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Garrett P. Lent

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August 8, 2025

#### VIA ELECTRONIC FILING

Matthew Homsher, Secretary Pennsylvania Public Utility Commission Commonwealth Keystone Building 400 North Street, 2nd Floor North P.O. Box 3265 Harrisburg, PA 17105-3265

Re: Application of Mid-Atlantic Interstate Transmission, LLC Filed Pursuant to 52 Pa. Code Chapter 57, Subchapter G, for Approval of the Carroll-Huntertown 230 Kilovolt Transmission Line Located in Straban, Mount Pleasant, Mount Joy, and Germany Townships, Adams County, Pennsylvania

Docket No. A-2025-\_\_\_\_\_

Dear Secretary Homsher:

Enclosed for filing on behalf of Mid-Atlantic Interstate Transmission, LLC ("MAIT") is the Application for Approval of the Caroll-Hunterstown 230 Kilovolt Transmission Line Located in Straban, Mount Pleasant, Mount Joy, and Germany Townships, Adams County, Pennsylvania, which includes the following:

- 1. The Application and the Exhibits in support;
- 2. The Direct Testimony in support of the Application; and
- 3. The Notice of Filing.

The associated \$350.00 filing fee has been paid by Post & Schell, P.C. as of the time of the filing.

MAIT notes that on July 3, 2025, the Company attempted to file the instant Application along with a related Letter of Notification with the Commission. The Commission rejected the filing and required that the Application and Letter of Notification be filed separately. To comply with the Commission's directive, MAIT is hereby re-submitting this Application for Approval of the

Matthew Homsher, Secretary August 8, 2025 Page 2

Carroll-Hunterstown 230 Kilovolt Transmission Line. The Letter of Notification will be separately filed.

Due to file size restrictions, the Application, the accompanying Exhibits, and Direct Testimony are being uploaded separately to the Commission's ShareFile for large filings. Additionally, under separate cover, MAIT is providing the Commission a CD containing PDF copies of the Application, the accompanying Exhibits, Direct Testimony, and Notice of Filing.

Copies of the Application, the accompanying Exhibits, and Direct Testimony are being served by certified mail, return receipt requested, upon the parties indicated on the Certificate of Service associated with the Application.

Copies of the Notice of Filing are being served by certified mail, return receipt requested, upon the parties indicated in the Certificate of Service associated with the Notice of Filing.

Subject to the Pennsylvania Public Utility Commission's approval, the Project has a scheduled construction date on or about April 1, 2027, for the proposed high-voltage transmission line to meet an in- service date of June 1, 2028. To support this construction timeline, MAIT respectfully requests that the Commission issue its final ruling on or before January 2027 to allow for preparation in advance of construction.

Respectfully submitted,

GPL/dmc Enclosures

cc: Deb Backer - Bureau of Technical Utility Services (*via email; w/attachments*)

Jordan Van Order - Bureau of Technical Utility Services (*via email; w/attachments*)

#### CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing Application has been served upon the following persons, in the manner indicated, in accordance with the requirements of 52 Pa. Code § 57.74(b).

# VIA CERTIFIED MAIL: RETURN RECEIPT REQUESTED

PA Department of Environmental Protection ATTN: Office of Chief Counsel 400 Market St., 9th Floor Harrisburg, PA 17105 CC: Secretary to PADEP Chief Counsel

PA Department of Environmental Protection ATTN: Bureau of Waterways Engineering and Wetlands 400 Market Street Harrisburg, PA 17101

Office of Consumer Advocate
555 Walnut Street
5th Floor Forum Place
Harrisburg, PA 17101-1923
Attn: Darryl Lawrence, Consumer Advocate

Pennsylvania Public Utility Commission Bureau of Investigation and Enforcement P.O. Box 3265 Harrisburg, PA 17105-3265 Attn: Allison Kaster

Office of Small Business Advocate 555 Walnut Street, 1st Floor Forum Place Harrisburg, Pennsylvania 17101 Attn: NazAarah Sabree, Small Business Advocate

#### **Adams County**

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Adams County Public Library Miranda Wisor, Executive Director 140 Baltimore Street Gettysburg, PA 17325

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Germany Township Planning Commission,
Secretary
136 Ulricktown Road
Littlestown, PA 17340

Robert Thaeler Germany Township Zoning Officer 136 Ulricktown Road Littlestown, PA 17340

Germany Township Engineer Gettysburg Engineering 1621 Baltimore Pike Gettysburg, PA 17325

Germany Township Engineer Keller Engineers, Inc. 207 Baltimore Street Gettysburg, PA 17325

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George Mauser Straban Township Planning Commission Vice Chairperson 1745 Granite Station Road Gettysburg, PA 17325 Shannon Schake Straban Township Code Enforcement Officer/Zoning Officer 1745 Granite Station Road Gettysburg, PA 17325

Straban Township Engineer Keller Engineers, Inc. 207 Baltimore Street Gettysburg, PA 17325 Mount Pleasant Township

## **Mount Pleasant Township**

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David Sentz Mount Pleasant Planning Commission Vice Chairman 1035 Beck Rd. Gettysburg, PA 17325

Timothy Topper Building Code/Zoning/Code Enforcement Officer 1035 Beck Rd. Gettysburg, PA 17325 C.S. Davidson, Inc. Mount Pleasant Township Engineer 38 N Duke Street York, PA 17401

Date: August 8, 2025

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# BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

APPLICATION OF MID-ATLANTIC INTERSTATE TRANSMISSION. LLC FILED PURSUANT TO 52 PA. CODE CHAPTER 57, SUBCHAPTER G, FOR APPROVAL OF THE SITING AND CONSTRUCTION OF THE CARROLL-HUNTERSTOWN 230 KILOVOLT TRANSMISSION LINE LOCATED STRABAN, MOUNT PLEASANT, MOUNT JOY, AND GERMANY TOWNSHIPS, ADAMS COUNTY, PENNSYLVANIA

Docket No. A-2025-	
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# APPLICATION OF MID-ATLANTIC INTERSTATE TRANSMISSION, LLC

#### TO THE PENNSYLVANIA PUBLIC UTILITY COMMISSION:

Mid-Atlantic Interstate Transmission, LLC ("MAIT"), a FirstEnergy Company, pursuant to the Pennsylvania Public Utility Commission's ("Commission") regulations at 52 Pa. Code § 57.72 et seq. and its Interim Guidelines for the Filing of Electric Transmission Line Siting Applications at 52 Pa. Code § 69.3101 et seq. ("Interim Guidelines"), requests the Commission's approval to construct approximately 12.9 miles of 230 kilovolt ("kV") transmission line by rebuilding the existing 115 kV and 138 kV transmission lines between the Pennsylvania-Maryland border and Hunterstown Substation to double-circuit 230/115 kV and 230/138 kV lines, respectively (together, the "Carroll–Hunterstown 230 kV Transmission Line" or "Project"). The

<sup>&</sup>lt;sup>1</sup> Related to the proposed Carroll-Hunterstown 230 kV Transmission Line, MAIT intends to file a separate Letter of Notification pursuant to Sections 57.72(d)(1)(i) and (vi) of the Public Utility Commission's regulations, 52 Pa. Code §§ 57.72(d)(1)(i) and (vi), to rebuild approximately 2.0 miles of the existing Lincoln—Orrtanna 115 kV Transmission Line to accommodate a higher capacity conductor (the "Lincoln—Orrtanna Rebuild Project"). The Lincoln—Orrtanna Rebuild Project is designed to address the same transmission system needs as the proposed Carroll—Hunterstown 230 kV Transmission Line. Collectively, the Carroll—Hunterstown 230 kV Transmission and the Lincoln—Orrtanna Rebuild Project are referred to herein as the "Carroll—Hunterstown Improvements Project."

proposed Carroll–Hunterstown 230 kV Transmission Line will cross 12.9 miles in Straban, Mount Pleasant, Mount Joy, and Germany townships in Adams County, Pennsylvania. In addition to the portions of the Carroll–Hunterstown 230 kV Transmission Line located in Pennsylvania, approximately 11.3 miles of the proposed Carroll–Hunterstown 230 kV Transmission Line will be located in Carroll County, Maryland,<sup>2</sup> terminating at Carroll Substation. The Carroll–Hunterstown 230 kV Transmission Line is needed to increase the current-carrying capacity of the existing Carroll–Hunterstown corridor that connects Hunterstown Substation in Adams County, Pennsylvania, to Carroll Substation in Carroll County, Maryland to meet current and expected transmission system needs in Adams and Carroll counties and the surrounding areas.

