

**BEFORE THE
MARYLAND PUBLIC SERVICE COMMISSION**

Application of The Potomac Edison Company *
for a Certificate of Public Convenience and *
Necessity to Construct a 230 kV line on the *
Existing Carroll-Germantown 138 kV *
Transmission Line in Carroll County, *
Maryland *

Case No. _____

**APPLICATION OF THE POTOMAC EDISON COMPANY
FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY FOR THE
CARROLL–HUNTERSTOWN IMPROVEMENTS PROJECT**

July 18, 2025

TABLE OF CONTENTS

I. INTRODUCTION.....	1
II. EXECUTIVE SUMMARY	1
III. PURPOSE AND JUSTIFICATION OF PROJECT UNDER COMAR 20.79.04.01	6
IV. DETAILED DESCRIPTION OF PROJECT UNDER COMAR 20.79.04.02	11
V. INFORMATION ON ALTERNATIVE ROUTES UNDER COMAR 20.79.04.03 AND PUA § 7-209	17
VI. ENVIRONMENTAL DESCRIPTION, IMPACT, AND PROPOSED MITIGATION PLAN INFORMATION FOR THE PROJECT UNDER COMAR 20.79.04.04.....	18
VII. PROJECT’S SATISFACTION OF FACTORS UNDER PUA § 7-207	20
VIII. GENERAL FILING REQUIREMENTS UNDER COMAR 20.79.01.06.....	22
IX. CONCLUSION	24

I. INTRODUCTION

The Potomac Edison Company (“Potomac Edison” or the “Company”),¹ a subsidiary of FirstEnergy Corp. (“FirstEnergy”), submits this application (“Application”) for a Certificate of Public Convenience and Necessity (“CPCN”) to construct the Carroll–Hunterstown Improvements Project (the “Project”). The Application is submitted in accordance with the Maryland Public Service Commission’s (“Commission”) authority under § 7-207 of the Maryland Annotated Code, Public Utilities Article (“PUA”) and Title 20, Subtitle 79 of the Code of Maryland Regulations (“COMAR”).

II. EXECUTIVE SUMMARY

The Project, which is needed to ensure the reliability of the transmission system in Maryland, consists of rebuilding the existing approximately 24-mile Carroll–Hunterstown transmission line, which is partially located in Maryland (11.3 miles) and extends into Pennsylvania (12.9 miles), to accommodate the addition of a 230 kilovolt (“kV”) transmission line within existing right-of-way (“ROW”). Potomac Edison owns the Maryland portion of the line. The Carroll–Hunterstown transmission corridor extends from Carroll Substation (in Carroll County, Maryland) to Hunterstown Substation (in Pennsylvania). This Application only pertains to the Maryland portion of the Project, which involves rebuilding 11.3 miles of existing transmission line from Carroll Substation located in Union Bridge, Carroll County, Maryland, to the Maryland-Pennsylvania border (near the intersection of Francis Scott Key Highway and Ruggles Road).² The rebuild Project will be contained within the existing 100-foot ROW, with

¹ Potomac Edison is regulated by the Federal Energy Regulatory Commission (“FERC”) as a public utility. *See* Md. Pub. Util. § 7-207(b)(3)(iii).

² The Pennsylvania portions of the proposed Project are the subject of a separate filing with the Pennsylvania Public Utility Commission for authorization to construct 12.9 miles of the 230 kV transmission line to Hunterstown Substation in Adams County, Pennsylvania.

the exception of a single 0.1-mile span outside of Carroll Substation, which will require an exclusive easement agreement.

The Carroll–Hunterstown transmission corridor in Maryland currently contains a single-circuit 138 kV transmission line on wooden H-frame structures. The proposed Project involves removing the existing wooden structures and 138 kV circuit, installing new galvanized steel double-circuit monopole structures engineered to 230 kV standards, and then installing the new 230 kV circuit on one side of the structures and re-installing a 138 kV circuit on the other side of the structures.³

The Project is necessary to ensure reliable electric service in Maryland. The Carroll–Hunterstown transmission line provides electrical power to serve customers in Carroll County, Maryland and supports the broader 115 kV and 138 kV transmission systems in Maryland. In December 2023, PJM Interconnection, LLC (“PJM”)⁴ selected the Project as part of PJM’s 2022 Regional Transmission Expansion Plan (“RTEP”) Open Window 3. Through its RTEP analysis, PJM determined that the Project is needed in accordance with FirstEnergy’s⁵ and PJM’s transmission planning criteria to mitigate and prevent thermal overload violations along the existing 115/138 kV Carroll–Hunterstown transmission corridor. Upgrades are also needed to provide adequate transmission capacity to meet current and expected transmission system needs in Maryland and the surrounding region. The Project will therefore ensure future reliability of the Company’s transmission system and provide additional transmission capacity into Maryland by

³ The existing 138 kV conductor is being updated to 230 kV standard to increase loadability (“current carrying capability”), but the 138 kV line will still be operated at its assigned voltage.

⁴ PJM is the FERC-approved and regulated independent regional transmission organization (“RTO”) responsible for ensuring the continued reliable operations of the region’s transmission system.

⁵ A description of FirstEnergy’s Transmission Planning Criteria is provided in the Direct Testimony of Jacquelyn L. Lojek.

