprise a tiered-incentive structure offering higher make-ready incentives to site hosts located in or near an LMI community.[174] Another option involves electrifying public transit and school buses serving LMI communities.[175]

80. Staff recommends the Commission reject this proposal, believing that the need for smart chargers is not as necessary as it once was.[176] Staff also argues that the Exelon Joint Utilities failed to provide the details necessary to properly evaluate this proposal,[177] specifically alleging there is no discussion of how a customer would qualify as limited-income or how the Exelon Joint Utilities would verify the customer's status.[178]

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[169] WeaveGrid Comments at 3.
[170] ChargePoint Comments at 6-7.
[171] OPC Comments at 11, 24.
[172] *Id.*
[173] *Id.* at 12, 25.
[174] *Id.*
[175] *Id.*
[176] Staff Comments at 4.
[177] *Id.*
[178] *Id.*

81. The Commission finds that this proposal to offer a $1,000 rebate specifically to low-income customers is premature at this time. BGE indicates that this proposal would cost $462,000.[179] The PHI Companies do not provide an estimate for the number of rebates or the cost of this proposal. The Commission is not convinced that an EVSE rebate covering the purchase and installation of a smart EV charger is the most efficient and cost-effective way to provide low-income customers with equitable access to EV programs.[180] First, as stated earlier, offering rebates toward the purchase and installation of smart chargers does not seem nearly as relevant today as when the Commission issued the 2019 EV Order. Second, while rebates may significantly reduce costs associated with installing a charger at home, they do nothing to address high upfront vehicle costs. Staff posits instead that tax rebates for EV purchases of used EVs or EVs at or below a particular price point would be more likely to increase EV adoption for low- or limited-income customers than an EVSE rebate.

82. While the Commission acknowledges that this proposal flows out of discussions in the EV Work Group, the Commission finds that more information is needed before the Commission can adopt a limited-income EVSE rebate program over other suggestions, such as OPC's make-ready incentive program or programs that support electrification but would not require limited-income customers to own an EV. For these reasons, this Exelon Joint Utilities request is denied.

83. The Commission finds that OPC's make-ready incentive suggestion warrants further exploration in the EV Work Group. OPC provides two examples of make-ready programs in other states for disadvantaged communities. In the example of Southern California Edison ("SCE"), the SCE Charge Ready Transit Bus program covers up to 50 percent of make-ready costs for eligible sites located in disadvantaged communities or supporting public transit and

[179] BGE Report, Appendix N at 1.
[180] *Id.*

school buses.[181] New York has a similar make-ready program where incentives vary based on proximity to low-income and environmental justice communities.[182] There, utility incentives can cover up to 100 percent of make-ready costs if the location is within 1-2 miles of a disadvantaged community.[183] While none of the Utilities have presented the Commission with a make-ready concept, OPC suggests that the Exelon Joint Utilities could coordinate with the Maryland Energy Administration's Clean Fuels Incentive Program with regard to make-ready work with fleets and use available state funds to optimize spending.[184] The Commission will address next steps for the EV Work Group in a later section.

#### 4. PHI Companies – Permit Use of Embedded EV Metrology

84. The PHI Companies propose to modify their residential rebate programs to permit the leveraging of embedded metrology data from EVs that have the capability of directly communicating charging behavior-related data from the vehicle itself for the purpose of qualifying customers for the $300 residential rebate.[185] If granted, this proposal will obviate the need for a smart charger or a second EV-dedicated meter.[186]

85. EEI[187] and WeaveGrid[188] specifically support this enhancement, stating that allowing the PHI Companies to use the embedded metrology data from EVs and EVSEs would enable more customers to participate in PHI's EV-only TOU rate and help the PHI Companies gather more charging data.[189] Staff and OPC agree.[190] OPC further notes that the TOU rate is an important

[181] OPC Comments at 2.
[182] *Id.*
[183] *Id.* at 12.
[184] *Id.*
[185] PHI Report at 25.
[186] *Id.*
[187] EEI Comments at 3.
[188] WeaveGrid Comments at 5.
[189] EEI Comments at 3.
[190] Staff Comments at 21; OPC Comments at 23.

tool for managing increased electricity demand from EV charging and avoiding potential reliability issues.[191]

86. The Commission previously authorized BGE to offer rebates to customers whose EVs are capable of directly communicating charging data to the utility platform. It follows that the PHI Companies should be allowed to do the same, where they are also working with WeaveGrid, BGE's technology vendor for this aspect of the program.[192] The Commission finds that this will lead to cost savings in avoided costs associated with installing a second meter, and individual savings for those EV owners who would not need to purchase and install a more expensive smart charger. Customers can choose an EVSE that best fits their needs. Furthermore, leveraging vehicle telematics instead of relying on a smart EV charger will allow the PHI Companies to simplify the customer experience and further support higher rates of customer enrollment in the EV program, including participating in EV TOU rates. For these reasons, the Commission approves PHI's proposal to use the embedded metrology data from EVs. The PHI Companies should make best efforts to allow and include other vehicle manufacturers' telematics.[193]

### 5. Potomac Edison – Residential Off-Bill Credit Program

87. Potomac Edison requests to continue its Residential Off-Bill Credit program for the remainder of the EV Pilot. This would not require any budget increase.[194] However, if the Commission directs the company to develop an EV-only TOU rate, Potomac Edison requests authorization to increase its budget by $724,000 to implement the TOU rate.[195]

[191] OPC Comments at 23.
[192] Oct. 13 Hr'g Tr. at 70 (Bell).
[193] *See* AAI Comments at 2 (observing that to date, vehicle telematics participants for BGE and PHI have been owners of a vehicle from a single manufacturer).
[194] Potomac Edison Report at 11.
[195] *Id.* at 12.

88. A number of participants specifically favor the TOU rate, as it will help encourage customers to charge during off-peak, lower-cost time periods and make charging more affordable.[196] AAI further states that TOU rates are foundational to vehicle-to-grid integration and offer significant grid benefits.[197] OPC supports aligning Potomac Edison's program offering with the Exelon Joint Utilities' TOU programs, explaining that EV rate design and load management options are critical for helping to ensure that increased EV adoption does not adversely impact grid reliability or otherwise increase costs to the distribution system.[198]

89. Staff argues that the residential off-bill credit—which Staff believes is a reward-only program—does not qualify as a TOU rate.[199] Staff points out that the off-bill credit carries no penalty or corresponding disincentive for charging on-peak.[200]

90. The Commission agrees with Staff and concludes that Potomac Edison's off-bill credit does not qualify as a TOU rate. As Staff aptly observes, a typical TOU rate adopts a structure where the on-peak rate is a multiple of the off-peak rate. This structure uses price incentives to encourage customers to charge off-peak.[201]

91. In the 2019 EV Order, the Commission directed Potomac Edison and the other Investor-Owned Utilities to develop an EV-only TOU rate.[202] The Commission subsequently approved Potomac Edison's residential off-bill credit program, in the interim, to allow time for Potomac Edison to analyze its customer charging data and develop an appropriate EV-only TOU rate. Staff questions whether the off-bill credit would be practical after the pilot concludes.[203] As EVs move toward becoming the standard form of automobile, Staff alleges that off-peak credits will

[196] WeaveGrid Comments at 6.
[197] AAI Comments at 2.
[198] OPC Comments at 31.
[199] Staff Comments at 24-25.
[200] *Id.* at 25.
[201] *Id.*
[202] 2019 EV Order at 53.
[203] Staff Comments at 25.

likely become costly. Staff, therefore, recommends that Potomac Edison be required to implement its EV-only TOU rate.[204] The Commission finds that where TOU rates have already been shown to shift charging behavior, and once established, carry no additional cost implications, it is in the public interest to pivot to a more cost-effective offering in the long term. The Commission approves Potomac Edison's alternative proposal, with the requested budget increase, to develop an EV-only TOU rate consistent with the 2019 EV Order.

## B. Multifamily Program Proposals

### 1. BGE - 100 Additional Utility-Owned Multifamily L2 Chargers

92. BGE's first multifamily enhancement requires a budget increase of $2.5 million to install another 100 company-owned and operated L2 charging stations on multifamily properties.[205] Since the company received approval in March 2021 to install and operate 40 dual-port L2 chargers on MUD properties, BGE reports that all of these chargers are committed, and the program is now oversubscribed with 50 additional requests for chargers.[206] If approved, BGE would install a percentage (e.g., 10-20 percent) of these company-owned chargers at multifamily locations with a high concentration of LMI residents.[207] BGE would limit the installation per location to no more than four separately metered, dual-port L2 charging stations. These stations would apply the same charging rate as BGE's public charging network.[208]

93. Based on its first half learnings, BGE explains that many multifamily property owners and managers decide not to install EVSEs because the significant upfront costs of EVSEs remain a barrier.[209] Supporters of this enhancement, such as ATE and Lyft, concur that allowing BGE

[204] *Id.*
[205] BGE Report at 28.
[206] *Id.*
[207] *Id.* at 29.
[208] *Id.* at 28-29.
[209] BGE's current non-residential rebate program is limited to multifamily or multi-unit dwelling locations.

to install and operate additional EVSEs at multifamily locations will help alleviate many landlord concerns associated with cost, complexity, and liability.[210] Other supporters of this enhancement include Mr. Verchinski,[211] ZEEVIC,[212] GWRCCC,[213] and EEI.[214]

94. Staff recommends granting a modified version of this proposal. First, Staff believes BGE should be limited to 60 additional L2 chargers without any increase in BGE's non-residential budget—i.e., the same way the Commission approved the first 40 multifamily chargers. This modification will limit ratepayer impacts while leaving $1.5 million of BGE's budget for the multifamily rebate program.[215] Second, Staff agrees with BGE's proposal to limit each multifamily property to four dual-port chargers.[216] Lastly, Staff recommends the Commission require that BGE install 20 percent of these chargers at locations with at least 30 percent LMI residents.[217]

95. OPC generally opposes the expansion of utility-owned and operated charging stations in multifamily locations, irrespective of any additional carve-out for LMI properties.[218] OPC believes that more directed efforts are necessary to address EV access in LMI communities. To that point, OPC questions whether these utility-owned stations will actually incentivize low-income residents to purchase EVs, noting in particular the lack of performance data for the 40 L2 chargers previously approved for BGE.[219] Further, BGE has not indicated how it will protect

[210] ATE Comments at 2-3, Lyft Comments at 1.
[211] Verchinski Comments at 2.
[212] ZEEVIC Comments at 1.
[213] GWRCCC Comments at 1.
[214] EEI BGE Comments at 3.
[215] Staff Comments at 5.
[216] *Id.*
[217] *Id.* at 5-6.
[218] OPC Comments at 13.
[219] *Id.*

ratepayers against the costs associated with underutilized charging stations that operate at a loss.[220]

96. Equitable access to EV charging is critical for the EV Pilot's overall success. Programs designed to increase the number of charging options at multifamily locations will undoubtedly increase LMI access to the benefits of EV charging and vehicle adoption. The Commission recognizes BGE's ongoing efforts to incorporate equity components in its multifamily offerings. BGE has demonstrated that multifamily property owners respond to this offering; however, its utility-owned charger program is still in its infancy, as none of the 40 previously-approved turnkey chargers are currently in operation. Because the true benefits of allowing utilities to own and operate multifamily chargers are not yet understood, the Commission cannot justify additional ratepayer spend for additional multifamily chargers.