MAIT is making this filing available to the public on its website. MAIT has included a link to this website<sup>3</sup> in this Application and in the Notice of Filing. MAIT also intends to provide the URL address to this filing in the newspaper notice it publishes in newspaper(s) of general circulation in the area of the Carroll–Hunterstown Improvements Project, which includes the Carroll-Hunterstown 230 kV Transmission Line.

Subject to the Commission's approval, construction on the Carroll–Hunterstown Improvements Project is scheduled to begin on or about April 1, 2027, to meet an in-service date of June 1, 2028. To support this construction timeline, MAIT respectfully requests that the Commission issue its final ruling by January 2027.

In support of this Application, MAIT states as follows:

<sup>&</sup>lt;sup>2</sup> The portion of the proposed Carroll–Hunterstown 230 kV Transmission Line located in Carroll County, Maryland will be the subject of a separate filing with the Maryland Public Service Commission ("MDPSC") and not a subject of this filing.

<sup>&</sup>lt;sup>3</sup> https://www.firstenergycorp.com/about/transmission\_projects/pennsylvania/carroll-hunterstown-project.html.

#### I. INTRODUCTION

1. The name of the Applicant and the address of its principal business office are:

Mid-Atlantic Interstate Transmission, LLC 341 White Pond Drive Akron, OH 44320

2. MAIT's attorneys in this matter authorized to receive notices and communications on its behalf are:

Tori L. Giesler (ID #207742) FirstEnergy Service Company 341 White Pond Dr. Akron, OH 44320 (610) 921-6658 tgiesler@firstenergycorp.com

David B. MacGregor (ID #28804)
Garrett P. Lent (ID #321566)
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17 North Second Street
12th Floor
Harrisburg, PA 17101-1601
(717) 731-1970
dmacgregor@postschell.com
glent@postschell.com
mrulli@postschell.com

3. MAIT also requests that a copy of all notices and communications regarding this matter be sent to:

Mary E. Anderson Supervisor, Transmission Siting East FirstEnergy Service Company 341 White Pond Drive Akron, OH 44320 mcargill@firstenergycorp.com

4. MAIT is a public utility that provides interstate electric transmission services in the Commonwealth subject to the jurisdiction of the Federal Energy Regulatory Commission

- ("FERC"). Accordingly, this Commission asserts jurisdiction over the siting and construction of transmission lines by MAIT in Pennsylvania pursuant to the Commission's regulations at 52 Pa. Code § 57.71 et seq.
- 5. In support of this Application, MAIT includes the written direct testimony of seven witnesses, identified as MAIT Statement Nos. 1 through 7, and their supporting exhibits. MAIT also includes with this submission a cross-reference document that lists provisions of the Commission's regulations and notes where they are referenced in this submission. *See*Attachment 1. Additionally, MAIT's witnesses sponsor the following exhibits, which are included with the filing and provide additional detailed information regarding the proposed Carroll–Hunterstown 230 kV Transmission Line:
  - Mary E. Anderson (MAIT Statement No. 1) provides an introduction of MAIT's seven witnesses, summarizes the Project's regulatory requirements, describes
     MAIT's outreach to the public, and sponsors MAIT Exhibits 1 and 2:
    - **MAIT Exhibit 1:** Project Fact Sheet; and
    - **MAIT Exhibit 2:** Proof of Publication for Public Meeting.
  - Jacquelyn Lojek (MAIT Statement No. 2) identifies the electrical need for the Project, describes the alternatives to the Project that were considered, describes the Electric and Magnetic field ("EMF") calculations for the Project, and sponsors MAIT Exhibits 3 through 10:
    - MAIT Exhibit 3: Relevant portions of PJM Interconnection, L.L.C.'s ("PJM")
       October 31, 2023 Transmission Expansion Advisory Committee ("TEAC")
       presentation;

- MAIT Exhibit 4: Relevant portions of PJM's December 5, 2023 TEAC presentation;
- MAIT Exhibit 5: MAIT's response to PJM accepting construction responsibility for the Project;
- MAIT Exhibit 6: Maps of the existing and proposed MAIT transmission system in the Project area, including the entirety of the proposed Carroll– Hunterstown corridor;
- MAIT Exhibit 7: Graph noting EMF calculations under normal loading for existing 115 kV conditions;
- MAIT Exhibit 8: Graph noting EMF calculations under normal loading for existing 138 kV conditions;
- MAIT Exhibit 9: Graph noting EMF calculations under normal loading for proposed 230/115 kV conditions; and
- MAIT Exhibit 10: Graph noting EMF calculations under normal loading for proposed 230/138 kV conditions.
- Barry A. Baker (MAIT Statement No. 3) describes the principal elements of the siting analysis completed for the Carroll–Hunterstown 230 kV Transmission Line, including an explanation of how the environmental assessment was conducted and the reasons why the proposed route was selected, and sponsors MAIT Exhibits 11 through 16:
  - MAIT Exhibit 11: Route Selection Study;
  - MAIT Exhibit 12: Topographic Overview Map;
  - MAIT Exhibit 13: Aerial General Layout Map;

- **MAIT Exhibit 14:** List of Agency & Permit Requirements;
- **MAIT Exhibit 15:** Wetland Delineation Report;
- MAIT Exhibit 16: Carroll—Hunterstown PA Natural Diversity Inventory ("PNDI") Review and Correspondence; and
- Lisa Marinelli (MAIT Statement No. 4) explains the process by which easements and other land rights were acquired for the ROW for the Project, and sponsors MAIT Exhibits 17 and 18:
  - MAIT Exhibit 17: List of property owners crossed by the ROW; and
  - MAIT Exhibit 18: 15-Day Landowner Notice Packet.
- Korey R. Swierczek (MAIT Statement No. 5) describes the design and engineering for the Project; how the Project will be constructed; MAIT's plans for operating and maintaining the proposed transmission line after it is constructed, including removing and controlling vegetation; and sponsors MAIT Exhibits 19 through 43:
  - MAIT Exhibit 19: Depiction of the proposed 230 kV transmission line within an existing 115 kV ROW between Germantown Substation and Lincoln Substation;
  - MAIT Exhibit 20: Depiction of a typical ROW section for the existing 115 kV transmission line between Germantown Substation and Lincoln Substation;
  - MAIT Exhibit 21: Depiction of the proposed 230 kV transmission line within an existing 115 kV ROW between Lincoln Substation and Hunterstown Substation;
  - MAIT Exhibit 22: Depiction of a typical ROW section for the existing 115 kV
     transmission line between Lincoln Substation and Hunterstown Substation;

