

Jessica M. Raba, Esq.

Telephone: 610.816.9303
Fax: 330.436.8124
jraba@firstenergycorp.com

June 20, 2025

VIA ELECTRONIC FILING

Andrew S. Johnston, Executive Secretary
Maryland Public Service Commission
William Donald Schaefer Tower
6 St. Paul Street, 16th Floor
Baltimore, MD 21202T

**Re: Case No. 9741: Implementation Plan of the Potomac Edison Company for a
Vehicle to Grid Electric School Bus Pilot**

Dear Secretary Johnston:

In accordance with Maryland Public Service Commission Order No. 91571 in the above-referenced matter, enclosed please find the Implementation Plan of the Potomac Edison Company for a Vehicle to Grid Electric School Bus Pilot. As noted in the document, the Company is respectfully requesting a final approval order from the Commission by September 1, 2025, so that the Company can begin implementing the Pilot promptly and consistent with the timelines and budget provided therein.

If you have any questions about this matter, please do not hesitate to contact me.

Respectfully submitted,



Jessica M. Raba
Counsel to The Potomac Edison Company

cc: Case No. 9741 Service List
Enclosure

**BEFORE THE
PUBLIC SERVICE COMMISSION OF MARYLAND**

Potomac Edison Company's
Proposal for an Electric School
Bus Pilot

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Case No. 9741

**Implementation Plan
of The Potomac Edison Company for a
Vehicle to Grid Electric School Bus Pilot**

June 20, 2025

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Implementation Plan of The Potomac Edison Company for a Vehicle to Grid Electric School Bus Pilot

I. INTRODUCTION

A. Executive Summary

On March 21, 2025, the Maryland Public Service Commission (“Commission”) approved the Electric School Bus (“ESB”) Pilot filed by The Potomac Edison Company (“Potomac Edison” or the “Company”) subject to certain required modifications, as detailed in Order No. 91571 (the “Order”). The Order requires the modifications to be filed with the Commission in an Implementation Plan within 90 days. Through this filing, Potomac Edison submits its Implementation Plan to the Commission for approval and requests authorization to proceed with its ESB Pilot subject to the modifications herein.

Consistent with the Order, the Company engaged with Commission Staff (“Staff”), the Office of People’s Counsel (“OPC”) and parties of record (collectively, the “Stakeholders”) to develop final incentive selection criteria, clearly define pilot goals, and associated evaluation criteria.¹ The Company developed this Implementation Plan to provide greater details regarding bidirectional charging, referred to as Vehicle-To-Grid (“V2G”) implementation, and load management. The Implementation Plan includes a V2G demonstration project with Frederick County Public Schools.² Education and outreach efforts will be prioritized toward Western Maryland counties and commenced prior to the deployment of ESBs.³ The Implementation Plan contains clear goals and commitments pertaining to the deployment of ESBs in underserved

¹ Order 91571 at 35.

² *Id.* at 31.

³ *Id.* at 31 and 32.

communities ensuring that the ESB Pilot has at least one Environmental Justice Community⁴ and one non-Environmental Justice Community among its rollout of the 28 approved ESBs. Metrics will be recorded during the ESB Pilot; these metrics include metrics the Company previously agreed to as well as additional metrics established through engagement with Stakeholders.⁵ This Implementation Plan also enhances the process for evaluating and reporting on the ESB Pilot as directed by the Commission. Finally, this Implementation Plan includes a revised budget and tariff.⁶

B. Overview of Implementation Plan

The primary goal of the ESB Pilot is to determine the ability of ESBs to provide distribution system load relief through V2G-dispatched ESBs subject to transportation requirements across all county school systems in the Potomac Edison service territory.⁷ The approach the Company will use to achieve this goal and address each of the requirements set forth by the Commission is organized as follows:

- Section II of this filing describes the collaboration the Company has undertaken with Stakeholders.
- Section III describes the ESB Pilot Implementation Plan including the incentive application process, ESB Pilot goals, commitment by a school system to participate, outreach and education, and how the Company will comply with requirements pertaining to underserved communities.

⁴ As discussed herein, the Company anticipates substituting Underserved Communities as defined by the Climate Solutions Now Act.

⁵ Order 91571 at 35.

⁶ *Id.* at 35.