97. Nevertheless, there is value in affording BGE flexibility to collect more data. To minimize cost impacts on BGE ratepayers, the Commission will adopt Staff's recommendation to allow BGE 60 additional L2 chargers at no additional increase in budget, and further directs BGE to install a minimum of 20 percent of these chargers at multifamily locations comprising at least 30 percent LMI residents.

98. The Commission finds that further discussions are needed to optimize the expansion of EV charging solutions to multifamily and LMI communities, with particular focus on alternatives to the utility-ownership model. For example, Mr. Verchinski and OPC discuss the possibility of utility make-ready preparations,[221] with OPC providing several examples of EV make-ready work in other states.[222] As discussed elsewhere in this Order, the Commission supports further discussion of potential make-ready solutions and incentives by and among

[220] *Id.*
[221] Verchinski Comments at 1-2; OPC Comments at 32-33.
[222] OPC Comments at 32-33.

stakeholders in the EV Work Group. These discussions should include the exploration of make-ready work in the multifamily context and how this can position the private sector to offer additional EVSE installations.

### 2. PHI Companies – Make-Ready and 100 Percent Multifamily Rebate Incentive

99. The PHI Companies' first multifamily enhancement consists of two modifications to the multifamily rebate structure. First, the PHI Companies request authorization to increase the existing make-ready incentive amount from $7,500 per L2 charging station to $15,000. Second, the PHI Companies seek to increase the EVSE equipment rebate coverage from 50 percent to 100 percent.[223] Similar to BGE's experience, the PHI Companies report limited participation in multifamily charging deployment across their service territories to date. PHI customers continue to identify costs as a major barrier to EVSE deployment at these locations.[224] The PHI Companies propose to address this issue without increasing the multifamily program budget by decreasing the total target number of L2 charging stations in their sub-portfolio from 250, as currently approved, to 125.[225]

100. EEI,[226] ChargePoint,[227] and Staff support this modification to further reduce barriers to entry for EV adoption and increase interest in the PHI's multifamily rebate program.[228] Staff observes that Pepco has only installed four multifamily charging stations to date, while Delmarva has yet to install any.[229]

[223] PHI Report at 23.
[224] *Id.*
[225] *Id.*
[226] EEI PHI Comments at 3.
[227] ChargePoint Comments at 2.
[228] EEI PHI Comments at 3; ChargePoint Comments at 3; Staff Comments at 22.
[229] Staff Comments at 22.

101. OPC does not oppose this modification but, instead, recommends two changes for the remainder of the EV Pilot. OPC contends that the PHI Companies should be required to reserve 50 percent of available MUD funding to support LMI properties and promote equitable access.[230] Additionally, OPC recommends that the PHI Companies adopt a tiered-incentive structure based on whether the properties are considered LMI properties, *i.e.*, with mostly LMI residents, or market-rate properties. For example, the PHI Companies could offer 100 percent coverage of make-ready costs for LMI properties and a lower amount for market-rate properties.[231]

102. Opponents of PHI's proposal are skeptical whether multifamily rebates have been working as intended.[232] Although the customer participation rate in the multifamily rebate program has been underwhelming thus far, supporters of the proposal contend that multifamily properties pose unique infrastructure challenges that warrant special consideration. As the Utilities generally observe, costs remain a major barrier for multifamily customers. The Commission concludes that offering a larger per-port make-ready incentive will encourage additional deployment of charging stations at multifamily locations. Furthermore, where BGE has demonstrated success with EVSE installations under the utility ownership model, this enhancement will allow the PHI Companies to test the efficacy of make-ready incentives as an alternative to the BGE offering.

103. The Commission declines to adopt OPC's LMI recommendations at this time. OPC is silent on whether its recommendations will require additional adjustments to PHI's target number of EVSE installations. PHI's approved budget—and commitment to implement this enhancement within that budget—requires reducing the total number of target multifamily installations from 250 to 125, or by 50 percent. Given PHI's multifamily EVSE deployment to

[230] OPC Comments at 26.
[231] *Id.*
[232] Verchinski Comments at 1.

date, the Commission finds this decrement is a reasonable tradeoff to entice greater customer interest by lowering the total cost per charger to multifamily customers. It is neither necessary nor desirable to further curtail this target number and potentially the amount of data that the PHI Companies could collect for the EV Pilot. For these reasons, the Commission approves the PHI Companies' enhancements to their multifamily make-ready and EVSE rebates, as proposed.

### 3. BGE/PHI – Expand Rebates to Non-Utility Public DCFC Stations (Within One Mile)

104. The Exelon Joint Utilities next propose to expand the eligibility for their multifamily rebate programs to new, privately-developed and non-utility-owned, public-facing DCFC charging stations located within one mile of at least 100 multifamily residential units.[233] These charging sites would be required to have 24/7 parking access without any fees, to encourage private charging companies to identify accessible and convenient charging locations in neighborhoods in which multifamily residents live.[234] BGE also requests authorization to increase the maximum site incentive from $25,000 under the current program to $30,000 per site, which would allow rebate recipients to install up to two DCFC units at a single site.[235] Notwithstanding these changes, the Exelon Joint Utilities do not request an increase in their multifamily budgets.[236]

105. BGE explains that many multifamily property owners and/or managers are hesitant to install charging infrastructure, even with available rebate incentives. Where multifamily residents often do not have the ability to install their own EV charger for personal use, residents who drive EVs must rely on offsite charging options, including DCFC charging.[237] BGE

[233] BGE Report at 29; PHI Report at 24.
[234] BGE Report at 30.
[235] *Id.*
[236] *Id.*; Oct. 13 Hr'g Tr. at 92 (Schatz).
[237] BGE Report at 29.

indicates that such DCFC charging may not be ideal if the charging station is not conveniently located nearby.[238] Thus, providing nearby commercial property owners with additional rebate incentives can contribute to the acceleration of EVSE deployment in locations that would be most accessible to multifamily residents.[239]

106. Supporters of this proposal recognize that there is no "one-size-fits-all" solution to address the challenges of EV charging at multifamily locations.[240] Given that multifamily properties are not all equally capable of hosting EV charging onsite, this enhancement would provide EV drivers with access to convenient charging close to their homes, and it would improve the economics of private sector charging deployments.[241]

107. ChargePoint recommends that the Commission broaden the rebates to include both DCFC and L2 charging stations and that BGE's $30,000 rebate request should apply per DCFC station to account for infrastructure costs and other challenges associated with multifamily EVSE deployment.[242] EVgo supports the Utilities' proposal but believes the one-mile restriction is unnecessary and limiting. EVgo further requests the Commission facilitate a stakeholder discussion on rebate amounts that could have a meaningful market development impact.[243]

108. OPC and Staff oppose extending the rebate to private charging companies for offsite EVSE deployment for anticompetitive reasons. OPC notes the Utilities have not described how they will ensure that multifamily residents receive access to these chargers.[244] OPC cautions that multifamily residents could compete with other EV drivers who wish to use chargers at

[238] *Id.*
[239] PHI Report at 24.
[240] ATE Comments at 3.
[241] ChargePoint Comments at 5; Greenlots Comments at 4.
[242] ChargePoint Comments at 5.
[243] EVgo Comments at 7-8.
[244] OPC Comments at 14.

commercial locations.[245] Staff argues this proposal will divert funds away from other proposals to install more company-owned chargers at additional multifamily locations. Staff is also concerned that rebates would be provided to locations that do not need them.[246] While Staff recommends denying the request to extend the multifamily rebate to private companies, Staff supports raising BGE's multifamily rebate cap to $30,000.

109. BGE previously proposed to extend its multifamily rebate to private charging companies in its last semi-annual filing. The Commission considered this request at the March 17, 2021 Administrative Meeting and denied the request. The Commission finds no reason to reverse that decision here.

110. BGE previously proposed to extend its multifamily rebate to private charging companies in its last semi-annual filing. The Commission considered this request at the March 17, 2021 Administrative Meeting and denied the request. The Commission finds no reason to reverse that decision here.

111. The Commission remains unconvinced that simply siting a charging station at a commercial location in close proximity to a multifamily property will present an adequate charging option for multifamily residents. Accordingly, the Commission denies the Exelon Joint Utilities' request to expand their multifamily rebate offerings to privately-developed, public-facing DCFC charging stations located within one mile of a multifamily location. The Commission does, however, grant BGE's request to raise its total site incentive cap to $30,000 per site to accommodate installation of up to two DCFCs per site, with the requirement that BGE must adhere to its existing multifamily budget.

[245] *Id.*
[246] Staff Comments at 6.

### 4. BGE/PHI – Multifamily Discount Rate for Public DCFC Stations

112. In line with efforts to provide additional multifamily incentives for charging options at or near multifamily properties, the Exelon Joint Utilities propose to offer a 25 percent discount for multifamily EV drivers to use the companies' public DCFC stations throughout their respective service territories, at no additional cost to ratepayers.[247] This rate is the same as BGE's fleet discount rate for its public DCFC network.[248] BGE notes that many of its DCFC stations are, or will be, located convenient to communities where multifamily residents live.[249] The discount is intended to allow multifamily residents to access charging at a cost more comparable to costs for those homeowners who have L2 chargers at home.[250]

113. Supporters of this discount rate enhancement, which include GWRCCC,[251] ATE,[252] and EEI,[253] commend the Exelon Joint Utilities for their progressive thinking to reach multifamily customers. ATE observes that BGE's discounted charging rate aligns with an "all of the above" approach and could be a viable solution for some EV drivers, given the increases in EV ranges and charging speeds today.[254]

114. Although OPC generally supports this concept as a way to increase multifamily access to public charging, OPC does not specifically endorse this proposal and explains that more information is needed.[255] OPC and other opponents point out that the Exelon Joint Utilities have not described how they will identify multifamily EV drivers, or how they will ensure that only

[247] BGE Report at 30-31; PHI Report at 24.
[248] *See* BGE Report at 31.
[249] *Id.* at 30-31.
[250] *Id.* at 31.
[251] GWRCCC Comments at 1.
[252] ATE Comments at 3-4.
[253] EEI BGE Comments at 3; EEI PHI Comments at 3.
[254] ATE Comments at 3-4.
[255] OPC Comments at 15.

multifamily drivers avail themselves of the discount.[256] Nor do the Exelon Joint Utilities address whether or to what extent this discount could harm privately-owned DCFC stations.[257]

115. To OPC's latter point, Staff has similar concerns that this proposal is anticompetitive and would disadvantage the privately-owned charging market in the Utilities' service territory.[258] Staff argues this discount will incentivize EV drivers to use utility-owned chargers over any other public charger.[259] Staff prefers that the Utilities focus more on efforts to increase charger availability at multifamily properties.[260]