- MAIT Exhibit 23: Depiction of the proposed 230 kV transmission line within an existing 138 kV ROW between the Pennsylvania-Maryland State Line and Germantown Substation;
- MAIT Exhibit 24: Depiction of a typical ROW section for the existing 138 kV transmission line between the Pennsylvania-Maryland State Line and Germantown Substation;
- MAIT Exhibit 25 depicts the new ROW needed at the Hunterstown Substation parcel to accommodate the Hunterstown–Riley 115 kV Transmission Line relocation and the new Carroll–Hunterstown 230 kV Transmission Line;
- MAIT Exhibit 26: Depiction of a 115 kV single-circuit steel pole, with strain insulators on arms in a delta configuration;
- MAIT Exhibit 27: Depiction of an atypical double-circuit steel two-pole structure, with suspension insulators on arms;
- MAIT Exhibit 28: Depiction of a typical 230 kV single-circuit steel three-pole structure, with strain insulators for light line angles;
- MAIT Exhibit 29: Depiction of a typical 230 kV single-circuit steel three-pole structure, with strain insulators for heavy line angles;
- MAIT Exhibit 30: Depiction of an atypical double-circuit steel pole structure,
   with 230 kV strain insulators attaching to the pole and 115 kV insulators
   attaching to arms below the 230 kV;
- MAIT Exhibit 31: Depiction of an atypical double-circuit steel pole structure,
   with strain insulators in a vertical configuration with the 230 kV above the
   115/138 kV;

- MAIT Exhibit 32: Depiction of an atypical double-circuit steel pole structure,
   with suspension insulators on arms attaching to the pole in a vertical
   configuration with the 230 kV above the 115/138 kV;
- MAIT Exhibit 33: Depiction of a typical double-circuit steel pole structure,
   with suspension insulators on arms in a vertical configuration for light line angles;
- MAIT Exhibit 34: Depiction of a typical double-circuit steel pole structure,
   with strain insulators on arms in a vertical configuration for light to heavy line angles;
- MAIT Exhibit 35: Depiction of an atypical double-circuit steel two-pole structure, with strain insulators on arms in a delta configuration;
- MAIT Exhibit 36: Depiction of a typical 230 kV single-circuit steel pole structure, with strain insulators in a vertical configuration for heavy line angles;
- MAIT Exhibit 37: Depiction of a typical 115 kV single-circuit steel pole structure, with strain insulators in a vertical configuration for light line angles;
- MAIT Exhibit 38: Depiction of an atypical 115 kV single-circuit steel pole structure, with suspension insulators on arms in a delta configuration for light line angles;
- MAIT Exhibit 39: Depiction of a typical 115 kV single-circuit steel pole structure with horizontal post insulators in a delta configuration;
- MAIT Exhibit 40: Depiction of a typical wood H-Frame tangent structure,
   which represents the majority of the structures that support the existing
   conductors within the Carroll–Hunterstown Transmission corridors;

- MAIT Exhibit 41: Maintaining a Safe and Reliable Transmission System
   Vegetation Management for New Transmission Construction Projects
   Brochure;
- MAIT Exhibit 42 Maintaining a Safe and Reliable Transmission System Tree
   Trimming Comprehensive Vegetation Management Brochure; and
- **MAIT Exhibit 43:** Vegetation Management Program Brochure.
- Andrew Gledhill (MAIT Statement No. 6) describes PJM's Load Forecasting Process, explains the specific long-term load forecasts on which PJM relied for the 2022 Window 3 Competitive Solicitation Process, and sponsors MAIT Exhibits 44 through 50:
  - MAIT Exhibit 44: PJM Manual 19: Load Forecasting and Analysis;
  - MAIT Exhibit 45: PJM 2024 Load Forecast Supplement;
  - MAIT Exhibit 46: Itron Inc.'s 2022 PJM Model Review Report;
  - **MAIT Exhibit 47**: PJM 2022 Load Forecast Report;
  - MAIT Exhibit 48: PJM 2023 Load Forecast Report;
  - MAIT Exhibit 48: PJM 2024 Load Forecast Report; and
  - MAIT Exhibit 50: PJM 2025 Load Forecast Report.
- Sami Abdulsalam (MAIT Statement No. 7) describes the PJM Regional Transmission Expansion Plan ("RTEP") process, explains PJM's 2022 Window 3 Process, details 2022 Window 3 violations as it pertains to the reliability need for this Project, and sponsors MAIT Exhibits 51 through 55:
  - MAIT Exhibit 51: Operating Agreement, Schedule 6, PJM's Regional
     Transmission Expansion Planning Protocol;

- MAIT Exhibit 52: PJM Manual 14B PJM Region Transmission Planning
   Process (Revision 56);
- MAIT Exhibit 53: PJM RTEP 2022 RTEP Proposal Window 3, Problem
   Statement and Requirements;
- MAIT Exhibit 54: Special TEAC Materials, 2023 RTEP 2028 Preliminary
   Summer & Winter Generation Deliverability 500 kV and Above Violation
   Summary (April 27, 2023); and
- MAIT Exhibit 55: Reliability Analysis Report, 2022 Window 3 (December 8, 2023).
- 6. The Application regarding the Carroll–Hunterstown 230 kV Transmission Line, inclusive of the accompanying exhibits and statements, which are incorporated herein by reference, contains all the information required by 52 Pa. Code §§ 57.72(c), 69.1101, 69.3101-.3107.

# II. APPLICATION FOR SITING APPROVAL OF THE CARROLL-HUNTERSTOWN 230 KV TRANSMISSION LINE

## A. General Description of the Project

7. MAIT proposes to rebuild approximately 12.9 miles of the existing 115 kV and 138 kV transmission lines between the Pennsylvania-Maryland border and Hunterstown Substation as a double-circuit transmission line to accommodate the proposed new 230 kV circuit on one side and the 115 kV or 138 kV circuit on the other. This includes approximately 2.8 miles of the Carroll–Germantown 138 kV Transmission Line, approximately 7.5 miles of the Germantown–Lincoln 115 kV Transmission Line, approximately 1.4 miles of the Lincoln–Riley 115 kV Transmission Line, and approximately 1.2 miles of the Hunterstown–Riley 115 kV Transmission Line. The 138 kV circuit extends from Carroll Substation in Maryland to Germantown Substation

in Pennsylvania. The 115 kV circuits currently terminate at Germantown Substation, Straban Substation, Lincoln Substation, Riley Substation, and Hunterstown Substation. The existing 138 kV and 115 kV transmission lines will continue to provide service to those substations after the rebuild. The proposed Carroll–Hunterstown 230 kV Transmission Line will bypass the intermediate substations and electrically connect Hunterstown Substation in Pennsylvania to Carroll Substation in Maryland. The new 230 kV circuit may be constructed on single circuit structures as it bypasses the intermediate substations while the existing 115 kV and 138 kV circuits maintain their existing connections.

- 8. The proposed improvements from Carroll Substation to Hunterstown Substation will primarily consist of two single-circuit transmission lines, each consisting of three electrical phases, elevated above the ground by self-supporting, double-circuit steel monopole structures. Approximately 105 structures ranging from approximately 56 to 198 feet in height above ground will be installed, with an average height of approximately 120 feet and span lengths of approximately 800 feet.
- 9. The Carroll–Hunterstown 230 kV Transmission Line is needed to mitigate violations of FirstEnergy's and PJM Interconnection, LLC's ("PJM") planning criteria that were identified as part of PJM's 2022 RTEP analysis for Open Window 3. Specifically, the Carroll–Hunterstown 230 kV Transmission Line will address thermal violations identified under North American Electric Reliability Corporation ("NERC") Category P1, P2, P4, and P7 conditions and to provide adequate transmission capacity to meet current and expected transmission system needs in Adams County, Pennsylvania; Carroll County, Maryland; and the surrounding areas.
- 10. MAIT is including with this Application several maps that either depict or aid in understanding the location and description of the Carroll–Hunterstown 230 kV Transmission Line.

Jacquelyn Lojek (MAIT Statement No. 2) sponsors **MAIT Exhibit 6**, which is a map showing the existing transmission system in the Carroll–Hunterstown 230 kV Transmission Line area. This exhibit also reflects the proposed transmission system in the Carroll–Hunterstown 230 kV Transmission Line area after completion of the rebuild. In addition, Barry A. Baker (MAIT Statement No. 3) sponsors **MAIT Exhibits 12 and 13**, which are, respectively, a topographic general overview and an aerial general layout mapping of the area encompassing the Carroll–Hunterstown 230 kV Transmission Line showing the proposed line route in relation to major physical features. Mr. Baker also provides a narrative description of the proposed route in his direct testimony.