⁷ A limited number of locations may be equipped solely with unidirectional charging if V2G is deemed infeasible. This accommodation would be made to expand the geographic coverage of the program and also to test the feasibility of contractors using ESBs. PE anticipates no more than five (5) ESBs which would be served by unidirectional chargers. Such chargers would be subject to charging management to avoid charging at peak times. This method is referred to as “V1G”.

- Section IV describes the enhanced metrics that the Company will report, the associated required data collection, the methodology for evaluating V2G operations and an assessment of the ability of ESBs to provide load management.
- Section V provides the revised ESB Pilot budget and ESB tariff rider.

II. STAKEHOLDER COLLABORATION

A. Summary

Pursuant to the Order, Potomac Edison was instructed to “consult with OPC, Staff, [Maryland Energy Administration (“MEA”)], Earthjustice, and other interested stakeholders to discuss the additional information and evaluation metrics discussed in [the] Order and submit a filing within 90 days, specifically addressing those factors in the context of Potomac Edison’s ESB Pilot Program proposal.”⁸

More specifically, Potomac Edison was directed to work with Staff, OPC and other parties of record to develop final selection criteria, clearly defined goals, and associated evaluation criteria, without needing to incur any additional expenses of a third-party evaluator, to determine if goals are met.

To comply with the Commission’s requests Potomac Edison performed the following:

1. Compiled a list of evaluation metrics and selection criteria comprised of those included in the Company’s initial filing, as well as the agreed upon additional metrics proposed by other parties including OPC Witness Courtney Lane and Staff Witness Matthew Hoyt.
2. Prioritized and defined final selection criteria for situations in which two schools may be requesting the same funding.

⁸ Order at 36.

3. Clearly defined Potomac Edison's Pilot Program goals.
4. Aligned the complete list of compiled evaluation metrics to Pilot Program goals.
5. Created a presentation addressing the Order requirements, final selection criteria, clearly defined goals, and evaluation metrics.
6. Conducted two meetings with the parties of record⁹ to review Potomac Edison's presentation, answer questions, and gather feedback.
7. Revised the presentation to incorporate stakeholder suggestions and distributed a final presentation to all stakeholders soliciting feedback prior to two follow-up meetings.
8. Held two follow-up meetings to address any written comments received, of which there were none.¹⁰
9. Responded to questions asked during those two meetings and received no additional edits.

After the meetings and prior to filing this Implementation Plan, Potomac Edison circulated to the parties the complete list of metrics, which are attached to this filing as Appendix A.

III. IMPLEMENTATION

A. Site Selection Criteria

The Company reviewed the site selection criteria with Stakeholders during the development of this Implementation Plan in compliance with the Order.¹¹ This review resulted in

⁹ Representatives from Staff, OPC, MEA, and Maryland League of Conservation Voters and Sierra Club participated in the meetings.

¹⁰ Again, representatives from Staff, OPC, MEA, and Sierra Club attended the second set of stakeholder meetings.

¹¹ Order 91571 at 35.

the addition of Staff’s criteria to consider the “potential for each ESB to contribute valuable insights and data regarding V2G deployment.”¹² The final site selection criteria are as follows:

1. Ability to perform V2G functions and contribute valuable insights and data
2. Expected annual ESB vehicle miles traveled
3. Expected underserved census tracts to be served by funded ESBs
4. Number of underserved communities within the county defined by census tract and based on availability of data due to removal of federal resources
5. Number of incentives already received by applicant (to mitigate concentration in a single county)
6. ESB project cost

In addition to Frederick and Montgomery Counties, each of which currently operates ESBs, Allegany and Garrett Counties previously indicated openness to participation. Upon a final order approving this Pilot, the Company will reengage with each county served in whole or in part by Potomac Edison.

B. Incentive Payment

The Company has defined incentive payment processes for school system owned ESBs, ESB-as-a-Service, contracted ESBs, electric vehicle supply equipment (“EVSE”), EVSE installation, and other ESB-related costs incurred by school systems.

Electric School Buses

For school system-owned buses, the ESB dealer will complete an attestation that they are an authorized Original Equipment Manufacturer (“OEM”) dealer. The school system will then provide the Company with the invoice for each ESB and a dealer-provided cost estimate for a

¹² *Id.* at 24.

comparable diesel school bus. The Company will then give the school system a voucher for the difference between the ESB and the comparable diesel bus, which the school system can then provide to the OEM dealer. The OEM dealer would then remit this voucher to the Company, and the Company will pay the incentive to the dealer.