116. BGE previously requested this program modification during the March 17, 2021 Administrative Meeting. The Commission denied the company's request then. This proposal is different from the other offerings in the Exelon Joint Utilities' multifamily sub-portfolios. Instead of focusing on expanding charging options at multifamily properties, this enhancement focuses solely on off-site public charging. In the 2019 EV Order, the Commission approved utility ownership of public charging equipment on a limited scale to balance the Utilities' ability to reach certain market segments faster with important State policy considerations, such as competitive access to charging, cost impacts, and ratepayer risk.[261]

117. The Commission's policy continues to favor competitive markets as an integral part of the State's electricity landscape. Hence, Staff's concerns resonate with the Commission. Several participants also concur that this discount will create an unlevel playing field, further undermining competitive third-party charging stations that apply market charging rates.[262] Where privately-operated stations are not able to offer a similar discount, they could face

[256] *Id.* At 15, 27; ChargePoint Comments at 5; Staff Comments at 7.
[257] OPC Comments at 15, 27.
[258] Staff Comments at 7.
[259] *Id.*
[260] *Id.*
[261] *See* 2019 EV Order at 63-64.
[262] ChargePoint Comments at 6; Evgo Comments at 5.

unsustainable economic risk as a result. There is also a concern that the discount would inadvertently discriminate against single-family homeowners who lack the ability to charge at home, simply because they are not multifamily residents.[263]

118. The Commission finds that the proposal's anticipated benefits—e.g., to incentivize and lower the costs of off-site charging for multifamily residents who do not have access to convenient on-site charging—should not be outweighed by any harm inadvertently caused to the private charging companies. Furthermore, as opponents of this proposal point out, open questions remain as to how the Exelon Joint Utilities will ensure that the program has its desired effect and that only multifamily EV drivers receive the discount.[264] The Commission–again–is not persuaded that a multifamily discount for public charging is needed to entice EV charging. For purposes of this mid-course review, the Exelon Joint Utilities have yet to demonstrate that the discount either will not result in harm to the competitive service providers or, if so, the anticipated benefits clearly outweigh the harm. For these reasons, the Commission denies this Exelon Joint Utilities request.

### 5. BGE – EV Carshare Program

119. BGE requests approval for $1.2 million in additional budget for a carsharing program that would provide one EV and one L2 charger at 15 multifamily properties serving LMI customers in BGE's service territory.[265] BGE would not own or operate the EVs. Instead, BGE would partner with a carshare company to supply the EV, deploy the reservation platform, and handle customer questions or concerns.[266]

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[263] Staff Comments at 7.
[264] BGE does not describe how it will verify the customer's multifamily resident status, but the company notes it will work with its network vendor or other vendor to develop a customer validation process. BGE Report at 31 n.11.
[265] *Id.* At 32.
[266] *Id.*

120. Supporters approve of this carshare concept because it would promote equity by providing EV benefits to numerous LMI customers who would not otherwise have an opportunity to participate in the EVsmart program.[267] Staff and OPC, on the other hand, object to using ratepayer funds for this initiative, where its goals can be accomplished by rideshare companies, such as Uber and Lyft, which are already starting to provide EV options to customers.[268] Thus, Staff believes the proposal is unnecessary.[269] OPC notes that this type of program is typically implemented and funded through a state or community organization.[270]

121. While BGE's proposal is an example of creative, outside-the-box thinking, OPC raises a fair argument that this proposal oversteps the bounds of what BGE's role should be in transportation electrification.[271] At the October Hearing, none of the participants provided examples of any carshare programs currently being offered by a regulated utility elsewhere in the country, nor is the Commission aware of any.

122. Further discussion on this topic may be worthwhile. Questions remain surrounding the proposal's actual benefits to low-income customers, particularly as rideshare companies themselves introduce more EV rideshare options. As OPC points out, it is unclear whether and to what extent rideshare companies operating EVs will specifically target and serve LMI customers.[272] The EV Work Group may wish to provide the Commission with more information on this subject. Presently, the Commission does not find that ascribing ratepayer funds to cover the purchase of EVs is in the best interest of BGE ratepayers. Accordingly, BGE's enhancement is denied.

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[267] ATE Comments at 4; EEI BGE Comments at 3; GWRCCC Comments at 1.
[268] Staff Comments at 8.
[269] *Id.*
[270] OPC Comments at 16.
[271] *Id.* at 15.
[272] *Id.* at 15-16.

### 6. Potomac Edison – Company-Owned Multifamily L2 Chargers

123. Due to continued low interest in Potomac Edison's current multifamily rebate program, the company requests authorization to install, own, and operate up to seven L2 charging stations at multifamily properties.[273] Although this request supplements Potomac Edison's existing rebate incentive, it would not require additional budget.[274] Potomac Edison would use its existing budget on a first-come, first served basis and limit each multifamily location to one separately metered, dual-port L2 charging station.[275]

124. EEI and Staff support this proposal, while OPC opposes for the same reason it opposes BGE's multifamily charger request. EEI believes this enhancement will help reduce the barrier to entry for EVs, providing more options to generate interest in the program.[276] Staff notes that Potomac Edison has yet to receive a single application for its multifamily rebate program.[277] Indeed, all of the investor-owned utilities have experienced difficulty soliciting sufficient interest in the multifamily property EVSE rebate program. Instead of expanding utility-owned and operated chargers at multifamily locations, OPC believes Potomac Edison should focus on make-ready work.[278]

125. Notwithstanding OPC's objections, the success of BGE's utility-owned MUD charger offering is instructive here. The fact that Potomac Edison has committed to operate within its existing multifamily budget is a key distinction from BGE's similar request for an additional 100 multifamily EVSEs. The Commission finds that Potomac Edison's proposed limited offering appropriately balances ratepayer considerations with efforts to provide greater access to EVSE

[273] Potomac Edison Report at 13.
[274] *Id.* at 14.
[275] *Id.* at 13-14.
[276] EEI PE Comments at 3.
[277] Staff Comments at 25.
[278] OPC Comments at 32.

deployment in difficult-to-site locations for the remainder of the EV Pilot. Potomac Edison's multifamily offering is hereby approved.

126. To be clear, however, the Commission does not view this solution as the panacea for multifamily charging. As with BGE's request for additional multifamily EVSEs, OPC has recommended that the Commission consider make-ready programs as an alternative to the utility-ownership model. The Commission does not reach that decision here, but instead requests that the EV Work Group explore potential make-ready incentives for multifamily and other applications.

### C. Public Charging Proposal

#### 1. BGE – Enhanced Maintenance/Repair Contract

127. BGE seeks to improve the uptime and reliability of its public charger network through a proposed enhanced maintenance and repair contract with Greenlots, its current public charging network platform provider.[279] BGE's public charging network experienced a network-wide uptime and reliability of 97 percent at the end of the last semi-annual reporting period and 95 percent uptime through June 30, 2021.[280] With the expansion of its public charging network, BGE has had to resolve more charging issues or "tickets," averaging approximately 20 tickets per month per 100 chargers.[281]

128. The enhanced maintenance contract carries an incremental cost increase of $1 million for the remainder of the EV Pilot but would allow BGE to guarantee an uptime of 98 percent across its public charging network. BGE and its supporters recognize the importance of minimizing downtime of public charging stations because inoperable chargers can create negative customer

[279] BGE Report at 33.
[280] *Id.*
[281] *Id.*

experiences for EV drivers.[282] Pursuant to the agreement, Greenlots would provide BGE with preventative and corrective EVSE maintenance, replacement parts, software expertise, and an EVSE electrician.[283] Greenlots has committed to resolving public charger issues within two days,[284] subject to financial penalty if it fails to maintain the uptime threshold.[285]

129. Greenlots notes that BGE's existing public chargers come with a standard manufacturer's warranty, limited to parts only. Current supply chain issues have impacted the timely delivery of new EVSE models and replacement parts. Consequently, charging stations can potentially remain offline for days or weeks.[286] The enhanced maintenance contract would supplement the EVSE factory warranty with a "whole system warranty approach."[287]

130. Staff and OPC support this enhancement.[288] Despite concerns that BGE is again seeking ratepayer funds to ensure charger reliability and operability—an assurance BGE provided to the Commission before the EV Pilot was approved—Staff claims the need for fully operational charging stations is of the utmost importance to all EV drivers.[289] Staff recommends, however, that if the Utilities are permitted to own and operate charging stations after the pilot period, the Utilities should be required to develop in-house expertise to maintain and repair their EVSEs in a timely manner.[290]

131. The Commission finds that reliable public charging is critical for EV drivers and instilling public confidence in the EV Pilot and EV adoption generally. Although this proposal appears to have near-unanimous support from industry stakeholders, it is noteworthy that two EV

[282] BGE Report at 33; MD Volt Comments at 1.
[283] BGE Report at 34.
[284] Staff Comments at 8 (citing BGE Response to Staff DR 8-14).
[285] Greenlots Comments at 3.
[286] *Id.*
[287] *Id.*
[288] OPC recommends the Commission consider the ongoing costs of utility-owned EV chargers with respect to future proposals. OPC Comments at 16.
[289] Staff Comments at 9.
[290] *Id.*

drivers—Mr. Verchinski and Mr. Hartmann—have spoken out against the enhanced maintenance contract. Their objections notwithstanding, the Commission has additional concerns with the proposal, as filed.

132. BGE reports a current average charger uptime of 95 percent for the Pilot to date.[291] BGE argues that greater reliability is needed, but the contract would only guarantee 98 percent uptime—a three percent improvement for the remaining two years of the Pilot. During the October Hearing, the Commission queried why BGE is unable to provide 98 percent charger uptime under its existing service contract.[292] BGE responded that although it has contracts with Greenlots and a local electrician to cover network administration (Greenlots) and preventative/reactive maintenance (electrician), BGE has experienced supply chain issues that the company hopes to avoid with the enhanced contract.[293]

133. In the 2019 EV Order, the Commission expressly required that the Utilities "be responsible for ensuring that public charging stations are working and maintained in good working order."[294] As Staff correctly observes, the Commission acted on claims by BGE and the other IOUs that their superior reliability record and customer service was a reason to allow them to own and operate public charging stations.[295] During the Commission's public EV proceedings in 2018, the IOUs represented that they could maintain the reliability of public chargers as part of their systems. In discussing the utilities' unique position to help overcome traditional barriers to accelerating market growth for EV charging, BGE counsel explained:

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[291] BGE defines charger uptime as "the percent of time a station is in cellular communication and able to dispense a charge or is actively dispensing a charge. BGE Report at 32. BGE measures charger uptime both at the individual station level and network level, explaining that reliability at the network level also considers charger redundancy, *i.e.*, co-locating multiple charging stations or ports at a specific location. BGE Report at 21.
[292] Oct. 13 Hr'g Tr. at 44 (Gupta & Fleischmann Groncki).
[293] *Id.* at 45 (Fleischmann Groncki).
[294] 2019 EV Order at 63.
[295] Staff Comments at 9.