(i) enhancing the resilience of the grid to withstand and recover from disruptions, (ii) delivering power to customers in Carroll County, and (iii) transferring electrical energy to Maryland loads. The Project's in-service date, as directed by PJM, is June 1, 2028. If this Application is granted, the Company anticipates needing to begin construction of the Project by June 1, 2027, to meet PJM's in-service date.

Upon PJM's identification of the need for the Project, the Company immediately began conducting extensive public outreach in Maryland regarding the proposed rebuild Project to inform residents along (and within 500 feet of) the existing Carroll–Hunterstown transmission corridor. Company representatives met with landowners and interested members of the public both in person and virtually to address questions, concerns, or to schedule individual meetings. Landowners were provided with materials that introduced the Project, information on the dates, times, and locations of open houses regarding the Project, and guidance on how to access the virtual open house presentation. These public outreach efforts were also advertised in newspapers of general circulation in the area of the Project. The Company now files this Application to obtain Commission approval to construct the proposed Project.

As reflected in the accompanying testimony, reports, and exhibits, this Project provides a cost-effective solution to address and expand transmission deliverability in Maryland by rebuilding existing transmission facilities along an existing ROW and thereby reducing costs and environmental or socioeconomic impact.⁶ Additionally, the Project provides resiliency benefits

⁶ Although the Project is a rebuild within existing right-of-way ("ROW"), the Company nevertheless analyzed alternative routes to determine whether other options existed that would provide better alternatives and minimize environmental and socioeconomic impacts than a rebuild project. The Company's alternatives analysis concluded that the rebuild option minimizes the social, environmental, and construction impacts associated with constructing the Project, as compared to the other alternative routes.

by replacing older wooden H-frame structures that are at heightened risk of weathering or environmental damage with new steel structures that will improve the longevity of the line. The Company will also implement advanced Optical Ground Wires for the corridor, which can be used for high-speed transmission of data for the purpose of protection and control of the transmission line, as well as for voice and other data communication. For the construction of this Project, Potomac Edison regional crews will have the right of first refusal for this Project to facilitate the construction of the transmission line and related substation facilities—thereby contributing to the Maryland economy should the Company accept the construction contract.

In support of this Application, Potomac Edison includes the written, direct testimony of eight witnesses and their supporting exhibits:

Mary E. Anderson, Supervisor, Transmission Siting East at FirstEnergy Service Company (“FirstEnergy Service Co.”), provides an introduction of Potomac Edison’s seven witnesses, summarizes how the Project meet Maryland’s regulatory requirements, and describes Potomac Edison’s outreach to the public.

Sami Abdulsalam, Ph.D., P.Eng., Director of Transmission Planning for PJM, describes the PJM Regional Transmission Expansion Plan (“RTEP”) process, explains PJM’s 2022 Window 3 Process, and details 2022 Window 3 violations as they pertain to the reliability need for this Project.

Andrew Gledhill, Manager of Resource Adequacy, System Planning Division of PJM, describes PJM’s Load Forecasting Process and explains the specific long-term load forecasts on which PJM relied for the 2022 Window 3 Competitive Solicitation Process.

Jacquelyn L. Lojek, Manager, Transmission Planning in the Transmission Planning and Protection Department at FirstEnergy Service Co., identifies the electrical need for the Project, its benefits, and the consequences of deferring the Project, and describes the alternatives to the Project that were considered.

Kory R. Swierczek, Director – Transmission Engineering, ExecuPOWER, LLC,⁷ describes the design and engineering for the Project, its safety and design standards (including the Project’s ability to withstand extreme weather), the Project’s costs and estimated costs for the alternative routes considered, how the Project will be constructed, and Potomac Edison’s plans for operating and maintaining the proposed transmission line after it is constructed, including removing and controlling vegetation.

Barry A. Baker, Vice President and Eastern United States (“U.S.”) Regional Practice Lead for the Environmental Planning & Permitting Practice at AECOM Technical Services Corporation (“AECOM”), describes the principal elements of the siting analysis completed for the Carroll–Hunterstown Improvements Project, including an analysis on alternative routes considered and rejected, and an overview of the environmental review and permitting requirements for the Project.

Kelly M. Grube, Staff Scientist, FirstEnergy Service Co., provides the environmental studies and coordination efforts for the environmental conditions along the Project corridor in Maryland, sponsors the permit matrix applicable to the Project’s site, and sponsors copies of environmental studies conducted for the Project.

Lisa Marinelli, Senior Real Estate Representative, FirstEnergy Service Co., provides a description of the existing property rights related to the construction of the Project, identifies how Potomac Edison determined the potentially affected landowners and properties, and describes the code of conduct applicable to the Company’s employees, agents, contractors, and subcontractors in their respective interactions with impacted property owners.

Justin P. Marx, Manager, Transmission Rates, FirstEnergy Service Co., provides an overview of the determination and allocation of revenue requirements associated with the Project and an estimate of the Project’s impact on customers’ bills.

Attachment 1 to this Application contains a cross-reference chart for Maryland transmission line CPCN regulations. **Attachment 2** contains the Project’s Route Selection Study, and **Attachment 3** contains the Project’s Environmental Review Document (“ERD”).

⁷ ExecuPOWER, LLC is a full-service engineering and project management company supporting transmission, substation, and distribution design projects, that supports FirstEnergy Service Co. for professional or consulting services.

III. PURPOSE AND JUSTIFICATION OF PROJECT UNDER COMAR 20.79.04.01

As required by COMAR 20.79.04.01, the information presented below shows the need for the Project, justification for the Project, consequences of not approving the Project, and cost-effectiveness of the Project, as well as the Project's impact on the economies of the State.