Certain counties contract for transportation services through third parties. These counties make periodic payments to compensate contractors for: (1) the cost of the vehicle including a return on the contractor's investment through a per vehicle allotment ("PVA"); and (2) the driver's wages and operating costs (e.g., maintenance and fuel). For these counties, Potomac Edison will provide ESB contractors the difference between the cost of an ESB and a comparable diesel bus in the form of a PVA. Thus, a contractor seeking to provide ESB services to a county will be paid a PVA and operating costs aligned with the costs of the ESB. In such cases, the school system will pay the PVA and operating costs of a diesel bus, and the Company will pay the difference between the diesel bus payment and the ESB payment.

Certain school systems may operate under an "ESB as-a-service" model in which a contractor provides all cost components of bus services in a single periodic payment (e.g., Montgomery County obtains ESB services through an "ESB-as-a-Service" model from Highland Electric Fleets). In such cases, the contractor will be paid an amount each month (or other frequency based on discussions with the school system and service provider) that represents the difference between the per-ESB as-a-service contract price and the PVA plus operating costs for a diesel bus.

For each of the above, the Company may follow an alternate process for ESB incentive payment that is mutually agreeable to the Company and a school system.

Charging Infrastructure Installation

With regard to electrical infrastructure necessary to charge the ESBs, Potomac Edison will pay for design, engineering, and permitting, as well as equipment acquisition and construction costs on the load side of the meter as well as work on the line side of the meter. When contractors are selected by the incentive recipient, all specifications, plans, and costs will be subject to review and approval in advance by the Company. Final layout of ESB parking spaces and equipment shall require mutual agreement between Potomac Edison and the incentive recipient. Potomac Edison will make all approved payments related to design, engineering, permitting, and construction to the school system, which in turn will pay the service provider. In situations where these costs are included in the bus lease price, as may be the case with ESB-as-a-Service, there will be no separate incentive.

Maintenance

School systems are responsible for maintaining the ESBs and the Company will reimburse the school system for the positive cost difference between ESB maintenance and comparable diesel bus maintenance, if any. Similarly, the Company will reimburse the school system for the positive difference between an ESB warranty and a comparable warranty for a diesel bus, if any. In situations where these costs are included in the ESB-as-a-Service price, as may be the case with ESB-as-a-Service, there will be no separate incentive.

EVSE Purchase and Use

Potomac Edison will identify approved EVSE makes and models, technology providers (including charging station management services and V2G platforms), and EVSE maintenance and service providers from which incentive recipients may choose. Incentive recipients will enter into contracts directly with the approved provider of the goods or services, and Potomac Edison will

pay approved invoice amounts to the incentive recipient for the duration of the Pilot. If a school bus contractor participates in the ESB Pilot, the school system will serve as the intermediary. In situations where these costs are included in the bus lease price, as may be the case with ESB-as-a-Service, there will be no separate incentive. For the duration of the Pilot, Potomac Edison will retain full rights to interact with and direct the actions of the suppliers of the EVSE, technology providers, and EVSE maintenance and service providers.

C. V2G and V1G Dispatch Events

The objective of the ESB Pilot is to test the ability of ESBs to provide distribution system load relief through V2G subject to school system transportation requirements.¹³ A limited number of V1G installations may also be tested within the ESB Pilot. To test the ability of the ESB and EVSE to provide such load relief, the Company has designed a set of “scheduled” and “unscheduled” dispatch events. The purpose and primary measurement of the events, as well as specific V2G performance metrics requested by Stakeholders, are described below in Section IV.

Scheduled Dispatch Events

Scheduled dispatch events occur at predetermined times and are designed to test the reliability and ability of ESBs to functionally respond to such dispatch requests. The performance under scheduled events is measured by the Scheduled Event Response Rate which is calculated as the number of scheduled events responded to across the Pilot divided by the number of scheduled events called during a given reporting period. Performance is also evaluated on the quantity of energy actually injected into the grid during these events compared to the quantity of energy requested during these events. These events will be controlled by a third-party V2G platform which

¹³ To facilitate geographic diversity among the seven counties served in whole or in part by Potomac Edison, and given contractors may park their buses at sites not conducive or economical to V2G, the ESB Pilot may include up to five standard unidirectional (“V1G”) chargers which shall be controlled via telemetry for purposes of managed charging to avoid peak times.

possesses the ability to communicate with ESBs and EVSE; this platform integrates data, providing the school systems and Potomac Edison situational awareness. One capability of the V2G platform is to display each ESB's actual state of charge; emerging technology is expected to also project the state of charge at a specified future time. Based on the information available from the V2G platform, or alternatively based on historical experience, the V2G platform will be instructed to charge or discharge for scheduled and unscheduled events (see below for a description of unscheduled events). The quantity of energy actually charged or discharged will be measured by Potomac Edison using the bi-directional meter at the site.

