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December 17, 2024

BY ELECTRONIC FILING

Mr. Bernard Logan, Clerk
c/o Document Control Center
State Corporation Commission
1300 East Main Street
Tyler Building – 1st Floor
Richmond, Virginia 23219

Application of Virginia Electric and Power Company
For approval and certification of electric facilities:
Line #2183 230 kV Evergreen Mills Loop
Case No. PUR-2024-00225

Dear Mr. Logan:

Please find enclosed for electronic filing in the above-captioned proceeding the application for approval of electric transmission facilities on behalf of Virginia Electric and Power Company (the "Company"). This filing contains the Application, Appendix, Direct Testimony, and DEQ Supplement, including attachments.

As indicated in Section II.A.12.b of the Appendix, an electronic copy of the map of the Virginia Department of Transportation "General Highway Map" for Loudoun County, as well as the digital geographic information system ("GIS") map required by § 56-46.1 of the Code of Virginia, which is Attachment II.A.2 to the Appendix, were provided via an e-room to the Commission's Division of Public Utility Regulation on December 17, 2024.

Please do not hesitate to call if you have any questions regarding the enclosed.

Highest regards,

Vishwa B. Link

Enclosures

cc: William H. Chambliss, Esq.
Mr. David Essah (without enclosures)

Mr. Neil Joshipura (without enclosures)
Mr. Michael A. Cizenski (without enclosures)
David J. DePippo, Esq.
Charlotte P. McAfee, Esq.
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Jontille D. Ray, Esq.
Etahjayne J. Harris, Esq.
Alexis Hills, Esq.

Dominion Energy®

Application, Appendix, DEQ Supplement, Direct Testimony and Exhibits of Virginia Electric and Power Company

Before the State Corporation Commission of Virginia

Line #2183 230kV Evergreen Mills Loop

Application No. 345

Case No. PUR-2024-00225

Filed: December 17, 2024

Volume 1 of 2

COMMONWEALTH OF VIRGINIA
BEFORE THE
STATE CORPORATION COMMISSION

APPLICATION OF

VIRGINIA ELECTRIC AND POWER COMPANY

FOR APPROVAL AND CERTIFICATION
OF ELECTRIC FACILITIES

Line #2183 230kV Evergreen Mills Loop

Application No. 345

Containing Information in Response to
"Guidelines for Transmission Line Applications Filed Under title 56 of the Code of Virginia."

Case No. PUR-2024-00225

Filed: December 17, 2024

COMMONWEALTH OF VIRGINIA

STATE CORPORATION COMMISSION

APPLICATION OF	)	
	)	
VIRGINIA ELECTRIC AND POWER COMPANY	)	Case No. PUR-2024-00225
	)	
For approval and certification of electric facilities: Line #2183 230 kV Evergreen Mills Loop	)	
	)	

APPLICATION OF VIRGINIA ELECTRIC AND POWER COMPANY FOR APPROVAL AND CERTIFICATION OF ELECTRIC FACILITIES: LINE #2183 230 KV EVERGREEN MILLS LOOP

Pursuant to § 56-46.1 of the Code of Virginia ("Va. Code") and the Utility Facilities Act, Va. Code § 56-265.1 *et seq.*, Virginia Electric and Power Company ("Dominion Energy Virginia" or the "Company"), by counsel, files with the State Corporation Commission of Virginia (the "Commission") this application for approval and certification of electric facilities (the "Application"). In support of its Application, Dominion Energy Virginia respectfully shows as follows:

1. Dominion Energy Virginia is a public service corporation organized under the laws of the Commonwealth of Virginia furnishing electric service to the public within its Virginia service territory. The Company also furnishes electric service to the public in portions of North Carolina. Dominion Energy Virginia's electric system—consisting of facilities for the generation, transmission, and distribution of electric energy—is interconnected with the electric systems of neighboring utilities and is a part of the interconnected network of electric systems serving the continental United States. By reason of its operation in two states and its interconnections with other utilities, the Company is engaged in interstate commerce.

2. In order to perform its legal duty to furnish adequate and reliable electric service, Dominion Energy Virginia must, from time to time, replace existing transmission facilities or construct new transmission facilities in its system. The electric facilities proposed in this Application are necessary so that Dominion Energy Virginia can continue to provide reliable electric service to its customers, consistent with applicable reliability standards.

3. In this Application, in order to maintain reliable service for the overall growth in the area, and to comply with mandatory North American Electric Reliability Corporation ("NERC") Reliability Standards, Dominion Energy Virginia proposes, in Loudoun County, Virginia, to construct: (1) a new approximately 0.6-mile 230 kV Line #2183 Loop by cutting the 230 kV Brambleton - Poland Road Line #2183 at Evergreen Mills Junction and looping in and out of the Evergreen Mills Switching Station, resulting in: (i) 230 kV Brambleton - Evergreen Mills Line #2210 and (ii) 230 kV Evergreen Mills - Poland Road Line #2183; and (2) install two additional strings of breakers (totaling four) in a breaker-and-a-half scheme at Evergreen Mills Switching Station to allow for two additional 230 kV terminations of 230 kV Brambleton-Evergreen Mills Line #2210 and 230 kV Evergreen Mills - Poland Road Line #2183. The third and fourth string will consist of two 230 kV breakers with make ready work for a third breaker on each string to be added in the future to allow for the customer's third and fourth 230 kV delivery. The Line #2183 Loop and breaker installation are collectively referred to as the "Project."

4. The Company proposed to construct the Project in two parts in Case No. PUR-2019-00191 ("Evergreen Mills Part A"). During Part A, the Company constructed the Evergreen Mills Switching Station and the Line #2172 Loop. For Part B, the Company now proposes to construct the Line #2183 Loop and to install the remaining breakers at the Evergreen Mills Switching Station.

5. The Northern Virginia data center market is spread across Loudoun, Fairfax, and Prince William Counties. Loudoun County's "Data Center Alley," which is generally bounded by Gloucester Parkway to the north, Dulles Greenway to the south, Ashburn Village Parkway to the west, and Sully Road (Route 28) to the east, boasts the world's largest concentration of data centers. The combination of competitive colocation / cloud environment, fiber connectivity, strategic geographic location, low risk of business disruptions, affordable and reliable power, and the business climate in Virginia has created the largest market for data center capacity in the United States. The Project is needed to maintain reliable service for the overall load growth in the Project area and to comply with mandatory NERC Reliability Standards.

6. The Company has a double circuit corridor originating from Brambleton Substation consisting of what the Company will refer to herein as the "Yardley Line" and the "Poland Line." Recent transmission projects have modified the Yardley and Poland Lines as compared to how they were originally defined in the Evergreen Mills Part A filing. Evergreen Mills Switching Station was approved by Final Order of the Commission on May 22, 2020, in Case PUR-2019-00191. The station was constructed and placed in service on May 6, 2021. Mars Switching Station was approved by Final Order of the Commission on April 5, 2023, in Case PUR-2022-00183. The station is currently being constructed and is expected to be placed in service by June 1, 2025. Aviator Switching Station was approved by Final Order of the Commission on November 28, 2022. The station was constructed and placed in service on September 30, 2024. The application for approval of Aviator-Takeoff 230kV double circuit was filed with the Commission on July 17, 2024, in Case PUR-2024-00131. If approved, this station is expected to be placed in service by August 1, 2027.

7. With the additions of Evergreen Mills and Mars Switching Stations, the "Yardley Line" consists of 230 kV Brambleton - Evergreen Mills Line #2172, 230 kV Evergreen Mills - Yardley Ridge Line #2209,[1] 230 kV Yardley Ridge - Cabin Run Line #2213, and future 230 kV Cabin Run - Mars Line #2287. After additions of Aviator Switching Station and Aviator-Takeoff 230 kV double circuit, the "Poland Line" consists of 230 kV Brambleton - Poland Road Line #2183 and 230 kV Poland Road - Aviator Line #2221. The Poland Line terminates at Aviator as a result the Aviator-Takeoff project.

8. As part of the 2022 RTEP Window 2, PJM identified a 300 MW N-1-1 load drop violation (NERC Category P6 contingency) for the loss of 230 kV Brambleton - Evergreen Mills Line #2172 and 230kV Cabin Run - Mars Line #2287 in 2027. This contingency drops all substations along the "Yardley Line" described above. Specifically Evergreen Mills, Yardley Ridge, and Cabin Run substations are dropped. The combined load of these three substations in the 2022 RTEP Window 2 summer case was 316.55 MW. In order to comply with NERC Reliability Criteria and to solve the 300 MW violation, the Company proposes the Project to be in service by summer 2027.

9. For the Line #2183 Loop, the existing right-of-way ("ROW") to be used is 160 feet in width and will parallel Line # 2172 and Line #2209 to the Evergreen Mills Substation. The Proposed Route will extend for approximately 70 feet over an existing 50-foot-wide sanitary sewer easement located adjacent to Evergreen Mills Road. Due to the opposing angles of the County sewer easement and the Proposed Route alignments, the estimated length of the sanitary easement that would be crossed by ROW associated with the Proposed Route is 220 feet. The Company is proposing one proposed route for Commission consideration and notice.

10. The desired in-service target date for the Project is May 17, 2027. The Company estimates it will take approximately 20 months for detailed engineering, materials procurement, permitting, real estate, and construction after a final order from the Commission. Accordingly, to support this estimated construction timeline and construction plan, the Company respectfully requests a final order by September 15, 2025. Should the Commission issue a final order by September 15, 2025, to accommodate long-lead materials procurement, the Company estimates that construction should begin around September 15, 2026, and be completed by May 17, 2027. This schedule is contingent upon obtaining the necessary permits and outages, the latter of which may be particularly challenging due to the amount of new load growth, rebuilds, and new builds scheduled to occur in this load area. Dates may need to be adjusted based on permitting delays or design modifications to comply with additional agency requirements identified during the permitting application process, as well as the ability to schedule outages, and unpredictable delays due to labor shortages, or materials/supply issues.

11. In addition, the Company is actively monitoring regulatory changes and requirements associated with the Northern long-eared bat ("NLEB") and how they could potentially impact construction timing associated with time of year restrictions ("TOYRs"). On October 15, 2024, the U.S. Fish and Wildlife Service ("USFWS") issued the NLEB Final Guidance for development projects. The USFWS Interim Guidance for the NLEB expired on November 30, 2024, and the Final Guidance took effect.

12. The Company is also monitoring regulatory changes associated with the potential up-listing of the Tricolored bat ("TCB"). The Company is anticipating the TCB will be listed; therefore, the Company assumes any regulatory changes associated with the potential listing of the TCB will affect these Projects. On September 14, 2022, the TCB was proposed to be listed as

Endangered by the USFWS. USFWS extended its Final Rule issuance target from September 2023 to the end of 2024. At this time, the TCB Final Rule has not been issued.

13. In October 2024 USFWS issued a final NLEB and TCB Range-wide Determination Key ("Dkey") to allow project proponents to assess project impacts, practicable avoidance and minimization measures, and consultation requirements under the final NLEB guidance and the eventual TCB listing ahead of the final decision. The Company will utilize the DKey to further assess project impacts and determine appropriate avoidance and minimization measures to ensure compliance with state and federal regulations when the Projects enter permitting.

14. Any adjustments to this Project schedule resulting from these or similar challenges could necessitate a minimum of a six- to twelve-month delay in the targeted in-service date. Accordingly, for purposes of judicial economy, the Company requests that the Commission issue a final order approving both a desired in-service target date (*i.e.*, May 17, 2027) and an authorization sunset date (*i.e.*, May 17, 2028) for energization of the Project.

15. The estimated conceptual cost of the Project is approximately $9.46 million (in 2024 dollars), which includes $6.72 million for transmission-related work and $2.74 million for substation-related work.

16. Based on consultations with the Virginia Department of Environmental Quality ("DEQ"), the Company has developed a supplement ("DEQ Supplement") containing information designed to facilitate review and analysis of the proposed facilities by the DEQ and other relevant agencies. The DEQ Supplement is attached to this Application.

17. Based on the Company's experience, the advice of consultants, and a review of published studies by experts in the field, the Company believes that there is no causal link to harmful health or safety effects from electric and magnetic fields generated by the Company's

existing or proposed facilities. Section IV of the Appendix provides further details on Dominion Energy Virginia's consideration of the health aspects of electric and magnetic fields.

18. Section V of the Appendix provides a proposed route description for public notice purposes and a list of federal, state, and local agencies and officials that the Company has or will notify about the Application.

19. In addition to the information provided in the Appendix and the DEQ Supplement, this Application is supported by the prefiled direct testimony of Company Witnesses Bradley S. Lowe, Shannon L. Snare, and Stefan R. Brooks.

20. Finally, Dominion Energy Virginia requests that, to the extent the Commission modifies the deadline for responses to interrogatories and requests for production of documents in 5 VAC 5-20-260, the Commission grant the parties seven calendar days in order to afford the Company adequate time to provide comprehensive responses to discovery.

WHEREFORE, Dominion Energy Virginia respectfully requests that the Commission:

(a) direct that notice of this Application be given as required by § 56-46.1 of the Code of Virginia;

(b) approve pursuant to § 56-46.1 of the Code of Virginia the construction of the Project; and,

(c) grant a certificate of public convenience and necessity for the facilities under the Utility Facilities Act, § 56-265.1 *et seq.* of the Code of Virginia.

VIRGINIA ELECTRIC AND POWER COMPANY

By: *[s] Vishwa B. Link*
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December 17, 2024

COMMONWEALTH OF VIRGINIA
BEFORE THE
STATE CORPORATION COMMISSION

APPLICATION OF

VIRGINIA ELECTRIC AND POWER COMPANY

FOR APPROVAL AND CERTIFICATION OF ELECTRIC TRANSMISSION FACILITIES

Line #2183 230kV Evergreen Mills Loop

Application No. 345

Appendix

Containing Information in Response to
"Guidelines for Transmission Line Applications Filed Under title 56 of the Code of Virginia"

Case No. PUR-2024-00225

Filed: December 17, 2024

TABLE OF CONTENTS

EXECUTIVE SUMMARY

In order to maintain reliable service for the overall growth in the area and to comply with mandatory North American Electric Reliability Corporation ("NERC") Reliability Standards, Virginia Electric and Power Company ("Dominion Energy Virginia" or the "Company") proposes, in Loudoun County, Virginia, to:

i. Construct a new approximately 0.6-mile 230 kV Line #2183 Loop by cutting the 230 kV Brambleton-Poland Road Line #2183 at Evergreen Mills Junction and looping in and out of the Evergreen Mills Switching Station, resulting in: (i) 230 kV Brambleton - Evergreen Mills Line #2210 and (ii) 230 kV Evergreen Mills - Poland Road Line #2183; and

ii. Install two additional strings of breakers (totaling four) in a breaker-and-a-half scheme at Evergreen Mills Switching Station to allow for two additional 230 kV terminations of 230 kV Brambleton - Evergreen Mills Line #2210 and 230kV Evergreen Mills - Poland Road Line #2183. The third and fourth string will consist of two 230 kV breakers with make ready work for a third breaker on each string to be added in the future to allow for the customer's third and fourth 230 kV delivery.

The Line #2183 Loop and breaker installation are collectively referred to as "the Project."

The Company proposed to construct the Project in two parts in Case No. PUR-2019-00191 ("Evergreen Mills Part A"). During Part A, the Company constructed the Evergreen Mills Switching Station and the Line #2172 Loop. During Part B, the Company proposes to construct the Line #2183 Loop and to install the remaining breakers at the Evergreen Mills Switching Station.

The Project is needed to maintain reliable service for the overall load growth in the Project area, and to comply with mandatory NERC Reliability Standards. The Northern Virginia data center market is spread across Loudoun, Fairfax, and Prince William Counties. Loudoun County's "Data Center Alley," which is generally bounded by Gloucester Parkway to the north, Dulles Greenway to the south, Ashburn Village Parkway to the west, and Sully Road (Route 28) to the east, boasts the world's largest concentration of data centers. The combination of competitive colocation / cloud environment, fiber connectivity, strategic geographic location, low risk of business disruptions, affordable and reliable power, and the business climate in Virginia has created the largest market for data center capacity in the United States.

For the Line #2183 Loop, the existing right-of-way ("ROW") to be used is 160 feet in width and will parallel Line # 2172 and Line #2209 to the Evergreen Mills Substation. The Proposed Route will extend for approximately 70 feet over an existing 50-foot-wide sanitary sewer easement located adjacent to Evergreen Mills Road. Due to the opposing angles of the County sewer easement and the Proposed Route alignments, the estimated length of the sanitary easement that would be crossed by ROW associated with the Proposed Route is 220 feet.

The Company is proposing one proposed route for Commission consideration and notice. Discussion of this proposed route and the route selection process is provided in Section II of the Appendix.

The estimated conceptual cost of the Project utilizing the Proposed Route is approximately $9.46 million, which includes approximately $6.72 million for transmission-related work and approximately $2.74 million for substation-related work (2024 dollars).

The desired in-service target date for the Project is May 17, 2027. The Company estimates it will take approximately 20 months for detailed engineering, materials procurement, permitting, real estate, and construction after a final order from the Commission. Accordingly, to support this estimated construction timeline and construction plan, the Company respectfully requests a final order by September 15, 2025. Should the Commission issue a final order by September 15, 2025, to accommodate long-lead materials procurement, the Company estimates that construction should begin around September 15, 2026, and be completed by May 17, 2027. This schedule is contingent upon obtaining the necessary permits and outages, the latter of which may be particularly challenging due to the amount of new load growth, rebuilds, and new builds scheduled to occur in this load area. Dates may need to be adjusted based on permitting delays or design modifications to comply with additional agency requirements identified during the permitting application process, as well as the ability to schedule outages, and unpredictable delays due to labor shortages, or materials/supply issues.

In addition, the Company is actively monitoring regulatory changes and requirements associated with the Northern long-eared bat ("NLEB") and how they could potentially impact construction timing associated with time of year restrictions ("TOYRs"). On October 15, 2024, the U.S. Fish and Wildlife Service ("USFWS") issued the NLEB Final Guidance for development projects. The USFWS Interim Guidance for the NLEB expired on November 30, 2024, and the Final Guidance took effect.

The Company is also monitoring regulatory changes associated with the potential up-listing of the Tricolored bat ("TCB"). The Company is anticipating the TCB will be listed; therefore, the Company assumes any regulatory changes associated with the potential listing of the TCB will affect these Projects. On September 14, 2022, the TCB was proposed to be listed as Endangered by the USFWS. USFWS extended its Final Rule issuance target from September 2023 to the end of 2024. At this time, the TCB Final Rule has not been issued.

In October 2024 USFWS issued a final NLEB and TCB Range-wide Determination Key ("Dkey") to allow project proponents to assess project impacts, practicable avoidance and minimization measures, and consultation requirements under the final NLEB guidance and the eventual TCB listing ahead of the final decision. The Company will utilize the DKey to further assess project impacts and determine appropriate avoidance and minimization measures to ensure compliance with state and federal regulations when the Projects enter permitting.

Any adjustments to this Project schedule resulting from these or similar challenges could necessitate a minimum of a six- to twelve-month delay in the targeted in-service date. Accordingly, for purposes of judicial economy, the Company requests that the Commission issue

a final order approving both a desired in-service target date (*i.e.*, May 17, 2027) and an authorization sunset date (*i.e.*, May 17, 2028) for energization of the Project.

I. NECESSITY FOR THE PROPOSED PROJECT

A. State the primary justification for the proposed project (for example, the most critical contingency violation including the first year and season in which the violation occurs). In addition, identify each transmission planning standard(s) (of the Applicant, regional transmission organization ("RTO"), or North American Electric Reliability Corporation) projected to be violated absent construction of the facility.

Response: The Project is necessary to maintain reliable service for the overall load growth in the Loudoun County Load Area and to comply with mandatory NERC Reliability Standards. See Attachment I.A.1 for an overview map of the proposed Project along the Proposed Route.

Dominion Energy Virginia's transmission system is responsible for providing transmission service (i) for redelivery to the Company's retail customers; (ii) to Appalachian Power Company, Old Dominion Electric Cooperative, Northern Virginia Electric Cooperative, Central Virginia Electric Cooperative, and Virginia Municipal Electric Association for redelivery to their retail customers in Virginia; and, (iii) to North Carolina Electric Membership Corporation and North Carolina Eastern Municipal Power Agency for redelivery to their customers in North Carolina (collectively, the "DOM Zone"). The Company needs to be able to maintain the overall, long-term reliability of its transmission system to meet its customers' evolving power needs in the future.