A. An Explanation of the Need for the Project in Meeting Demands for Service⁸

The Project is needed to meet the demands for service in Maryland. As discussed in Witness Gledhill's Direct Testimony, PJM's 2022 Load Forecast Report showed that electricity demand in the PJM Region⁹ is expected to steadily increase over the next 15 years. In the 2022 Load Forecast Report, PJM identified several transmission zones, including the Allegheny Power Systems ("APS"), Dominion Virginia Power ("DOM"), American Transmission Systems, Inc. ("ATSI"), and Commonwealth Edison ("COMED") zones,¹⁰ that had to be adjusted to account for large, unanticipated load changes. This contrasted with the relatively flat demand trends throughout much of PJM for the preceding decade. PJM created a 2022 Modified Load Forecast for 2027 for the Maryland (APS) and DOM (Virginia) zones that considered approximately 1,200 MW and 2,700 MW of additional load, respectively.

As described more fully in the Direct Testimony of Sami Abdulsalam, Ph.D., P.Eng., PJM opened 2022 RTEP Window 3 in response to identified reliability criteria violations anticipated to occur as early as 2027 due to the aforementioned load growth and other system changes. These

⁸ See COMAR 20.79.04.01A(1) (An application for a proposed transmission line or modification to an existing transmission line shall include an "explanation of the need for the project in meeting demands for service").

⁹ PJM coordinates the transmission of electricity through all or parts of 13 states (Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia) and the District of Columbia (collectively, the "PJM Region").

¹⁰ A map of the PJM transmission zones is available at the following link: <https://www.pjm.com/-/media/DotCom/about-pjm/pjm-zones.pdf>.

anticipated reliability criteria violations include exceeding thermal loading limits, voltage magnitude or deviation limits, non-convergent contingencies (in which the power flow analysis failed to reach a numerical solution indicating instability in the transmission system) and overloaded 500 kV facilities during summer and winter peak durations.

As part of its RTEP analysis, and as relevant to the Project, PJM identified several reliability criteria violations along the existing 115/138 kV transmission corridor connecting Hunterstown Substation in Pennsylvania and Carroll Substation in Maryland that would not be addressed by other projects that were also selected through the 2022 RTEP Window 3. Among these anticipated reliability and planning criteria violations, PJM identified that upon the outage of the Conastone–Brighton 500 kV transmission line, the loading on two 138 kV transmission lines increases drastically—namely, the Germantown–Taneytown 138 kV Transmission Line would increase to approximately 143% and the Taneytown–Carroll 138 kV Transmission Line would increase to 139% of the summer emergency rating, respectively. As a result, the Carroll–Hunterstown transmission corridor is anticipated to be severely overloaded under those conditions. Overloaded transmission lines (which may occur as a result of transmitting more power than the system is designed for) can lead to cascading outages and system collapse. The Project resolves these observed reliability criteria violations, thereby providing greater operational flexibility for planned and unplanned outages. Thus, the Project plays a vital role in reliably meeting demands for service.

B. A Description of the Effect of the Project on System Reliability and Stability.¹¹

The effect of the Project on system reliability and stability is discussed more fully in Witness Abdulsalam’s Direct Testimony and the Direct Testimony of Jacquelyn L. Lojek. The Project is needed to safeguard the continued reliability and stability of the regional transmission system that serves Maryland by preventing anticipated violations of reliability criteria that are forecasted to occur in 2027 and 2028 on the existing Carroll–Hunterstown transmission corridor.

The Carroll–Hunterstown transmission corridor links the transmission system in Maryland to the transmission system in Pennsylvania and crosses the Maryland-Pennsylvania state line. Customers in central Maryland (including Potomac Edison’s service territory) are primarily served from 500 kV corridors from the west, south, and east. The local transmission serving Maryland load is connected to the 500 kV system through transformers at the Black Oak, Bedington, and Doubs substations. The Carroll–Hunterstown transmission lines provide electrical power to serve customers in Carroll County, Maryland and support the broader 115 kV and 138 kV transmission systems. The Project will ensure future reliability of the Company’s transmission system and provide additional transmission capacity into Maryland by (i) enhancing the resilience of the grid to withstand and recover from disruptions, (ii) delivering power to customers in Carroll County, and (iii) transferring electrical energy to Maryland loads.

¹¹ See COMAR 20.79.04.01A(2) (An application for a proposed transmission line or modification to an existing transmission line shall include a “description of the effect of the project on system stability and reliability”).

C. Description of the Consequences if the Project is Not Approved.¹²

If the Project is not approved, the reliability of the 138 kV network within the Potomac Edison service territory will be at risk of failure, which negatively impacts the reliability of transmission service for Maryland. The failures can lead to cascading loss of system elements due to transmission lines exceeding their thermal or capacity limits, voltage collapse due to insufficient reactive power support, and electric service interruption. In short, overloading transmission lines may cause permanent damage to transmission infrastructure and power outages. Addressing reliability needs promptly is crucial to avoid damaging the critical infrastructure, maintaining reliable service to customers, and ensuring a secure, resilient, and efficient power system. Further consequences if the Project is not approved are discussed more fully in Witness Abdulsalam's Direct Testimony and Witness Lojek's Direct Testimony.