Unscheduled Dispatch Events

The ESBs will also be subject to unscheduled dispatch events, which will occur with lead times of no more than 48 hours. The ability of ESBs to provide load relief during unscheduled events will be evaluated through an Unscheduled Event Response Rate and an Unscheduled Event Energy Availability Rate. The Unscheduled Event Response Rate is calculated as the number of unscheduled events responded to across the ESB Pilot divided by the unscheduled events called during a given reporting period. The Unscheduled Event Energy Availability Rate is calculated as the total kWh provided during unscheduled events divided by the total kWh requested during unscheduled events during a given reporting period.

ESBs that operate under V1G will be subject to similar scheduled and unscheduled event testing and evaluation. In the case of V1G, energy availability will be assessed based on the reduction in load (kW) versus load prior to the start of the dispatch event.

Unscheduled events will be initiated based on PJM Emergency Procedures including Hot Weather Alerts, Post Contingency Local Load Relief Warnings, Cold Weather Alerts, and

Conservative Operations, all of which correlate with high loading on the distribution system and can benefit from both load reduction and the injection of energy into the grid.

The purpose of a Hot Weather Alert is to prepare for extreme hot and/or humid weather conditions, which may cause capacity requirements and/or unit unavailability to be substantially higher than forecasted, and which are expected to persist for an extended period. In general, a Hot Weather Alert can be issued on a Control Zone basis, if projected temperatures are to exceed 90 degrees with high humidity for multiple days. PJM may also issue a Hot Weather Alert at lower temperatures during the spring and fall periods if there are significant amounts of generation and transmission outages that reduce available generating capacity.¹⁴ Between 2021 and 2024, PJM issued an average of ten Hot Weather Alerts per year covering the APS zone, which includes Potomac Edison.

A Post-Contingency Local Load Relief Warning is an emergency procedure that provides advance notice to a specific transmission owner that their local transmission system is under stress and more vulnerable to power outages. This type of warning is the most common emergency procedure PJM issues. Between 2021 and 2024, PJM issued an average of twelve Post-Contingency Local Load Relief Warnings per year covering the APS zone.

The Company will also respond to Cold Weather Alerts¹⁵ and Conservative Operations Alerts,¹⁶ each of which has occurred between one and three times per year over the past four years.

¹⁴ PJM Manual 13: Emergency Operations at 65.

¹⁵ The purpose of the Cold Weather Alert is to prepare personnel and facilities for expected extreme cold weather conditions. As a general guide, PJM can initiate a Cold Weather Alert across the Regional Transmission Organization or on a Control Zone basis when the forecasted weather conditions approach minimum or actual temperatures of 10 degrees Fahrenheit or below. PJM can initiate a Cold Weather Alert at higher temperatures if PJM anticipates increased winds or if PJM projects a portion of gas fired capacity is unable to obtain spot market gas during load pick-up periods.

¹⁶ Conservative Operations are declared when PJM determines the need to operate more conservatively due to events such as weather, environmental, physical or cyber security.

Implementation of Dispatch Activities

Scheduled and unscheduled events are initiated by a V2G platform which will be managed by the Company and a designated V2G vendor. In the case of scheduled events, times and durations will be set through consultation with each school system. The triggering event(s) for unscheduled events will be monitored by the Company. When such a triggering event occurs, the Company will communicate with the V2G platform either in a manual or automated mode depending on the circumstances of the triggering event and the capabilities of the system which Potomac Edison uses.

D. Firm V2G Agreement

The Order directs Potomac Edison to include in this Implementation Plan a firm agreement between the Company and at least one county to participate in a V2G plan or project, sometimes referred to as a “Demonstration Project.” This Implementation Plan contains details “regarding how the Company plans to employ V2G capabilities as well as identification of V2G learning goals [that are] in the public interest and critical for guiding future Commission decisions.”¹⁷

Although Potomac Edison cannot contractually commit to any school system or contractor until receipt of a final order from the Commission authorizing the Company to proceed, Potomac Edison understands Order No. 91571 to require a commitment to the extent possible. Potomac Edison has therefore entered into extensive and detailed discussions with Frederick County Public Schools, and both parties have a verbal understanding and are working towards execution of a signed agreement committing to an approach under which the Company will perform a series of V2G initiatives including through which ESB batteries will be dispatched to provide power back to the grid. Such injections will be based on specified triggers from PJM described above, and

¹⁷ Order 91571 at 31.