- 11. The Carroll–Hunterstown 230 kV Transmission Line will be located in Straban, Mount Pleasant, Mount Joy, and Germany townships in Adams County, Pennsylvania. A description of the Proposed Route is provided as required by 52 Pa. Code § 57.72(c)(3) in **Appendix A**, attached hereto. The Carroll–Hunterstown 230 kV Transmission Line is proposed to be constructed within an existing transmission corridor, which is currently occupied by the Carroll–Germantown 138 kV, Germantown–Lincoln 115 kV, Lincoln–Riley 115 kV, and Riley–Hunterstown 115 kV transmission lines.
- 12. The proposed route for the Carroll–Hunterstown 230 kV Transmission Line occupies existing ROW on 85 property tracts, including land upon which the existing Germantown, Lincoln, Straban, and Hunterstown substations are situated. New ROW is required for one parcel that currently accommodates the existing Hunterstown Substation in Adams County, Pennsylvania, as depicted in **MAIT Exhibit 25**. MAIT will amend a license agreement through negotiation with the affected property owner in order to terminate the proposed new 230 kV line at the substation and relocate approximately 600 feet of the Hunterstown–Riley 115 kV

Transmission Line near the Hunterstown Substation. The existing and newly acquired ROW agreements with the underlying landowners will allow MAIT to install the proposed structures to support the proposed Carroll–Hunterstown 230 kV Transmission Line. MAIT does not anticipate any directly impacted landowners will object to the Carroll–Hunterstown 230 kV Transmission Line.

- 13. Korey R. Swierczek (MAIT Statement No. 5) describes the existing transmission line corridor used by the Carroll–Hunterstown 230 kV Transmission Line, and he sponsors several exhibits depicting the corridor and the typical structures that will support the proposed transmission line.
- 14. In full, the proposed transmission line will extend from Carroll Substation in Carroll County, Maryland, to Hunterstown Substation in Adams County, Pennsylvania. For the portion of the Carroll–Hunterstown 230 kV Transmission Line located in Pennsylvania, the transmission line will be approximately 12.9 miles in length and will occupy primarily existing transmission line ROW with one amended license agreement being required. In total, the proposed Carroll–Hunterstown 230 kV Transmission Line is approximately 24.2 miles in length, with 12.9 miles in Pennsylvania and 11.3 miles in Maryland.
- 15. The proposed transmission line begins by exiting the Carroll Substation and follows the existing 138 kV transmission line ROW to the northeast for 2.34 miles to the Middleburg Road crossing. Continuing to the northeast, the Proposed Route extends for 3.84 miles to the SR 140 (Taneytown Pike) crossing located east of Taneytown, Maryland. After crossing SR 140, the proposed route extends north for 5.14 miles to the Maryland/Pennsylvania border. Turning to the northeast, the route extends for 2.80 miles to the SR 97 (Baltimore Pike) crossing located adjacent to Germantown Substation, which is where the 138 kV line changes over to 115 kV. At this point,

the transmission line crosses SR 97 and turns to the northwest for 7.48 miles to Lincoln Substation located near Gettysburg. From Lincoln Substation, the route turns to the northeast and extends for 2.61 miles to Hunterstown Substation.

16. **MAIT Exhibit 13** provides a general layout for the proposed Carroll–Hunterstown 230 kV Transmission Line. Pursuant to 52 Pa. Code § 57.72(c)(3), a general description of the Proposed Route of the Carroll–Hunterstown 230 kV Transmission Line is attached to this Application as **Appendix A**.

#### **B.** Engineering Description

- 17. The proposed Carroll–Hunterstown 230 kV Transmission Line would rebuild approximately 12.9 miles of the existing 115 kV and 138 kV transmission lines between the Pennsylvania-Maryland border and Hunterstown Substation as a double-circuit transmission line to accommodate the proposed new 230 kV circuit on one side and the 115 kV or 138 kV circuit on the other. The proposed transmission line will be supported by multiple structure types as shown in MAIT Exhibits 26 through 39 and as described more fully in Mr. Swierczek's direct testimony (MAIT Statement No. 5). Based on preliminary engineering, the proposed transmission line will require approximately 105 structures ranging in height from approximately 56 feet to approximately 198 feet above ground, with an average height of approximately 120 feet. The average span length between structures will be approximately 800 feet. The structures are designed as steel monopole structures.
- 18. The overhead 230 kV double-circuit transmission line will utilize conductors that are 1590 thousand circular mils ("KCM") 54/19 aluminum conductor, steel reinforced ("ACSR"). In addition to the transmission conductors, the line will carry two shield wires. One of the shield wires will be 7 No. 8 Alumoweld, which consists of seven strands of No. 8 aluminum-clad steel

wire. The main purpose of the shield (or ground) wire is for lightning protection. The other shield wire will be an optical ground wire ("OPGW").<sup>4</sup> This wire is composed of aluminum and aluminum-clad steel strands surrounding an aluminum tube containing fiber-optic strands. The optical fibers within the cable 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. The proposed Project will be designed and operated at 230 kV. The transmission maximum design operating temperature is 212 degrees Fahrenheit. The transmission line will meet or exceed all requirements of the current National Electrical Safety Code ("NESC") under all operating conditions.

## C. Right-of-Way Assessment

- 19. The proposed new Carroll–Hunterstown 230 kV Transmission Line will utilize the existing ROW on the Carroll–Germantown 138 kV, Germantown–Lincoln 115 kV, Lincoln–Riley 115 kV, and Hunterstown–Riley115 kV transmission line corridors. Typical ROW width for the corridor between Lincoln Substation and the Pennsylvania-Maryland border is 110 feet, while the typical ROW width for the corridor between Lincoln Substation and Hunterstown Substation is 200 feet. The existing 115 and 138 kV transmission line structures in the centerline of the ROW are depicted in MAIT Exhibits 20 and 24. The existing 115 transmission line structures offset in the ROW are depicted in MAIT Exhibit 22.
- 20. The proposed double circuit 230/138 kV and 230/115 kV transmission lines will be constructed along the center of the existing 138 and 115 kV ROW. The 230 kV line will bypass

<sup>4</sup> Implementation of advanced technologies was considered as part of this Project. OPGW will be installed from Hunterstown Substation (PA) to Carroll Substation (MD), which will complete the fiber pathway between the Substations. OPGW enables remote power system monitoring, relay protection, and network communications through high-speed data transmission. It provides real-time data exchange for system protection schemes and Supervisory Control and Data Acquisition ("SCADA"), improving system reliability and operational flexibility. OPGW offers a reliable communication path with minimal maintenance. It enables critical power functions like remote monitoring,

fault detection, and real-time data communication.

the Germantown, Straban, and Riley substations remaining on the center of the ROW. The proposed transmission line structures that will support the existing 115 and 138 kV lines and proposed new 230 kV transmission line conductors are depicted within centerline of existing ROW in **MAIT Exhibits 19 and 23**. The proposed transmission line structures that will support the existing 115 lines and proposed new 230 kV transmission line conductors are depicted in offset existing ROW in **MAIT Exhibit 21**. ROW widths and configurations are more fully described in Mr. Swierczek's direct testimony (MAIT Statement No. 5).

# **D.** Property Owners

21. The names and addresses of known persons, corporations and other entities of record who own property within the proposed transmission line route for the Carroll–Hunterstown 230 kV Transmission Line are provided in **MAIT Exhibit 17**. Of the 85 parcels crossed by the Project, new ROW is required for one parcel that currently accommodates the existing Hunterstown Substation in Adams County, Pennsylvania. MAIT will amend a license agreement through negotiation with the affected property owner in order to relocate a portion of the existing Hunterstown–Riley 115 kV Transmission Line and allow for the proposed new 230 kV line to terminate at the Hunterstown Substation.