D. An Explanation of the Cost Effectiveness of the Project, Including an Estimate of Capital Cost and Annual Operating Cost.¹³

The estimated total cost of the Project, including proposed upgrades in Maryland and associated substation costs, is approximately \$148,450,000. Of this cost, approximately \$62,600,000 is the total approximate cost in Maryland.¹⁴ The operating cost for the Maryland portion is approximately \$5,702,000.¹⁵ Information regarding the cost-effectiveness of the Project

¹² See COMAR 20.79.04.01A(3) (An application for a proposed transmission line or modification to an existing transmission line shall include a "description of the consequences if the project is delayed or not approved").

¹³ See COMAR 20.79.04.01A(4) (An application for a proposed transmission line or modification to an existing transmission line shall include an "explanation of the cost effectiveness of the project, including an estimate of capital cost and annual operating cost").

¹⁴ Of the approximate \$148,450,000, total approximate cost in Pennsylvania is \$85,850,000.

¹⁵ Operating costs are estimated based on standard costs associated with transmission line maintenance and vegetation schedules. These costs do not include any emergency costs.

is discussed more fully in the Direct Testimony of Barry A. Baker and the Direct Testimony of Kory R. Swierczek. As a rebuild project, the Project utilizes the Company's existing ROW; thus, overall, the Project lowers (i) the footprint of socioeconomic and environmental impacts, and (ii) purchase costs related to acquiring property rights for the Project, as well as related legal and permitting costs. In addition to the information provided in this Application, PJM found the Project to be the more efficient or cost-effective project out of the projects submitted in the 2022 RTEP Window 3.¹⁶

E. A Description of the Impact of the Project on the Economies of the State.¹⁷

The Project will positively contribute to the economies of the State by among other things, helping ensure the reliability of Maryland's transmission system and the continued reliable provision of electric service to Maryland customers. Furthermore, as described in detail in the Direct Testimony of Justin P. Marx, the Project follows the Energy Cost Adjustment ("ECA") set in the Settlement Agreement in Commission Case No. 8908.¹⁸ The Project is estimated to increase a typical Potomac Edison Maryland residential customer's monthly bill by approximately \$0.26 per month.

As addressed in the Direct Testimony of Lisa Marinelli, the real estate property tax for the calendar year following the in-service date of the Carroll–Hunterstown Improvements Project is estimated to be approximately \$210,000. Potomac Edison estimates that the Project's construction

¹⁶ See Order No. 1000, FERC Stats. & Regs. ¶ 31,323 at P. 148 (2011).

¹⁷ See COMAR 20.79.04.01A(5) (An application for a proposed transmission line or modification to an existing transmission line shall include a "description of the impact of the project on the economies of the State").

¹⁸ *In re the Commission's Inquiry into the Competitive Selection of Electricity Supplier/Standard Offer Service*, Case No. 8908, Order No. 78710 (Sept. 30, 2003) (adopting the Phase II Settlement Agreement without modification).

workforce will consist of approximately 20 to 30 workers at any given time, as referenced in the Direct Testimony of Kory R. Swierczek.

IV. DETAILED DESCRIPTION OF PROJECT UNDER COMAR 20.79.04.02

As required by COMAR 20.79.04.02, the information presented below describes in detail the features of the Project.

A. COMAR 20.79.04.02A: Description of Engineering and Construction Features of the Project

A complete description of the engineering and construction features of the Project, including corridor dimensions and specific components of the line and circuits, is also contained in the Direct Testimony of Kory R. Swierczek attached to this Application. The Project rebuilds the existing single-circuit 138 kV transmission line to a double-circuit 138 kV and 230 kV transmission line accommodated with new galvanized steel monopoles for the majority of the ROW. The remainder 0.1 miles of ROW pertains to structures in the immediate vicinity of Carroll Substation to accommodate the termination of the 230 kV addition as part of this Project. An overview of the construction and engineering features in accordance with COMAR 20.79.04.02A follows herein.

COMAR 20.79.04.02A: Engineering and Construction Features	
(1) <u>Width, Length, and Total Acreage of the Right-of-Way in Maryland</u>	11.3 miles of 100-foot right-of-way (“ROW”) 137 acreage in total
(2) <u>Line Voltage</u>	230 kV on one side and 138 kV on the other side of the new poles.
(3) <u>Number of Circuits</u>	Two (2) using double-circuit 138 kV and 230 kV transmission lines.
(4) <u>Number of Circuits per structure</u>	Two (2) in a vertical configuration using one (1) 7 No. 8 Alumoweld Shield Wire and one (1) Optical Ground Wire (“OPGW”).

(5) <u>Structure Type and Dimensions</u>	Self-supporting steel poles with an average above-ground height of 120 feet and foundation diameter of approximately 8 feet wide.
(6) <u>Conductor Configuration and Size</u>	1590 KCM, 54/19 ACSR, also known as Falcon.
(7) <u>Nominal Capacity (MVA)</u>	726 MVA under summer normal operating capacity.
(8) <u>Nominal Length of Span between Structures</u>	700 feet (average span) and a 100-foot difference from the existing span length in the existing structures of the corridor.

Right-of-Way Requirements

The Project utilizes existing 100-foot-wide ROW along the Germantown–Carroll 138 kV transmission line corridor.