Dominion Energy Virginia is part of the PJM Interconnection, LLC ("PJM") regional transmission organization ("RTO"), which provides service to a large portion of the eastern United States. PJM is currently responsible for ensuring the reliability and coordinating the movement of electricity through all or parts of Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia, and the District of Columbia. This service area has a population of approximately 65 million and, on August 2, 2006, set a record high of 165,563 MW for summer peak demand, of which Dominion Energy Virginia's load portion was approximately 19,256 MW. On August 2, 2024, the Company set a record high of 22,654 MW for summer peak demand. On December 24, 2022, the Company set a winter and all-time record demand of 22,189 MW. Based on the 2024 PJM Load Forecast, the DOM Zone is expected to grow with average growth rates of 5.6% summer and 5.1% winter over the next 10 years compared to the PJM average of 1.7% and 2.0% over the same period for the summer and winter, respectively.[1]

Dominion Energy Virginia is also part of the Eastern Interconnection transmission grid, meaning its transmission system is interconnected, directly or indirectly, with all of the other transmission systems in the United States and Canada between the

[1] A copy of the 2024 PJM Load Report is available at the following: https://www.pjm.com/-/media/library/reports-notices/load-forecast/2024-load-report.ashx. *See, in particular,* page 3 (PJM) and pages 28, 35, 39 (DOM Zone).

Rocky Mountains and the Atlantic coast, except for Quebec and most of Texas. All of the transmission systems in the Eastern Interconnection are dependent on each other for moving bulk power through the transmission system and for reliability support. Dominion Energy Virginia's service to its customers is extremely reliant on a robust and reliable regional transmission system.

NERC has been designated by the Federal Energy Regulatory Commission ("FERC") as the electric reliability organization for the United States. Accordingly, NERC requires that the planning authority and transmission planner develop planning criteria to ensure compliance with NERC Reliability Standards. Mandatory NERC Reliability Standards require that a transmission owner ("TO") develop facility interconnection requirements that identify load and generation interconnection minimum requirements for a TO's transmission system, as well as the TO's reliability criteria.[2]

Federally mandated NERC Reliability Standards constitute minimum criteria with which all public utilities must comply as components of the interstate electric transmission system. Moreover, the Energy Policy Act of 2005 mandates that electric utilities must follow these NERC Reliability Standards and imposes fines on utilities found to be in noncompliance up to $1.3 million a day per violation.

PJM's Regional Transmission Expansion Plan ("RTEP") is the culmination of a FERC-approved annual transmission planning process that includes extensive analysis of the electric transmission system to determine any needed improvements.[3] PJM's annual RTEP is based on the effective criteria in place at the time of the analyses, including applicable standards and criteria of NERC, PJM, and local reliability planning criteria, among others.[4] Projects identified through the RTEP process are developed by the TO in coordination with PJM, and are presented at the Transmission Expansion Advisory Committee ("TEAC") meetings prior to inclusion in the RTEP, which is then presented for approval to the PJM Board of Managers (the "PJM Board").

Outcomes of the RTEP process include three types of transmission system upgrades or projects: (i) baseline upgrades are those that resolve a system reliability criteria violation, which can include planning criteria from NERC, ReliabilityFirst, SERC Reliability Corporation, PJM, and TOs; (ii) network upgrades are new or upgraded facilities required primarily to eliminate reliability criteria violations caused by proposed generation, merchant transmission, or long-term firm transmission service requests; and (iii) supplemental projects are projects initiated by the TO in

[2] The Company's Transmission Planning Criteria (effective September 1, 2024) can be found in Attachment 1 of the Company's Facility Interconnection Requirements ("FIR") document, which is available online at https://cdn-dominionenergy-prd-001.azureedge.net/-/media/pdfs/virginia/parallel-generation/sig-on-file--devet-facility-interconnection-requirements-rev23-eff-date-.

[3] PJM Manual 14B (effective June 27, 2024) focuses on the RTEP process and can be found at https://www.pjm.com/-/media/documents/manuals/m14b.ashx.

[4] *See* PJM Manual 14B, Attachment D: PJM Reliability Planning Criteria.

order to interconnect new customer load, address degraded equipment performance, improve operational flexibility and efficiency, and increase infrastructure resilience. The Project is classified as a baseline project initiated by the TO to address load growth deliverability and reliability. The PJM Board approved this Project on July 12, 2023. The PJM Upgrade ID is b3779. See Section I.J for a discussion of the PJM process as it relates to this Project.

NEED FOR THE PROJECT

As discussed in more detail below, the Project is needed to maintain reliable service for the overall load growth in the Project area, and to comply with mandatory NERC Reliability Standards. The Northern Virginia data center market is spread across Loudoun, Fairfax, and Prince William Counties. Loudoun County's "Data Center Alley," which is generally bounded by Gloucester Parkway to the north, Dulles Greenway to the south, Ashburn Village Parkway to the west, and Sully Road (Route 28) to the east, boasts the world's largest concentration of data centers. The combination of competitive colocation / cloud environment, fiber connectivity, strategic geographic location, low risk of business disruptions, affordable and reliable power, and the business climate in Virginia has created the largest market for data center capacity in the United States.

The Company has a double circuit corridor originating from Brambleton Substation consisting of what the Company will refer to herein as the "Yardley Line" and the "Poland Line." Recent transmission projects have modified the Yardley and Poland Lines as compared to how they were originally defined in the Evergreen Mills Part A filing. Evergreen Mills Switching Station was approved by Final Order of the Commission on May 22, 2020, in Case PUR-2019-00191. The station was constructed and placed in service on May 6, 2021. Mars Switching Station was approved by Final Order of the Commission on April 5, 2023, in Case PUR-2022-00183. The station is currently being constructed and is expected to be placed in service by June 1, 2025. Aviator Switching Station was approved by Final Order of the Commission on November 28, 2022. The station was constructed and placed in service on September 30, 2024. The application for approval of Aviator-Takeoff 230kV double circuit was filed with the Commission on July 17, 2024, in Case PUR-2024-00131. If approved, this station is expected to be placed in service by August 1, 2027.

With the additions of Evergreen Mills and Mars Switching Stations, the "Yardley Line" consists of 230 kV Brambleton - Evergreen Mills Line #2172, 230 kV Evergreen Mills - Yardley Ridge Line #2209,[5] 230 kV Yardley Ridge - Cabin Run Line #2213, and future 230 kV Cabin Run - Mars Line #2287. After additions of Aviator Switching Station and Aviator-Takeoff 230 kV double circuit, the "Poland Line" consists of 230 kV Brambleton - Poland Road Line #2183 and 230 kV Poland

Road - Aviator Line #2221. The Poland Line terminates at Aviator as a result the Aviator-Takeoff project.

The Project is needed to mitigate a NERC reliability violation and to maintain reliable service for overall load growth in the Project area. As part of the 2022 RTEP Window 2, PJM identified a 300 MW N-1-1 load drop violation (NERC Category P6 contingency) for the loss of 230 kV Brambleton - Evergreen Mills Line #2172 and 230kV Cabin Run - Mars Line #2287 in 2027. This contingency drops all substations along the "Yardley Line" described above. Specifically, Evergreen Mills, Yardley Ridge, and Cabin Run substations are dropped. The combined load of these three substations in the 2022 RTEP Window 2 summer case was 316.55 MW. In order to comply with NERC Reliability Criteria and to solve the 300 MW violation, the Company proposes the Project to be in service by summer 2027.

THE PROPOSED PROJECT

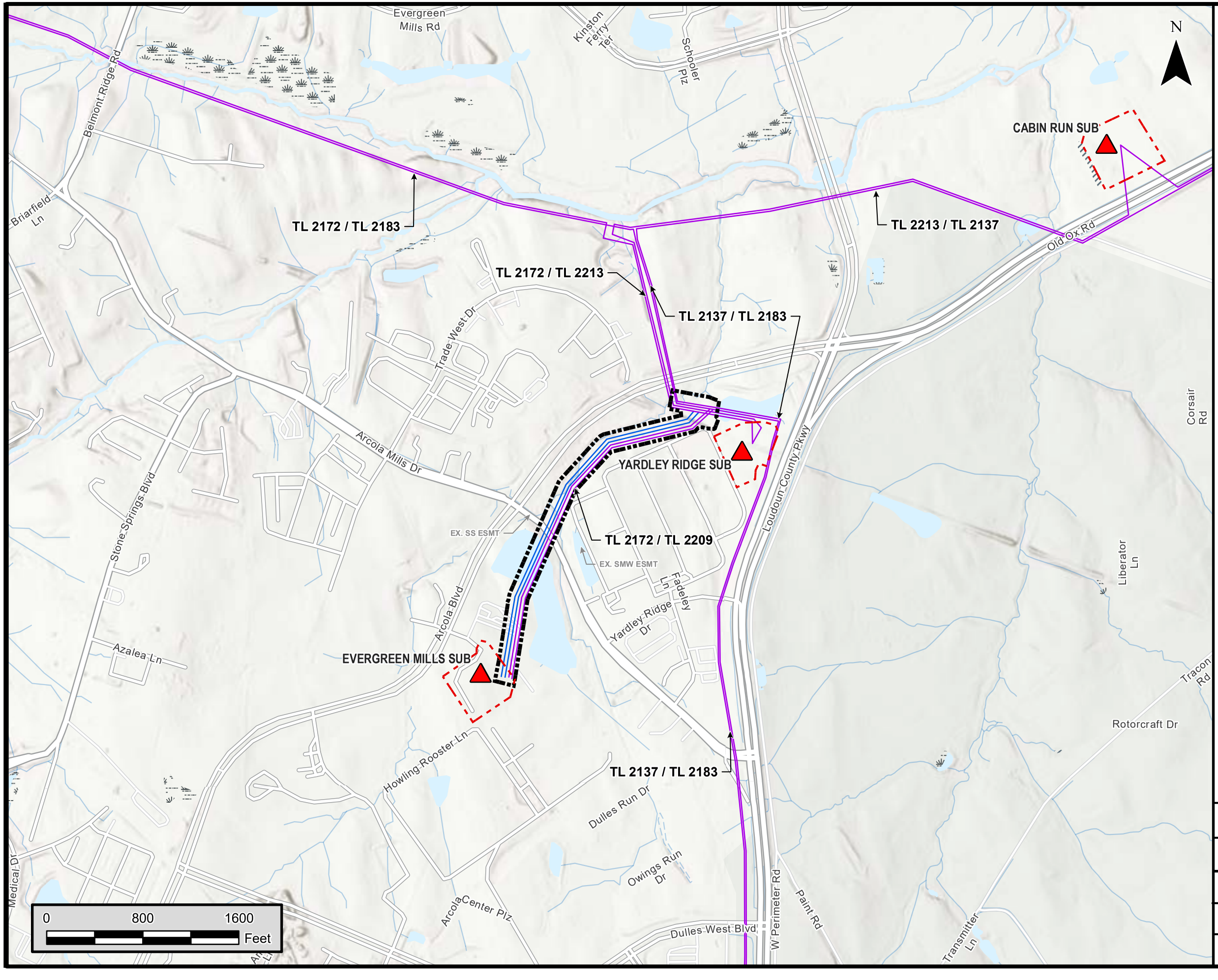
To maintain reliable service for the overall load growth in the area and to maintain compliance with mandatory NERC Reliability Standards, the Company proposes in Loudoun County, Virginia to construct a new approximately 0.6-mile 230 kV Line #2183 Loop by cutting the 230 kV Brambleton - Poland Road Line #2183 at Evergreen Mills Junction and looping into and out of the Evergreen Mills Switching Station, resulting in: (i) 230 kV Brambleton - Evergreen Mills Line #2210 and (ii) 230 kV Evergreen Mills - Poland Road Line #2183.

At the Evergreen Mills Switching Station during Part B, the Company proposes to build two additional strings of breakers (totaling four) in a breaker-and-a-half scheme to allow for two additional 230 kV terminations of 230 kV Brambleton - Evergreen Mills Line #2210 and 230 kV Evergreen Mills - Poland Road Line #2183. The third and fourth string will consist of two 230 kV breakers with make ready work for a third breaker on each string to be added in the future to allow for the customer's third and fourth 230 kV delivery. The proposed configuration of Evergreen Mills Switching Station is based on the customer's request for additional infrastructure. The Company's typical arrangement for the Project would be a six-breaker ring bus with two customer delivery points off the end busses.

Attachment I.A.2 provides a visual depiction and one-line diagram of the existing transmission system in the Project Area. Attachment I.A.3 provides a visual depiction and one-line diagram of the transmission system in the Project Area with the proposed Project.

***

In summary, the proposed Project will maintain reliable service for the overall load growth in the area and comply with the mandatory NERC Reliability Standards.



5

ATTACHMENT
I.A.1

TITLE:

PROJECT OVERVIEW MAP

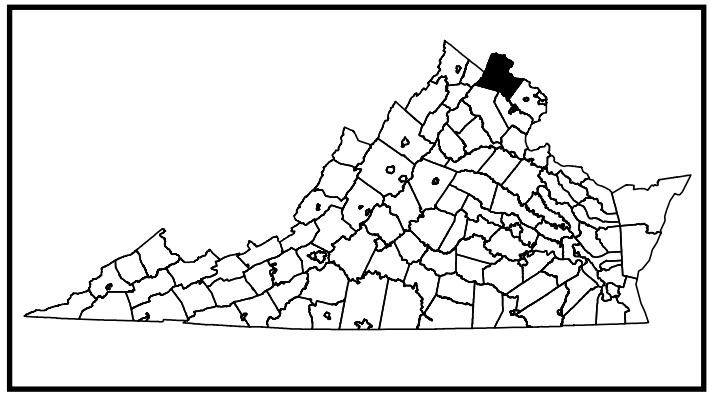
PROJECT:

EVERGREEN MILLS 230 KV LINE LOOP PART B

LEGEND

- EXISTING SUBSTATIONS
- EXISTING 230 KV TRANSMISSION LINES
- PROPOSED 230 KV TRANSMISSION LINE
- EXISTING SUBSTATION BOUNDARY
- PROJECT AREA

KEY PLAN

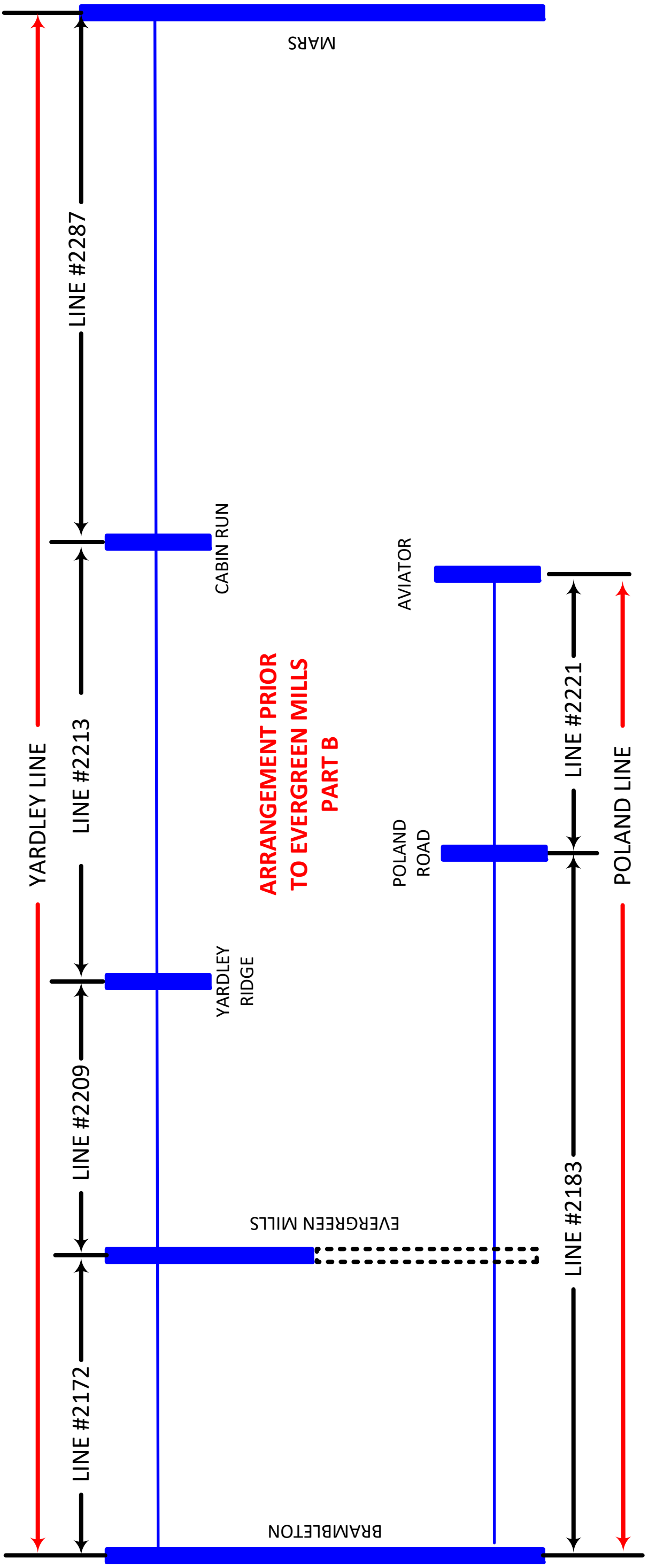


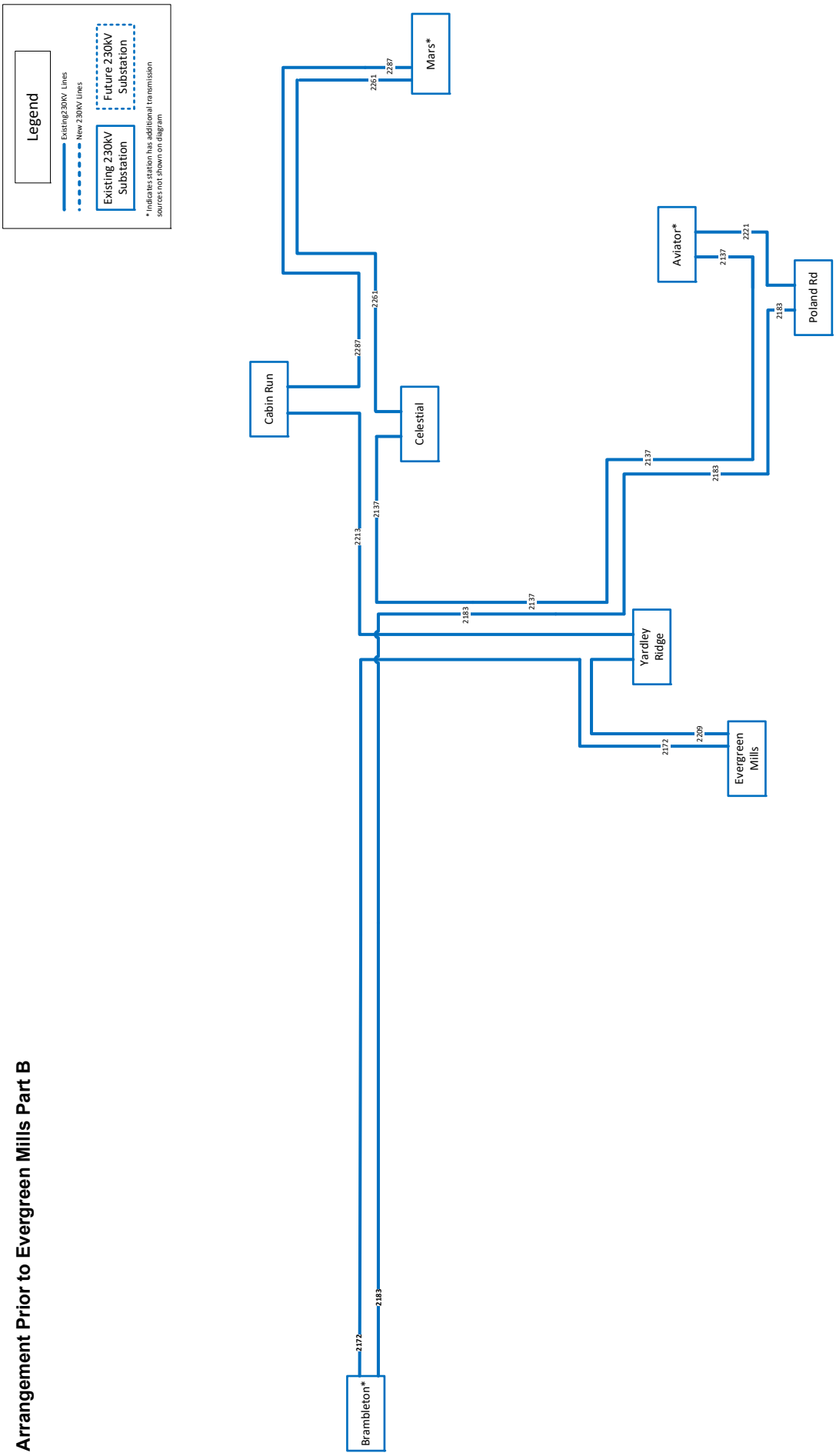
DOMINION PROJECT NUMBER: NW992802	PROJECT NUMBER: 50184751
DATE: 12/10/2024	
SCALE: 1" = 800 FEET	
PROJECT MANAGER: TL	
DRAWN BY: MGH	