Potomac Edison and Frederick County Public Schools both agree that they have a firm intent of entering into a contractual relationship following an authorizing order by the Commission.

E. Underserved Communities

The Order has established requirements for ESB Pilot deployments both within and outside of areas deemed to be “Environmental Justice Communities.” The Climate Solutions Now Act of 2022 (“CSNA”) which created the voluntary ESB Pilot Program uses the term “Underserved Community” and not “Environmental Justice Community.” Although the latter term is not defined in the CSNA, Potomac Edison believes it refers to the Justice40 Initiative which began during the Biden Administration and has since been cancelled. Potomac Edison has therefore applied the Commission’s requirements to census tracts designated as “Underserved” as defined by the CSNA.

ESB deployments within these Underserved Communities will be measured by either school location, bus stop location, or another measure acceptable to the Company and school system that reasonably and accurately reflects deployment of ESBs within an underserved community. For each deployment, the Company will calculate the percentage of ESB transportation miles deployed to underserved communities for each reporting period to the extent feasible and consistent with the selected ESB platform vendor capabilities.

Each school system receiving ESB Pilot funds will be required to make reasonable efforts to assign the ESBs to routes which serve schools located in underserved communities and to report ESB route information to the Company so that the Company can report such usage to the Commission.

F. Participant Training

Training for ESBs and EV charging infrastructure is typically provided by the ESB manufacturers or ESB-as-a-Service providers. Until the ESB and EVSE providers are identified (a

step which cannot occur prior to a final order from the Commission), the Company cannot provide a specific curriculum. However, Potomac Edison will coordinate with the ESB and EVSE suppliers as well as the incentive recipients to ensure training is provided. Such training typically includes:

- General ESB and EVSE safety training. This training includes an introduction to the knowledge of safe working practices, the dangers surrounding, and the precautions required to avoid potential injury when near electric vehicles.
- Training tailored to specific ESBs and EVSE based on the level of the individual's interaction with the hardware or software, such as staff who maintain and repair ESBs excluding the actual electrical system. This training conveys the knowledge required to work safely around a vehicle's electric system, while carrying out repairs or maintenance.

G. Outreach and Education

The Order directs the Company to prioritize implementing educational and outreach measures among Western Maryland counties' school systems and independent contractors, with the aim of ensuring that all of Potomac Edison's customers have equitable access to ESB Pilot benefits and technologies. In speaking with counties and contractors, it is clear that they have a thorough understanding of the benefits and challenges of ESBs and that the lack of adoption of ESBs is not due to a lack of awareness. For example, the U.S. Environmental Protection Agency and the Joint Office of Energy and Transportation each have held multiple outreach events on the subject over several years. Local to Maryland, the Maryland Department of the Environment, the Maryland Energy Administration, and the Maryland Association of School Bus Operators have sponsored webinars and panels on ESBs. Nongovernmental organizations and ESB vendors have also invested resources in communicating the benefits of ESBs widely, including to Maryland school systems.

Therefore, the emphasis of the Company's outreach and education efforts will be directed toward communicating the specifics of this Pilot, rather than generalized ESB benefits. The target audience will be the school systems in the seven counties served by Potomac Edison. Specific messaging for contractors, which the Company believes should be disseminated by the school systems which use contractors, will also be developed.

IV. METRICS & EVALUATION

A. Metrics

The Company will collect and maintain information that will be used to generate a series of metrics. These metrics will then be used to evaluate each aspect of the ESB Pilot and report the status of the ESB Pilot to the Commission. The information used to generate these metrics will be derived from the platform that manages V2G and V1G performance, Company-maintained data, and data provided by the school systems. The calculated metrics to be maintained and reported by the Company have been reviewed with the Stakeholders as described in Section II. The information to be collected and the metrics to be calculated are listed in Appendix A.