> [The Commission] can hold us accountable. You have full oversight over the planning, development and the operation of this program. You can order adjustments as needed. We have a regulatory obligation to maintain the charging networks much like any other distribution asset that we have. This is going to avoid situations where you have prolonged EV charger outages due to a breakdown or subsequent vandalism or any sort of thing that could befall one of these chargers, and it is our goal as always to provide excellent customer experience for those EV chargers. We have experience managing infrastructure investment projects, some of which are much bigger than this particular program. We can ensure the interoperability of these EV chargers . . . at least within our service territories.[296]

134. It is clear BGE assured the Commission in 2018 that, if allowed to assume this role in EV charging, it would keep its chargers operational. The Commission does not take these commitments lightly, especially where ratepayer funds are tied to the Commission's expectations. The Commission will hold BGE accountable for its commitments.

135. The Commission recognizes that BGE's proposal is an attempt to plan ahead and anticipate potential supply shortages through the proposed contract; however, questions remain concerning the value added by the proposal. BGE has not provided the Commission and the parties with sufficient details of the enhanced maintenance agreement to allow proper vetting of this proposal. It is therefore difficult for the Commission to independently assess the value of this contract over BGE's existing contract with Greenlots.

136. Where BGE believes the contract will resolve its pre- and post-COVID-19 pandemic supply chain issues, the Commission is not entirely convinced that it will. Supply chain issues often fall outside of the utilities' control. Even if the Greenlots service contract provides some assurance that EVSE replacement parts will be stored nearby and presumably available, it

[296] Sept. 6, 2018 Hr'g Tr. at 685-86 (Hurson).

remains unclear what long-term effects the current COVID-19 pandemic will have on the industry.

137. For the above reasons, BGE's proposal is denied without prejudice. BGE may resubmit this request at a later time, provided that BGE can demonstrate the value of this enhanced service over the terms and conditions of its current agreement with Greenlots. BGE should provide a comparison of the material terms of the relevant agreements and demonstrate how Greenlots will ensure the guaranteed uptime, including the consequences for failing to meet that threshold and what actions BGE will take, if that happens, to guarantee the same level of reliability.

### 2. BGE – Shift L2 and DCFC Charger Ratio

138. BGE requests an additional $5 million in funding to increase the number of company-owned DCFCs in its approved ratio of L2 to DCFC chargers. In the 2019 EV Order, the Commission authorized BGE to install, own and operate 500 public charging stations, comprising 400 L2 chargers and 100 DCFC stations, or an 80:20 split.[297] BGE seeks to convert this ratio to 60:40, which would allow BGE to offer 100 additional 50 kW DCFCs and 100 fewer L2 chargers to maintain the 500 charger program total.[298] BGE explains that, based on its learnings over the first half of the Pilot, state and government site hosts for the public charging program prefer to have at least one DCFC station on their properties.[299] Although BGE has not fully subscribed its public charging program, it has committed all of its allotted DCFCs and can no longer offer any DCFC stations to other site hosts.[300]

[297] BGE Report at 34.
[298] *Id.*
[299] *Id.*
[300] *Id.*

139. Industry stakeholders and other interested parties are divided on this proposal. GWRCCC,[301] FreeWire,[302] Greenlots,[303] ATE,[304] and the Cinemark Signatories[305] recommend allowing BGE to deploy the additional 100 DCFCs. These supporters contend that installing more DCFCs in BGE's network will lead to higher customer utilization, thus providing for better program economics overall[306] and further support expanding EV adoption in the State.307

140. Mr. Verchinski,[308] OPC,[309] Staff,[310] EVgo[311] and ChargePoint[312] recommend rejection of this proposal. They question the proposal's cost-effectiveness[313] and note that approximately 20 percent of BGE's public charging program is still in the early development stage.[314]

141. According to Staff, 53 L2 chargers out of BGE's 500 total allotted public chargers remain "unaccounted for," meaning the chargers have not been installed, designed, or otherwise included in the company's planning stage.[315] In order to add 100 DCFC stations, BGE must forgo 100 L2 chargers, which would require BGE to cancel or substitute 47 L2 chargers that were previously requested by site hosts. Staff does not support canceling or changing BGE's arrangement with the site host.[316] It is unclear whether or not BGE has the site host's consent to do so.

[301] GWRCCC Comments at 1.
[302] FreeWire Comments at 7.
[303] Greenlots Comments at 3.
[304] ATE Comments at 5.
[305] Cinemark Signatories Comments at 1
[306] ATE Comments at 5.
[307] Greenlots Comments at 3.
[308] Verchinski Comments at 3.
[309] OPC Comments at 17.
[310] Staff Comments at 10.
[311] EVgo Comments at 3.
[312] ChargePoint Comments at 2.
[313] *See generally* OPC Comments at 17.
[314] EVgo Comments at 3.
[315] Staff Comments at 10.
[316] *Id.*

142. In the 2019 EV Order, the Commission approved the Utilities' public charging programs on a first-come, first-served basis. While consumer demand and market trends may indicate a preference for higher-powered chargers, the Commission must weigh the preferences of late movers against the potential cost impact on BGE ratepayers. This is, after all, a pilot program. BGE's program enhancement commands a substantial budget increase of $5 million, yet BGE has offered little by way of evidence to support this increase. The Commission finds this proposal, along with BGE's 150 kW proposal, is too costly and not in the ratepayers' best interest.[317]

143. The Commission is further persuaded by Staff's and OPC's recommendations in the alternative, should the Commission allow BGE to convert some of its chargers to DCFCs. Staff and OPC agree that the scope of conversion should be smaller to minimize cost impacts. Staff recommends the Commission allow BGE to install 10 additional DCFC chargers, which would require BGE to convert 20 unaccounted-for L2 chargers, leaving 33 L2 chargers.[318] Staff notes that the average installation cost per DCFC charger ($61,000) is approximately double that of an L2 charger ($28,000).[319] OPC adopts a similar view, stating that any change in ratio of the company's public chargers should be done within the company's original budget by reducing the total number of chargers in BGE's public charging sub-portfolio.[320] The Commission will adopt Staff's alternative proposal to allow BGE to convert 10 unaccounted-for L2 chargers to DCFCs with the additional condition that BGE must stay within its current public charging program budget.

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[317] OPC Comments at 17.
[318] Staff Comments at 10.
[319] *Id.*
[320] OPC Comments at 17. OPC also recommends, as an alternative to utility-owned chargers, that BGE focus on make-ready work, which in OPC's view would be the more appropriate role for the utility. *Id.* Where the 2019 EV Order previously authorized utility ownership and operation of public charging stations, the Commission will not revisit the issue here.

144. With this decision, the Commission emphasizes geographic parity. EVgo observes that BGE has yet to provide an overarching framework that: (1) clearly identifies gaps in charging infrastructure deployment; and (2) establishes criteria for how BGE's incremental DCFC development would address those gaps and complement fast charging deployment by competitive third-party providers.[321] At the October Hearing, the Commission discussed gaps in BGE's DCFC deployment and emphasized the need for equitable installation of company-owned DCFCs across BGE's service territory.[322] The Commission previously identified issues with BGE's allocation of fast chargers for certain jurisdictions, including Baltimore County and Baltimore City. In response to our inquiry, BGE explained that some jurisdictions moved faster in time, some slower, and some were not interested at all or interested in fewer chargers. This forced BGE to reconsider its allocation strategy.[323] BGE has since improved its allocation method and applied it to Baltimore City.[324] BGE states that Baltimore City's allocation now meets the company's target 80:20 split of L2 to DCFC chargers.[325]

145. It is imperative that the company continue to use a deployment strategy that ensures geographic diversity and equitable distribution of public fast chargers throughout its service territory. The Commission established the EV Pilot in large part to learn as much as possible about the use of EVSEs and encourage third-party and private investment in public charging across the utility's service territory. Equitable allocation of company-owned and operated chargers, especially DCFCs, are therefore an important condition for the overall success of this program.

[321] EVgo Comments at 3.
[322] Oct. 13 Hr'g Tr. at 57-58 (Fleischmann Groncki).
[323] *Id.* at 52-54 (Gupta & Fleischmann Groncki).
[324] *Id.* at 59 (Fleischmann Groncki). BGE's improved allocation methodology considers the number of customers and geographic area per jurisdiction and arrives at a weighted average of BGE's total number of public chargers. *Id.*
[325] *Id.*

### 3. BGE/SMECO –Install 150 kW DCFC Stations

146. If the Commission approves BGE's request to adjust its L2:DCFC public charger ratio in favor of more DCFC stations, BGE requests an accompanying budget increase of $6 million for the purchase of 100 150 kW DCFCs.[326] Where BGE's original public charging sub-portfolio was based on then-market-standard 50 kW charging units, BGE contends that higher-powered 150 kW units are now the industry-standard in EV fast charging.[327] Taken together with BGE's request to install more DCFCs, the two programs require a combined budget increase of $11 million.

147. SMECO makes a similar request for flexibility to install higher-powered 150 kW DCFC stations on a case-by-case basis.[328] Unlike BGE, SMECO states that its proposal does not require an incremental budget increase—that SMECO can install the larger chargers and work within its existing budget.[329] SMECO notes that, based on EV driver feedback, this flexibility would allow it to meet the demands of the EV community.[330]

148. BGE's proposed enhancement is in conjunction with the company's request to install 100 additional DCFCs and, thus, invokes similar industry stakeholder and interested party positions and responses. Supporters of this proposal recommend allowing the company flexibility to deploy a larger number of higher-powered DCFC stations,[331] given that higher-powered fast charging is consistent with EV driver expectation and industry norm.[332] EEI asserts that higher-powered fast charging is critical for meeting the needs of a rapidly evolving market, where new

[326] BGE Report at 35.
[327] *Id.* at 34-35.
[328] *See* Oct. Hr'g Tr. at 124 (Hyland); SMECO Report at 16.
[329] Staff Comments at 29 (citing SMECO Response to Staff DR 1-2).
[330] SMECO Report at 16.
[331] FreeWire Comments at 7.
[332] Greenlots Comments at 4.

EVs have larger batteries and greater charging capacity.[333] This could render 50 kW chargers obsolete as customers favor faster charger options.[334] Greenlots notes that higher-powered 175 kW, 200 kW, and 350 kW chargers are now being deployed across the country.[335]

149. Opponents of BGE's proposal focus on the expensive cost of these higher-powered DCFCs, and state that private charging companies can and will lean into building out higher-powered chargers for public use.[336] EVgo states that if BGE wishes to install higher power stations, it should do so within the same budget originally authorized by the PSC.[337] None of these stakeholders object to SMECO's request.

150. OPC and Staff do not object to SMECO's proposal, but they recommend rejection of BGE's request. Alternatively, OPC and Staff do not oppose allowing BGE to install more powerful 150 kW chargers, so long as the company stays within its current budget.[338]

151. While the Commission is cognizant that more powerful EVSEs are gaining a foothold in the EV market, the Commission is not convinced at this time that 50 kW chargers are becoming less relevant for drivers and will become insufficient to meet their on-the-go charging needs. ChargePoint disputes BGE's claim that 150 kW DCFCs are now the industry standard.[339] In fact, ChargePoint insists there is no industry standard charging level, and moreover, the majority of EVs currently on the market do not charge above 50 kW.[340] Clearly, the costs associated with installing more powerful 150 kW DCFC stations are much higher compared to the 50 kW

[333] EEI BGE Comments at 3.
[334] *Id.*
[335] Greenlots Comments at 4.
[336] Verchinski Comments at 3; *see* EVgo Comments at 3.
[337] EVgo Comments at 4.
[338] Staff Comments at 11; OPC Comments at 17.
[339] ChargePoint Comments at 14.
[340] *Id.*

DCFC,[341] but apart from their future-proofing potential, BGE has not provided additional evidence to justify such a substantial increase in ratepayer funding.