Dominion Energy

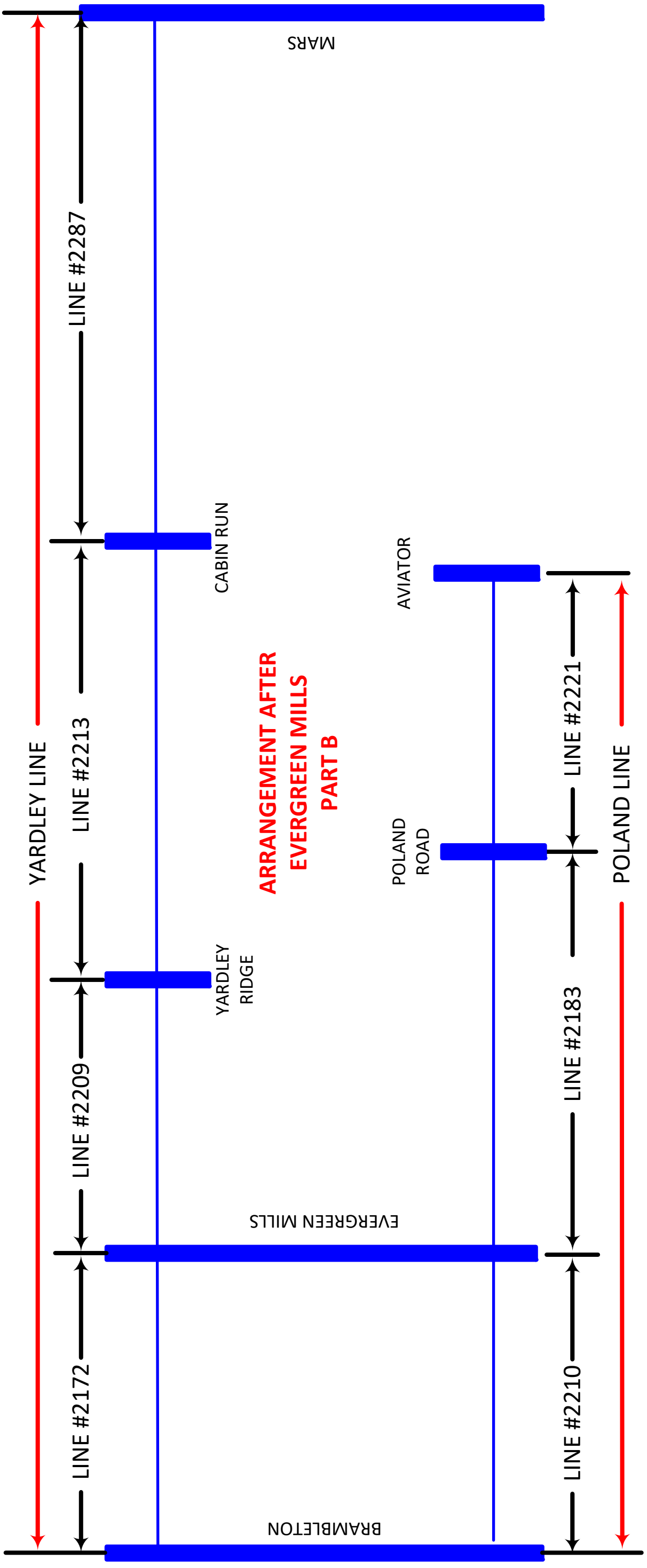
Dewberry

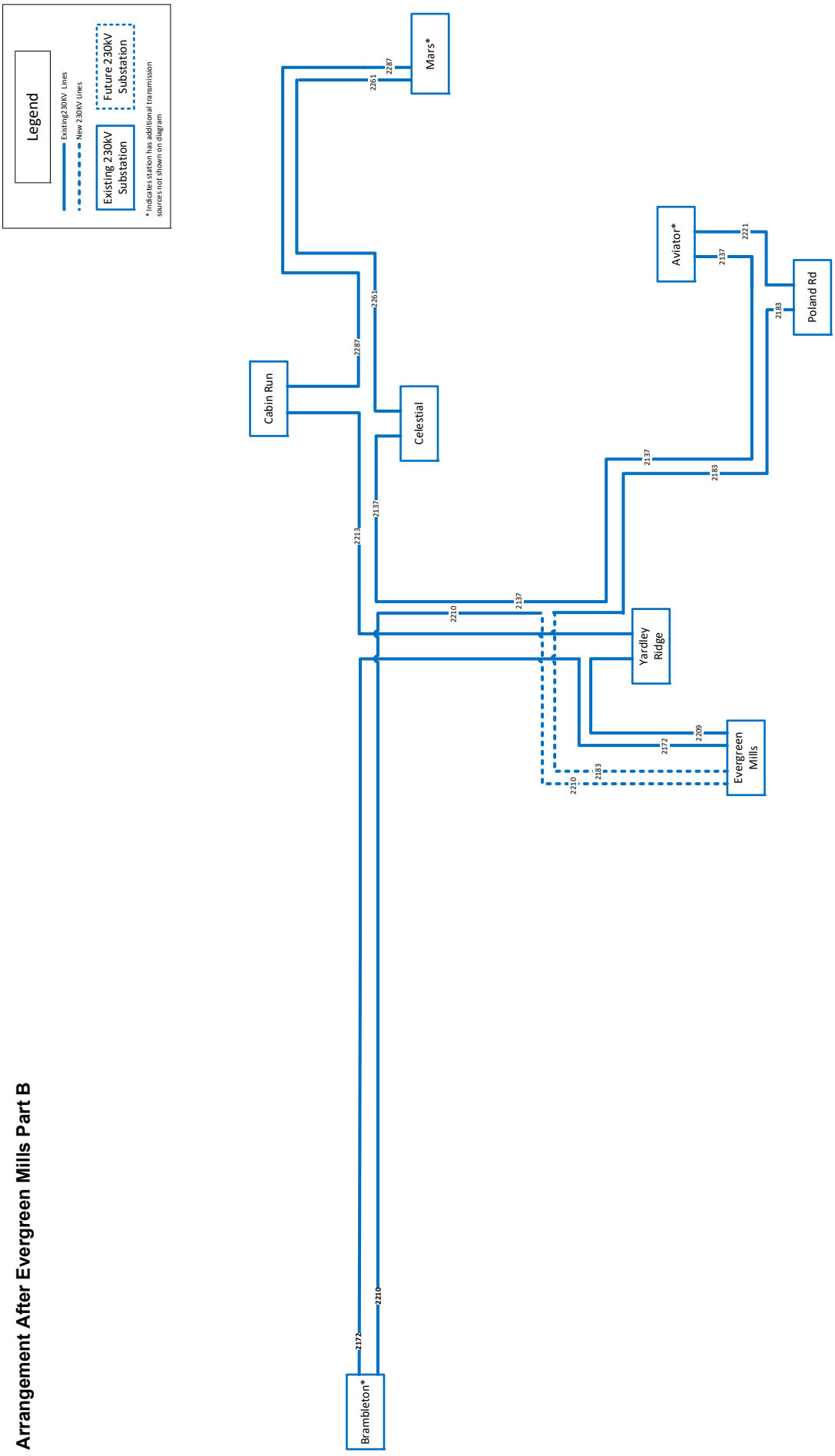
Attachment I.A.1


MARS
LINE #2287
CABIN RUN
YARDLEY LINE
LINE #2213
YARDLEY
RIDGE
LINE #2209
ARRANGEMENT PRIOR
TO EVERGREEN MILLS
PART B
AVIATOR
POLAND
ROAD
LINE #2221
POLAND LINE
LINE #2183
EVERGREEN MILLS
LINE #2172
BRAMBLETON



Arrangement Prior to Evergreen Mills Part B


MARS
LINE #2287
CABIN RUN
YARDLEY LINE
LINE #2213
YARDLEY
RIDGE
ARRANGEMENT AFTER
EVERGREEN MILLS
PART B
AVIATOR
POLAND
ROAD
LINE #2221
POLAND LINE
LINE #2209
LINE #2183
EVERGREEN MILLS
LINE #2172
LINE #2210
BRAMBLETON



Arrangement After Evergreen Mills Part B

I. NECESSITY FOR THE PROPOSED PROJECT

B. Detail the engineering justifications for the proposed project (for example, provide narrative to support whether the proposed project is necessary to upgrade or replace an existing facility, to significantly increase system reliability, to connect a new generating station to the Applicant's system, etc.). Describe any known future project(s), including but not limited to generation, transmission, delivery point or retail customer projects, that require the proposed project to be constructed. Verify that the planning studies used to justify the need for the proposed project considered all other generation and transmission facilities impacting the affected load area, including generation and transmission facilities that have not yet been placed into service. Provide a list of those facilities that are not yet in service.

Response:

(1) Engineering Justification for Project

Detail the engineering justifications for the proposed project (for example, provide narrative to support whether the proposed project is necessary to upgrade or replace an existing facility, to significantly increase system reliability, to connect a new generating station to the Applicant's system, etc.).

See Section I.A of the Appendix.

(2) Known Future Projects

Describe any known future project(s), including but not limited to generation, transmission, delivery point or retail customer projects, that require the proposed project to be constructed.

There are no future projects that have been presented to PJM which require the proposed project to be constructed. The need for the project is driven solely by the 300 MW N-1-1 load drop violation (NERC Category P6 contingency) described in Section I.A of the Appendix.

(3) Planning Studies

Verify that the planning studies used to justify the need for the proposed project considered all other generation and transmission facilities impacting the affected load area, including generation and transmission facilities that have not yet been placed into service.

Dominion Energy Virginia's Electric Transmission Planning group performs planning studies to ensure delivery of bulk power to a continuously changing customer demand under a wide variety of operating conditions. Studies are performed in coordination with the Company's RTO (*i.e.*, PJM) and in accordance with NERC Reliability Standards. In completing these studies, the Company

considered all other known generation and transmission facilities impacting the affected load area.

NERC Reliability Standards TPL-001 requirements R2, R5, and R6 require PJM, the Planning Coordinator ("PC") and Transmission Planner ("TP"), to have criteria. PJM's planning criteria outlined in Attachment D of Manual 14B requires the Company, as a TO, to follow NERC and Regional Planning Standards and criteria as well as the TO Standards filed in Dominion Energy Virginia's FERC 715 filings. The Company's FERC 715 filing contains the Dominion Energy Virginia Transmission Planning Criteria in Exhibit A of the FIR document.

The relevant planning criteria driving the need for this Project is:

1) N-1-1 contingencies load loss is limited to 300 MW (PJM Manual 14B Section 2.3.8, Attachment D, Attachment D-1, Attachment F)

(4) <u>Facilities List</u>

Provide a list of those facilities that are not yet in service.

All relevant facilities (both existing and planned) are listed in Section I.A.

I. NECESSITY FOR THE PROPOSED PROJECT

C. Describe the present system and detail how the proposed project will effectively satisfy present and projected future electrical load demand requirements. Provide pertinent load growth data (at least five years of historical summer and winter peak demands and ten years of projected summer and winter peak loads where applicable). Provide all assumptions inherent within the projected data and describe why the existing system cannot adequately serve the needs of the Applicant (if that is the case). Indicate the date by which the existing system is projected to be inadequate.

Response: The proposed Project will solve the 300 MW N-1-1 violation described in Section I.A by segmenting the Yardley Line such that the load at Evergreen Mills, Yardley Ridge, and Cabin Run can no longer be dropped as a result of any N-1-1 contingency.

The historical and projected load forecast for the Yardley Line is provided in Attachment I.C.1.

Based on current load projections, the system is projected to be inadequate by 2027 because of the Yardley Line 300 MW violation. The Company has proposed the Project to resolve the Yardley Line 300 MW violation.

I.C.1

Historical and Forecast MW Loads - Yardley Line

	Historical					Projected									
Station / Year	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**
Evergreen Mills	0	0	0	1.3	17.1	40.4	56.1	77.5	128.8	128.8	128.8	128.8	128.8	128.8	128.8
Yardley Ridge	32.6	52	76.5	96	101.7	103.4	105	108.4	109.7	110.1	110.3	110.4	110.4	110.5	110.5
Cabin Run	0	0	0	20	49.9	55.3	60.7	69.5	85	105.5	125.6	140.2	148.4	152.4	155.3
Yardley Line Total Load	**32.6**	**52**	**76.5**	**117.3**	**168.7**	**199.1**	**221.8**	**255.4**	**323.5**	**344.4**	**364.7**	**379.4**	**387.6**	**391.7**	**394.6**

I. NECESSITY FOR THE PROPOSED PROJECT

D. If power flow modeling indicates that the existing system is, or will at some future time be, inadequate under certain contingency situations, provide a list of all these contingencies and the associated violations. Describe the critical contingencies including the affected elements and the year and season when the violation(s) is first noted in the planning studies. Provide the applicable computer screenshots of single-line diagrams from power flow simulations depicting the circuits and substations experiencing thermal overloads and voltage violations during the critical contingencies described above.

Response: As part of the 2022 RTEP Window 2, PJM identified a 300 MW N-1-1 load drop violation (NERC Category P6 contingency) for the loss of 230 kV Brambleton - Evergreen Mills Line #2172 and 230 kV Cabin Run - Mars Line #2287. This contingency drops all substations along the "Yardley Line" described in Section I.A. Specifically Evergreen Mills, Yardley Ridge, and Cabin Run substations are dropped. The combined load of these three substations in the 2022 RTEP Window 2 summer case was 316.55 MW. In order to comply with NERC Reliability Criteria and to solve the 300 MW violation, the Company proposes the Project to be in service by summer 2027.

Figure 1 of Attachment I.D.1 shows a computer screenshot of the N-1-1 load drop results associated with the 2022 RTEP Window 2 summer case. In the columns label "First Cont Name" and "Second Cont Name", one of the contingency names contains "LN 9348". This contingency name was a temporary name given to the 230 kV Cabin Run - Mars transmission circuit. The new line name/number for this circuit is Line #2287. Figure 2 provides a screenshot showing the branch data for the 230 kV Cabin Run - Mars transmission circuit. Finally, Figure 3 of the attachment is a single line (slider diagram) that illustrates the Yardley Line. This single line diagram shows all loads at stations along the Yardley Line. The loads at these stations exceed 300 MW.

N-1-1 Analysis Load Drop Summary (Summer 2027 Case)

FG #	First Cont Name	Second Cont Name	TotalLoadLoss	PJM Accepting Proposals	Reasons For Exclusions	Comment
2022W2-N2-SLD1	DVP_P1-2: LN9348_SRT-A	DVP_P1-2: LN 2172_SRT-A	316.55	YES		Listed as flowgate 2022W1-N2-SLD3 from Window 1. Contingency update due to Immediate Need project inclusion.
2022W2-N2-SLD2	DVP_P1-2: LN 2172_SRT-A	DVP_P1-2: LN 9348_SRT-A	316.55	YES		Listed as flowgate 2022W1-N2-SLD4 from Window 1. Contingency update due to Immediate Need project inclusion.

2022W2-N2-SLD1 & 2022W2-N2-SLD2

Bus#	Bus Name	LoadMW
313730	6CABIN_RUN	111.3
313863	6YARDLEY	76.5
313827	6EVERGR MILL	128.8
		316.6

Figure 1: 2022 RTEP Window 2 - Summer N-1-1 load drop results

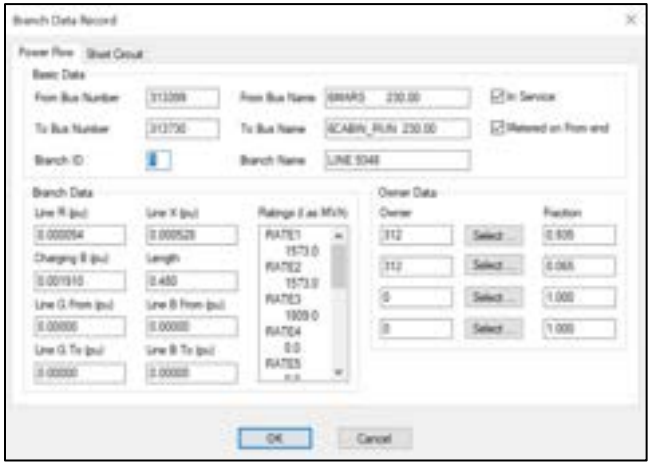


Figure 2: Branch Data for Line #2287 (Cabin Run - Mars)
[Line #9348 is a temporary line number]

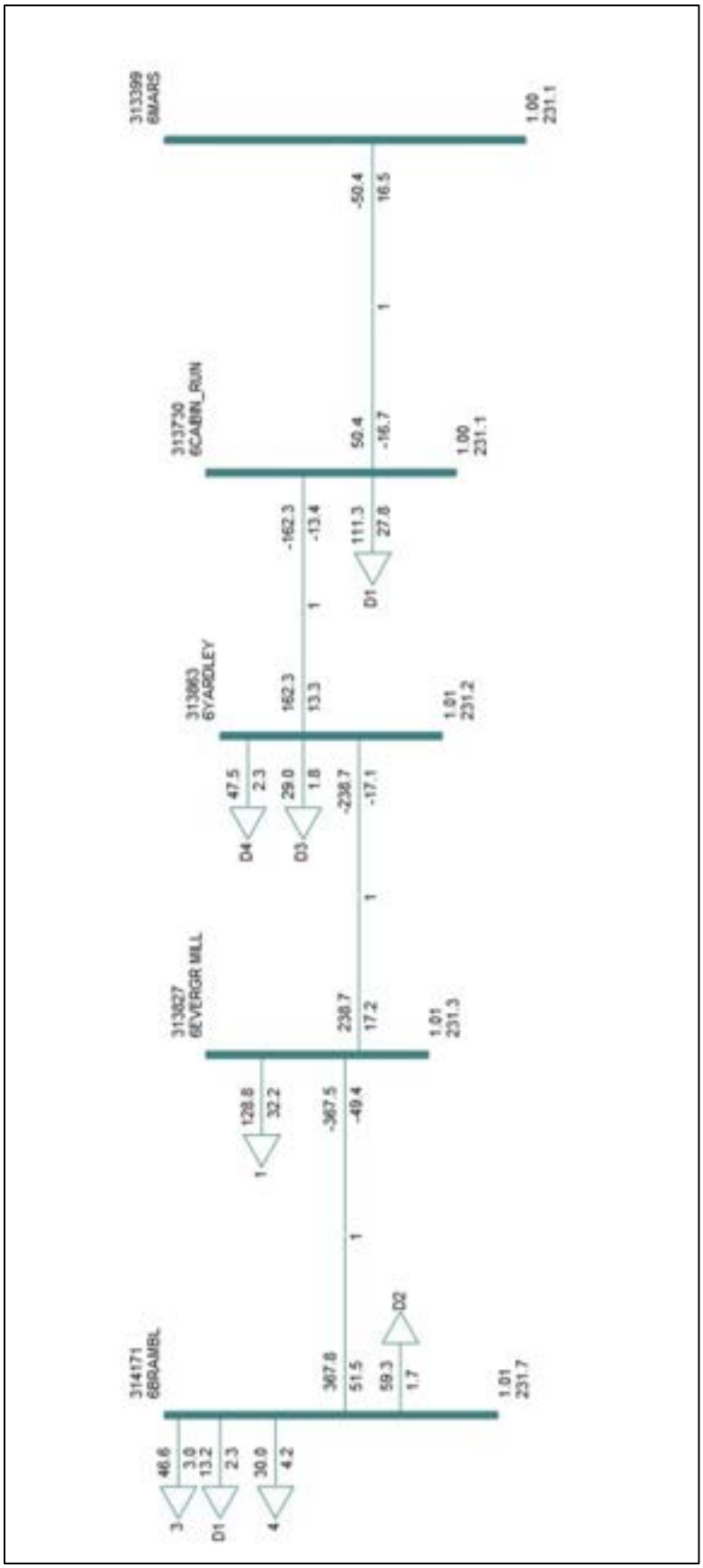


Figure 3: PSS/E Slider Diagram of "Yardley Line" showing loads at Evergreen Mills, Yardley Ridge, and Cabin Run

I. NECESSITY FOR THE PROPOSED PROJECT

E. Describe the feasible project alternatives, if any, considered for meeting the identified need including any associated studies conducted by the Applicant or analysis provided to the RTO. Explain why each alternative was rejected.