Proposed Line Design

The Project consists of rebuilding the existing single-circuit 138 kV transmission line by replacing the pole structures in order to accommodate a 230 kV line on one side and a 138 kV line on the other. Carroll Substation will be expanded to accommodate a 230 kV ring bus. This expansion will require the relocation of one (1) structure and the replacement of (1) one structure on the Carroll–Mount Airy 230 kV transmission line, and the relocation of two (2) structures and replacement of one (1) structure on the Carroll–Catoclin 138 kV transmission line. A comprehensive description of the proposed line design is provided in the Direct Testimony of Kory R. Swierczek.

Design Features and Construction Safety Practices

The new galvanized steel pole structures are designed to meet or exceed National Electrical Safety Code (“NESC”) requirements. Since the structures will use concrete foundations, no guy

wires are required for the steel structures. The new galvanized steel poles not only minimize maintenance requirements and have a longer life, but also remove common problems with wooden structures, such as woodpecker damage and degradation at the ground line. Furthermore, although the NESC allows for the conductor to be loaded up to 60% of the conductor's rated breaking strength, this Project will use conductor tensions closer to 30%—well below the maximum NESC-permitted conductor loading.

In addition to the steel pole structures and conductor tensions, the Company will use one (1) 7 No. 8 Alumoweld Shield Wire and one (1) Optical Ground Wire (“OPGW”) for the 138 kV and 230 kV lines, respectively. There are several benefits to the OPGW, including lightning protection and a high-speed ability to transfer data for protection and control of the transmission line. This design feature enhances data communication on the safety of the line. Additionally, the OPGW is designed to withstand harsh environmental conditions, and its long lifespan and inaccessible installation heights establish the wire material as one of the most reliable communication media.

Finally, project activities such as ROW clearing, pole foundation installation, and subsequent rehabilitation will conform to all applicable state requirements, as well as the National Pollutant Discharge Elimination System (“NPDES”) Guidance for Storm Water Discharges. FirstEnergy will employ Good Utility Practice and efficient engineering design and construction practices in developing the Project.

*Climate Change and Severe Weather Conditions*¹⁹

In the last decade, incorporating strategies for climate resilience has become an important priority for businesses, states, and municipalities. PUA § 7-207(e)(3) requires the Commission to give due consideration to the effects of climate change on an overhead transmission line based on the best available scientific information recognized by the Intergovernmental Panel on Climate Change, prior to taking final action on an application.

Extreme weather events due to climate change are anticipated to influence the reliability of overhead transmission lines. The changes in the frequency and/or intensity of these wind and/or ice events could impact the different structural components of the transmission line. The Direct Testimony of Kory R. Swierczek describes the design elements that address the structures' ability to withstand such extreme weather conditions in accordance with the 2023 NESC standards, including the NESC Rule 250B "Heavy Loading" condition and Rule 250C "Extreme Wind Loading" condition. Witness Swierczek also addresses the implementation of shield wire and OPGW above the conductors to provide protection against lighting strikes.

Further, **Attachment 3** (ERD) to this Application and the Direct Testimony of Kelly M. Grube addresses average and extreme temperature data obtained from the National Oceanic and Atmospheric Administration ("NOAA") National Centers for Environmental Information ("NCEI") for Carroll County, Maryland; a review of the Climate Mapping for Resilience and Adaptation ("CRMA") database provided by NOAA; and a review of current floodplain levels established by the Federal Emergency Management Agency ("FEMA") for nearby waterways. Potomac Edison will use best available design specifications and materials to withstand severe

¹⁹ See PUA § 7-207(e)(3) (The Commission must give due consideration to "the effect of climate change on the generating station, overhead transmission line, or qualified generator lead line based on the best available scientific information recognized by the Intergovernmental Panel on Climate Change.").

climate and weather conditions to ensure the transmission infrastructure is resilient to future climate hazards.

Vegetation Management

The Direct Testimony of Kory R. Swierczek provides a detailed description of the vegetation plan for the Project ROW. The Project ROW will be maintained in accordance with FirstEnergy Service Co.'s Transmission Vegetation Management Program ("TVMP").

B. COMAR 20.79.04.02.B: Description of Property Acquired or Property Right to Be Acquired

As described by Witness Swierczek, the Project will wholly utilize the existing 100-foot ROW along 11.3 miles of the Project line, until the 0.1-mile span outside Carroll Substation. The Direct Testimony of Lisa Marinelli also addresses the existing ROW and the process through which Potomac Edison confirmed and reviewed its existing easement documents for the siting of the Project. The Company has reached an agreement with affected non-Potomac Edison landowners and there is no litigation involving the Company or its affiliates with respect to the Project. Details of the new centerline to accommodate the modification to the existing ROW is provided in **Exhibit KRS-12**, attached to Witness Swierczek's Direct Testimony.

C. COMAR 20.79.04.02.C: Description of Access Roads for Construction or Maintenance

As described in the Direct Testimony of Kory R. Swierczek, construction access routes will be minimized to the extent possible. Access roads generally follow existing roads that are outside the existing ROW, such as farm access roads or similar, to provide access to the ROW. The Direct Testimony of Kelly M. Grube discusses any additional surveys or delineations conducted for access roads outside the transmission corridor and describes the Company's proposal for mitigating any temporary impacts of the access roads. Construction access routes will

be installed in accordance with the approved Soil Erosion and Sedimentation Control Plan. It is not typical Company practice to install permanent access roads. The Company has included a depiction of the proposed access roads in **Exhibit BAB-2** (Aerial General Layout Map) attached to the Direct Testimony of Barry A. Baker.