152. BGE already has an opportunity to evaluate usage of the higher-powered 150 kW DCFCs through its grant-funded smart charging project with the U.S. Department of Energy ("DOE"). This grant money is intended to finance charging equipment and other asset-related expenses. Staff believes that BGE will have enough grant-funded 150 kW chargers through its DOE smart charging project to allow the company to compare usage of the 50 kW chargers and 150 kW chargers at the end of the EV Pilot.[342] This type of third-party partnership steps away from the utility-ownership model and should be encouraged.

153. The Commission finds that BGE's proposal to upgrade its 50 kW DCFCs to higher-powered 150 kW units for an additional $6 million in ratepayer funds is not in the public interest and is, therefore, denied. BGE may, however, choose to use its existing public charging budget to upgrade a limited number of 50 kW DCFCs to 150 kW units.

154. By contrast, the Commission finds that SMECO's proposal is sufficiently distinguishable from BGE's request in two key respects. First, SMECO does not request approval of any definite change at this time, but instead seeks only the ability to decide whether to install a higher-powered DCFC station on a case-by-case basis. Second, to the extent SMECO will install a more powerful charger, the company has committed to absorb any increase in cost in its existing budget. Because SMECO's enhancement truly minimizes cost impacts to its members, the Commission approves SMECO's request.

[341] *Id.*
[342] Staff Comments at 11.

### 4. Potomac Edison/SMECO – Install Chargers on Gated Government Parks

155. Potomac Edison and SMECO each request authorization to install public L2 chargers on gated government property parks. Notwithstanding the general requirement that utility-owned and operated public chargers must be publicly accessible, this proposal would place public-facing L2 chargers in locations that close to the public for a short duration of the night.[343] Both proposals do not require any increase in program budget. Where the proposals differ, however, is that Potomac Edison seeks to initially install three L2 chargers on gated government parks.[344] SMECO, on the other hand, proposes a case-by-case approach.[345]

156. Both companies concur that a park setting merits a pilot learning experience because it can offer high vehicle traffic and utilization during its hours of availability. SMECO explains that a variety of state and local parks see thousands of vehicles throughout any given weekend. Parks are often host locations for a variety of recreational activities, where convenient EV charging would benefit many drivers who park their vehicles there for events.[346]

157. Supporters of this modification believe that installing public charging stations on gated government parks will further reduce the barrier to entry for EV ownership.[347] OPC supports this request, as described, noting that the request does not require any additional funds.[348] Staff, on the other hand, generally opposes the idea of installing utility-owned public chargers at locations that are not available to the public 24 hours a day.[349] Staff is concerned that further

[343] SMECO Report at 15.
[344] Potomac Edison Report at 14.
[345] SMECO Report at 15.
[346] *Id.*
[347] EEI PE Comments at 3.
[348] OPC Comments at 33.
[349] Staff Comments at 26.

limiting the availability of public chargers in a service territory that already has a limited number of chargers will negatively impact EV drivers.[350]

158. While Staff attempts to prioritize public charger availability for all EV drivers, not just for those who have reason to visit gated government parks, the Commission finds that this type of location deserves consideration for its potential as a high-traffic EV charging destination as compared to public charging locations that are open 24 hours a day.

159. As the Commission stated during the October Hearing, location is critical to ensure that EV drivers will use the chargers.[351] Both companies indicated that some parks can host events that attract thousands of people, such as youth sporting events and tournaments, where visitors—including individuals who come from outside the territory—often park for hours on end.[352] SMECO proposes to consider only high volume locations for these public chargers, on a case-by-case basis. The Commission approves of this approach, as higher volume means greater likelihood that the chargers will be used. Accordingly, Potomac Edison and SMECO are hereby authorized to install public-facing L2 chargers on gated government parks, on a case-by-case basis. The companies shall prioritize high volume locations.[353] To notify customers that the chargers are not available at all hours, Potomac Edison and SMECO are directed to post the chargers' hours of operation on their respective websites and on applications such as PlugShare and ChargePoint.

[350] *Id.*
[351] Oct. 13 Hr'g Tr. at 112 (Keating).
[352] *Id.* at 108-109 (Keating), 122-23 (Hyland).
[353] Neither SMECO nor Potomac Edison offers a definition for "high volume," and the Commission declines to create one *sua sponte*. Instead, the utilities are capable of investigating the degree of vehicle traffic in the parks within their respective service territories, throughout the year, and identify suitable candidate locations.

160. Lastly, although this modification is limited to public-facing L2 chargers, the Commission encourages Potomac Edison and SMECO to consider the benefits of expanding this pilot learning experience to include some DCFC applications.

### 5. Potomac Edison – Align EV and Energy Storage Pilot End Dates (Urbana Park and Ride)

161. In addition to its public charging gated parks request, Potomac Edison also proposes a site-specific modification to align and combine the end date for its EV public charging program with respect to the Urbana Park and Ride location in Frederick County with the end date for the Urbana energy storage pilot project, as approved in Case No. 9619.[354] The two projects have different end dates of December 31, 2023 (EV) and December 31, 2026 (storage). As a result of the different end dates, Potomac Edison has encountered issues with ongoing operations, site contracting, and implementing the storage concept.[355] Aligning, or co-terming, the two pilot project end dates would require extending Potomac Edison's EV public charging at this specific location. The request does not require any budget increase.

162. Apart from Staff, none of the stakeholders or interested parties offer positions on this proposal. Staff recommends that the Commission approve this request.

163. Proof of concept is a fundamental goal of pilot programs.[356] The main objective of the Urbana storage project is to demonstrate the efficacy of integrating energy storage with EV fast charging as a potential reliability solution. Combining the two project timelines will yield valuable insight into these technologies. Co-terming the two projects is therefore necessary to allow Potomac Edison to continue bundling the two technologies for purposes of proving the

[354] Potomac Edison Report at 14.
[355] *Id.*
[356] Maryland's energy storage pilot program, in particular, had its genesis in the proof-of-concept work developed within the Public Conference 44 Energy Storage Working Group, which later informed the 2019 Maryland Energy Storage Pilot Project Act. *See* Case No. 9619, *In the Matter of the Maryland Energy Storage Pilot Program*, Order No. 89240, at 2-4 (Aug. 23, 2019).

storage pilot concept. Accordingly, the Commission approves Potomac Edison's request and authorizes Potomac Edison to maintain the Urbana EVSE in working order, including any replacement if necessary, for the duration of the storage pilot.

### 6. Other Considerations

#### *a. Potomac Edison Public Charging Rate Changes*

164. While not part of the mid-course review, Potomac Edison also proposes to update its public charger charging rates as follows:[357]

| Charger | Current Rate | New Rate |
|---|---|---|
| L2 | $0.12 – $0.16 per kWh | $0.21 – $0.25 per kWh |
| DCFC | $0.25 – $0.30 per kWh | $0.31 – $0.34 per kWh |

165. Potomac Edison's public charging station rates reflect market-based charging rates and are evaluated quarterly.[358] These proposed rates are based on a market pricing survey of EV charging rates in Potomac Edison's service territory, collected over the past four quarters.[359] Potomac Edison seeks to align its public charging rates with market rates.

166. Staff does not object to Potomac Edison's new DCFC rate, but Staff disagrees with the proposed L2 rate, arguing that Potomac Edison's own survey does not support the new L2 rate. Staff believes this new rate is too high for the service territory and may discourage usage of Potomac Edison's L2 stations.[360] Staff recommends that the Commission reject Potomac Edison's proposed L2 rate and, instead, accept Staff's proposed rate of $0.17 to $0.20 per kWh.[361]

[357] Potomac Edison Report at 20.
[358] *Id.*
[359] *Id.*
[360] Staff Comments at 27-28.
[361] *Id.* at 28.

167. Other than Staff, none of the other stakeholders or parties address this rate request. Whereas Staff has no concerns with Potomac Edison's proposed DCFC rate, the Commission will accept Potomac Edison's new DCFC rate to align with the market-based fast charging rates in Potomac Edison's service territory.

168. To further align Potomac Edison's public charging rates with market rates, the Commission will accept Potomac Edison's proposed L2 rate. The Commission recognizes that Staff's proposed L2 rate attempts to provide a middle ground in between Potomac Edison's current L2 rate and the proposed new rate. In arriving at its recommendation, Staff observes the average L2 price in Potomac Edison's territory is 17.7 cents per kWh, with the majority of pay chargers ranging from 16 to 20 cents per kWh.[362] Potomac Edison's pricing survey notes, however, that there are currently a limited number of L2 charging stations in Potomac Edison's service territory. It is therefore reasonable for Potomac Edison to look more broadly at statewide data. The statewide average L2 price over the relevant period was 21.9 cents per kWh, with a range of 8 cents to 55 cents per kWh. Removing the upper and lower boundaries as outliers further narrows the price range between 13 and 25 cents per kWh, within which 75 percent of the sampled locations fell.[363] The Commission finds that Potomac Edison's new rate better reflects L2 pricing across the State and will help ensure that competitive charging providers are not disadvantaged.[364]

[362] *See id.* at 27-28.
[363] Potomac Edison Report, Attachment 1 - Gabel Associates Public EV Charging Pricing Survey: Second Quarter 2021 at 4 (June 30, 2021).
[364] *See* Oct. 13 Hr'g Tr. at 114 (Keating).

*b. Public Charger Reliability Reporting*

169. The Commission recognized during the October Hearing that the reliability of public charging stations presents a long-term issue. Mr. Hartmann criticized the reliability of BGE's public charging stations and provided two specific examples of BGE DCFC stations that have remained inoperable or have been operating at substantially diminished capacity for significant periods of time.[365] Mr. Verchinski similarly criticized BGE for its lack of diligence in maintaining its public charging stations.[366] MD Volt also raised concerns about negative driver experiences reported by its members while using utility-owned and operated charging stations, further stating that "[s]ome stations are chronically broken or unavailable to use."[367]

170. As stated earlier, the Commission originally approved the Utilities' request to own and operate public charging stations based on their promise of reliability. The Utilities have experience managing grid infrastructure investment projects and ensuring the delivery of safe and reliable electric service. The Commission will hold the Utilities to their obligation to provide reliable service and, thus, maintain their charging networks like any other distribution assets. Metrics capturing the uptime period for utility-owned chargers will be essential to any subsequent review of charger reliability.

171. Public charging uptime is not only critical for EV driver confidence, but also impacts the usage data that BGE and the other utilities are able to collect. This data is vital to the success of the EV Pilot and a material consideration in the Commission's original approval of the Pilot. For the final evaluation of the EV Pilot, the Commission will look to draw firm conclusions based on the data reported, which must, as a matter of data integrity, include information on charger reliability.