B. Evaluation

The Company will undertake an evaluation of the ability of ESBs to provide distribution system load relief and meet other requirements set forth by the Commission. This evaluation will consider each of the metrics previously described and relevant goals associated with these metrics.¹⁸ While the Company will endeavor to collect all information sufficient to calculate the proposed metrics, calculation of certain metrics may not be possible due to a lack of available data,

¹⁸ The initial performance goal for Scheduled Events is 97% reflecting industry standard levels of EVSE reliability. The initial performance goal for Unscheduled Events is 69% reflecting the PJM demand resource effective load carrying capability (ELCC) for the 2026/2027 delivery year.

feasibility, technical limitations and vendor capabilities. In such cases, the Company will notify the Commission of such circumstances during its required periodic reporting.

V. TARIFF RIDER & REVISED BUDGET

A. Tariff Rider

The Company will publish a tariff rider with eligibility limited to ESB incentive recipients. The tariff rider will document that the Company will reimburse each school system for energy extracted from the ESB batteries at the applicable full energy retail rate listed in the applicable base tariff under which the customer is served. This tariff rider includes a clear transition plan for ESB incentive recipients at the end of the ESB Pilot as directed by the Commission. The ESB Pilot and V2G demonstration project will be active for five years from the tariff rider's original effective date, or until Pilot funds are exhausted. Once the Pilot terminates, the V2G dispatch capabilities of the ESB's will revert to the public school system. This tariff rider is provided in Appendix B.

B. Revised Budget

The Company updated the ESB Pilot budget originally filed with its ESB Pilot application on January 17, 2024, as directed by the Commission in the Order. The revised ESB Pilot budget is now \$11.15 million¹⁹ as summarized below in Table 1 and detailed in Appendix C.

The updated budget is based on Commission approval of this Implementation Plan by September 1, 2025, and includes the following updates: (1) moving the start date of the ESB Pilot to 2025, and (2) updating costs for ESB incentives, EVSE, EVSE maintenance, and installation. These budget updates were made to reflect the expected timing of a final Commission order and

¹⁹ The initial ESB Pilot estimated budget from the Company's January 17, 2024, filing was \$10.4 million.

anticipated changes in associated costs since the original application was filed.²⁰ In cases in which a school system receives a separate grant unrelated to this Pilot for all or a portion of ESB(s) or EVSE, Potomac Edison may provide the remaining required amount subject to the requirements of the Implementation Plan. ESBs deployed as a result of these Potomac Edison incentive payments will be considered as part of the 28 ESBs described in the application and will not result in an increase in the overall ESB Pilot budget set forth in this Implementation Plan.

TABLE 1
Potomac Edison ESB Pilot Budget by Year

Description (\$M)	2025	2026	2027	2028	2029	2030	Total
ESB Incentives	\$ -	\$ 0.31	\$ 0.99	\$ 1.88	\$ 2.49	\$ 0.05	\$ 5.72
EVSE	-	0.50	0.66	0.24	0.03	-	1.43
Load Side Make Ready	-	0.36	0.51	-	0.02	-	0.88
Line Side Make Ready	-	-	0.27	0.02	0.02	-	0.30
Networking and Maintenance	-	0.06	0.13	0.19	0.24	0.26	0.88
School System Implementation Costs	-	0.40	-	-	-	-	0.40
Company Program Expenses	0.15	0.30	0.31	0.31	0.32	0.15	1.54
Pilot Total	\$ 0.15	\$ 1.93	\$ 2.86	\$ 2.64	\$ 3.11	\$ 0.46	\$ 11.15

VI. CONCLUSION

The Company respectfully requests the Commission grant final approval of Potomac Edison's ESB Pilot, subject to the modifications and program details discussed in this Implementation Plan, by September 1, 2025, so that the Company can begin implementing the Pilot promptly and consistent with the timelines and budget provided herein.

²⁰ Third-party costs required in advance of ESB deployments are included in the 2025 budget with other spending to commence in 2026.