#### E. Statement of Need

22. Ms. Lojek (MAIT Statement No. 2) explains that the Carroll–Hunterstown 230 kV Transmission Line is needed to mitigate violations of FirstEnergy and PJM planning criteria that were identified as part of PJM's 2022 RTEP analysis for Open Window 3. Specifically, the Carroll–Hunterstown 230 kV Transmission Line will address thermal violations identified under NERC Category P1, P2, P4, and P7 conditions and provide adequate transmission capacity to meet

current and expected transmission system needs in Adams County, Pennsylvania; Carroll County, Maryland; and the surrounding areas.

- 23. The proposed Carroll–Hunterstown 230 kV Transmission Line will resolve thermal loading planning criteria violations identified as part of the 2022 RTEP analysis. The 2022 RTEP analysis, which studied the transmission system model anticipated for the year 2027, identified thermal loading planning criteria violations including: (1) violations on the Lincoln–Orrtanna 115 kV, Hunterstown-Riley 115 kV, Lincoln-Riley 115 kV, Germantown-Lincoln 115 kV 998, and Germantown-Taneytown 138 kV transmission lines under NERC Category P1, P2, P4, and P7 conditions; (2) a violation following a faulted 500 kV circuit breaker at Conastone Substation, which would outage the Conastone-Brighton 500 kV Transmission Line and increase the loading on the Hunterstown-Riley 115 kV, Lincoln-Riley 115 kV, Germantown-Lincoln 115 kV, and Germantown-Taneytown 138 kV transmission lines to approximately 142 percent, 147 percent, 135 percent, 129 percent, and 143 percent of their summer emergency ratings, respectively; and (3) an outage of the Hunterstown–Lincoln 115 kV Transmission Line that would increase loading on the Lincoln–Orrtanna 115 kV Transmission Line to approximately 140 percent of the summer emergency rating. These violations are further described in the testimony of Jacquelyn Lojek (MAIT Statement No. 2).
- 24. As discussed in Mr. Gledhill's direct testimony (MAIT Statement No. 6), the 2022 Load Forecast Report showed that electricity demand in the PJM Region is expected to steadily increase over the next 15 years. In the 2022 Load Forecast Report, PJM identified several zones—including the APS, Dominion Virginia Power ("DOM"), American Transmission Systems, Inc. ("ATSI"), and Commonwealth Edison ("COMED") zones—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. PJM developed a 2027 study year base case and a 2028 study year sensitivity analysis.

- 25. As discussed in Dr. Abdulsalam's direct testimony (MAIT Statement No. 7), the 2027/28 baseline reliability criteria violations included numerous overloaded 500 kV transmission lines, which provide the backbone of the transmission system serving the District of Columbia, Maryland, and Virginia region, and the APS and DOM zones. The majority of those overloaded 500 kV facilities occurred during both summer and winter peak. In addition to the regional violations, the Carroll–Hunterstown transmission corridor was severely overloaded. Overloaded transmission lines, which are the result of transmitting more power than the system is designed for, can lead to cascading outages and system collapse if not addressed. Numerous voltage collapse and extreme low-voltage magnitude and voltage drop violations in various areas, including Maryland, APS and DOM zones, were observed, indicating the inability of the power system to deliver the generated power to load centers.
- 26. Based on this extensive review, PJM determined that not addressing these voltage violations will make the power system inoperable under the identified outage/condition leading to loss of load and generation and cascading transmission outages.

# F. Safety Considerations

27. The proposed Carroll–Hunterstown 230 kV Transmission Line will not create any unreasonable risk of danger to the public health or safety. The design, construction, and operation of the Carroll–Hunterstown 230 kV Transmission Line will meet or exceed the requirements specified in the latest edition of the NESC and all applicable safety standards established by the

Occupational Safety and Health Administration ("OSHA"). All work will be performed in accordance with NESC; OSHA; and any applicable local, state or federal requirements.

- 28. The Carroll–Hunterstown 230 kV Transmission Line is being completed within existing transmission line corridors, with the exception of the amended license agreement needed at the Hunterstown Substation property. FirstEnergy's vegetation management practices are described in **MAIT Exhibits 41 through 43** and discussed in Mr. Swierczek's direct testimony (MAIT Statement No. 5).
- 29. An EMF study for the proposed transmission line was performed. Results of that study are provided in Table 1 and Table 2 of Ms. Lojek's direct testimony (MAIT Statement No. 2) in response to Section 69.3107(b) of the Commission's Interim Guidelines.
- 30. No communication towers, pipelines, or other utilities will be affected by the Project.
- 31. The Project will involve numerous road crossings, including federal, state, and local roads and highways. MAIT will obtain the necessary Pennsylvania Department of Transportation ("PennDOT") Highway Occupancy Permits, or equivalent type permits prior to construction.
- 32. MAIT will coordinate with the Federal Aviation Association ("FAA") and PA Bureau of Aviation, as needed, to assess potential interference with any air navigation facility before construction. Aviation coordination has been initiated through the FAA. MAIT will ensure that the pole locations and heights are properly recorded by the FAA. MAIT will comply with any additional lighting and other visual aids that may be required by these agencies to ensure aviation safety in the region.

# **G.** Route Analysis

MAIT retained AECOM Technical Services Corporation ("AECOM"), an 33. Engineering and Environmental consulting firm, to prepare a comprehensive study of alternative routes and the potential impacts from the Carroll-Hunterstown 230 kV Transmission Line. The results of this study are set forth in AECOM's Transmission Line Route Selection Study ("Route Selection Study"), which is provided as MAIT Exhibit 11. MAIT evaluated four alternative routes ("Alternative Routes"), and of these routes, the Rebuild Route was selected as the Proposed Route. After analyzing and comparing the four Alternative Routes against potential impacts on the built environment, AECOM concluded that the Rebuild Route is preferred over other alternatives. The entire length of the Rebuild Route can be constructed within an existing 110- to 200-foot-wide ROW in Pennsylvania that currently contains a single-circuit 115 kV or 138 kV system. This route is also one of the shortest, most direct routes of all the Alternative Routes. Other options would require significantly more, new ROW. The Rebuild Route is expected to result in minimal incremental impacts to the built environment, including residential areas, land use, conserved lands, and cultural resources. The basis for the final route selection is set forth in Section 6 of the Route Selection Study and is also explained in Mr. Baker's direct testimony (MAIT Statement No. 3). The Route Selection Study and Mr. Baker's testimony provide additional information regarding the Alternative Routes considered by MAIT.

#### H. Environmental Assessment

34. AECOM conducted a comprehensive review of the environmental constraints located within the Carroll–Hunterstown 230 kV Transmission Line study area ("Study Area") that identified the environmental setting of the Study Area including wetlands, soils, geology, public lands, designated natural areas or preserves, recreation areas, and historic resources. The

environmental assessment is set forth in Section 4.1 of the Route Selection Study (**MAIT Exhibit** 11). No substantial impacts to these resources are anticipated as a result of constructing the Carroll–Hunterstown 230 kV Transmission Line.

- 35. As further explained in Mr. Baker's direct testimony, after analyzing and comparing the four routes against potential impacts to the natural environment, AECOM concluded that the Rebuild Route is preferred over the other Alternative Routes from an environmental perspective. This alignment would result in significantly less forest clearing and potential impacts to forested wetlands compared to other options. The Rebuild Route would also minimize the amount of 100-year floodplain crossed.
- 36. MAIT will implement appropriate measures during construction and throughout the subsequent operation of the Carroll–Hunterstown 230 kV Transmission Line to avoid or minimize impacts to environmental resources. MAIT will obtain all the relevant state and federal permits needed to construct the Carroll–Hunterstown 230 kV Transmission Line and will adhere to the conditions set forth in those permits. As part of the permitting process, MAIT has conducted detailed ecological surveys of the Rebuild Route Corridor. These surveys included wetland delineations, stream identifications, and threatened and endangered species surveys. MAIT will continue to coordinate with state and federal agencies to minimize the potential ecological impacts.