D. COMAR 20.79.04.02.D: Location and Identification of Sites from Which the Project Would Clearly Be Visible.

A Visual Assessment report has been prepared for the Project and is included as **Exhibit BAB-6** attached to Mr. Baker's Direct Testimony. This report addresses known scenic resources and visually sensitive areas such as historic resources, institutional lands, recreational lands, esthetic aspects of the Project area, Wildlife Management Areas, state and federal parks and state and federal forests. Overall, the landscape traversed by the Project ROW includes forested hills, pastoral and farming communities, and residential communities. The modification of the existing transmission line is expected to have an incremental visual effect on the surrounding landscape since the existing transmission line and ROW have been present for numerous years.

E. COMAR 20.79.04.02.E: Construction Within the 100-Year Floodplain

As provided in **Table 1** in the Direct Testimony of Kelly M. Grube, the Company has assessed preliminary impacts to any Federal Emergency Management Agency ("FEMA")-defined floodplains. Table 1 in Witness Grube's Direct Testimony is copied in relevant part below. Witness Grube further attaches **Exhibit KMG-3** (Examples of Resource Crossings) which illustrates the boundaries and locations of the FEMA 100-year floodplains and identifies the plans and permits applicable to confirm that any impact will provide the required protection to the floodplains.

RESOURCE	COMMENT
FEMA FLOODPLAINS	
FEMA floodplains	Two (2) areas - Little Pipe Creek and Piney Creek
FEMA floodplain crossings	Both FEMA floodplain areas will require temporary crossings to access existing structure locations
Existing poles in FEMA floodplains	Three (3) existing poles in FEMA floodplains to be replaced
New poles in FEMA floodplains	One (1) new pole in FEMA floodplains
Temporary FEMA floodplain impacts	0.79 acres of temporary impacts from matting
Permanent FEMA floodplain impacts	160 square feet of permanent impact for replacement of three existing poles and installation of one new structure

F. COMAR 20.79.04.02.F: Location and Identification of Public Airports Within One Mile of the Line

The Carroll County Regional Airport in Westminster, Maryland is the closest airport to the Project, located approximately 7.80 miles of the East Route and 9.90 miles east of the substation. There are two smaller privately owned airstrips within 1 mile of the line: the Keymar Airpark is located within 0.65 miles of the East Route and Greer Airport is within 0.75 miles of the West Route. The Company does not expect the Project will hazard the airport's flight operations. To confirm this determination and ensure that regulations are followed, the Company intends to file the appropriate documentation with the Federal Aviation Administration and Maryland Aviation Administration to ensure the Project will not hazard airport flight operations.

G. COMAR 20.79.04.02.G: Depiction on Topographical Map

The required maps are included with this Application in the Direct Testimony of Barry A. Baker in **Exhibits BAB-1** (Topographic Overview Map) and **BAB-2** (Aerial General Layout Map).

V. INFORMATION ON ALTERNATIVE ROUTES UNDER COMAR 20.79.04.03 AND PUA § 7-209

PUA § 7-209 and COMAR 20.79.04.03 require that for a new greenfield transmission line, the applicant must examine construction and routing alternatives, including the use of existing

transmission line corridors. COMAR 20.79.04.03(B) states that “[f]or modifications to existing transmission lines,” such as this rebuild Project, “alternative routes need not be evaluated.” Even though these requirements do not apply to this Project, **Attachment 2** (Route Selection Study) to this Application, described in the Direct Testimony of Barry A. Baker, provides an assessment of the development of potential and alternative routes. Additionally, the Direct Testimony of Jacquelyn L. Lojek explains that the Company rejected a greenfield solution in favor of rebuilding the existing transmission line within existing ROW and adding the second 230 kV circuit to the new structures within the existing corridor. The Company and the Route Selection Study concluded that the rebuild Project, as proposed in this Application, minimizes the social, environmental, and construction impacts associated with constructing and maintaining the transmission line compared to the other studied alternatives. An analysis of the cost estimates for each of the alternative transmission routes considered can be found in the Direct Testimony of Kory R. Swierczek.

VI. ENVIRONMENTAL DESCRIPTION, IMPACT, AND PROPOSED MITIGATION PLAN INFORMATION FOR THE PROJECT UNDER COMAR 20.79.04.04

A. COMAR 20.79.04.04.A: General Description of the Physical, Biological, Aesthetic and Cultural Features and Conditions of the Site and Adjacent Areas

The Direct Testimony of Kelly M. Grube provides a general description of the physical and biological features of the Project while the Direct Testimony of Barry A. Baker addresses any aesthetic, social and cultural resources of the line and adjacent areas. Section 4 of **Attachment 2** (Route Selection Study) and **Exhibit BAB-6** (Visual Assessment) provide a detailed description of the physical, biological, aesthetic, and cultural features of the Project site and the surrounding area.

B. COMAR 20.79.04.04.B: Summary of the Environmental and Socioeconomic Effects of the Construction and Operation of the Project

A summary of the potential environmental impacts of the Project is provided in Table 1 in the Direct Testimony of Kelly M. Grube, attached to this Application. **Attachment 2** (the Route Selection Study) to this Application and the accompanying Direct Testimony of Barry A. Baker, provides a summary of the environmental and socioeconomic effects of the construction and operation of the Project.