[365] *Id.* at 248-50 (Hartmann).
[366] Verchinski Comments at 2.
[367] MD Volt Comments at 1.

172. The Commission finds that, going forward, the Utilities' semi-annual progress reports should include details of charger uptime for each public charging station owned and operated by the utility.[368] Until now, the Utilities have been reporting uptime in the aggregate. Shifting to uptime data per station will allow the Commission and general public to evaluate charger reliability at a more granular level and help ensure that attention to reliable public charging is distributed equitably throughout the utility service territory.

173. To effectuate this additional reporting, the Commission recognizes it is necessary to develop more detailed uptime and reliability standards or metrics for the remainder of the EV Pilot. For example, the reporting could capture the number of chargers down for more than 24 hours and the number of consecutive 24-hour periods of downtime that occurred in the reporting period. The Commission hereby directs the Utilities to work with the EV Work Group to develop consensus public charger reliability standards or metrics for pilot semi-annual reporting purposes. The Work Group shall file these standards with the Commission prior to the Utilities' August 1, 2022 semi-annual reports. The Utilities shall include this data in their future semi-annual reports for the remainder of the EV Pilot, beginning August 1, 2022. The Utilities shall also address in their reports the impact, if any, that public charger uptime has on the quality and quantity of charger data reported for the Pilot.

### D. Fleet and Workplace Program Proposals

174. The Exelon Joint Utilities share the same four fleet and workplace enhancements, which the Commission will address together. Potomac Edison's single fleet proposal—the request to convene an EV fleet-specific work group—is also shared with the Exelon Joint Utilities.

[368] MD Volt Comments at 1.

### 1. BGE/PHI – Fleet Calculator Tool

175. The Exelon Joint Utilities' first fleet offering proposes to launch a web-based, self-service Fleet Calculator Tool to help educate fleet customers on the types of EVs that are available for purchase, what charging equipment to buy, and available EV rates.[369] As a light-touch resource, this tool would provide information, such as Total Cost of Ownership (TCO) for each vehicle type—*e.g.*, upfront vehicle costs and ongoing savings from reduced operations and maintenance—to help managers understand the costs and feasibility of electrifying their fleets.[370] The Exelon Joint Utilities request $100,000 in additional funding per operating company,[371] for a total combined cost of $300,000. Fleets of all sizes and industries will be able to use this tool, free of charge.[372]

176. Supporters of this proposed enhancement, such as ZEEVIC,[373] EEI,[374] ATE,[375] the Cinemark Signatories,[376] ChargePoint,[377] and Staff,[378] contend this low-cost resource will provide fleet managers with actionable information for transitioning to electrification.[379] Engaging these customers early in the process will increase the likelihood of a positive customer experience, which can lead to further adoption of EVs.[380] ChargePoint generally supports the Exelon Joint Utilities' proposed fleet measures but emphasizes the importance of maintaining neutrality with respect to charging station equipment vendors and/or network service

[369] BGE Report at 37; PHI Report at 27.
[370] BGE Report at 37-38; PHI Report at 27.
[371] BGE Report at 37-38; Maillog No. 237506, PHI Response to Bench Data Request at 1 (Oct. 20, 2021).
[372] BGE Report at 38.
[373] ZEEVIC Comments at 1.
[374] EEI BGE Comments at 3; EEI PHI Comments at 4.
[375] ATE Comments at 6.
[376] Cinemark Signatories Comments at 1.
[377] ChargePoint Comments at 7.
[378] Staff Comments at 12.
[379] *See, e.g.*, ATE Comments at 5; Staff Comments at 11-12.
[380] ATE Comments at 5.

providers.[381] Staff recommends the Commission accept the proposal, further explaining that fleet electrification, particularly large fleets, can lead to greater reductions in greenhouse gas emissions and local pollution.[382]

177. OPC believes that BGE should first receive authorization to provide a fleet conversion offering before pursuing specific initiatives such as the Fleet Calculator.[383] OPC reasons that such offerings can and should be developed in coordination with the State's business and economic development agencies or through private companies under State contract.[384]

178. While the Commission does not fault OPC's rationale, we recognize that as of this Order, there are over 40,000 registered EVs in the State.[385] The Commission finds that fleet electrification can and must play a key role in positioning the State toward meeting its EV adoption goal of 300,000 EVs by 2025. Additionally, fleet electrification can yield greater public benefit in improved air quality conditions within frontline communities and overburdened areas that are often home to warehouses, commercial and industrial complexes, where fleet vehicles operate more frequently. This on-line resource will not only provide valuable assistance to fleet managers but also allow the Exelon Joint Utilities to learn about fleet electrification plans in their respective service territories and provide touch points to engage those fleet customers for additional support and education. The Commission finds this proposal offers a reasonable and inexpensive point of entry for exploring fleet electrification. We therefore authorize the Exelon Joint Utilities to begin with this offering.

[381] ChargePoint Comments at 7.
[382] Staff Comments 11-12.
[383] OPC Comments at 19.
[384] *Id.*
[385] Maryland Zero Emission Electric Vehicle Infrastructure Council, https://www.mdot.maryland.gov/tso/pages/Index.aspx?PageId=81 (last visited Jan. 10, 2022).

179. We emphasize, however, that this decision serves as a springboard for a more robust discussion on fleet electrification program development. This stakeholder discussion should involve key voices, such as the State's business and economic development agencies. More often than not, there is no one-size-fits-all solution. This is true for EV charging. A non-utility model may have more relevance in certain use cases compared to others. It has been suggested that make-ready incentives may find use in at least two other program settings. Where make-ready models already exist in the EV programs elsewhere in the country, they could provide a cost-effective alternative to utility investment for fleet applications. The EV Work Group should explore this as part of its make-ready discussions.

### 2. BGE/PHI – Fleet Electrification Assessments

180. The Exelon Joint Utilities also seek authorization to offer 100 "technical assessments" for fleet customers across their service territories. These technical assessments are an advisory service designed to "walk fleet customers through the fleet electrification process from beginning to end," and would provide customers with the technological and economic feasibility of electrifying the customer's unique fleet on a timeline and budget that works for the customer.[386] BGE further explains that this service will help fleet managers understand the full TCO of an electrified fleet and the full scope of its benefits and savings, including greenhouse gas emissions reductions.[387] Each assessment will cost approximately $25,000 which means BGE and the PHI Companies will each require budget increases of $2.5 million.[388]

181. Supporters of the Fleet Calculator Tool similarly recommend the Commission approve this program enhancement. They believe these technical assessments will provide fleet managers with valuable insight into their decision to electrify as well as facilitate a smooth

[386] BGE Report at 38.
[387] *Id.*
[388] *Id.*

transition by helping them understand how to optimize their EV charging, select the best charging solutions, and learn about available rebates and incentives to help offset TCO.[389]

182. ChargePoint and Staff propose additional recommendations. ChargePoint requests that the Commission direct the Exelon Joint Utilities to ensure that communications with fleet customers remain vendor neutral.[390] Staff recommends that the Commission limit the proposal to 50 assessments for each utility, and those fleet customers who choose this service must first use the companies' Fleet Calculator Tool.[391] Staff further recommends that customers who receive an assessment but elect not to purchase any EVs should be required to refund 20 percent of the assessment cost, *i.e.*, $5,000.[392]

183. OPC and Mr. Verchinski oppose this proposal and recommend denial. As with the Fleet Calculator request, OPC maintains the Exelon Joint Utilities should first receive Commission authorization to provide a fleet conversion offering to customers.[393] OPC questions whether the Exelon Joint Utilities have the in-house expertise to advise prospective fleet customers on converting fleets to EVs. Rather, OPC states that private firms can and do provide this expertise and assistance.[394] Alternatively, OPC would support a cost-sharing requirement that the fleet customer pay a portion of the fleet assessment costs to demonstrate a commitment to electrification and a willingness to invest in the process.[395]

184. The Commission recognizes there are at present minimal offerings for fleets in the EV Pilot. BGE has the only existing fleet incentive in its public DCFC discount for fleet vehicles. While this novel concept could ostensibly assist fleet customers with their decision to electrify

[389] *See, e.g.*, EEI Comments at 3; ATE Comments at 6.
[390] ChargePoint Comments at 7-8.
[391] Staff Comments at 12.
[392] *Id.* at 13.
[393] OPC Comments at 19, 28.
[394] *Id.* at 19, 28-29.
[395] *Id.* at 19, 29.

their vehicles, the costs associated with this enhancement are considerable. This stands in sharp contrast with the Exelon Joint Utilities' Fleet Calculator Tool.

185. Although the IOUs originally proposed fleet incentives as part of the EV Portfolio in 2018, the Commission limited their non-residential sub-portfolio offerings to multi-family (MUD) incentives to lessen the overall cost impact on utility ratepayers. As it did then, the Commission must give thoughtful consideration to the potential cost impacts of this proposal on ratepayers.

186. At the October Hearing, BGE conceded its lack of in-house expertise to provide this advisory service, stating that it would engage an outside firm to provide the assessments.[396] The Exelon Joint Utilities' own expertise touches only a portion of the entire walk-through process. Yet, the PHI Companies explained there would be efficiencies in coordinating with the fleet consultant, in-house, to assess grid impacts.[397] Although the Commission queried the potential business opportunity for firms to provide this advisory service independently, there are limited examples of similar programs elsewhere in the country. Even if the Exelon Joint Utilities' holistic approach ultimately leads to efficiencies compared to a segregated process, these efficiencies would be overshadowed by the total cost of the program, which would be socialized entirely to the utilities' ratepayers. However, if fleet managers and operators can receive funding assistance elsewhere—for example, through the State or from federal sources—costs would not be borne solely by ratepayers.[398] OPC suggests there would be no loss of efficiency.[399]

187. The Commission must also consider the possibility that a fleet customer may decide against electrification after receiving an assessment. The Commission therefore finds that some

[396] Oct. 13 Hr'g Tr. at 62-63 (Fleischmann Groncki).
[397] *Id.* at 98 (Schatz).
[398] OPC Comments at 19.
[399] *Id.*

cost-sharing would be appropriate. The Exelon Joint Utilities stated at the October Hearing that they are willing to engage in cost-share discussions. Notwithstanding Staff's cost-sharing recommendation, the Commission believes that further discussion in the EV Work Group on how best to structure this initiative, with cost-sharing, would be beneficial to all interested parties. Accordingly, the Commission finds the enhancement premature at this time and denies it without prejudice.

### 3. BGE/PHI – Workplace Charger Rebate Program

188. The Exelon Joint Utilities request authorization to offer fleet and workplace rebates to cover 50 percent of the upfront costs for an L2 charger and installation, up to $5,000 per L2 port.[400] This structure models the same rebate structure as the companies' existing multifamily rebate program. The maximum incentive per location would be $30,000. BGE estimates the total requested budget increase for this proposal is approximately $750,000, which would provide for approximately 25 fleet and workplace locations.[401] The same applies for the PHI Companies.