Response: No alternatives were considered.

Analysis of Demand-Side Resources:

Pursuant to the Commission's November 26, 2013 Order entered in Case No. PUE-2012-00029, and its November 1, 2018 Final Order entered in Case No. PUR-2018-00075 ("2018 Final Order"), the Company is required to provide analysis of demand-side resources ("DSM") incorporated into the Company's planning studies. DSM is the broad term that includes both energy efficiency ("EE") and demand response ("DR"). In this case, the Company has identified a need for the Project based on the need to provide service to a data center customer and to comply with mandatory NERC Reliability Standards, while maintaining the overall long-term reliability of its transmission system. Notwithstanding, when performing an analysis based on PJM's 50/50 load forecast,[6] there is no adjustment in load for DR programs that are bid into the PJM reliability pricing model ("RPM") auction because PJM only dispatches DR when the system is under stress (*i.e.*, a system emergency). Accordingly, while existing DSM is considered to the extent the load forecast accounts for it, DR that has been bid into PJM's RPM auction is not a factor in this particular application because of the identified need for the Project. Based on these considerations, the evaluation of the Project demonstrated that despite accounting for DSM consistent with PJM's methods, the Project is necessary.

Incremental DSM also will not eliminate the need for the Project. As discussed in Section I.C, the Project is necessary to resolve identified violations of NERC Reliability Standards and to maintain the structural integrity and reliability of its transmission system. As reflected in Sections I.A and I.C, the projected load fully built out, combined with emerging load in the Loudoun County Load Area, exceeds 300 MW by 2027. By way of comparison, statewide the Company achieved demand savings of 276.5 MW (net) / 350 MW (gross) from its DSM Programs in 2023.

[6] While the PJM load forecast does not directly incorporate DR, its load forecast incorporates variables derived from Itron that reflect EE by modeling the stock of end-use equipment and its usages. Further, because PJM's load forecast considers the historical non-coincident peak ("NCP") for each load serving entity ("LSE") within PJM, it reflects the actual load reductions achieved by DSM programs to the extent an LSE has used DSM to reduce its NCPs.

I. NECESSITY FOR THE PROPOSED PROJECT

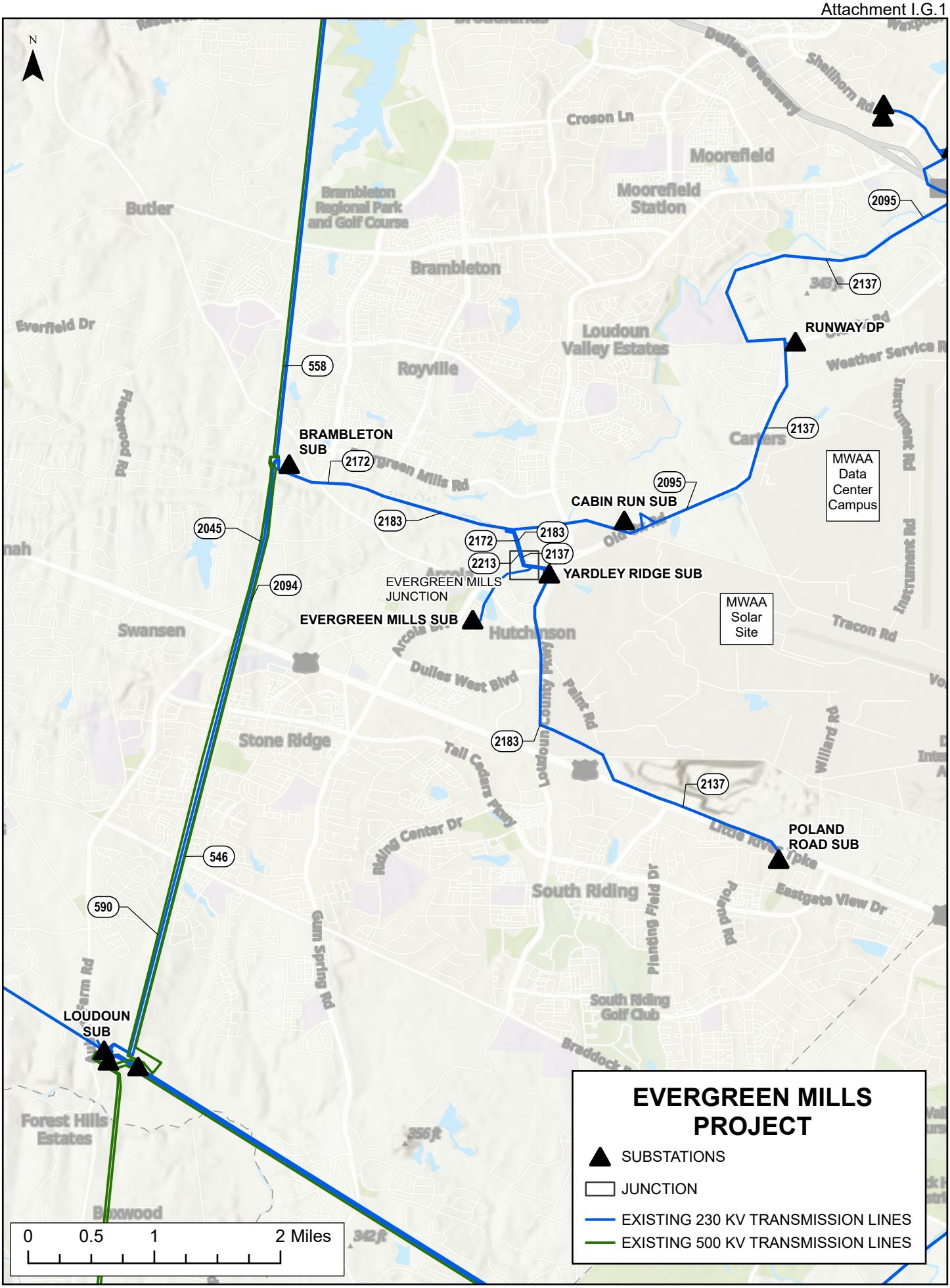
F. Describe any lines or facilities that will be removed, replaced, or taken out of service upon completion of the proposed project, including the number of circuits and normal and emergency ratings of the facilities.

Response: One (1) 230 kV tangent double circuit engineered galvanized steel single pole structure on a concrete pier foundation #2183/92 (#2137/99) will be replaced with a dead-end double circuit engineered steel single pole structure on a concrete pier foundation.

I. NECESSITY FOR THE PROPOSED PROJECT

G. Provide a system map, in color and of suitable scale, showing the location and voltage of the Applicant's transmission lines, substations, generating facilities, etc., that would affect or be affected by the new transmission line and are relevant to the necessity for the proposed line. Clearly label on this map all points referenced in the necessity statement.

Response: See Attachment I.G.1.


N
BRAMBLETON SUB
CABIN RUN SUB
RUNWAY DP
YARDLEY RIDGE SUB
EVERGREEN MILLS JUNCTION
EVERGREEN MILLS SUB
POLAND ROAD SUB
LOUDOUN SUB
MWAA Data Center Campus
MWAA Solar Site
2095
2137
2172
2183
2213
2045
2094
558
546
590
Croson Ln
Moorefield
Moorefield Station
Brambleton Regional Park and Golf Course
Brambleton
Butler
Everfield Dr
Loudoun Valley Estates
Royville
Carters
Swansen
Hutchinson
Stone Ridge
South Riding
South Riding Golf Club
Forest Hills Estates
Dulles West Blvd
Tall Cedars Pkwy
Riding Center Dr
Gum Spring Rd
Eastgate View Dr
Tracon Rd
Willard Rd
Paint Rd
Planding Field Dr
Loudoun County Pkwy
Instrument Rd
Fleetwood Rd
Dulles Greenway
Shellhorn Rd
Weather Service Rd
0 0.5 1 2 Miles
EVERGREEN MILLS PROJECT
SUBSTATIONS
JUNCTION
EXISTING 230 KV TRANSMISSION LINES
EXISTING 500 KV TRANSMISSION LINES

I. NECESSITY FOR THE PROPOSED PROJECT

H. Provide the desired in-service date of the proposed project and the estimated construction time.

Response: The in-service date for the proposed Project is May 17, 2027.

The Company estimates it will take approximately 20 months for detailed engineering, materials procurement, permitting, real estate, and construction after a final order from the Commission. Accordingly, to support this estimated construction timeline and construction plan, the Company respectfully requests a final order by September 15, 2025. Should the Commission issue a final order by September 15, 2025, the Company estimates that construction should begin around September 15, 2026, and be completed by May 17, 2027. This schedule is contingent upon obtaining the necessary permits and outages. Dates may need to be adjusted based on permitting delays or design modifications to comply with additional agency requirements identified during the permitting application process, as well as the ability to schedule outages, and unpredictable delays due to labor shortages or materials/supply issues. This schedule is also contingent upon the Company's ability to negotiate for easements with property owners along the approved route and to purchase land for substation use without the need for additional litigation.

In addition, the Company is actively monitoring regulatory changes and requirements associated with the Northern long-eared bat ("NLEB") and how they could potentially impact construction timing associated with time of year restrictions ("TOYRs"). On October 15, 2024, the U.S. Fish and Wildlife Service ("USFWS") issued the NLEB Final Guidance for development projects. The USFWS Interim Guidance for the NLEB expired on November 30, 2024, and the Final Guidance took effect.

The Company is also monitoring regulatory changes associated with the potential up-listing of the Tricolored bat ("TCB"). The Company is anticipating the TCB will be listed; therefore, the Company assumes any regulatory changes associated with the potential listing of the TCB will affect these Projects. On September 14, 2022, the TCB was proposed to be listed as Endangered by the USFWS. USFWS extended its Final Rule issuance target from September 2023 to the end of 2024. At this time, the TCB Final Rule has not been issued.

In October 2024 USFWS issued a final NLEB and TCB Range-wide Determination Key ("Dkey") to allow project proponents to assess project impacts, practicable avoidance and minimization measures, and consultation requirements under the final NLEB guidance and the eventual TCB listing ahead of the final decision. The Company will utilize the DKey to further assess project impacts and determine appropriate avoidance and minimization measures to ensure compliance with state and federal regulations when the Projects enter permitting.

Any adjustments to this Project schedule resulting from these or similar challenges could necessitate a minimum of a six- to twelve-month delay in the targeted in-service date. Accordingly, for purposes of judicial economy, the Company requests that the Commission issue a final order approving both a desired in-service target date (*i.e.*, May 17, 2027) and an authorization sunset date (*i.e.*, May 17, 2028) for energization of the Project.

I. NECESSITY FOR THE PROPOSED PROJECT

I. Provide the estimated total cost of the project as well as total transmission-related costs and total substation-related costs. Provide the total estimated cost for each feasible alternative considered. Identify and describe the cost classification (e.g. "conceptual cost," "detailed cost," etc.) for each cost provided.

Response: The estimated conceptual cost of the Project is approximately $9.46 million (in 2024 dollars), which includes $6.72 million for transmission-related work and $2.74 million for substation-related work.

No feasible alternatives were considered.

I. NECESSITY FOR THE PROPOSED PROJECT

J. If the proposed project has been approved by the RTO, provide the line number, regional transmission expansion plan number, cost responsibility assignments, and cost allocation methodology. State whether the proposed project is considered to be a baseline or supplemental project.

Response: PJM presented Attachment I.J.1 during the April 11, 2023 TEAC Meeting for the 2022 Reliability Open Window #2. The assumption reference, applicable RTEP models, and problem statement for the Yardley Line 300MW N-1-1 load drop violation are shown on slide 8. PJM shows the selection of the Project as the preferred solution on slide 9. The Project was assigned baseline Upgrade ID b3779.

The Project is presently 100% cost allocated to the DOM Zone.

Reliability Analysis Update

Sami Abdulsalam, Senior Manager

Transmission Expansion Advisory Committee

April 11, 2023

Recommended Solution

Baseline Reliability Projects

Dominion Transmission Zone: Baseline Evergreen Mills - 300MW Load Drop Violation

Process Stage: Recommended Solution

Criteria: 300MW Load Loss

Assumption Reference: 2027 RTEP assumption

Model Used for Analysis: 2027 RTEP Summer & Winter cases

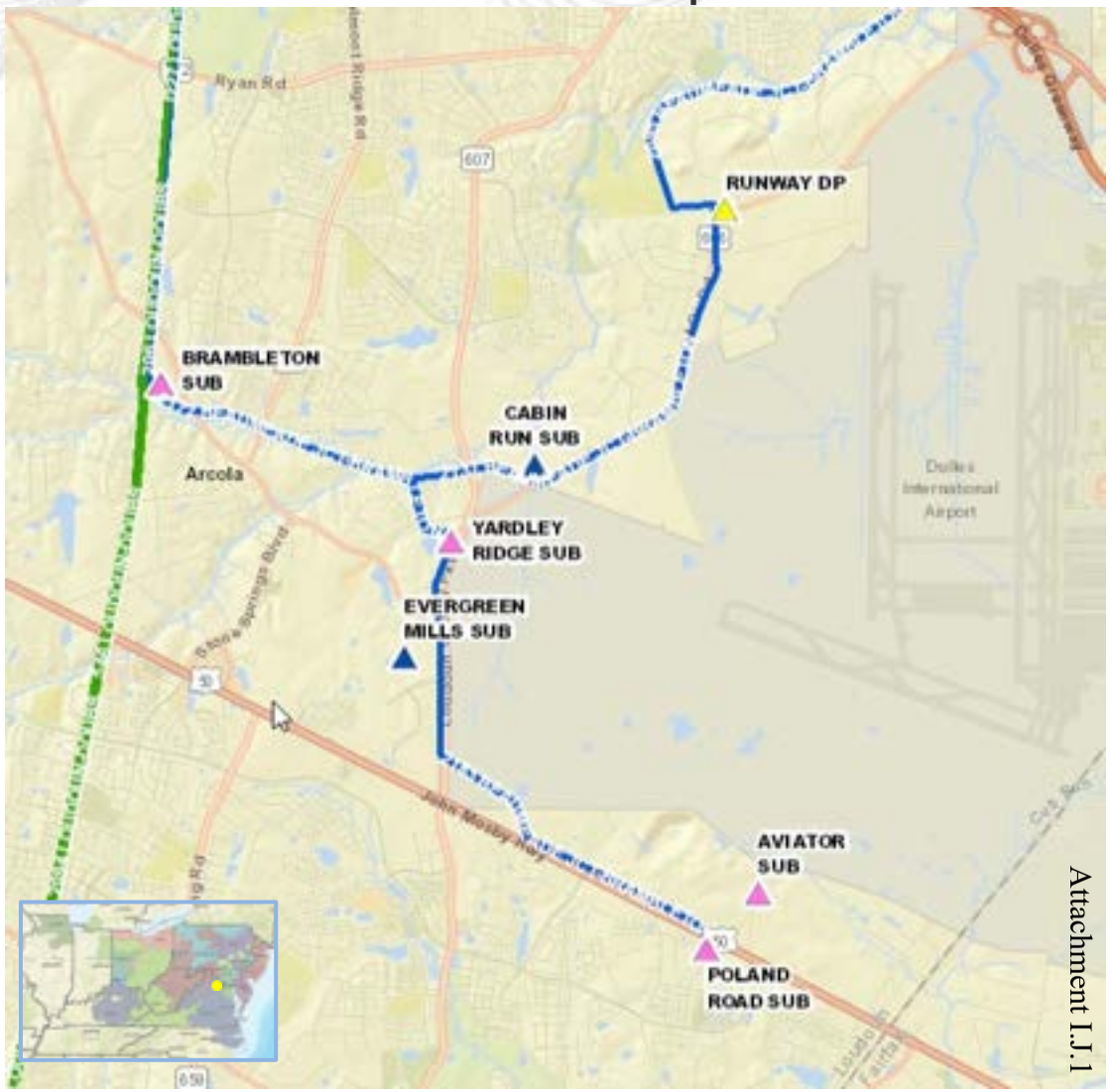
Proposal Window Exclusion: None

Problem Statement:

2022W2-N2-SLD1, 2022W2-N2-SLD2, 2022W2-N2-WLD1, 2022W2-N2-WLD2

27

In the 2027 RTEP Summer & Winter cases, a 300 MW load loss occurs under an N-1-1 scenario.



Attachment I.J.1

Dominion Transmission Zone: Baseline Evergreen Mills - 300MW Load Drop Violation

As part of the 2022 RTEP Window #2, the projects listed in the table below are proposed to address the following violations: 2022W2-N2-SLD1, 2022W2-N2-SLD2, 2022W2-N2-WLD1 & 2022W2-N2-WLD2

Proposal ID	Proposing Entity	Upgrade Description	Upgrade Cost ($M)
648	Dominion	Cut existing 230kV Line #2183 (Brambleton - Poland Road) and extend double circuit 230kV lines creating new Line #2210 (Brambleton - Evergreen Mills) and Line #2183 (Evergreen Mills - Poland Road)	7.71

28

Recommended Solution: Proposal #2022_2-648

- Cut existing 230kV line #2183 and extend from Poland Road substation to Evergreen Mills substation. Approximately 0.59 miles of new line will be built from the cut-in to the Evergreen Mills substation. Cut and extend the existing 230kV line #2183 creating a new line #2210 from Brambleton substation to be terminated at Evergreen Mills substation. Approximately 0.59 miles of new line will be built from the cut-in to the Evergreen Mills substation. (**b3779)**

Total Estimated Cost: $7.71M

Required IS Date: 6/1/2027
Projected IS Date: 6/1/2027
Previously Presented: 2/7/2023

Attachment I.J.1

I. NECESSITY FOR THE PROPOSED PROJECT

K. If the need for the proposed project is due in part to reliability issues and the proposed project is a rebuild of an existing transmission line(s), provide five years of outage history for the line(s), including for each outage the cause, duration and number of customers affected. Include a summary of the average annual number and duration of outages. Provide the average annual number and duration of outages on all Applicant circuits of the same voltage, as well as the total number of such circuits. In addition to outage history, provide five years of maintenance history on the line(s) to be rebuilt including a description of the work performed as well as the cost to complete the maintenance. Describe any system work already undertaken to address this outage history.

Response: Not applicable. See Section I.A.

I. NECESSITY FOR THE PROPOSED PROJECT

L. If the need for the proposed project is due in part to deterioration of structures and associated equipment, provide representative photographs and inspection records detailing their condition.

Response: Not applicable. See Sections I.A and I.C.

I. NECESSITY FOR THE PROPOSED PROJECT

M. In addition to the other information required by these guidelines, applications for approval to construct facilities and transmission lines interconnecting a Non-Utility Generator ("NUG") and a utility shall include the following information:

1. The full name of the NUG as it appears in its contract with the utility and the dates of initial contract and any amendments;

2. A description of the arrangements for financing the facilities, including information on the allocation of costs between the utility and the NUG;

3. a. For Qualifying Facilities ("QFs") certificated by Federal Energy Regulatory Commission ("FERC") order, provide the QF or docket number, the dates of all certification or recertification orders, and the citation to FERC Reports, if available;

b. For self-certificated QFs, provide a copy of the notice filed with FERC;

4. Provide the project number and project name used by FERC in licensing hydroelectric projects; also provide the dates of all orders and citations to FERC Reports, if available; and

5. If the name provided in 1 above differs from the name provided in 3 above, give a full explanation.

Response: Not applicable.

I. NECESSITY FOR THE PROPOSED PROJECT

N. Describe the proposed and existing generating sources, distribution circuits or load centers planned to be served by all new substations, switching stations and other ground facilities associated with the proposed project.

Response: Not applicable.

II. DESCRIPTION OF THE PROPOSED PROJECT

A. Right-of-way ("ROW")

1. Provide the length of the proposed corridor and viable alternatives.

Response: Dominion Energy Virginia is proposing to build a new pair of parallel 230 kV double-circuit transmission lines, approximately 0.6 mile, that will originate from existing infrastructure and extend to the Evergreen Mills Switching Station, which will be located immediately south of Arcola Mills Drive approximately 0.3 mile west of its intersection with Loudoun County Parkway.

Given the availability of existing ROW and the statutory preference given to the use of existing ROW, and because additional costs and environmental impacts would be associated with the acquisition and construction of new ROW, the Company did not consider any alternate routes requiring new ROW for the Project. See Section II.A.9.