Appendix A

Appendix A: Metrics¹

Information Collected²

Deployment

- 1 Number of ESBs deployed through the pilot
- 2 Number of Pilot-supported ESBs as a percentage of total school buses by school system
- 3 ESBs deployed in underserved communities
- 4 Percentage deployed to underserved areas

Cumulative ESB Performance

- 5 Kilowatt hour (“kWh”)/mile
- 6 kWh/hour charging performance (rate of energy transfer in kW)
- 7 Emissions compared to diesel-powered buses
- 8 Vehicle miles traveled (“VMT”), including in Underserved Communities, to the extent feasible
- 9 Number of hours on the road during the reporting period
- 10 kWh consumed in charging during the reporting period
- 11 Time of day and duration of ESB charging
- 12 EVSE uptime
- 13 ESB maintenance costs
- 14 Electricity as a fuel equivalent cost compared to diesel (\$/mile)

Emissions

- 15 Net reduction in NO_x, SO_x, PM_{2.5} emissions (i.e., ESB compared to fossil-powered buses)
- 16 Report separately on the following metrics specific to ESBs deployed in underserved communities: Demonstrated reduced emissions (NO_x, SO_x, PM_{2.5}) when compared to fossil-powered buses; number of miles on the road during the reporting period; number of hours on the road during the reporting period; Greenhouse Gas (“GHG”) emissions reduced.

Costs

- 17 Required distribution system upgrade costs by school system
- 18 Total cost of ESB ownership by participating school system
- 19 Participant ESB operation and maintenance costs
- 20 Total incentives paid per county

Training

- 21 School system and bus contractor staff enrollment in ESB training

¹ While the Company will endeavor to collect all information sufficient to calculate the proposed metrics, calculation of certain metrics may not be possible due to a lack of available data, feasibility, technical limitations and vendor capabilities.

² Metrics will be reported for each participating county.

Outreach and Education

- 22 Frequency
- 23 Persons or entities with whom Potomac Edison engaged

Foundational Information

- 24 Event ID (each event will have a unique ID)
- 25 Event location (county, location name, and address)
- 26 Site nameplate capacity
- 27 Rate schedule

Event Description

- 28 School day or non-school day
- 29 Instruction(s) issued
- 30 Scheduled or unscheduled
- 31 Event start and end time and date (based on instruction)

Asset Description

- 32 Number of ESBs deployed to the Event Site on the Event Date
- 33 Number of EVSE deployed to the Event Site on the Event Date
- 34 Number of EVSE/ESBs dispatched
- 35 Number of EVSE/ESBs properly responding
- 36 Participation (success) rate (calculated as total buses assigned to site / buses correctly responding to signal)

Energy and Power Measurements³

- 37 Total Energy Discharged (kWh) (accumulated during event)
- 38 Total Energy Charged (kWh) (accumulated during event)
- 39 Meter current reading (kW) at start of event
- 40 Meter current reading (kW) during event
- 41 Meter current reading (kW) at end of event

Data and Metric Summary for Reporting

- 42 Total events per reporting cycle
- 43 Total and average event duration during reporting cycle

³ The following were included in the Company's presentation to stakeholders: (1) Circuit peaks vs. historical circuit peaks and (2) load shapes for V2G event days vs. load shapes for non-event days. Because feeder loading correlates with the wholesale market and dispatch events will be triggered based on PJM actions, these items are no longer applicable to the Pilot.

Appendix B

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ISSUED BY K. JON TAYLOR, SENIOR VICE PRESIDENT

Issued June 20, 2025

Effective XX-XX-XXXX

ELECTRIC SCHOOL BUS RIDER**AVAILABILITY**

Available to all public-school systems who intend to purchase an Electric School Bus ("ESB") as outlined in the Maryland Code, Public Utilities Article § 7-217. This is a voluntary tariff that provides an ESB Incentive Credit to public school systems for costs related to the purchase of ESBs and participation in the Vehicle to Grid ("V2G") demonstration project. The ESB pilot program will be capped at twenty-eight (28) ESBs and serve public school systems based on the Company's approved evaluation criteria.

ESB Participation Requirements:

1. Comply with Maryland Code, Public Utilities Article § 7-217 requirements;
2. ESB must have lap and shoulder belts;
3. ESB must have collision avoidance systems;
4. ESB must have vehicle telematics approved by the Company; and
5. The charging station management service and the V2G platform supporting the Electric Vehicle Service Equipment ("EVSE") must be approved by the Company.

ESB INCENTIVE CREDIT

The Company will pay up to one hundred (100) percent of the incremental cost difference between an ESB that complies with all ESB pilot requirements and a diesel bus that a school system would have purchased or contracted for absent the ESB pilot, net of any operating cost savings.

The Company will pay up to one hundred (100) percent of the cost of an EVSE and associated technology including a charging station management service and V2G platform to charge the ESB.

The Company will pay up to one hundred (100) percent of the cost of maintaining and servicing the EVSE for the duration of the pilot.