189. BGE states that since the launch of the EV Pilot, the company has received numerous requests for workplace and fleet charging programs from hospitals, schools, and universities.[402] An available rebate would not only help fleet customers reduce their overall TCO, but also encourage them to work with the Exelon Joint Utilities early in the process to help address site design, engineering, and construction prior to installation.[403]

[400] BGE Report at 39; PHI Report at 28.
[401] BGE Report, Appendix N at 1; Staff Comments at 13.
[402] BGE Report at 39.
[403] *Id.*

190. Supporters of this proposal include ZEEVIC,[404] GWRCCC,[405] ChargePoint,[406] ATE,[407] Greenlots,[408] EEI,[409] the Cinemark Signatories,[410] and Staff.[411] ChargePoint contends that installing chargers in the workplace can make employees six times more likely to purchase an EV.[412] These rebates can be leveraged to offer customers a better return on their investment and change the economics of electrification for companies and fleet operators.[413]

191. Staff supports this proposal but recommends that the Commission approve only 25 rebates and direct BGE to award the rebates only to Maryland-based companies that qualify as small businesses or non-profit entities.[414] Staff believes these rebates should not be used by large companies, but instead be applied to Maryland businesses that might not have sufficient capital to install chargers themselves.[415]

192. OPC and Mr. Verchinski recommend the Commission deny this request. OPC objects to a proposal that provides charger rebates to private companies, explaining that these companies should be motivated to provide EV charging as part of the benefits offered to employees.[416] Both OPC and Mr. Verchinski point out that the Commission previously denied a similar workplace rebate proposal by BGE in the 2019 EV Order.[417] For cost reasons, OPC states that

[404] *See generally* ZEEVIC Comments at 1.
[405] GWRCCC Comments at 1.
[406] ChargePoint Comments at 8.
[407] ATE Comments at 6.
[408] Greenlots Comments at 4-5.
[409] EEI BGE Comments at 4; EEI PHI Comments at 3-4.
[410] Cinemark Signatories Comments at 1.
[411] Staff Comments at 13.
[412] ChargePoint Comments at 8.
[413] ATC Comments at 6; Greenlots Comments at 5.
[414] Staff Comments at 13.
[415] *Id.* at 13-14.
[416] OPC Comments at 3.
[417] *Id.* at 20.

State and local governments should fund workplace programs.[418] The utility should focus instead on developing commercial tariffs that support the use of workplace charging.[419]

193. The Commission values the importance of workplace charging for those drivers who do not have access to convenient charging at home.[420] As BGE observes, workplaces are the second most frequent parking location after homes.[421] Indeed, workplace and fleet rebates can serve two important functions: (1) to lower the financial barrier to EV adoption; and (2) to facilitate early fleet customer engagement with the utility, which in turn will help the utility better support the fleet operator to optimize a transition to electrification.[422] This may also direct serious fleet candidates to other resources, such as the Fleet Calculator Tool.[423]

194. The Commission approves the Exelon Joint Utilities' request to offer workplace rebates modeled after the companies' existing multifamily rebate structure, with Staff's modification. The rebates shall be limited to 25 and shall be awarded to Maryland-based companies that qualify as small business or non-profit organizations. For fleet rebates, a "fleet" must have at least five EVs to be eligible for the rate. To ensure the maximum benefits for these chargers, the Commission directs that chargers must be software-enabled—that is, capable of energy management and data collection—to be eligible for the rebate. These charger capabilities will further inform utility system planning and future programs.

#### 4. BGE/PHI/Potomac Edison – Work Group EV Fleet Subgroup

195. The Exelon Joint Utilities and Potomac Edison request that the Commission create a specific EV Work Group subgroup to discuss, strategize, and develop future EV fleet offerings,

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[418] *Id.*
[419] *Id.*
[420] BGE Report at 39.
[421] *Id.*
[422] *Id.* at 40.
[423] *Id.*

such as managed charging, rate tools, and more.[424] This fleet-focused subgroup would work towards developing fleet customer solutions and programs that best drive fleet electrification in the State, reviewing programs offered elsewhere in the country and discussing best practices and lessons learned.[425] The subgroup would glean insight into the challenges that fleet owners and independent operators face, as well as how utilities can help boost fleet EV adoption.[426] Once convened, the Exelon Joint Utilities recommend that the subgroup be directed to file suggestions and results focused on fleets by the end of Q1 2022.[427]

196. OPC and Staff support the creation of a fleet subgroup of the EV Work Group, noting that doing so would not require any budget increase.[428] OPC recommends that the Commission include the participation of the State's economic development and business support agencies and further direct the group to consider non-utility fleet options.[429]

197. The Commission is not aware of any opposition to this request. The Commission recognizes that fleet electrification is a necessary and important step to achieving Maryland's EV goals. It follows that a forum specifically dedicated to strategizing and developing optimized fleet solutions can help lay the groundwork for successful fleet programs. The Commission therefore approves this request and directs the EV Work Group Leader to convene a fleet-specific subgroup. The subgroup should discuss both utility and non-utility fleet options. As indicated elsewhere in this Order, the Commission directs the subgroup to explore the potential for make-ready applications for workplace and fleet charging in the State, as well as tiered make-ready incentive options designed to reach LMI customers. Should the utilities wish to revise

[424] *Id.* at 40; PHI Report at 28; Potomac Edison Report at 15.
[425] BGE Report at 40.
[426] Potomac Edison Report at 15.
[427] BGE Report at 40.
[428] Staff Comments at 14.
[429] OPC Comments at 20-21.

their fleet technical assessment proposals, the subgroup should discuss appropriate cost-sharing arrangements to mitigate ratepayer impacts. The subgroup is further directed to file with the Commission any fleet-related recommendations and/or results of fleet discussions no later than the end of Q2 2022.

### E. Education and Outreach Budget Requests

198. BGE, the PHI Companies, and Potomac Edison each request approval to increase their respective E&O budgets from five percent to 10 percent of their total EV program budgets.[430] This would require increases of approximately $1.1 million for BGE,[431] $1.0 million for the PHI Companies,[432] and $400,000 for Potomac Edison.[433]

199. BGE notes that customers still lack education and awareness of EVs. The company maintains there is value in developing customer relationships to educate them and grow awareness about EVs and the benefits of EV charging, including managed charging and off-peak charging.[434] Increasing the E&O budget will allow BGE to engage different customers beyond early EV adopters and identify customer segments that are not being addressed by the marketplace.[435] Potomac Edison agrees that the increased budget and increased engagement will lead to increased program adoption and an overall increase in customer awareness of EV benefits.[436]

[430] BGE proffers this request as an E&O program enhancement, while the PHI Companies and Potomac Edison propose the increase as a residential enhancement. BGE Report at 40; PHI Report at 24; Potomac Edison Report at 11.
[431] Staff Comments at 14.
[432] *Id.* at 20. PHI's combined E&O budget increase would mean an additional $710,659 for Pepco and $276,418 for Delmarva. *Id.*
[433] *Id.* at 24.
[434] BGE Report at 41.
[435] *Id.*
[436] Potomac Edison Report at 12.

200. None of the participants in this proceeding object to the Investor-Owned Utilities' E&O budget requests. In support of this enhancement, ATE observes that when the Commission initially reduced the total size of the EV Pilot, the utility E&O budgets were also reduced as a percentage of the IOUs' total program budgets. ATE contends that because E&O efforts are not scalable, the IOUs need their original budget amounts.[437]

201. Staff and OPC support this proposal. OPC recommends that the Commission direct the IOUs to coordinate their education, outreach, and marketing activities through ZEEVIC for a consistent message conveying the many benefits of EVs and customer incentives, similar to the co-marketing model recently approved for the EmPOWER programs.[438]

202. The Commission recognizes there are still educational barriers to EV adoption, particularly among customer segments not captured by first adopters. Staff notes that customers still have questions related to how EVs work, where they can charge, and how much it costs to refuel.[439] While customer outreach and education is a critical element of the EV Pilot, it remains unclear why it is necessary to double the IOUs' E&O budgets for the remainder of the EV Pilot. At the October Hearing, BGE said it still has approximately $8 million remaining in its overall EVsmart program budget, which was approved for $22 million.[440] Yet BGE front-loaded a large majority of its E&O budget on online program marketing to drive customer engagement. Now, at the half-way point, BGE has approximately $200,000 remaining of its currently approved $1.1 million budget.[441]

203. The Commission has long held it incumbent upon utilities to manage their budgets responsibly. While the Commission does not make a determination here on the prudency of

[437] ATE Comments at 7.
[438] OPC Comments at 21.
[439] *See, e.g.*, Staff Comments at 14.
[440] Oct. 13 Hr'g Tr. at 225 (Fleischmann Groncki).
[441] *Id.* at 225-26 (Fleischmann Groncki).

BGE's budget spending, the front-loading of the company's marketing budget gives the Commission pause to approve additional E&O funds without a more detailed understanding of how BGE and other IOUs plan to use that money over the remainder of the EV Pilot. To this point, the Commission finds the IOUs' requests for additional E&O budget lacking support. The IOUs have provided scant detail on how they plan to engage new customer segments, or engage customers in new ways, versus "business as usual." They provide only an overview of how they plan to use the additional funds. BGE plans "to host ride and drive events, conduct a charging awareness campaign, and continue to pursue strategic partnerships with EV advocate groups in Maryland, dealerships, and auto manufacturers."[442] Potomac Edison will use the additional funds "to generate more impactful and meaningful engagement of current and prospective EV customers, provide education on EV benefits and incentives, and encourage EV customers to participate in Potomac Edison's time of use program."[443] The PHI Companies state that "[t]hrough increased marketing and customer education channels, the additional education and outreach dollars will contribute to more widespread adoption of the EVsmart program."[444] Specific and targeted customer outreach plans, revised or improved marketing strategies, and planned events and activities with specified dates and times—these are all absent. Furthermore, the Commission holds the view that accelerating EV adoption also means investing in outreach and education to diverse, rural, and populated urban communities in addition to addressing gaps in charging deployment.[445] Yet the IOUs do not discuss whether or how they plan to target outreach to diverse and underserved communities in their territories about the benefits of the EV Pilot.

[442] BGE Report at 41.
[443] Potomac Edison Report at 12.
[444] PHI Report at 24-25.
[445] *See* EVNoire Comments at 1.

204. While the Commission acknowledges that customer education and outreach remain top priorities for BGE, the PHI Companies, and Potomac Edison, the Commission denies their requests to increase their E&O budgets at this time, without prejudice. The IOUs may resubmit their requests but are advised to include specific details on their planned customer outreach strategies, along with an explanation of how the additional funding will be sufficient to sustain their E&O efforts for the remainder of the EV Pilot.