C. COMAR 20.79.04.04.C: A Copy of All Studies of the Environmental Impact of the Project

Attachment 3 (ERD) and the corresponding exhibits to the Direct Testimony of Kelly M. Grube listed below contain all the copies of the studies regarding the Project's environmental impact:

Attachment 3 (Environmental Review Document)	
<u>Appendix A</u>	Correspondence from Local, State, and Federal Agencies
<u>Appendix B</u>	Wetland Delineation Report
Direct Testimony of Kelly M. Grube	
<u>Exhibit KMG-1</u>	Topographic Constraint Mapping
<u>Exhibit KMG-2</u>	Aerial Constraint Mapping
<u>Exhibit KMG-3</u>	Example Resource Crossings

D. COMAR 20.79.04.04.D: A Statement of the Ability to Conform to Applicable Environmental Standards

The Company confirms that the Project will conform to all applicable environmental requirements. A list of anticipated permits and approvals for the Project is attached as **Exhibit KMG-4** to the Direct Testimony of Kelly M. Grube.

VII. PROJECT'S SATISFACTION OF FACTORS UNDER PUA § 7-207

As described below, the Project meets all factors that the Commission is required to consider in evaluating a transmission line CPCN application under PUA § 7-207.

A. PUA § 7-207(e)(1): Recommendation of Governing Bodies of Each County or Municipal Corporation Where Proposed Transmission Line is To Be Located

FirstEnergy's Local Engagement Specialist began outreach with public officials in the county and townships within the Project area in July 2024. Follow-up notifications were also made to notify public officials of the date for the public engagement meeting held on November 20, 2024, and the officials were invited to attend. In addition, FirstEnergy's Local Engagement Specialist provided the public officials with a courtesy copy of the landowner letter and fact sheet for the Project. In addition, the same courtesy notification was also given to senators and delegates who represent Carroll County, Maryland.

B. PUA § 7-207(e)(2): The Effect of the Transmission Line on (i) the Stability and Reliability of the Transmission System; (ii) Economics; (iii) Esthetics; (iv) Historic Sites; (v) Aviation Safety; and (vi) Air and Water Pollution

Please see **Section II** (Executive Summary) and **Section III** (Purpose and Justification of the Project) of this Application, *supra*, for a description of factors (i) and (ii) of PUA § 7-207(e)(2). **Section VI** (Environmental Information) of this Application, *supra*, addresses factors (iii) through (vi) of PUA § 7-207(e)(2). A detailed description of the resources in the Project's site and vicinity is provided in the Direct Testimony of Kelly M. Grube attached to this Application.

C. PUA § 7-207(e)(3): The Effect of Climate Change on the Overhead Transmission Line Based on the Best Available Scientific Information Recognized by the Intergovernmental Panel on Climate Change

As previously described in **Section IV** (Detailed Description of Project) of this Application, the Project will use best available design specifications and materials to withstand

severe climate and weather conditions, which is also addressed in more detail in the Direct Testimonies of Kory R. Swierczek and Kelly M. Grube.

D. PUA § 7-207(f)(1): The Need to Meet Existing and Future Demand for Service

Sections II (Executive Summary) and **III** (Purpose and Justification of the Project) of this Application provide an overview of the need for the transmission line to meet existing and future demand for service. The Direct Testimonies of Dr. Sami Abdulsalam and Jacquelyn L. Lojek provide a detailed description of the need for the Project.

E. PUA § 7-207(f)(2): The Commission Shall Require As an Ongoing Condition of the CPCN That an Applicant Comply with: (i) All Relevant Obligations Imposed by PJM Interconnection LLC; and (ii) All Obligations Imposed by NERC and FERC

Potomac Edison agrees to comply with (i) all relevant agreements with PJM, or its successors, related to the ongoing operation and maintenance of the overhead transmission line; and (ii) all obligations imposed by the North American Electric Reliability Council (“NERC”) and the Federal Energy Regulatory Commission (“FERC”) related to the ongoing operation and maintenance of the overhead transmission line.

F. PUA § 7-207(f)(3): The Commission Shall Require the Applicant to Identify Whether the Transmission Line is to be Constructed on: (i) An Existing Brownfields Site; (ii) Property That is Subject to an Existing Easement; or (iii) A Site Where a Tower or Structure to Support an Overhead Transmission Line Exists

An overview of the Project’s site and vicinity is provided in **Exhibit BAB-2** (Aerial General Layout Map), attached to the Direct Testimony of Barry A. Baker. Additionally, details of the new centerline within the existing ROW are provided in **Exhibit KRS-12**, attached to the Direct Testimony of Kory R. Swierczek.

G. PUA § 7-207(g)(1): The Commission May Not Authorize the Construction of an Overhead Transmission Line Unless the Federal Aviation Administration and the Maryland Aviation Administration determine the Construction will Not Constitute a Hazard to Air Navigation

As described in **Section IV.F.** of this Application and the Direct Testimony of Kelly M. Grube, the Company will seek the appropriate documentation from the Federal Aviation Administration and the Maryland Aviation Administration to ensure the operation of the line does not create a hazard for air navigation for public airports.

VIII. GENERAL FILING REQUIREMENTS UNDER COMAR 20.79.01.06

A. COMAR 20.79.01.06A: Name of the Applicant

The name of the Applicant is The Potomac Edison Company.

B. COMAR 20.79.06.01.B: Address of the Principal Business Office of the Applicant

The address of the principal business office of Applicant is: 10802 Bower Ave,
Williamsport, MD, 21795.