TERM

The ESB pilot program and V2G demonstration project will be active for five (5) years from this Rider's original effective date, or until programs funds are exhausted. Once the pilot program terminates, the V2G dispatch capabilities of the ESB's will revert to the public school system.

ISSUED BY K. JON TAYLOR, SENIOR VICE PRESIDENT

Issued June 20, 2025

Effective XX-XX-XXXX

ELECTRIC SCHOOL BUS RIDER (Concluded)**GENERAL**

By participating in the ESB pilot program, school systems agree to participate in the V2G demonstration project. The V2G demonstration project will allow the Company to use the storage batteries of the ESB to access the stored electricity:

1. without additional compensation to the school system for the electricity; and
2. at times when the participating school system determines that the ESBs are not needed to transport students; and
3. if the Company uses electricity from a participating school systems' ESB battery, the Company will replace that electricity at no cost to the participating school system.

The Company will provide and install the interconnection equipment and interconnection facilities to the EVSE at no additional charge to the Customer.

COST RECOVERY

Cost recovery will be consistent with Commission Order No. 91571 in Case No. 9741. The Company will establish a regulatory asset for all costs incurred by the Company, such as program administration, incentives, and education and outreach, which will be collected and incorporated into a rate base as part of the Company's next base rate case proceeding. The regulatory asset will earn a return at the Company's authorized rate of return once the asset is incorporated into rate base. The amortization period for the regulatory asset will be five (5) years, with recovery beginning on the effective date of new distribution rates resulting from the Company's next base rate proceeding.

Service supplied is subject to the Company's Rules and Regulations Covering the Supply of Electric Service.

ISSUED BY K. JON TAYLOR, SENIOR VICE PRESIDENT

Appendix C

Appendix C: Revised Budget

County Implementation Cost Incentive	2025	2026	2027	2028	2029	2030	Total
County Implementation Costs		\$ 398,746					\$ 398,746
*Limited to 5% of total pilot budget, costs to cover additional staffing to support IT systems, maintenance costs for charging stations, training for fleet operators, technical assistance or staff capacity for applying for this program, or other projects or initiatives							
Company Program Expenses	2025	2026	2027	2028	2029	2030	Total
FTE ¹	0	1	1	1	1	1	NA
Third-Party Contractor	\$ 150,000	\$ 153,750	\$ 157,594	\$ 161,534	\$ 165,572	\$ -	
Cost	\$ 150,000	\$ 303,750	\$ 307,594	\$ 311,534	\$ 315,572	\$ 150,000	\$ 1,538,449
Non-ESB Incentives & Pilot Costs, All Counties							
Description	2025	2026	2027	2028	2029	2030	Total
EVSE		504,000	658,050	235,340	27,999	-	1,425,389
Load-Side Make Ready		360,000	507,375	-	16,153	-	883,528
Line-Side Make Ready		-	271,625	15,759	16,153	-	303,538
Networking and Maintenance		55,656	129,232	192,721	240,473	262,487	880,569
School District Implementation Costs		398,746	-	-	-	-	398,746
Company Pilot Program Expenses		303,750	307,594	311,534	315,572	150,000	1,538,449
Pilot Total		\$ 1,622,152	\$ 1,873,876	\$ 755,354	\$ 616,350	\$ 412,487	\$ 5,430,219
Total Program Budget by Year							
Description	2025	2026	2027	2028	2029	2030	Total
ESB Incentives ²		\$ 306,000	\$ 988,000	\$ 1,880,000	\$2,492,000	\$ 52,083	\$ 5,718,083
EVSE		504,000	658,050	235,340	27,999	-	1,425,389
Load-Side Make Ready		360,000	507,375	-	16,153	-	883,528
Line-Side Make Ready		-	271,625	15,759	16,153	-	303,538
EVSE Networking and Maintenance		55,656	129,232	192,721	240,473	262,487	880,569
School System Implementation Costs		398,746	-	-	-	-	398,746
Company Pilot Program Expenses	150,000	303,750	307,594	311,534	315,572	150,000	1,538,449
Pilot Total	\$ 150,000	\$ 1,928,152	\$ 2,861,876	\$ 2,635,354	\$ 3,108,350	\$ 464,570	\$ 11,148,302

Notes

1. FTE cost is set at \$150,000 per year.
2. Incentives include a PVA adder of \$10,417 per year based on 5 ESBs under PVA contracting with cumulative cost shown in 2030.