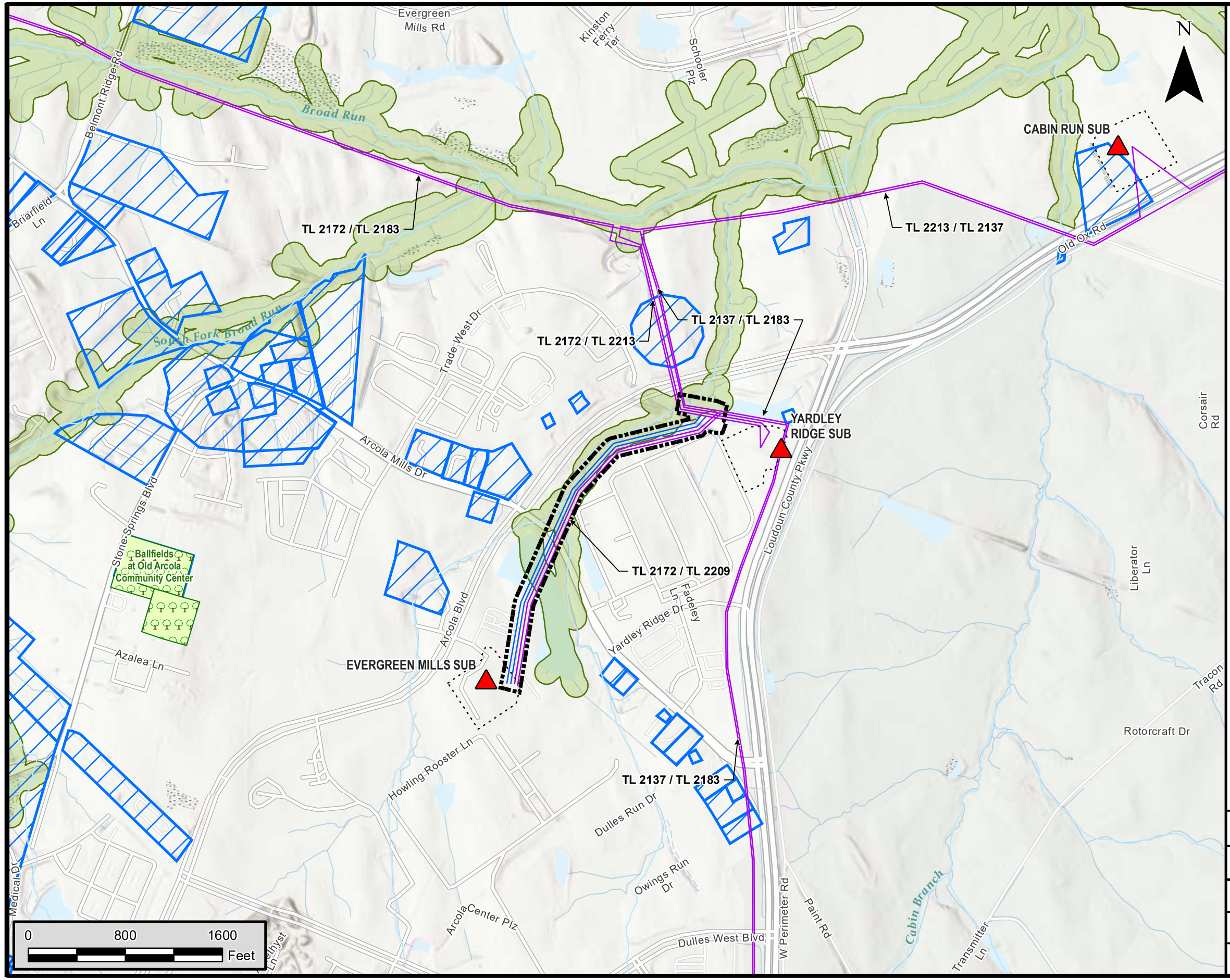
II. DESCRIPTION OF THE PROPOSED PROJECT

A. Right-of-way ("ROW")

2. Provide color maps of suitable scale (including both general location mapping and more detailed GIS-based constraints mapping) showing the route of the proposed line and its relation to: the facilities of other public utilities that could influence the route selection, highways, streets, parks and recreational areas, scenic and historic areas, open space and conservation easements, schools, convalescent centers, churches, hospitals, burial grounds/cemeteries, airports and other notable structures close to the proposed project. Indicate the existing linear utility facilities that the line is proposed to parallel, such as electric transmission lines, natural gas transmission lines, pipelines, highways, and railroads. Indicate any existing transmission ROW sections that are to be quitclaimed or otherwise relinquished. Additionally, identify the manner in which the Applicant will make available to interested persons, including state and local governmental entities, the digital GIS shape file for the route of the proposed line.

Response: See Attachment II.A.2. No portion of the ROW is proposed to be quitclaimed or relinquished.

Dominion Energy Virginia will make the digital Geographic Information Systems ("GIS") shape file available to interested persons upon request to the Company's legal counsel as listed in the Project Application.



ATTACHMENT
II.A.2

TITLE:

ENVIRONMENTAL CONSTRAINTS MAP

PROJECT:

EVERGREEN MILLS 230 KV LINE LOOP PART B

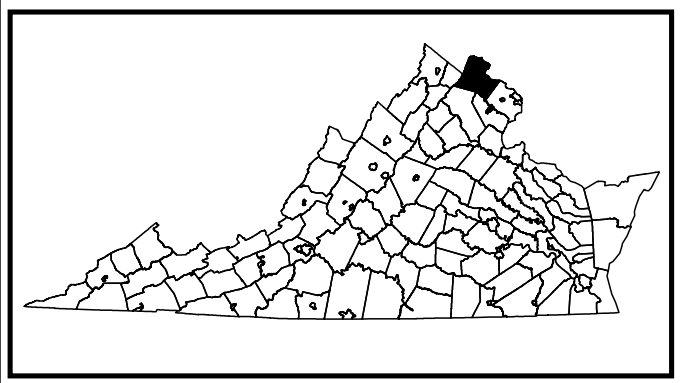
LEGEND

- EXISTING SUBSTATIONS
- PROJECT AREA
- LOCAL PARKS
- EXISTING SUBSTATION BOUNDARY
- EXISTING 230 KV TRANSMISSION LINES
- PROPOSED 230 KV TRANSMISSION LINE
- COUNTY STREAMS
- ARCHITECTURE RESOURCES

LOUDOUN COUNTY RIVER/STREAM RESOURCES CORRIDOR

- 100 FT

KEY PLAN



DOMINION PROJECT NUMBER: NW992802	PROJECT NUMBER: 50184751
DATE: 11/18/2024	
SCALE: 1" = 800 FEET	
PROJECT MANAGER: TL	
DRAWN BY: MGH	

Dominion Energy

Dewberry

II. DESCRIPTION OF THE PROPOSED PROJECT

A. Right-of-way ("ROW")

3. Provide a separate color map of a suitable scale showing all of the Applicant's transmission line ROWs, either existing or proposed, in the vicinity of the proposed project.

Response: See Attachment I.G.1.

II. DESCRIPTION OF THE PROPOSED PROJECT

A. Right-of-way ("ROW")

4. To the extent the proposed route is not entirely within existing ROW, explain why existing ROW cannot adequately service the needs of the Applicant.

Response: Not applicable. The Company will use existing ROW that serves the customer site.

II. DESCRIPTION OF THE PROPOSED PROJECT

A. Right-of-way ("ROW")

5. Provide drawings of the ROW cross section showing typical transmission line structure placements referenced to the edge of the ROW. These drawings should include:

a. ROW width for each cross section drawing;

b. Lateral distance between the conductors and edge of ROW;

c. Existing utility facilities on the ROW; and

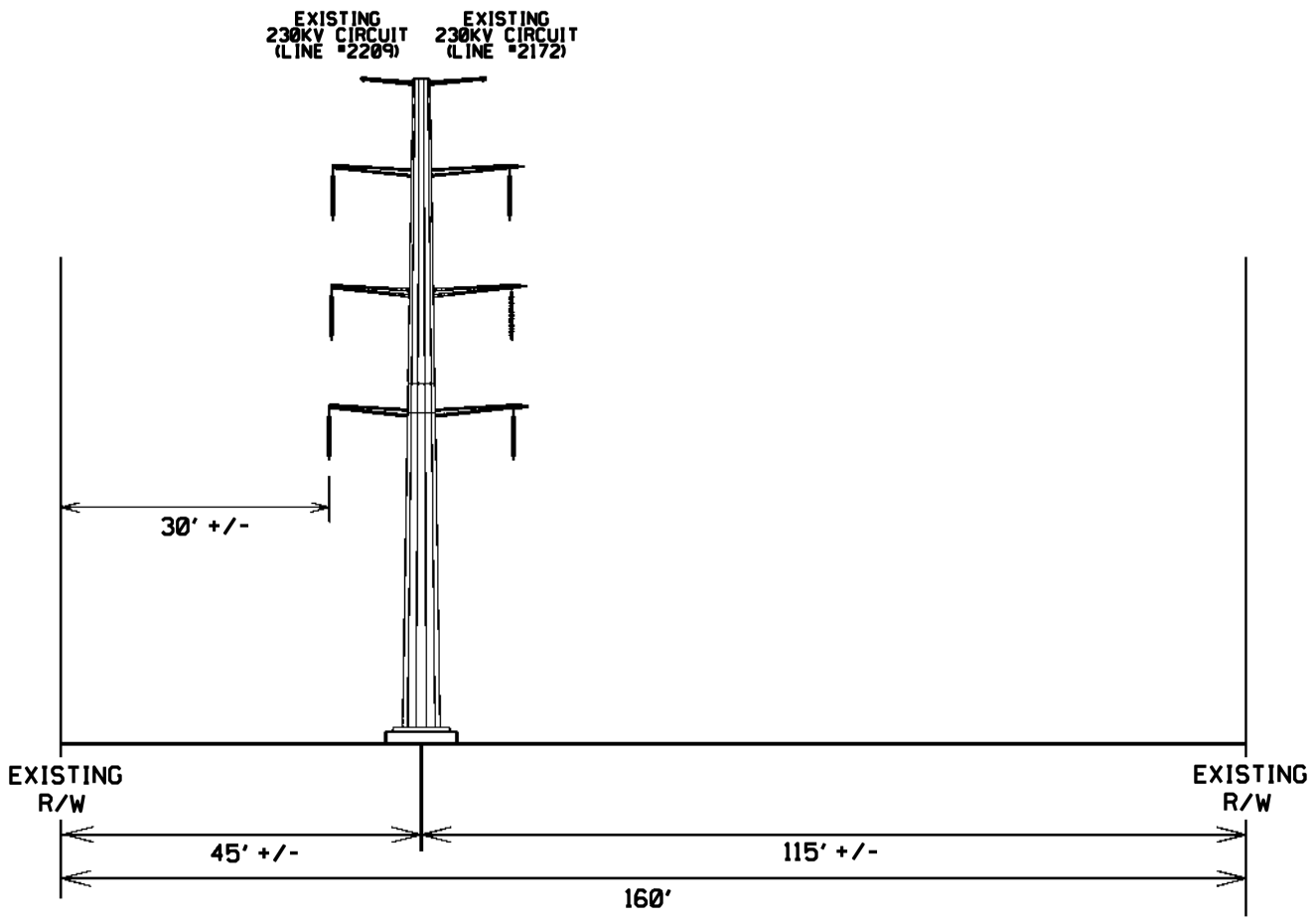
d. For lines being rebuilt in existing ROW, provide all of the above (i) as it currently exists, and (ii) as it will exist at the conclusion of the proposed project.

Response: See Attachment II.A.5.a.

For additional information on the structures, see Section II.B.3.

LINE #2172 EVERGREEN MILLS - BRAMBLETON
LINE #2209 EVERGREEN MILLS - YARDLEY RIDGE

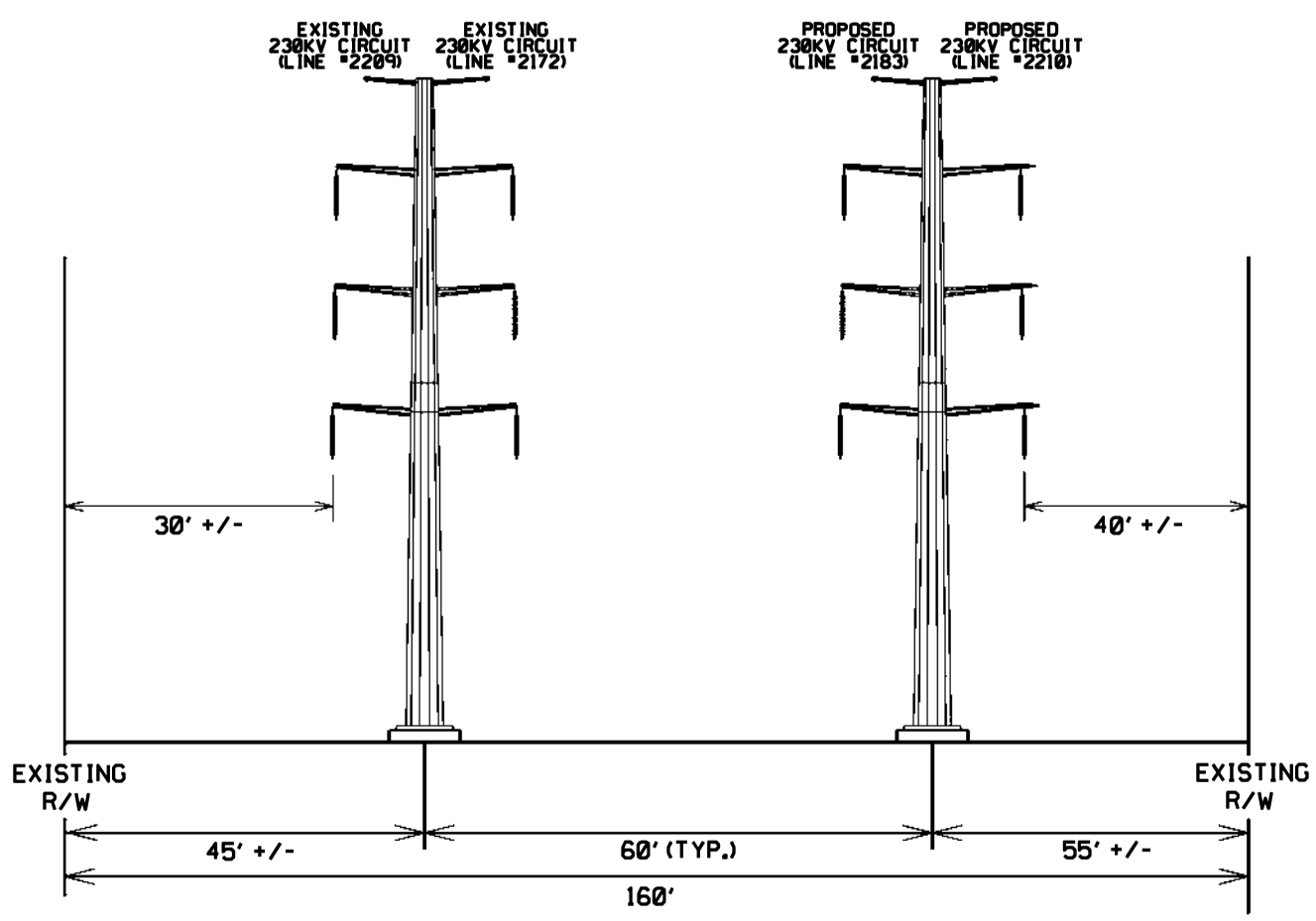
EXISTING CONFIGURATION



TYPICAL ROW LOOKING TOWARDS EVERGREEN MILLS

LINE #2172 EVERGREEN MILLS - BRAMBLETON
LINE #2209 EVERGREEN MILLS - YARDLEY RIDGE
LINE #2183 EVERGREEN MILLS - POLAND ROAD
LINE #2210 EVERGREEN MILLS - BRAMBLETON

PROPOSED CONFIGURATION



TYPICAL ROW LOOKING TOWARDS EVERGREEN MILLS

NOTE: INFORMATION CONTAINED ON DRAWING IS CONSIDERED PRELIMINARY IN NATURE AND SUBJECT TO CHANGE BASED ON FINAL DESIGN.

II. DESCRIPTION OF THE PROPOSED PROJECT

A. Right-of-way ("ROW")

6. Detail what portions of the ROW are subject to existing easements and over what portions new easements will be needed.

Response: The Proposed Route would extend for approximately 70 feet over an existing 50-foot-wide sanitary sewer easement and approximately 14 feet over an existing 10-foot-wide sanitary sewer easement, both of which are located adjacent to Arcola Mills Road. The existing 50-foot-wide sanitary sewer easement parallels the proposed transmission alignment and overlaps with the existing ROW for an additional 389 feet in two separate locations. See Attachment II.A.6. Due to the opposing angles of the County sewer easement and the Proposed Route alignments, the estimated length of both sanitary easements that would be crossed by ROW associated with the Proposed Route is 220 feet. The existing easement for the 160-foot-wide right-of-way has been acquired for the length of the proposed transmission line from the proposed tap location to the Evergreen Mills Switching Station.

Attachment II.A.6. depicts the land crossed by the Proposed Route.

ATTACHMENT
II.A.6

TITLE:

EASEMENTS MAP

PROJECT:

EVERGREEN MILLS 230 KV LINE LOOP PART B

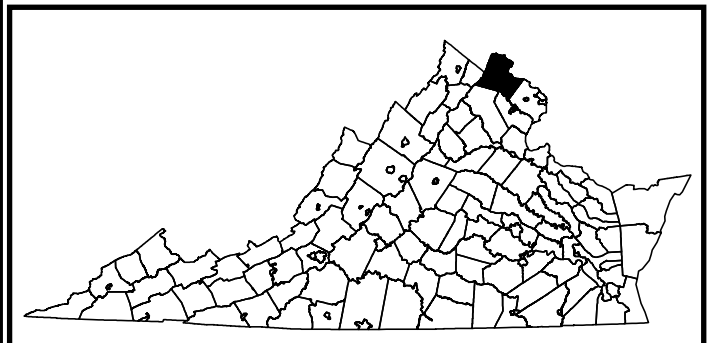
LEGEND

- EXISTING SUBSTATIONS
- PROJECT AREA
- LOCAL PARKS
- EXISTING SUBSTATION BOUNDARY
- PROPOSED 230 KV TRANSMISSION LINE
- EXISTING 230 KV TRANSMISSION LINES
- EXISTING STORMWATER EASEMENT
- EXISTING SANITARY SEWER EASEMENT
- VIRGINIA WATER PROTECTION (VWP) PERMITTEE RESPONSIBLE MITIGATION AREA (PRMA) BOUNDARIES

COUNTY CONSERVATION EASEMENT TYPE

- DEVELOPMENT RESTRICTION

KEY PLAN



DOMINION PROJECT NUMBER:	PROJECT NUMBER:
NW992802	50184751

DATE: 12/10/2024

SCALE: 1" = 800 FEET

PROJECT MANAGER: TL

DRAWN BY: MGH

Dominion Energy

Dewberry

Attachment II.A.6

41

0 800 1600 Feet

II. DESCRIPTION OF THE PROPOSED PROJECT

A. Right-of-way ("ROW")

7. Detail the proposed ROW clearing methods to be used and the ROW restoration and maintenance practices planned for the proposed project.

Response: The land crossed by the proposed alignment within the existing ROW has already been cleared of trees. This route includes crossing a stormwater detention basin and two data centers' properties on which the existing transmission right-of-way and substations exist. See Attachment II.A.6.

Trimming of tree limbs along the edge of the right-of-way also may be conducted to support construction activities for the Project. For any such minimal clearing within the right-of-way where development has already occurred, trees will be cut to no more than three inches above ground level. Trees located outside of the right-of-way that are tall enough to potentially impact the transmission facilities, commonly referred to as "danger trees," may also need to be cut. Danger trees will be cut to be no more than three inches above ground level, limbed, and will remain where felled. Debris that is adjacent to homes will be disposed of by chipping or removal. In other areas, debris may be mulched or chipped as practicable. Danger tree removal will be accomplished by hand in wetland areas and within 100 feet of streams, if applicable. Care will be taken not to leave debris in streams or wetland areas. Matting will be used for heavy equipment in these areas. Erosion control devices will be used where applicable on an ongoing basis during all clearing and construction activities accompanied by weekly Virginia Stormwater Management Program inspections.

Erosion control will be maintained and temporary stabilization for all soil disturbing activities will be used until the right-of-way has been restored. Upon completion of the Project, the Company will restore the right-of-way utilizing site rehabilitation procedures outlined in the Company's *Standards & Specifications for Erosion & Sediment Control and Stormwater Management for Construction and Maintenance of Linear Electric Transmission Facilities* that was approved by the Virginia Department of Environmental Quality ("DEQ"). Time of year and weather conditions may affect when permanent stabilization takes place.