### F. COMAR Waivers

205. In the 2019 EV Order, the Commission waived COMAR provisions 20.25.01.01B, 20.25.01.04A(2), and 20.25.01.05H to allow residential smart chargers installed pursuant to the Utilities' residential rebate programs to be used as submeters, in lieu of a dedicated billing meter for EV charging. The waivers allowed the Utilities to avoid applying the normal testing, installation, accuracy, and records requirements used to qualify a meter for revenue billing purposes. BGE requests that the Commission continue the existing COMAR waivers granted under the 2019 EV Order and grant additional waivers of COMAR provisions 20.25.01.04C, 20.25.01.04I, 20.25.01.04J(1), and 20.25.01.04J(2)—to the extent those provisions apply—for at least the remainder of the EV Pilot.[446] Based on learnings from the first half of the Pilot, BGE states that EV L2 chargers cannot be tested for submetering accuracy because there are no finalized standards for doing so, including any standards developed through the American National Standards Institute.[447] Moreover, unlike for standard utility meters, the IOUs currently do not have the facilities or personnel equipped or trained to perform on-site testing of

[446] BGE Report at 43.
[447] *Id.* at 42.

equipment lacking national standards.[448] Thus, BGE contends it is not possible at this time to perform the accuracy testing required under the applicable COMAR provisions.[449]

206. The below table summarizes the additional COMAR sections in question:

| COMAR Section | Section Text | Explanation for Requested Waiver |
|---|---|---|
| 20.25.01.04(C) | Meter Accuracy. All submeters in service shall be tested by the owner as provided by this chapter. | There are no finalized standards for testing accuracy, and utility crews and facilities are neither equipped nor trained to perform testing on-site without a standard from which to work. |
| 20.25.01.04(I) | Meter Test by Owner. Upon application by occupant, the owner shall test the submeter for accuracy, at a laboratory approved by the Commission or on-site with instruments approved by the Commission, with no charge to the occupant, provided that no test was made within the past 18 months. | A lack of testing standards means that utilities are not trained or equipped to perform on-site testing, and it may not be possible depending on the charging equipment. Due to the embedded nature of the metrology of EV charging equipment, testing would likely require uninstalling and shipping to a third-party testing location, which would be cost prohibitive compared to testing standard utility meters. |
| 20.25.01.04(J)(1) | A submeter may not be placed in service until it has been tested and adjusted by the owner at a laboratory approved by the Commission or on-site with instruments approved by the Commission to within plus or minus 1 percent of 100 percent accuracy. | There are no accepted accuracy standards to test to. In addition, the meter manufacturers are not currently testing every device or the utilities are not aware of such testing. |
| 20.25.01.04(J)(2) | If any submeter is removed from service or replaced by another submeter, it shall be properly tested and adjusted by the owner at a laboratory approved by the Commission before being placed in service again. | Without testing standards that can be met by the manufacturers, devices could not be retested if there are no accepted standards for the manufacturers (or utilities) to test to. |

[448] *Id.*
[449] *Id.*

207. None of the participants to this proceeding oppose BGE's request. ATE,[450] WeaveGrid,[451] and Staff[452] specifically recommend approval. Staff further recommends the Commission extend this waiver request, and approval, to the other Utilities for the remainder of the Pilot. Staff has committed to work with the Utilities to apply lessons learned from the Pilot and recommend EV metering regulations before the Pilot concludes.[453]

208. The Commission finds that continuing the COMAR waivers will allow the Utilities to utilize EV charging technology to its maximum potential. The Utilities are thus able to implement time-variant rates, pursue load management opportunities, and collect important data regarding customer charging habits, without the need for a separate meter. Maximizing the potential of EV charging remains a core function of the EV Pilot, and to do so while mitigating ratepayer impact is consistent with the public interest.

209. As BGE and Staff point out, there is no systematic or standard approach to performance testing of any installed charging equipment for COMAR compliance purposes, which means the Utilities cannot perform the accuracy testing required under COMAR at this time. The Commission finds good cause to extend the existing COMAR waivers and to waive the additional COMAR sections as requested. The Commission will direct Staff to work with the Utilities to develop and propose EV metering regulations before December 31, 2023.

### G. EV Work Group Instructions

210. The first half of the EV Pilot has already produced valuable learnings regarding customer charging and considerations for EV adoption. As we begin the second half of the Pilot, the Commission finds it would be appropriate to begin looking ahead toward the future direction of

[450] ATE Comments at 7.
[451] WeaveGrid Comments at 7.
[452] Staff Comments at 19-20.
[453] *Id.* at 20.

the EV program. The demands on the electric grid will only increase with EV adoption in the State. While utility-led managed charging and load management programs will undoubtedly help reduce grid impacts, emerging trends and technologies in the market may offer additional solutions to help build out the grid.

211. At the October Hearing, FreeWire described its battery-integrated ultrafast EV charging market product, which draws power from the grid at the same level as a L2 charger to charge the integrated battery while delivering ultrafast charging.[454] According to FreeWire, such modular assets can be deployed at locations where charging is needed without the expensive infrastructure upgrades at the edge of the grid needed to support and enable traditional fast charging technology.[455] Although Potomac Edison's Urbana Park Energy Storage Pilot is designed to test the integration of battery energy storage with EV charging, that project is on a larger scale than FreeWire's example of a modular, commercial product. FreeWire indicated at the October Hearing that at least six other companies plan to bring similar products to market.[456] This trend in the market presents an opportunity to examine the benefits and use cases for battery-integrated fast charging, especially to reduce grid strain, improve cost effectiveness, and further accelerate EV deployment. Therefore, in addition to convening the fleet-specific subgroup as described herein, the Commission directs the EV Work Group to investigate the topic of incorporating other energy source technologies, like battery storage, into EV charging.

212. In addition to investigating grid build-out solutions, assisting EV customers with managing their power consumption should remain a top priority for the Utilities. In the 2019 EV Order, the Commission recognized that the increased stress on the electric grid from EV charging, especially during peak system hours, could implicate issues with grid reliability and

[454] FreeWire Comments at 3-4; Oct. 13 Hr'g Tr. at 136 (Olmsted).
[455] FreeWire Comments at 4.
[456] Oct. 13 Hr'g Tr. at 140 (Olmsted).

resiliency. Therefore, it is imperative that EV load is managed effectively, "otherwise, all ratepayers will share in the expensive costs of upgrading and maintaining the distribution system to accommodate the increased load on the system."[457] The Commission specifically found that data from smart chargers can raise customer awareness of their charging usage and encourage charging at certain times during the course of the day.[458]

213. Although residential rebate customers have the ability—through smart charger or vehicle capability—to set a time for vehicle charging, Staff remains concerned with drivers' charging habits.[459] According to the Guidehouse EM&V Report, residential rebate customers across the utilities, on average, began their vehicle charging sessions before 7:00 pm. By contrast, EV-only TOU customers, on average, began their charging during the off-peak period.[460] Staff supports any educational efforts by the Utilities to encourage customers to charge their vehicles during off-peak hours. Staff's concern is well noted, along with the recognition that external factors, such as the COVID-19 pandemic, may also be influencing charging behavior. There is opportunity during this second half of the EV Pilot for Utilities to educate customers on how to manage their charging. Accordingly, the Commission directs the EV Work Group to work with the Utilities and explore such educational efforts for off-peak charging. The Work Group may submit any updates to the Commission, independent of the Utilities' semi-annual reporting, as appropriate.

214. Finally, the Commission has provided additional direction for the EV Work Group in this Order, where appropriate. Summarized briefly, the Commission directs the utilities to work with the Work Group to develop consensus reporting metrics or standards capturing granular uptime

[457] 2019 EV Order at 49.
[458] *Id.* at 50, 52.
[459] Staff Comments at 31.
[460] Guidehouse Report at 17.

data for the Utilities' public-facing chargers, including any utility-owned multifamily chargers, for future semi-annual reports beginning August 1, 2022. To the extent the Utilities believe there is value in pursuing a carshare concept, the Work Group should discuss and present the Commission with additional information on the topic concurrent with any proposal submitted by the utilities.

## IV. CONCLUSION

215. The Commission recognizes that many of the proposals reviewed in this Order attempt to incorporate learnings from the first half of the EV Pilot for the purpose of making meaningful program adjustments and stimulate a build-out of EV charging in certain customer segments that remain underserved today. Despite its progress, the Pilot's ultimate success lies in the sampling and quality of the charging data gathered. With two years remaining in the Pilot, the Commission recognizes the need to pivot toward deployment strategies that lean into charging gaps in order to engage a more diverse customer base to better understand different charging patterns. However, this must be done in a responsible way that does not place the entire burden on utility ratepayers. For the reasons set forth herein, the Commission finds it in the public interest to approve a limited scope of program modifications for the Utilities. The decision today reflects a measured approach, where the Commission considered the proposals' objectives along with potential impacts on the competitive market and cost implications for ratepayers. As the EV market matures, opportunities for additional learnings and responding to technological trends will undoubtedly help streamline the deployment of charging infrastructure in a way that is cost-effective and optimized for the greater benefit of the State and ratepayers alike.

**IT IS THEREFORE** this 11th day of January, in the year Two Thousand Twenty-Two, by the Public Service Commission of Maryland,

**ORDERED**: (1) That Baltimore Gas and Electric Company's proposed modifications to its residential, non-residential multifamily, and public charging sub-portfolios are approved, in part, as modified herein, and denied, in part;

(2) That the proposed modifications offered by Potomac Electric Power Company and Delmarva Power & Light Company to their residential and non-residential multifamily charging sub-portfolios are approved, in part, as modified herein, and denied, in part;

(3) That Potomac Edison's proposed modifications to its residential, non-residential multifamily, and public charging sub-portfolios are approved, in part, and denied, in part, as described herein;

(4) That the Southern Maryland Electric Cooperative, Inc.'s proposed modifications to its public charging program are approved;

(5) That the requests by BGE, the PHI Companies, and Potomac Edison to increase their respective customer education, marketing and outreach budgets from 5 percent to 10 percent of their total program budgets are denied, without prejudice;

(6) That the novel fleet and workplace proposals offered by BGE, the PHI Companies, and Potomac Edison are approved, in part, as modified herein, and denied, in part;

(7) The Potomac Edison's request to update the charging rates for its company-owned public charging stations is approved;

(8) That BGE's request to continue waivers of COMAR Sections 20.25.01.01(B), 20.25.01.04(A)(2), and 20.25.01.05(H), and grant additional waivers for COMAR Sections 20.25.01.04(C), 20.25.01.04(l), 20.25.01.04(J)(1), and 20.25.01.04(J)(2) for the duration of the EV charging pilot program is approved for all the Utilities;

(9) That the Utilities shall include as part of their semi-annual reporting requirement, public charger reliability data as described herein;

(10) That the PC44 Electric Vehicle Work Group shall convene a fleet-specific subgroup and file any fleet-specific recommendations and/or results from fleet discussion no later than the end of Q2 2022;

(11) That the EV Work Group shall address the additional topics as identified in the EV Work Group Instructions section, including but not limited to make-ready incentives and applications, battery-integrated EV fast charging, customer charging habits, and EV carshare;

(12) That all other requests not specifically addressed in this Order are hereby denied; and

(13) That the Utilities shall file revised tariffs in accordance with this Order.

*/s/ Jason M. Stanek*

*/s/ Michael T. Richard*

*/s/ Anthony J. O'Donnell*

*/s/ Odogwu Obi Linton*

*/s/ Mindy L. Herman*
Commissioners