C. COMAR 20.79.01.06.C: Persons Authorized to Receive Notices and Communication

The names, titles, addresses, and email addresses of the people authorized to receive notices and communications with respect to the Application are:

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agsinha@venable.com

D. COMAR 20.79.01.06.E: Location at Which a Copy of the Application May be Inspected by the Public

A copy of the Application will be filed with the Commission, and as such, it may be accessed by the public online through the Commission's website (www.psc.state.md.us). A copy of the Application will also be posted on the Company's website (https://www.firstenergycorp.com/about/transmission_projects/maryland/carroll-hunterstown.html). The public may also inspect a copy of this Application at the following library:

Carroll County Public Library
Taneytown Branch
10 Grand Dr., Taneytown, MD 21787

E. COMAR 20.79.01.06.F: Local, State, and Federal Government Agencies Having Authority to Approve or Disapprove the Construction or Operation of the Project

In addition to the certificate sought through the CPCN Application herein, the Company has provided a list of permitting authorities having oversight of the Project's construction in **Exhibit KMG-4** attached to the Direct Testimony of Kelly M. Grube. All applicable permits and approvals required for the construction and operation of the Project will be obtained from these agencies.²⁰

²⁰ In addition to the entities provided above, the Pennsylvania portions of the proposed Project are the subject of a separate siting application filed with the Pennsylvania Public Utility Commission. *See supra* n.2.

F. COMAR 20.79.01.06H: Information Required On Project Need and Justification for Transmission Lines

Section III (Purpose and Justification of the Project) of this Application provides the required information under COMAR 20.79.04.01 for transmission line facilities.

G. COMAR 20.79.01.06I: Information Required on Project Description and Alternative Routes Considered

The proposed Project is a rebuild project; it is not new construction of a transmission line. Therefore, the requirement to describe and evaluate alternative routes under COMAR 20.79.04.03 does not apply. Nevertheless, **Attachment 2** (Route Selection Study) and the Direct Testimony of Barry A. Baker provides an overview of the route selection and the alternative analysis conducted by the Company. The Direct Testimony of Kory R. Swierczek provides the approximate capital and operating costs of the alternative routes considered.

H. COMAR 20.79.01.06J: An Implementation Schedule for the Project

The PJM-required in-service date for the Project is June 1, 2028. To meet this in-service date, construction is scheduled to begin on or about June 1, 2027, pending Commission approval of the Application.

I. COMAR 20.79.01.06I: Environmental, Natural Resources, and Socioeconomic Information Required for Transmission Line Projects

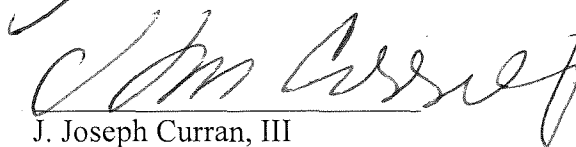
Section VI (Environmental Information) of this Application provides the required information under COMAR 20.79.04 for transmission line facilities.

IX. CONCLUSION

Based on the forgoing, Potomac Edison requests that the Maryland Public Service Commission review and approve this Application for a Certificate of Public Convenience and Necessity as in the public interest for the siting and construction of the Maryland portion of the

Carroll–Hunterstown Improvements Project, as described herein and in the supporting documents attached hereto and accompanying this Application, and grant any additional authorizations, waivers, approvals, or other relief as may be necessary to authorize the construction of the Project.

Respectfully Submitted,



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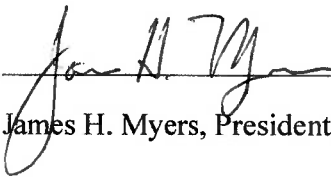
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*Attorneys for The Potomac Edison
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VERIFICATION REQUIRED BY COMAR 20.79.02.01

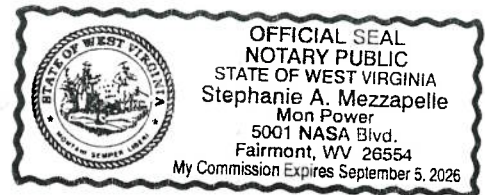
State of West Virginia)
)
City of Fairmont)

I, James H. Myers, President of The Potomac Edison Company ("Potomac Edison" or the "Company"), on behalf of the Company, being duly sworn, affirm that the matters and facts set forth in the Application Of The Potomac Edison Company For A Certificate Of Public Convenience And Necessity For The Carroll-Hunterstown Improvements Project are true and correct to the best of my information, knowledge, ad belief.


James H. Myers, President, The Potomac Edison Company

Taken, sworn to and subscribed before me this 14 day of July, 2025.


Notary Public



My commission expires on the 5 day of September, 2026

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that, pursuant to COMAR 20.79.02.02 and Md. Code Ann., Pub. Util. § 7-207(c), the foregoing Application of The Potomac Edison Company for a Certificate of Public Convenience and Necessity was forwarded via email, or by U.S. mail if an email address was not available, to the following:

Commissioner Kenneth Kiler, President
Carroll County Board of Commissioners
Carroll County Office Building
225 North Center Street
Westminster, Maryland 21157
Email: kkiler@carrollcountymd.gov

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michael.dean@maryland.gov

I also HEREBY CERTIFY that, also pursuant to COMAR 20.79.02.02 and Md. Code Ann., Pub. Util. § 7-207(c), notice of the foregoing Application was sent to all owners of land or owners of adjacent land, via U.S. first-class mail, postage prepaid.

/s/ J. Joseph Curran, III
J. Joseph Curran, III