This right-of-way will continue to be maintained on a regular cycle to prevent interruptions to electric service and provide ready access to the right-of-way in order to patrol and make emergency repairs. Periodic maintenance to control woody growth will consist of hand cutting, machine mowing and/or herbicide application.

II. DESCRIPTION OF THE PROPOSED PROJECT

A. Right-of-way ("ROW")

8. Indicate the permitted uses of the proposed ROW by the easement landowner and the Applicant.

Response: Any non-transmission use will be permitted that:

- Is in accordance with the terms of the easement agreement for the right-of-way;
- Is consistent with the safe maintenance and operation of the transmission lines;
- Will not restrict future line design flexibility; and
- Will not permanently interfere with future construction.

Subject to the terms of the easement, examples of typical permitted uses include but are not limited to:

- Agriculture;
- Hiking Trails;
- Fences;
- Perpendicular Road Crossings;
- Perpendicular Utility Crossings;
- Residential Driveways; and
- Wildlife / Pollinator Habitat.

II. DESCRIPTION OF THE PROPOSED PROJECT

A. Right-of-way ("ROW")

9. Describe the Applicant's route selection procedures. Detail the feasible alternative routes considered. For each such route, provide the estimated cost and identify and describe the cost classification (e.g. "conceptual cost," "detailed cost," etc.). Describe the Applicant's efforts in considering these feasible alternatives. Detail why the proposed route was selected and other feasible alternatives were rejected. In the event that the proposed route crosses, or one of the feasible routes was rejected in part due to the need to cross, land managed by federal, state, or local agencies or conservation easements or open space easements qualifying under §§ 10.1-1009 – 1016 or §§ 10.1-1700 – 1705 of the Code (or a comparable prior or subsequent provision of the Code), describe the Applicant's efforts to secure the necessary ROW.

Response: This Project involves both new transmission lines within existing ROW (*i.e.*, Lines #2183 and #2210), and one structure replacement carrying existing Lines #2137 and #2210 (existing Line #2210 will be renumbered to Line #2183 between Evergreen Mills Switching Station and Poland Road Substation). The route selection process is outlined below.

The Company's route selection for this project began with a review of existing rights-of-way. This approach generally minimizes impacts on the natural and human environments. This approach is also consistent with Attachment 1 to these Guidelines, which provides a tool routinely used by the Company in routing its transmission line projects. Specifically, this approach is consistent with Guideline #1, which states that existing rights-of-way should be given priority when adding new transmission facilities, and Va. Code §§ 56-46.1 and 56-259, which promote the use of existing rights-of-way for new transmission facilities. For the proposed Project, the existing 160-foot right-of-way is adequate.

Because the existing rights-of-way and Company-owned property are adequate to construct the proposed Project, no new ROW is necessary. Given the availability of existing rights-of-way and/or easements and the statutory preference given to the use of existing rights-of-way, and because additional costs and environmental impacts would be associated with the acquisition of and construction on entirely new rights-of-way, the Company did not consider any alternate routes requiring new rights-of-way for this Project. See Section I.I for costs of the proposed Project. See Attachment II.A.6 for easements crossed by the proposed route.

II. DESCRIPTION OF THE PROPOSED PROJECT

A. Right-of-way ("ROW")

10. Describe the Applicant's construction plans for the project, including how the Applicant will minimize service disruption to the affected load area. Include requested and approved line outage schedules for affected lines as appropriate.

Response: The Company will construct the Line #2183 Loop by feeding conductor down the existing right-of-way on new structures to the Evergreen Mills Switching Station. Where possible, outages will be minimized by sequencing construction to eliminate the need to install transmission lines over energized stations. The Company will also complete the twelve breaker and half scheme at the Evergreen Mills Switching Station. The Company will submit outage requests within sufficient time to ensure completion by the needed in-service date. Construction of the new Line #2183 Loop will begin around September 15, 2026. Assuming the Commission issues a final order by September 15, 2025, and Project construction commences in September 2026, the Company estimates that construction of the Project will be completed by May 17, 2027.

The Company intends to complete this work during requested outage windows, as described above. However, as with all outage scheduling, these outages may change depending on whether PJM approves the outages and other relevant considerations allow for it. It is customary for PJM to hold requests for outages and approve only shortly before the outages are expected to occur and, therefore, the requested outages are subject to change. Therefore, the Company will not have clarity on whether this work will be done as requested until very close in time to the requested outages. If PJM approves different outage dates, the Company will continue to diligently pursue timely completion of this work.

II. DESCRIPTION OF THE PROPOSED PROJECT

A. Right-of-way ("ROW")

11. Indicate how the construction of this transmission line follows the provisions discussed in Attachment 1 of these Guidelines.

Response: Attachment 1 to these Guidelines provide a tool routinely used by the Company in routing its transmission line projects.

The Company utilized Guideline #1 by minimizing conflict between the rights-of-way and present and prospective uses of the land on which the proposed Project is to be located (to the extent permitted by the property interest involved, rights-of-way should be selected with the purpose of minimizing conflict between the rights-of-way and present and prospective uses of the land on which they are to be located. To this end, existing rights-of-way should be given priority as the locations for additions to existing transmission facilities, and the joint use of existing rights-of-way by different kinds of utility services should be considered.). As discussed in Section II.A.6, the Project is located within existing electric transmission rights-of-way and will parallel Line # 2172 and Line # 2209 to the Evergreen Mills Substation to mitigate the need for new ROW.

The proposed Project will have minimal to no impact to any site listed on the National Register of Historic Places ("NRHP"). Thus, it is consistent with Guideline #2 (where practical, rights of-way should avoid sites listed on the NRHP). A Stage I Pre-Application Analysis prepared by Dewberry Engineers Inc. on behalf of the Company is included with the Environmental Routing Study as Appendix E and was submitted to VDHR on December 16, 2024.

The Company communicated with local, state, and federal agencies and relevant private organizations prior to filing this Application consistent with Guideline #4 (where government land is involved the applicant should contact the agencies early in the planning process). In particular, the Company consulted with Loudoun County. See Sections II.A.9, III.B, III.J, and V.D of this Appendix.

The Company follows recommended construction methods in the Guidelines on a site-specific basis for typical construction projects (Guidelines #8, #10, #11, #15, #16, #18, and #22).

The Company also utilizes recommended guidelines in clearing right-of-way, constructing facilities, and maintaining rights-of-way after construction. Moreover, secondary uses of right-of-way that are consistent with the safe maintenance and operation of facilities are permitted.

II. DESCRIPTION OF THE PROPOSED PROJECT

A. Right-of-way ("ROW")

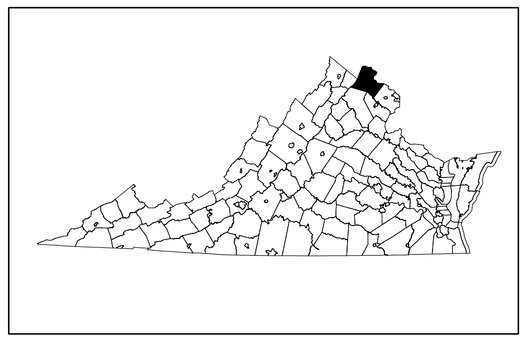
12. a. Detail counties and localities through which the line will pass. If any portion of the line will be located outside of the Applicant's certificated service area: (1) identify each electric utility affected; (2) state whether any affected electric utility objects to such construction; and (3) identify the length of line(s) proposed to be located in the service area of an electric utility other than the Applicant; and

b. Provide three (3) color copies of the Virginia Department of Transportation "General Highway Map" for each county and city through which the line will pass. On the maps show the proposed line and all previously approved and certificated facilities of the Applicant. Also, where the line will be located outside of the Applicant's certificated service area, show the boundaries between the Applicant and each affected electric utility. On each map where the proposed line would be outside of the Applicant's certificated service area, the map must include a signature of an appropriate representative of the affected electric utility indicating that the affected utility is not opposed to the proposed construction within its service area.

Response:

a. The approximately 0.6 mile proposed Project is located entirely in Loudoun County. The proposed Project is partially located in the service territory of NOVEC. Specifically, approximately 0.3 mile (1,584 feet) of the Project would cross NOVEC service territory. NOVEC does not object to construction of the proposed Project.

b. Three copies of the Virginia Department of Transportation "General Highway Map" for Loudoun County have been marked and signed by NOVEC representatives as required and filed with the Application. Reduced copies of the maps are attached as Attachment II.A.12.b.



MAP DATE: 11/20/2024

Loudoun County Road Map

This digital map depicts the Virginia Electric and Power Company ("Company") transmission facilities in this county as approved by the Virginia State Corporation Commission ("SCC"), and any proposed transmission facilities in this county, as of 11/20/2024. Other Company facilities previously authorized by the SCC may be depicted on prior SCC approved county maps.

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VIRGINIA ELECTRIC AND POWER COMPANY PLANS TO BUILD TRANSMISSION LINES AND SUBSTATIONS AS SHOWN IN BLACK DASHES ON THIS MAP.

NORTHERN VIRGINIA ELECTRIC COOPERATIVE IS NOT OPPOSED TO SUCH CONSTRUCTION IN ITS SERVICE TERRITORY.

SIGNATURE *Thomas Pierpoint*

DATE 12/12/2024 TITLE VP, Operations

Legend

- Project Area
- Proposed 230kV Transmission Line
- 500kV Under Consideration by SCC
- 230kV Under Consideration by SCC
- 1/1 Number of Lines of Structures/Number of Circuits
- △ Proposed Substation
- ▲ Existing Substation
- 115 kV
- 230 kV
- 500 kV

Provider Service Territory

- NOVEC
- VEPCO

West Virginia

Maryland

Clarke County

Fauquier County

Prince William County

Fairfax County

HAMILTON SUB
BREEZY KNOLL SUB
DRY MILL SOUTH SUB
ALTAIR SWITCHING STATION
GOOSE CREEK SUB
PLEASANT VIEW SUB
APOLLO SUB
LUNAR SUB
STARLIGHT SUB
STONEWATER SUB
BELMONT SUB
SYCOLIN CREEK SUB
ASHBURN SUB
MIDDLEBURG SUB
WAXPOOL SUB
BEAUMEADE SUB
DTC SUB
BECO SUB
FARMWELL SUB
NIMBUS SUB
CUMULUS SUB
ROUNDTABLE SUB
ENTERPRISE SUB
SHELLHORN ROAD SUB
BUTTERMILK SUB
BRAMBLETON SUB
NEW ROAD SUB
LOCKRIDGE SUB
PACIFIC SUB
GLOBAL PLAZA SUB
STERLING PARK SUB
DAVIS DRIVE SUB
EVERGREEN MILLS SUB
YARDLEY RIDGE SUB
CABIN RUN SUB
WASHINGTON-DULLES INT'L AIRPORT
LOUDOUN SUB
MOSBY SUB
POLAND ROAD SUB
AVIATOR SUB

Miles
2 1 0 2 4 6

*VDOT and other road data obtained from Navteq and County data, current as of June 2016.

Loudoun

Attachment II.A.12.b

II. DESCRIPTION OF THE PROPOSED PROJECT

B. Line Design and Operational Features

1. Detail the number of circuits and their design voltage, initial operational voltage, any anticipated voltage upgrade, and transfer capabilities.

Response: Each proposed segment of the four circuits will be designed and operated at 230 kV, and each of the proposed line segments will have a transfer capability of 1572 MVA.

II. DESCRIPTION OF THE PROPOSED PROJECT

B. Line Design and Operational Features

2. Detail the number, size(s), type(s), coating and typical configurations of conductors. Provide the rationale for the type(s) of conductor(s) to be used.

Response: Each proposed segment of the four transmission lines will include 3-phase twin-bundled 768.2 ACSS/TW conductors and a fiber optic shield wire arranged as shown in Attachments II.B.3.a - c. The twin-bundled 768.2 ACSS/TW conductors are a Company standard for new 230 kV construction.

II. DESCRIPTION OF THE PROPOSED PROJECT

B. Line Design and Operational Features

3. With regard to the proposed supporting structures over each portion of the ROW for the preferred route, provide diagrams (including foundation reveal) and descriptions of all the structure types, to include:

a. mapping that identifies each portion of the preferred route;

b. the rationale for the selection of the structure type;

c. the number of each type of structure and the length of each portion of the ROW;

d. the structure material and rationale for the selection of such material;

e. the foundation material;

f. the average width at cross arms;

g. the average width at the base;

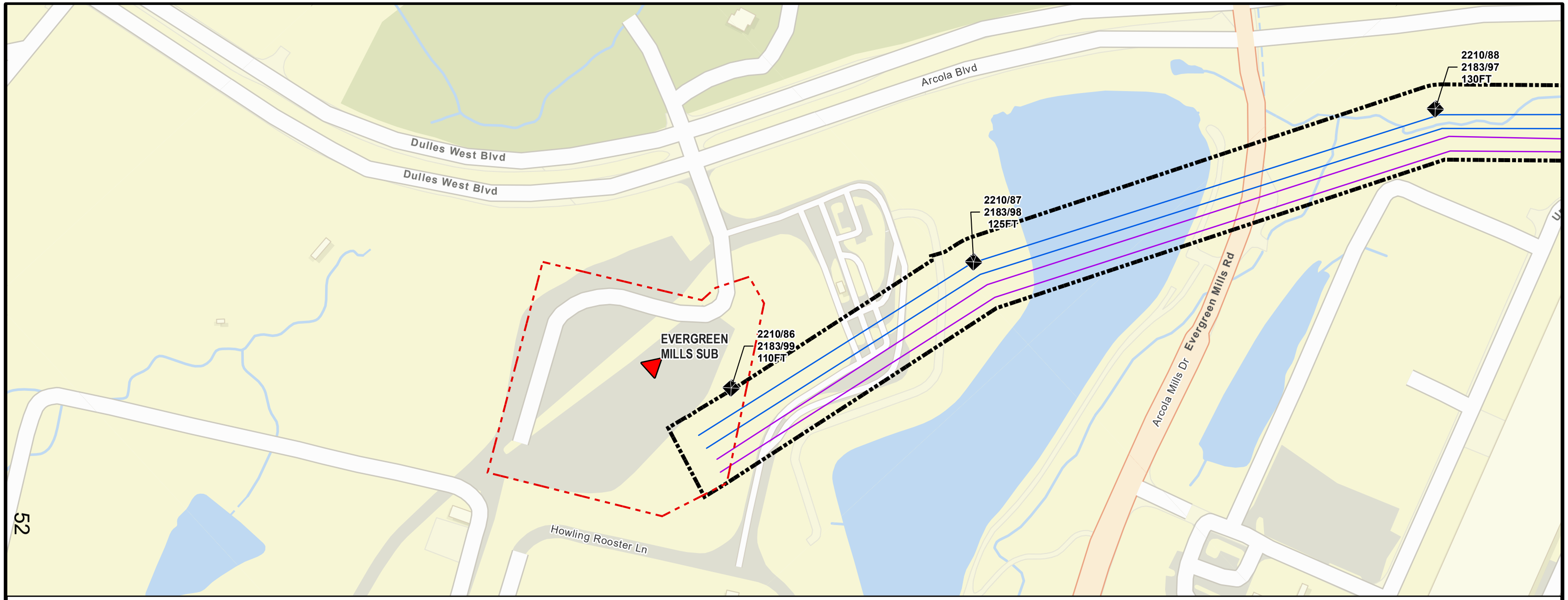
h. the maximum, minimum and average structure heights;

i. the average span length; and

j. the minimum conductor-to-ground clearances under maximum operating conditions.

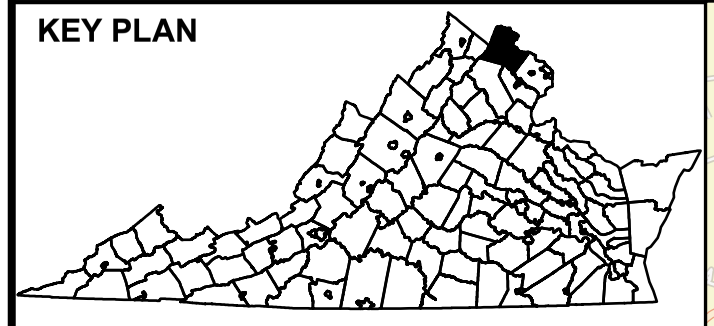
Response:

See Attachment II.B.3 and Attachments II.B.3.a - c.



Proposed Structures Line 1	Proposed Structures Line 2	Proposed Structure Height (FT)
2210/86	2183/99	110
2210/87	2183/98	125
2210/88	2183/97	130

KEY PLAN



LEGEND

- EXISTING SUBSTATIONS
- PROPOSED STRUCTURES
- PROPOSED 230 KV TRANSMISSION LINE
- EXISTING 230 KV TRANSMISSION LINES
- EXISTING SUBSTATION BOUNDARY
- PROJECT AREA

0 200 400 Feet

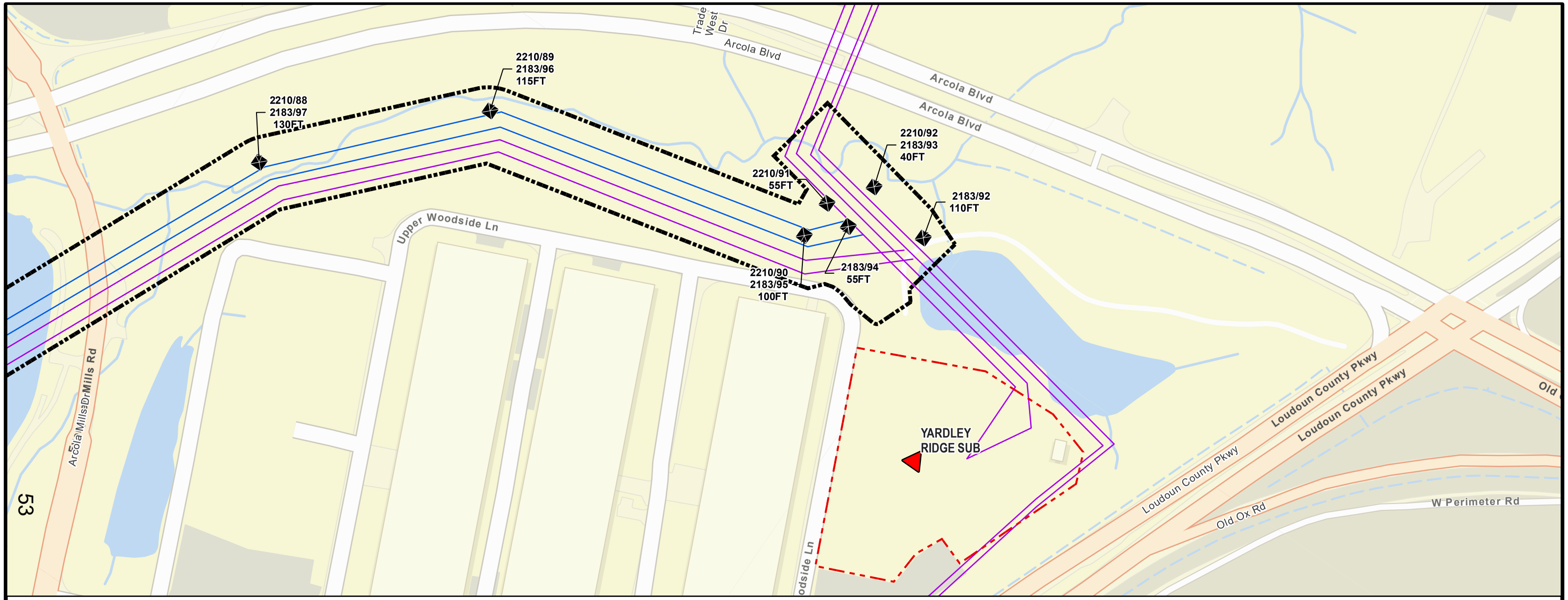
N

DOMINION PROJECT NUMBER: NW992802	PROJECT NUMBER: 50184751
DATE: 12/11/2024	
SCALE: 1" = 200 FEET	
PROJECT MANAGER: TL	
DRAWN BY: MGH	