#### I. Social Assessment

37. The Route Selection Study also considered social resources in or near the Study Area. The entire Study Area was evaluated based on existing residential and commercial development, land uses, archaeological and historical areas, recreational and scenic resources, conserved lands, and terrain and landscape. MAIT also provided notice of the Carroll–Hunterstown 230 kV Transmission Line to representatives of Adams County and the

commissioners of the townships through which the Proposed Route will pass. In addition, a Public Open House was held to gather additional comments and opinions from affected landowners and the local community, and a virtual public open house forum was also made available on the internet for the public to review the proposed Carroll–Hunterstown 230 kV Transmission Line virtually. Comments received from landowners were considered in the selection of the Proposed Route. The built environment assessments are set forth in Section 4.2 of the Route Selection Study. A summary of the Public Open House is provided in Section 6.1 of the Route Selection Study.

38. After analyzing and comparing the four Alternative Routes against potential impacts on the built environment, the Routing Team concluded the Rebuild Route is preferred over other alternatives. The entire length of the Rebuild Route can be constructed within an existing 110- to 200-foot-wide ROW in Pennsylvania that currently contains a single-circuit 115 kV or 138 kV system. This route is also one of the shortest, most direct routes of all the alternatives. Other options would require significantly more, new ROW. Although the Rebuild Route cumulatively crosses more parcels and is in close proximity to more residences, the existing line has been in place for decades and over this time, land subdivision has increased the number of parcels crossed, and the expanding residential development has placed more homes up against the line. Therefore, the Rebuild Route is expected to result in minimal incremental impacts to the built environment including residential areas, land use, conserved lands, and cultural resources.

# J. Airports and Aircraft Facilities

39. The closest airport to Hunterstown Substation is the Gettysburg Regional Airport, which is located approximately 5.80 miles west of the substation and approximately 4.00 miles from the West Route. No private airports are located in the Pennsylvania portion of the Study Area, and no other smaller airports or heliports were identified within 2 miles of the Study Area.

No potential aeronautical effects are anticipated as a result of the Project; however, MAIT will continue its coordination with the FAA and PA Bureau of Aviation, as needed, to assess potential interference with any air navigation facility before construction commences.

## K. Governmental Agency Requirements

40. A list of local, state, and federal governmental agencies that have permitting or licensing requirements in connection with the construction or maintenance of the Carroll–Hunterstown 230 kV Transmission Line and a list of documents that have been, or are required to be, filed with those agencies in connection with siting and construction are set forth in MAIT Exhibit 14.

41. To date, no comments have been received from Adams County officials, nor has the Company received comments from officials in Straban, Mount Pleasant, Mount Joy, or Germany townships in response to the proposed Carroll–Hunterstown 230 kV Transmission Line.

# L. Ownership, Cost and Construction Schedule

- 42. MAIT will own and construct the Project. Construction is scheduled to begin on or about April 2027, pending Commission approval. The proposed in-service date for the Project is June 1, 2028.
- 43. The estimated total cost of the Project, including proposed upgrades in Maryland and associated substation costs, is approximately \$148,450,000.<sup>5</sup> Of this total Project cost, approximately \$85,850,000<sup>6</sup> will include upgrades in Pennsylvania, of which approximately \$82,090,000 is attributed to the transmission line upgrades. Of the transmission line upgrades,

<sup>6</sup> Of the approximate \$85,850,000 Pennsylvania Project costs, approximately \$3,760,000 is attributed to associated substation upgrades at Hunterstown, Straban, Lincoln, and Germantown substations.

<sup>&</sup>lt;sup>5</sup> Of the approximate \$148,450,000 total Project cost, the total approximate cost for upgrades in Maryland is \$62,600,000.

approximately \$71,110,000 is attributed to the proposed Carroll-Hunterstown 230 kV Transmission Line.

#### Estimated Transmission Line Costs:

Carroll–Hunterstown 230 kV Transmission Line	\$71,110,000
Lincoln–Orrtanna 115 kV Transmission Line	\$10,980,000 <sup>7</sup>

# M. Litigation

44. There is no litigation concluded or in progress concerning the siting and construction of the Project.

# N. Additional Information Required By Commission Guidelines

- 45. The Interim Guidelines, 51 Pa. Code §§ 69.3101-.3107, contain guidelines for public notice of transmission line siting applications. A copy of MAIT's Project fact sheet is included as **MAIT Exhibit 1**, along with a copy of the proof of newspaper publication for the public information meeting included as **MAIT Exhibit 2**. A copy of the 15-day landowner notice package is included as **MAIT Exhibit 18**.
- 46. Section 69.3103 of the Interim Guidelines provides that applications for eminent domain authority should be filed separately but may be filed simultaneously with the associated transmission siting application, or as soon as reasonably known. MAIT is coordinating with one landowner for an amended license agreement. MAIT does not anticipate the need to exercise eminent domain in connection with the Carroll–Hunterstown 230 kV Transmission Line.
- 47. Section 69.3104 of the Interim Guidelines lists information required for exemption from municipal zoning standards. A list of municipal permits required for the Carroll–Hunterstown 230 kV Transmission Line, and their status, is contained in **MAIT Exhibit 14**.

<sup>&</sup>lt;sup>7</sup> The associated Lincoln-Orrtanna 115 kV Transmission Line Project will be subject to a separate Letter of Notification.

- 48. Section 69.3105(1) of the Interim Guidelines provides that applications for siting electric transmission lines should utilize a combination of transmission route evaluation procedures, including high-level GIS data, traditional mapping (including U.S. Geological Survey data and compilation), aerial maps, and analysis of physical site-specific constraints raised by affected landowners. This information is included in the Route Selection Study (MAIT Exhibit 11).
- 49. Section 69.3105(2) of the Interim Guidelines provides that transmission applicants should summarize the status of property acquisitions and provide the current status of property acquisition litigation or settlements. MAIT has existing rights to support the Carroll–Hunterstown 230 kV Transmission Line. A list of property owners from whom land rights have been obtained is included in **MAIT Exhibit 17**. As previously mentioned, regarding the sole parcel where new ROW is required, MAIT will amend the existing license agreement through negotiation with the affected property owner in order to relocate a portion of the Hunterstown–Riley 115 kV Transmission Line to allow for termination of the proposed new 230 kV at the substation.
- 50. Section 69.3105(3) of the Interim Guidelines states transmission applications should provide information regarding the reasonable alternative routes the utility actively considered in its final phase of the route selection process, and the relative merits of each, including:
  - The environmental, historical, cultural and aesthetic considerations of each route;
  - ii. The proximity of these alternative routes to residential and non-residential structures;
  - iii. The applicant's consideration of relevant existing ROWs; and

- iv. The comparative construction costs associated with each route.
- 51. Items (i) through (iii) of Section 69.3105(3) are included as part of **MAIT Exhibit**11. The comparative estimated construction costs (item iv) for the four alternative transmission line routes evaluated are shown below in Table 1. Approximate costs include the scope of work in both Pennsylvania and Maryland for the new 230 kV transmission line.

Table 1: Alternative Route Cost Comparison

<b>Route Alternative</b>	<b>Approximate Distance (miles)</b>	<b>Approximate Cost (\$)</b>
Proposed Route (Rebuild Route)	24.2	\$125,130,000
East Route	31.7	\$140,382,000
Central Route	24.0	\$153,984,000
West Route	24.8	\$150,814,000

- 52. Section 69.3106 of the Interim Guidelines provides that siting applications should include a matrix or list showing all expected federal, state and local government regulatory permitting or licensing approvals that may be required for the project at the time the application is filed, the issuing agency, the approximate timeframe for approval and current status. MAIT Exhibit 14 contains a list of all local, state and federal agencies with requirements for permitting or licensing approvals. MAIT will inform the Commission in a timely manner of all changes in the status of all permits and licenses required for the Carroll–Hunterstown 230 kV Transmission Line.
- 53. Section 69.3107(a) of the Interim Guidelines provides that siting applications should contain a vegetation management plan. MAIT Exhibit 41 is a copy of the FirstEnergy Maintaining a Safe and Reliable Transmission System Vegetation Management for New Transmission Construction Projects Brochure, MAIT Exhibit 42 is a copy of the FirstEnergy Maintaining a Safe and Reliable Transmission System Tree Trimming Comprehensive Vegetation Management Brochure, and MAIT Exhibit 43 is a copy of the FirstEnergy Vegetation

Management Program Brochure. These exhibits describe MAIT's vegetation plan, vegetation practices, and landowner notification procedures.