Dominion Energy

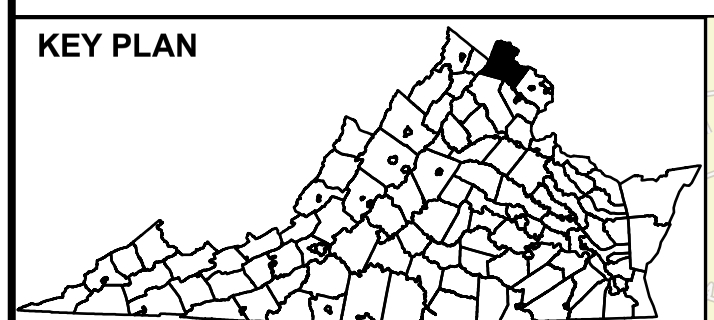
Dewberry

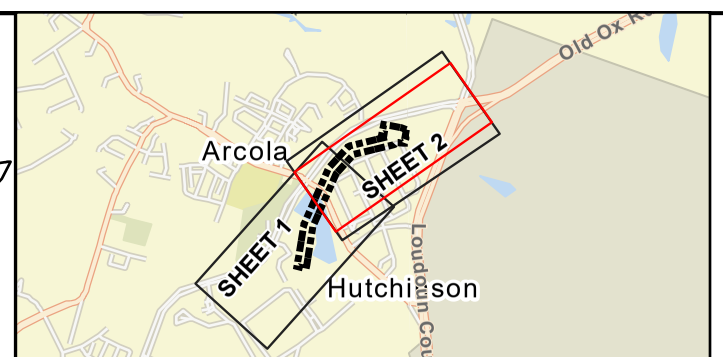
Attachment II.B.3



Proposed Structures Line 1	Proposed Structures Line 2	Proposed Structure Height (FT)
2210/88	2183/97	130
2210/89	2183/96	115
2210/90	2183/95	100
2210/91		55
	2183/94	55
2210/92	2183/93	40
	2183/92	110

KEY PLAN





LEGEND

- EXISTING SUBSTATIONS
- PROPOSED STRUCTURES
- PROPOSED 230 KV TRANSMISSION LINE
- EXISTING 230 KV TRANSMISSION LINES
- EXISTING SUBSTATION BOUNDARY
- PROJECT AREA

0 200 400 Feet

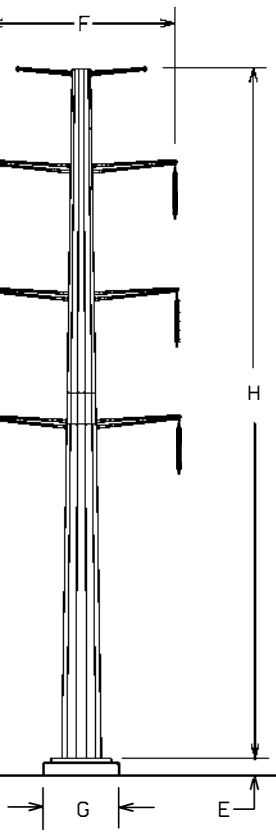
DOMINION PROJECT NUMBER: NW992802	PROJECT NUMBER: 50184751
DATE: 12/11/2024	
SCALE: 1" = 200 FEET	
PROJECT MANAGER: TL	
DRAWN BY: MGH	

Dominion Energy

Dewberry

Attachment II.B.3

230KV LINE #2183 EVERGREEN MILLS - POLAND ROAD
230KV LINE #2210 EVERGREEN MILLS - BRAMBLETON



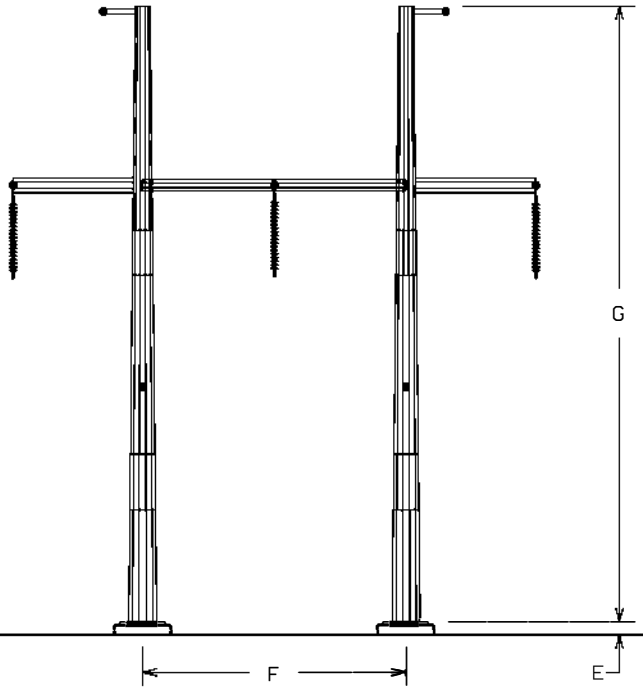
DOUBLE CIRCUIT DEADEND MONOPOLE STRUCTURE

A. MAPPING OF THE ROUTE:	SEE ATTACHMENT II.B.3
B. RATIONALE FOR STRUCTURE TYPE:	ACCOMODATES EFFICIENT USE R/W AND REDUCES BLOWOUT FOOTPRINT
C. LENGTH OF R/W (STRUCTURE QTY):	0.65 MILES (6)
D. STRUCTURE MATERIAL: RATIONAL FOR MATERIAL:	GALVANIZED STEEL GALVANIZED STEEL WAS SELECTED FOR ITS CORROSION RESISTANCE, ENVIRONMENTAL SUSTAINABILITY DUE TO LOW MAINTENANCE, AESTHETIC APPEAL, LOW COST AND LONGEVITY.
E. FOUNDATION MATERIAL: AVERAGE FOUNDATION REVEAL:	CONCRETE SEE NOTE 2
F. AVERAGE WIDTH AT CROSS ARM:	28'
G. AVERAGE WIDTH AT BASE:	9' DIAMETER FOUNDATION (SEE NOTE 3)
H. MINIMUM STRUCTURE HEIGHT: MAXIMUM STRUCTURE HEIGHT: AVERAGE STRUCTURE HEIGHT:	100' 130' 115'
I. AVERAGE SPAN LENGTH (RANGE):	573' (392' - 808') (WIND SPAN)
J. MINIMUM CONDUCTOR-TO-GROUND:	25.5' (AT MAXIMUM OPERATING TEMPERATURE)

NOTE:

1. INFORMATION CONTAINED ON DRAWING IS PRELIMINARY IN NATURE AND SUBJECT TO CHANGE DURING FINAL DESIGN.
2. MINIMUM FOUNDATION REVEAL SHALL BE 1.5'
3. FINAL FOUNDATION DIAMETER SHALL BE BASED UPON FINAL ENGINEERING.
4. STRUCTURE HEIGHTS ARE MEASURED FROM THE STRUCTURE CENTERLINE.

230KV LINE #2183 EVERGREEN MILLS - POLAND ROAD
230KV LINE #2210 EVERGREEN MILLS - BRAMBLETON



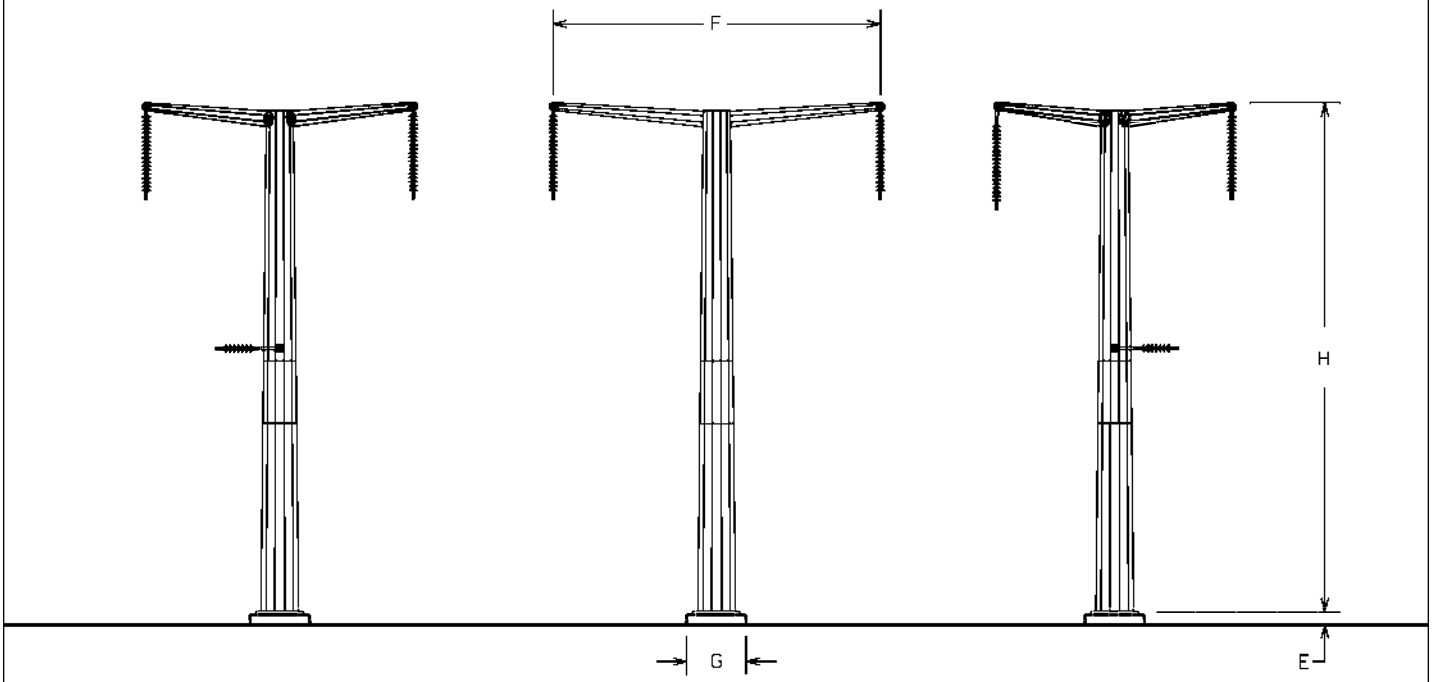
SINGLE CIRCUIT DEADEND H-FRAME STRUCTURE

A. MAPPING OF THE ROUTE:	SEE ATTACHMENT II.B.3
B. RATIONALE FOR STRUCTURE TYPE:	MAINTAINS FLAT CONFIGURATION TO ALLOW CROSSING OF EXISTING CIRCUITS.
C. LENGTH OF R/W (STRUCTURE QTY):	0.03 MILES (2)
D. STRUCTURE MATERIAL: RATIONAL FOR MATERIAL:	GALVANIZED STEEL GALVANIZED STEEL WAS SELECTED FOR ITS CORROSION RESISTANCE, ENVIRONMENTAL SUSTAINABILITY DUE TO LOW MAINTENANCE, AESTHETIC APPEAL, LOW COST AND LONGEVITY.
E. FOUNDATION MATERIAL: AVERAGE FOUNDATION REVEAL:	CONCRETE SEE NOTE 2
F. AVERAGE WIDTH AT BASE:	23.6', 4.5' DIAMETER FOUNDATION (SEE NOTE 3)
G. MINIMUM STRUCTURE HEIGHT: MAXIMUM STRUCTURE HEIGHT: AVERAGE STRUCTURE HEIGHT:	55' 55' 55'
H. AVERAGE SPAN LENGTH (RANGE):	86' (79' - 92') (WIND SPAN)
I. MINIMUM CONDUCTOR-TO-GROUND:	25.5' (AT MAXIMUM OPERATING TEMPERATURE)

NOTE:

1. INFORMATION CONTAINED ON DRAWING IS PRELIMINARY IN NATURE AND SUBJECT TO CHANGE DURING FINAL DESIGN.
2. MINIMUM FOUNDATION REVEAL SHALL BE 1.5'
3. FINAL FOUNDATION DIAMETER SHALL BE BASED UPON FINAL ENGINEERING.
4. STRUCTURE HEIGHTS ARE MEASURED FROM THE STRUCTURE CENTERLINE.

230KV LINE #2183 EVERGREEN MILLS - POLAND ROAD
230KV LINE #2210 EVERGREEN MILLS - BRAMBLETON



DOUBLE CIRCUIT DEADEND 3-POLE STRUCTURE

A. MAPPING OF THE ROUTE:	SEE ATTACHMENT II.B.3
B. RATIONALE FOR STRUCTURE TYPE:	ACCOMODATES LINE TO BE DEADENDED IN VICINITY OF OVERHEAD CROSSING ALLOWING FOR LINE TO BE ROUTED TO EVERGREEN MILLS SWITCHING STATION.
C. LENGTH OF R/W (STRUCTURE QTY):	0.02 MILES (1)
D. STRUCTURE MATERIAL: RATIONAL FOR MATERIAL:	GALVANIZED STEEL GALVANIZED STEEL WAS SELECTED FOR ITS CORROSION RESISTANCE, ENVIRONMENTAL SUSTAINABILITY DUE TO LOW MAINTENANCE, AESTHETIC APPEAL, LOW COST AND LONGEVITY.
E. FOUNDATION MATERIAL: AVERAGE FOUNDATION REVEAL:	CONCRETE SEE NOTE 2
F. AVERAGE WIDTH AT CROSS ARM:	26.2'
G. AVERAGE WIDTH AT BASE:	5.5' DIAMETER FOUNDATION (SEE NOTE 3)
H. MINIMUM STRUCTURE HEIGHT: MAXIMUM STRUCTURE HEIGHT: AVERAGE STRUCTURE HEIGHT:	40' 40' 40'
I. AVERAGE SPAN LENGTH:	95' (WIND SPAN)
J. MINIMUM CONDUCTOR-TO-GROUND:	25.5' (AT MAXIMUM OPERATING TEMPERATURE)

NOTE:

1. INFORMATION CONTAINED ON DRAWING IS PRELIMINARY IN NATURE AND SUBJECT TO CHANGE DURING FINAL DESIGN.
2. MINIMUM FOUNDATION REVEAL SHALL BE 1.5'
3. FINAL FOUNDATION DIAMETER SHALL BE BASED UPON FINAL ENGINEERING.
4. STRUCTURE HEIGHTS ARE MEASURED FROM THE STRUCTURE CENTERLINE.

II. DESCRIPTION OF THE PROPOSED PROJECT

B. Line Design and Operational Features

4. With regard to the proposed supporting structures for all feasible alternate routes, provide the maximum, minimum and average structure heights with respect to the whole route.

Response: Not applicable.

II. DESCRIPTION OF THE PROPOSED PROJECT

B. Line Design and Operational Features

5. For lines being rebuilt, provide mapping showing existing and proposed structure heights for each individual structure within the ROW, as proposed in the application.

Response: Not applicable.

II. DESCRIPTION OF THE PROPOSED PROJECT

B. Line Design and Operational Features

6. Provide photographs for [a] typical existing facilities to be removed, [b] comparable photographs or representations for proposed structures, and [c] visual simulations showing the appearance of all planned transmission structures at identified historic locations within one mile of the proposed centerline and in key locations identified by the Applicant.

Response:

[a] typical existing facilities to be removed

See Attachment II.B.6.a.i.

[b] comparable photographs or representations for proposed structures

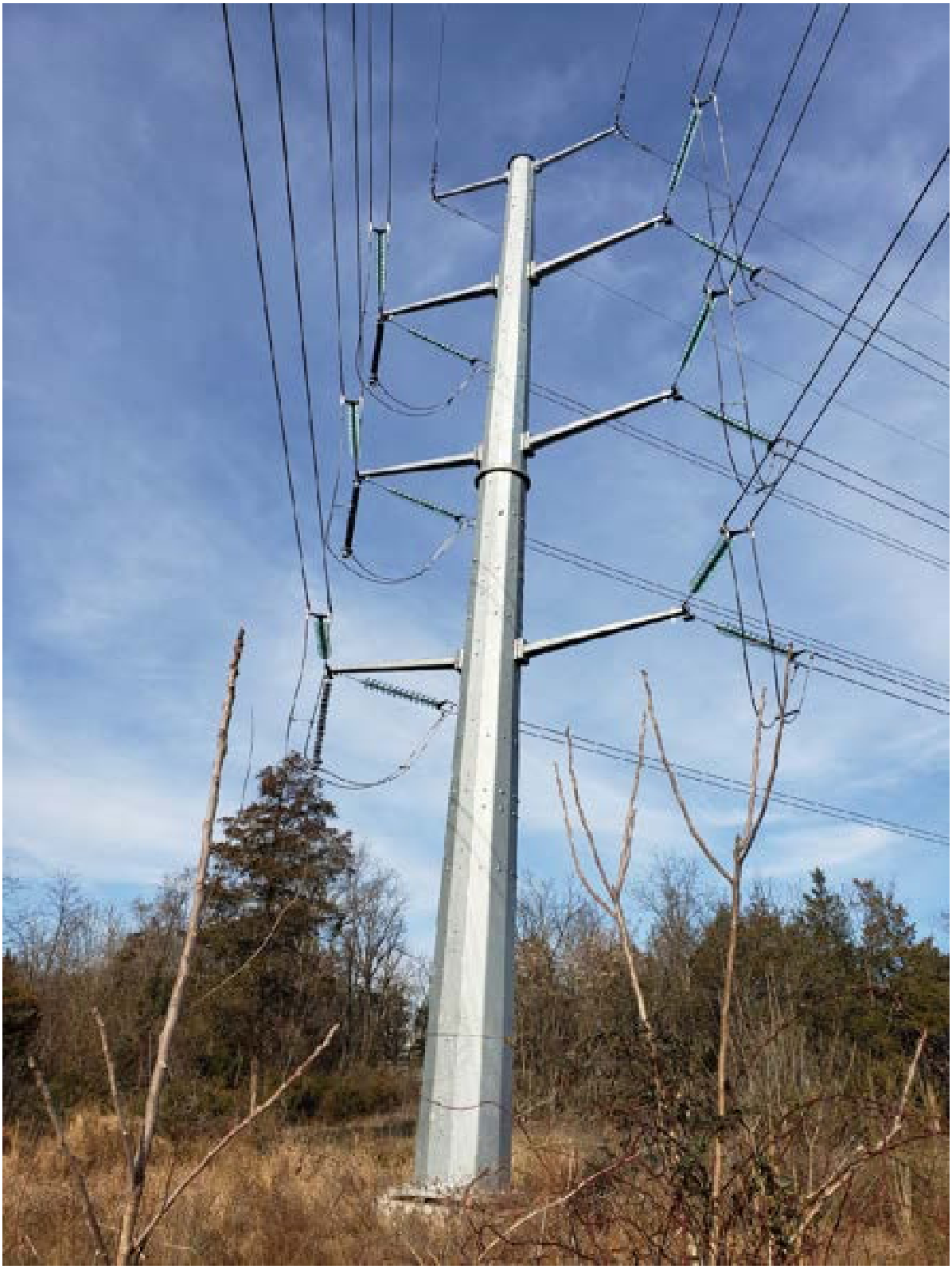
See Attachments II.B.6.b.i-iii for representative photographs of the proposed structures. Note that the Company has proposed galvanized steel as the structure material for Project structures. See Attachments II.B.3.a - c.

[c] visual simulations showing the appearance of all planned transmission structures at identified historic locations within one mile of the proposed centerline and in key locations identified by the Applicant.

Visual simulations showing the appearance of the proposed transmission structures at identified historic locations within 1.0 mile of the proposed centerline of the Proposed Route are provided. See Attachment II.B.6.c for a map of the simulation locations, the existing views at the historic locations, and simulated proposed views. These simulations were created using Geographic Information Systems modeling to depict whether the proposed structures will be visible from the identified historic location. The historic locations evaluated are described below. See also the Stage I Pre-Application Analysis Report attached as Attachment 2.I.1 to the DEQ Supplement.