- 54. Section 69.3107(b) of the Interim Guidelines provides that siting applications should contain a description of electric and magnetic field mitigation procedures that the utility proposes to utilize along the transmission line. MAIT's typical transmission line route selection process, which was employed for the Carroll–Hunterstown 230 kV Transmission Line, evaluates a number of factors to identify the appropriate location for the proposed transmission line. Among other things, this evaluation process identifies and considers residences and locations where large groups of people typically gather, such as schools and places of worship. Although locating the transmission line in close proximity to these types of land uses is not precluded by state or federal rules or guidelines, providing the largest practical distance from residences, schools, places of worship and similar facilities is generally more acceptable to the local community and is an effective way to mitigate potential EMF concerns.
- 55. As part of MAIT's approach to efficiently construct a transmission line project, the design of all or portions of a transmission line project will typically utilize a compact conductor arrangement. This approach has the added benefit of reducing EMF strengths. Here, MAIT proposes to construct a double-circuit steel tangent structure because it is a compact design that reduces EMF field strengths in comparison to other installations.
- 56. As a point of reference, the Company is providing estimates of the EMF strengths for the Carroll–Hunterstown 230 kV Transmission Line. These estimates have been prepared utilizing the Electric Power Research Institute's EMF Workstation 2015 software program ("Program"). The Program relies on the law of Biot-Savart, an equation describing the magnetic field generated by a constant electric current. The law relates the magnetic field to the magnitude,

direction, length, and proximity of the electric current. The EMF strengths directly beneath the centerline at mid-span and at the edges of the ROW for the proposed 230/138 kV and 230/115 kV transmission lines have been calculated. These calculations are provided in the Direct Testimony of Ms. Lojek (MAIT Statement No. 2) and **MAIT Exhibits 7 through 10**.

# O. Service of Application

57. Copies of this Application and accompanying exhibits, or the Notice of Filing, have been served upon all interested parties by certified mail, return receipt requested, as required by the Commission's regulation at 52 Pa. Code § 57.74.

#### III. CONCLUSION

WHEREFORE, based on the forgoing, Mid-Atlantic Interstate Transmission, LLC respectfully requests that the Pennsylvania Public Utility Commission review and approve this application for the location and construction of the Carroll–Hunterstown 230 kV Transmission Line.

Respectfully Submitted,

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# **APPENDIX A**

#### APPENDIX A

The following description of the Proposed Route for the Carroll-Hunterstown 230 kV Transmission Line is provided as required by 52 Pa. Code § 57.72(c)(3).

The Carroll–Hunterstown 230 kV Transmission Line, as shown on MAIT Exhibit 12 will start at the existing Carroll Substation in Carroll County, Maryland, and will extend approximately 24.2 miles to the existing Hunterstown Substation. In Pennsylvania, the proposed Carroll-Hunterstown 230 kV Transmission Line involves rebuilding approximately 12.9 miles of the existing 115 kV and 138 kV transmission lines between the Pennsylvania-Maryland border and Hunterstown Substation as a double-circuit transmission line to accommodate the proposed new 230 kV circuit on one side and the 115 kV or 138 kV circuit on the other. The proposed new Carroll–Hunterstown 230 kV line will utilize the existing ROW on the Carroll–Germantown 138 kV, Germantown-Lincoln 115 kV, Lincoln-Riley 115 kV, and Riley-Hunterstown 115 kV transmission line corridors. The typical ROW width for the corridor between Lincoln Substation and the Pennsylvania-Maryland border is 110 feet, while the typical ROW width for the corridor between Lincoln Substation and Hunterstown Substation is 200 feet. The Carroll-Hunterstown 230 kV Transmission Line will occupy existing transmission line right-of-way. In Pennsylvania, the Carroll-Hunterstown 230 kV Transmission Line will cross 12.9 miles of Adams County, including 2.91 miles of Germany Township, 3.17 miles of Mount Joy Township, 1.49 miles of Mount Pleasant Township, and 6.30 miles of Straban Township.

Beginning in Carroll County, Maryland, from Carroll Substation, the proposed route follows the existing 138 kV transmission line ROW to the northeast for 2.34 miles to the Middleburg Road crossing. Continuing to the northeast, the route extends for 3.84 miles to the SR 140 (Taneytown Pike) crossing located east of Taneytown, Maryland. After crossing SR 140,

the proposed route extends north for 5.14 miles to the Maryland/Pennsylvania border. Turning to the northeast, the route extends for 2.80 miles to the SR 97 (Baltimore Pike) crossing located adjacent to Germantown Substation, which is where the 138 kV line changes over to 115 kV. At this point, the proposed route crosses SR 97 and turns to the northwest for 7.48 miles to Lincoln Substation located near Gettysburg. From Lincoln Substation, the route turns to the east and extends for 2.61 miles to Hunterstown Substation.

# **ATTACHMENT 1**

# ATTACHMENT 1 CARROLL-HUNTERSTOWN IMPROVEMENTS PROJECT PA PUC REGULATION CROSS-REFERENCE MATRIX

Pennsylvania Code Section*	PA PUC Regulation Requirement	Location in Application	Associated Tables/Figures
57.72 (c)	Application shall contain		
57.72 (c)(1)	The name of the applicant and the address of its principal business office.	• Application, Section I	
57.72 (c)(2)	The name, title and business address of the attorney of the applicant and the person authorized to receive notice and communications with respect to the application if other than the attorney of the applicant.	Application, Section I	
57.72 (c)(3)	A general description – not a legal or metes and bounds description – of the proposed route of the HV line, to include the number of route miles, the rights-of-way width and the location of the proposed HV line within each city, borough, town, and township traversed.	Application,     Appendix A	
57.72 (c)(4)	A names and addresses of known persons, corporations, and other entities of record owning property within the proposed rights-of-way, together with an indication of HV line rights-of-way acquired by the applicant.	• Exhibit 18	
57.72 (c)(5)	A general statement of the need of the proposed HV line in meeting identified present & future demands for service, how the proposed line will meet that need, and engineering justifications	Application, Section II.E	
57.72 (c)(6)	A statement of the safety considerations which will be incorporated into the design, construction, and maintenance of the proposed HV line.	Application, Section II.F	
57.72 (c)(7)	A description of the studies which had been made as to the projected environmental impact of the HV line as proposed and of the efforts which have been and will be made to minimize the impact of the HV line upon the environment and upon scenic and historic areas.	• Exhibit 11 (Route Selection Study)	• Section 5.0



Pennsylvania Code Section*	PA PUC Regulation Requirement	Location in Application	Associated Tables/Figures
57.72 (c)(8)	A description of the efforts of the applicant to locate and identify archeologic, geologic, historic, scenic, or wilderness areas within 2 miles of the proposed right-of-way and the location and identity of the areas	• Exhibit 11 (Route Selection Study)	S
57.72 (c)(9)	The location and identity of airports within 2 miles of the nearest limit of the right-of-way of the proposed HV line.	• Exhibit 11 (Route Selection Study)	• Section 4.2.1
57.72 (c)(10)	A general description of reasonable alternative routes to the proposed HV line, including a description of the corridor planning methodology, a comparison of the merits and detriments of each route, and a statement of the reasons for selecting the proposed HV line route.	• Exhibit 11 (Route Selection Study)	
57.72 (c)(11)	A list of the local, state, and federal governmental agencies which have requirements that shall be met in connection with the construction or maintenance of the proposed HV line and a list of documents which have been or are required to be filed with those agencies.	• Exhibit 14	
57.72 c(12)	The estimated cost of construction of the proposed HV line and the projected date for completion.	• Application, Section II.L, MAIT Statement No. 5	
57.72 c(13)(i)	A depiction of the proposed route on aerial photographs and topographic maps of suitable detail.	• Exhibit 12 and Exhibit 13	
57.72 c(13)(ii)	A description of the proposed HV line, including the length of the line, the design voltage, the size, number, and materials of conductors, the design of the supporting structures and their height, configuration and materials of construction, the average distance between supporting structures, the number of supporting structures, the number of supporting structures, the line to structure clearances and the minimum conductor to ground clearance at midspan under normal load and average weather conditions and under predicted extreme load and weather conditions.	<ul> <li>Application, Section II.B</li> <li>MAIT Statement No. 5</li> </ul>	



Pennsylvania Code Section*	PA PUC Regulation Requirement	Location in Application	Associated Tables/Figures
57.72 c(13)(iii)	A simple drawing of a cross section of the proposed rights-of-way of the HV line and any adjoining rights-of-way showing the placement of the supporting structures at typical locations, with the height and width of the structures, the width of the right-of-way and the lateral distance between the conductors and the edge of the right-of-way indicated.	• Exhibits 19, 21, and 23	Tables/Figures
57.72 c(13)(iv)	A system map which shows in suitable detail the location and voltage of existing transmission lines and substations of the applicant and the location and voltage of the proposed HV line and associated substations	• Exhibit 12 and Exhibit 13	
57.72 (c)(14)	A statement identifying litigation concluded or in progress which concerns property or matter relating to the proposed HV line, right-of-way route, or environmental matters.	Application, Section II.M	
Chapter 69	Interim guidelines require		
69.3102 (a)(1)	A Code of Conduct/Internal Practices governing the manner in which public utility employees or their agents interact with landowners along proposed rights of way.	• Exhibit 18	
69.3102 (a)(2)	Copies of information provided to landowners by the public utility of any publicly disseminated notices advising landowners to contact the Commission or OCA in the event of improper land agent practices.	• Exhibit 18	
69.3102 (a)(3)	Copies of all notices sent pursuant to \$57.91 (relating to disclosure of eminent domain power of electric utilities).	• Exhibit 18	
69.3102 (b)	Applicants for transmission siting authority should serve a copy of the Code of Conduct on all landowners along the proposed route whose property is to be purchased, subject to easement rights or borders the transmission corridor. The Code of Conduct should also be available on the applicant's website.	• Exhibit 18	



Pennsylvania Code Section*	PA PUC Regulation Requirement	Location in Application	Associated Tables/Figures
69.3102 (c)	Applicants for transmission siting authority should provide prior notice to the Commission's Office of Communications of informational presentations to community groups by the public utility scheduled after the filing of the transmission siting application so that the Commission, OCA and other interested parties can attend meetings or obtain copies of information being disseminated at the presentations.	At this time, no informal presentations are scheduled for after the Application is filed.	Tancor gares
69.3103	Eminent domain filing requirements	Not applicable.	
69.3104	Exemption from municipal zoning standards	Not applicable.	
69.3105 (1)	Transmission applicants should utilize a combination of transmission route evaluation procedures including highlevel GIS data, traditional mapping (including US Geological Survey data and compilation), aerial maps and analysis of physical site-specific constraints raised by affected landowners.	• Exhibit 11 (Route Selection Study)	
69.3105 (2)	Transmission applicants should summarize the status of property acquisitions (including fee simple acquisitions and rights of way/easements) as part of the application. The applicant should provide the current status and continuing updates on property acquisition litigation or settlements during the course of the siting proceeding.	• Statement No. 4	
69.3105 (3)(i)	In providing information regarding the reasonable alternative routes the utility actively considered in its final phase of the route selection process, and the relative merits of each, in accordance with §57.72(c)(10), the applicant should include the following information: The environmental, historical, cultural and aesthetic considerations of each route.	<ul> <li>Application, Section II.G</li> <li>Exhibit 11 (Route Selection Study)</li> </ul>	• Exhibit 11, Section 5.0
69.3105 (3)(ii)	The proximity of these alternative routes to residential and non-residential structures.	• Exhibit 11 (Route Selection Study)	• Section 5.2.2.1



Pennsylvania Code Section*	PA PUC Regulation Requirement	Location in Application	Associated Tables/Figures
69.3105 (3)(iii)	The applicant's consideration of relevant existing rights of way.	• Exhibit 11 (Route Selection Study)	runes/rigures
69.3105 (3)(iv)	The comparative construction costs associated with each route.	• Exhibit 11 (Route Selection Study)	• Section 5.0
69.3105 (4)	With reference to the proposed route, applicants should provide a summary of efforts made to contact and solicit assistance from local governments and non-governmental organizations regarding areas encompassed within the requirement of §57.72(c)(8).	• Exhibit 11 (Route Selection Study)	
69.3106 (1)	A matrix or list showing all expected federal, state and local government regulatory permitting or licensing approvals that may be required for the project at the time the application is filed, the issuing agency, approximate timeline for approval and current status. The applicant should provide an update on the status of the regulatory permitting/licensing approvals as the case progresses.	• Exhibit 14	
69.3107(a)(1)	Applicants for transmission line siting authority should provide a detailed vegetation management plan that includes the following components: A general description of the utility's vegetation management plan.	• Exhibit 43	
69.3107(a)(2)	Factors that dictate when each method, including aerial spraying, is utilized.	• Exhibit 43	
69.3107(a)(3)	Vegetation management practices near aquatic and other sensitive locations.	• Exhibit 43	
69.3107(a)(4)	Notice procedures to affected landowners regarding vegetation management practices.	• Exhibit 18	
69.3107(a)(5)	Provision of a copy of a landowner maintenance agreement that describes the duties and responsibilities of landowners and the utility for vegetation management to the extent utilized.	Not Applicable.	



Pennsylvania Code Section*	PA PUC Regulation Requirement	Location in Application	Associated Tables/Figures
69.3107(b)(1)	Transmission siting applications should include the following: A description of the EMF mitigation procedures that the utility proposes to utilize along the transmission line route. This description should include a statement of policy approach for evaluating design and siting alternatives and a description of the proposed measures for mitigating EMF impacts.	• Application, Section II.N	

\*Pennsylvania Code 57.71 – 57.75 relates to "Commission Review of Siting and Construction of Electric Transmission Lines". Pennsylvania Code 69.3101 – 69.3107 relates to "General Orders, Policy Statements, and Guidelines on Fixed Utilities". Sections described within Attachment 1 pertain specifically to those items required to be included for a transmission line application filing.



# BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

APPLICATION **OF MID-ATLANTIC:** INTERSTATE TRANSMISSION, FILED PURSUANT TO 52 PA. CODE: **Docket No. A-2025-**CHAPTER 57, SUBCHAPTER G, FOR APPROVAL **OF** THE **SITING** CONSTRUCTION OF THE CARROLL-230 **KILOVOLT HUNTERSTOWN** TRANSMISSION LINE LOCATED STRABAN, MOUNT PLEASANT, MOUNT JOY, **AND GERMANY** TOWNSHIPS, ADAMS COUNTY, PENNSYLVANIA

# **VERIFICATION**

I, Mary E. Anderson, state that I am a Supervisor of Transmission Siting at FirstEnergy Service Company; that I am authorized to make this Verification on behalf of MAIT and that the facts set forth are true and correct to the best of my knowledge, information and belief. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

August 8, 2025

Mary E. Anderson

Mary E. Anderson