Historic Property	Viewpoint(s)	Comments
Arcola Slave Quarters (VDHR ID# 053-0984)	1, 2, and 3	The Proposed Route will have minimal impact on Arcola Slave Quarters
Arcola Elementary School (VDHR ID# 053-0982)	1	The Proposed Route will have minimal impact on the Arcola Elementary School

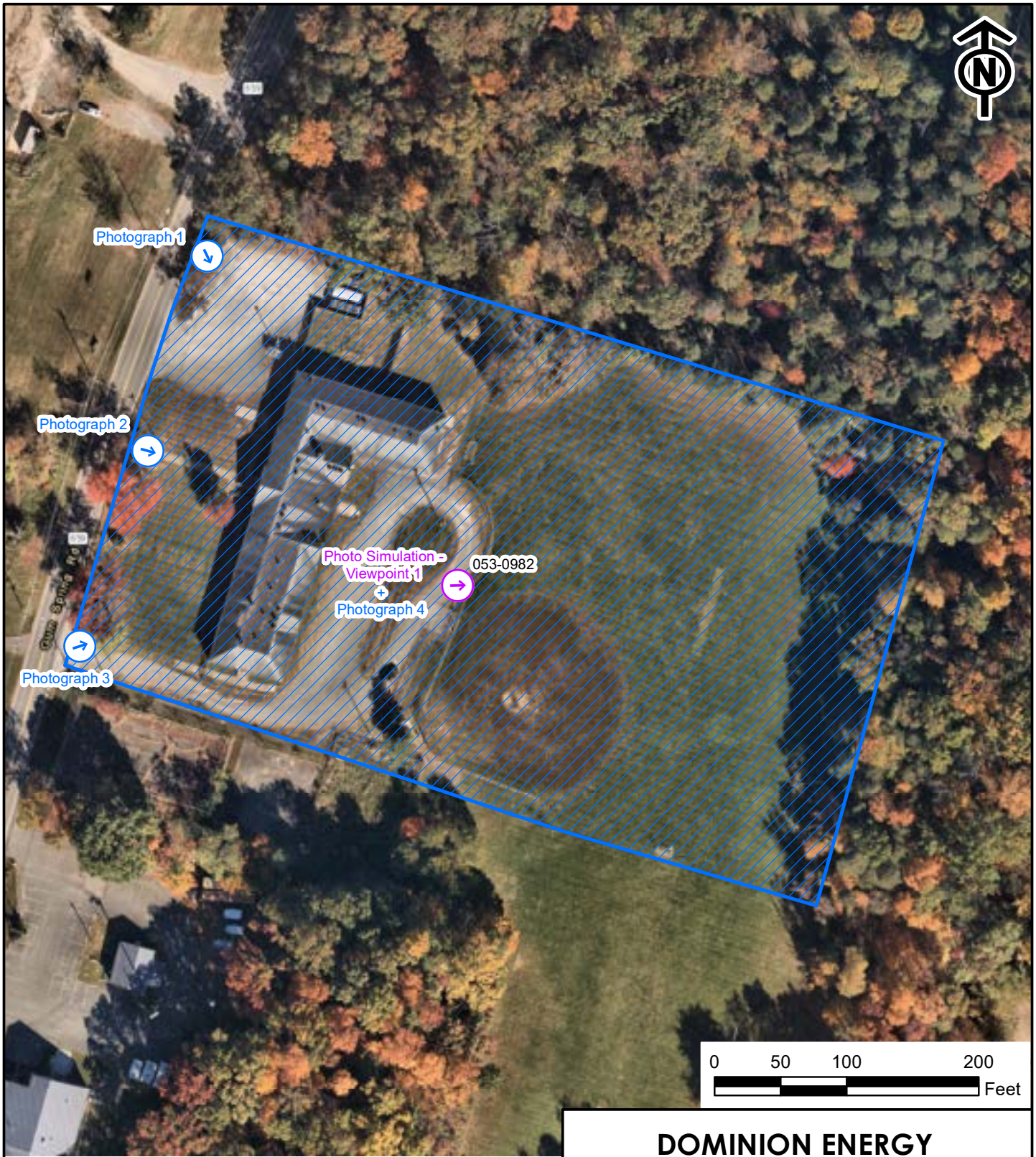
Existing Structure Type:
230kV Double Circuit Steel Monopole (TAN)



Proposed Structure
Type: 230kV Double Circuit Steel Monopole
(DDE)

Proposed Structure
Type: 230kV Single Circuit Steel H-Frame (DDE)

*Structure pictured above is similar to the proposed structure except the proposed structure will have the OPGW installed as underbuilt, and the proposed structure will have the crossarm installed at the top of the poles.



LEGEND

DHR ID

053-0982

Photo Location

Photo Simulation Location

Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors

Path: Q:\50184751\GIS\Mxd\7_PhotoandSimulationLocations_EvergreenMillsSCCPreAppAnalysis_LoudounCountyVA.mxd

DOMINION ENERGY

LOCATIONS OF PHOTOGRAPHS AND PHOTO-SIMULATIONS - 053-0982

SCC Pre-Application Analysis of Cultural Resources
Evergreen Mills Part B 230 kV Transmission Line Project
Loudoun County, Virginia

SCALE: 1" = 100'

DATE: November 2024

Dewberry

FIGURE 7

EXISTING VIEW

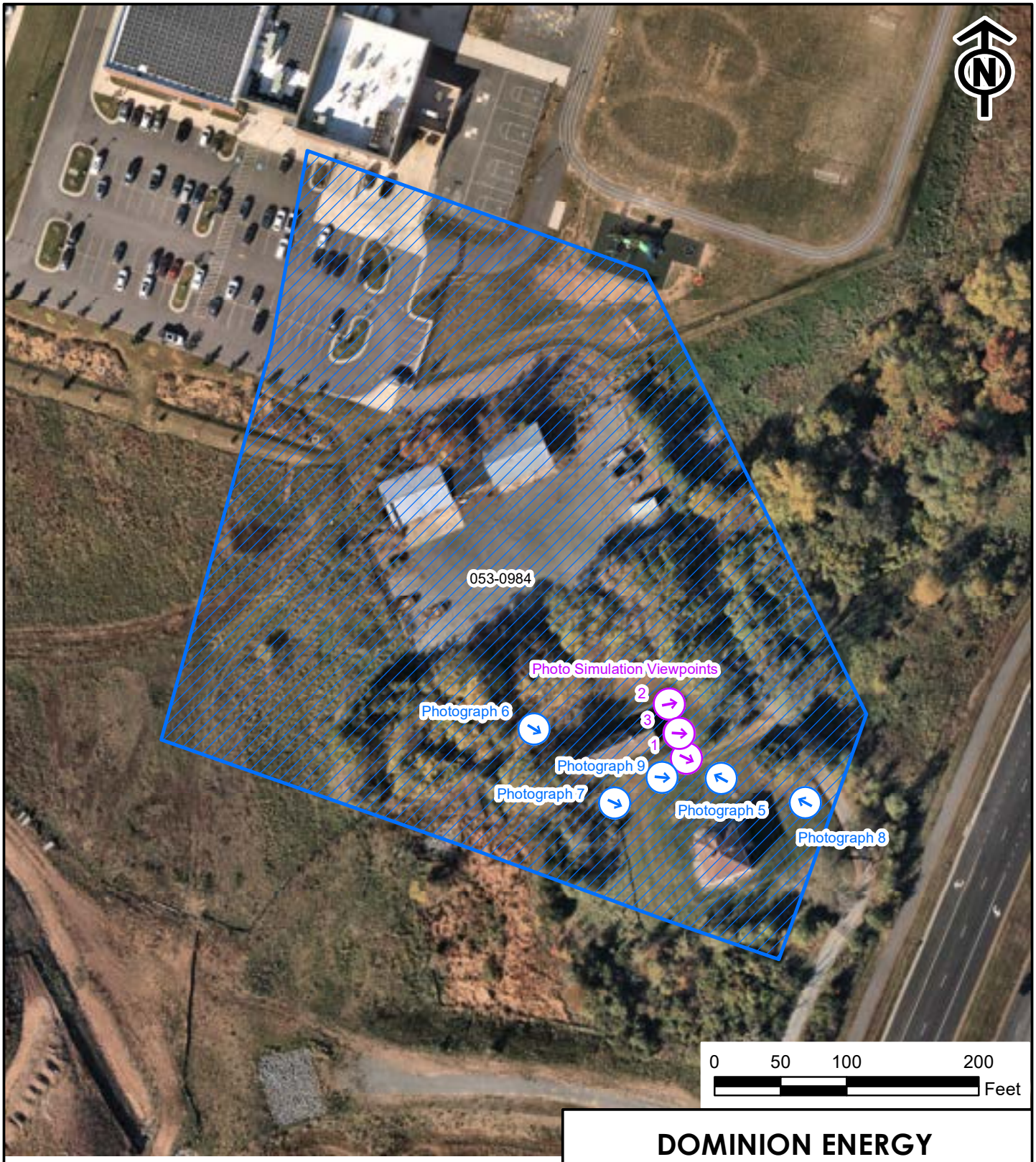
FROM ARCOLA ELEMENTARY SCHOOL LOOKING EAST

DATE: 11/19/2024
TIME: 10:11 AM
DISTANCE FROM LINE: 0.59 MILES

VIEW OF PROPOSED LINE

FROM ARCOLA ELEMENTARY SCHOOL LOOKING EAST

DATE: 11/19/2024
TIME: 10:11 AM
DISTANCE FROM LINE: 0.59 MILES



LEGEND

DHR ID

053-0984

Photo Location

Photo Simulation Location

Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors

Path: Q:\50184751\GIS\Mxd\9_PhotoandSimulationLocations_EvergreenMillsSCCPreAppAnalysis_LoudounCountyVA.mxd

DOMINION ENERGY

LOCATIONS OF PHOTOGRAPHS AND PHOTO-SIMULATIONS - 053-0984

SCC Pre-Application Analysis of Cultural Resources
Evergreen Mills Part B 230 kV Transmission Line Project
Loudoun County, Virginia

SCALE: 1" = 100'

DATE: November 2024

Dewberry

FIGURE 9

EXISTING VIEW

FROM ARCOLA SLAVE QUARTERS SITE LOOKING EAST

DATE: 11/19/2024
TIME: 9:49 AM
DISTANCE FROM LINE: 0.14 MILES

VIEW OF PROPOSED LINE

FROM ARCOLA SLAVE QUARTERS SITE LOOKING EAST

DATE: 11/19/2024
TIME: 9:49 AM
DISTANCE FROM LINE: 0.14 MILES

EXISTING VIEW

FROM ARCOLA SLAVE QUARTERS SITE LOOKING NORTHEAST

DATE: 11/19/2024
TIME: 9:42 AM
DISTANCE FROM LINE: 0.14 MILES

VIEW OF PROPOSED LINE

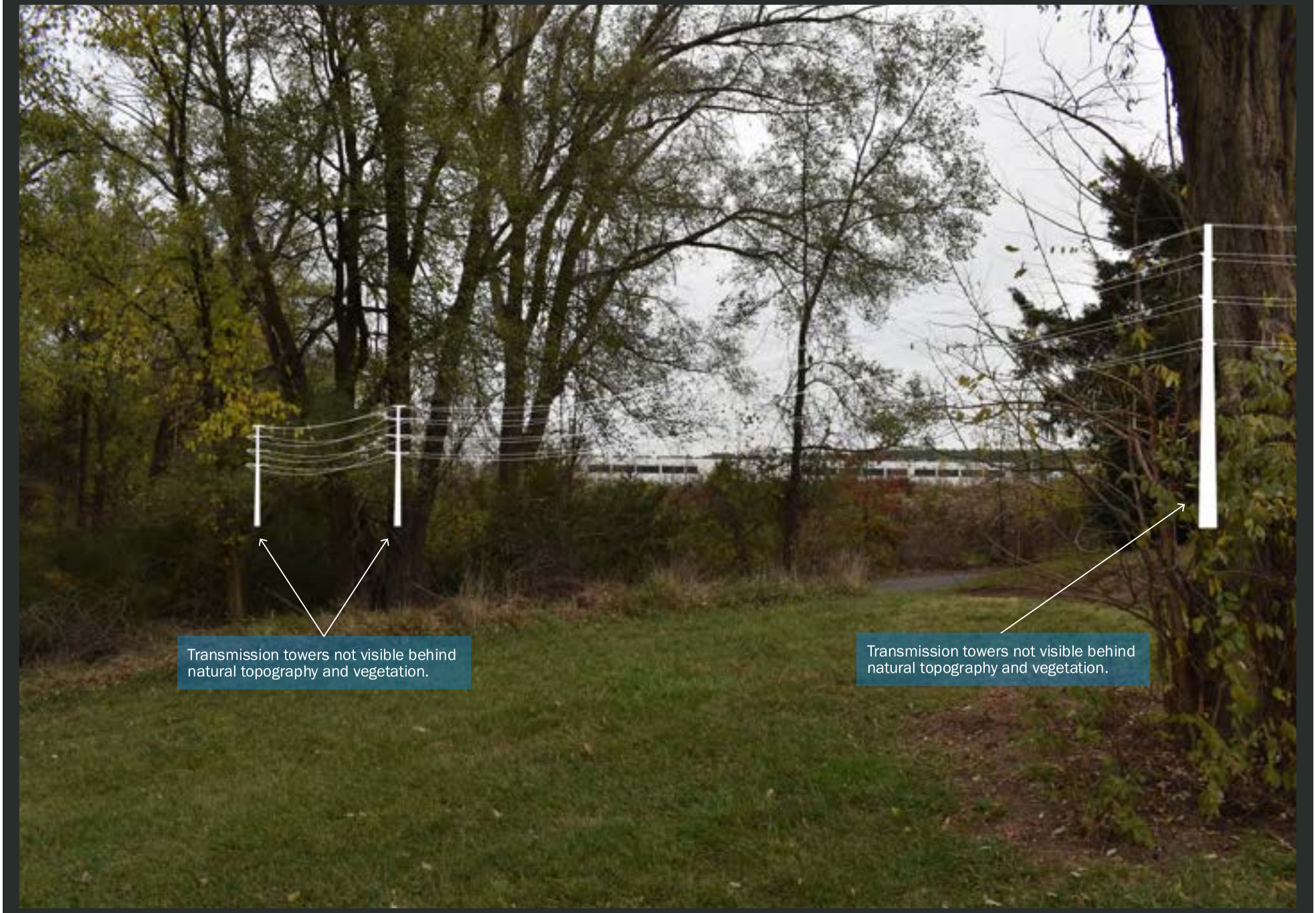
FROM ARCOLA SLAVE QUARTERS SITE LOOKING NORTHEAST

DATE: 11/19/2024
TIME: 9:42 AM
DISTANCE FROM LINE: 0.14 MILES

EXISTING VIEW

FROM ARCOLA SLAVE QUARTERS SITE LOOKING NORTHEAST

DATE: 11/19/2024
TIME: 9:52 AM
DISTANCE FROM LINE: 0.14 MILES



VIEW OF PROPOSED LINE

FROM ARCOLA SLAVE QUARTERS SITE LOOKING NORTHEAST

DATE: 11/19/2024
TIME: 9:52 AM
DISTANCE FROM LINE: 0.14 MILES

II. DESCRIPTION OF THE PROPOSED PROJECT

C. Describe and furnish plan drawings of all new substations, switching stations, and other ground facilities associated with the proposed project. Include size, acreage, and bus configurations. Describe substation expansion capability and plans. Provide one-line diagrams for each.

Response: Not applicable.

III. IMPACT OF LINE ON SCENIC, ENVIRONMENTAL, AND HISTORIC FEATURES

A. Describe the character of the area that will be traversed by this line, including land use, wetlands, etc. Provide the number of dwellings within 500 feet, 250 feet and 100 feet of the centerline, and within the ROW for each route considered. Provide the estimated amount of farmland and forestland within the ROW that the proposed project would impact.

Response: A portion of the proposed Project is located within a large master-planned development area known as "Arcola Center," which was approved by Loudoun County in October 2018 (Loudoun County Zoning Amendment ZMAP-2016-0013, Zoning Concept Plan Amendment ZCPA-2016-0010, Zoning Modification ZMOD-2016-0013 and Minor Special Exception SPMI-2017-0017). As shown on Attachment III.A.1, Arcola Center is divided by Arcola Boulevard. The Project will cross commercial areas operating as data center and electric substation use, identified as Landbay 3 (PD-IP) area in Loudoun Zoning. The rest of the proposed Line #2183 Loop will be located over an existing stormwater management pond, existing Arcola Mills Drive (formerly known as Evergreen Mills Road), and property owned and occupied by an existing data center. The portion of this existing data center property where the Project will be located was previously cleared for the 160-foot right-of-way approved for the Evergreen Mills Part A scope in Case No. PUR-2019-00191. None of these areas contain farmland.

To the north-northwest of the Project is an existing large-scale commercial development known as Dulles Trade Center West.

No existing residential dwellings would be located within any of the rights-of-way of the Proposed Route. Further, no residential dwellings are located within 500 feet of the proposed rights-of-way.

The Proposed Route is not anticipated to result in forest impacts as the proposed alignment is within existing right-of-way that has been previously cleared.

Impacts of the proposed Project on natural resources, including streams, wetlands, and riparian areas would be limited in part due to the relatively short length of the alternatives and the relatively few resource features in the study area. The potential length of wetlands crossed and number of streams spanned by the proposed route is provided in the following table:

Table III.A.1. Delineated Wetland and Waterbody Crossings within the Proposed ROW

Wetland/ Waterbody Type				Cowardin Code	Linear Feet	Square Feet	Acres
Palustrine Scrub-Shrub Wetland*				PSS	N/A	748	0.017
Palustrine Emergent Wetland	PEM	N/A	18,484	0.424			
Open Waters	PUB	N/A	61,407	1.410			
Perennial Stream	R3	1,300	13,587	0.312			
Intermittent Stream				R4	45	186	0.004

*The total area estimated as PSS wetlands includes three features that were delineated as Palustrine Forested (PFO) wetlands but were determined to have been converted to, and maintained as, PSS wetlands during the construction of the Evergreen Mills Part A project.

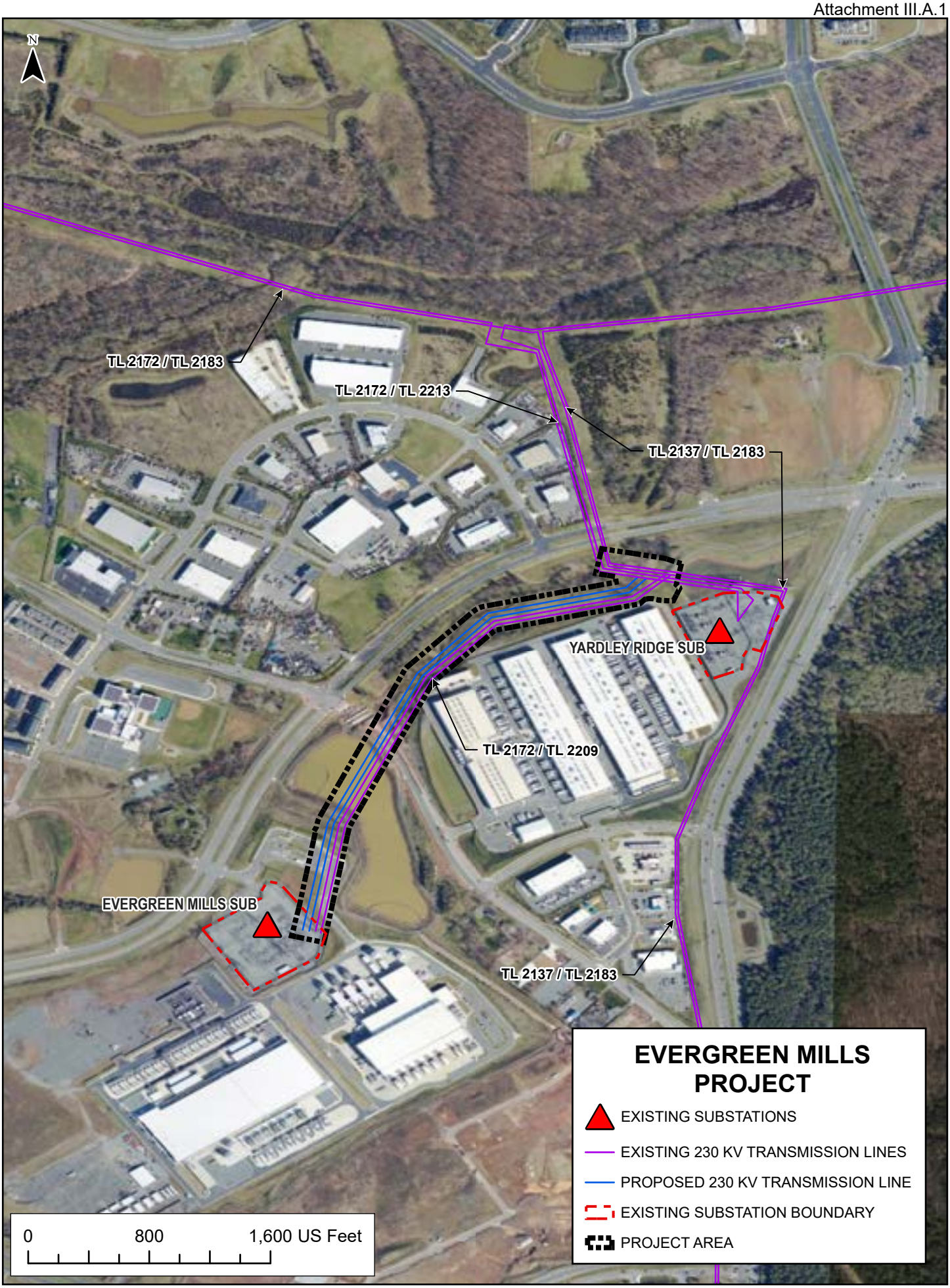
The Proposed Route is anticipated to cross six wetland areas, three stream channels and include one waterbody crossing.

One property listed with the NRHP, the Arcola Slave Quarters, is located within the study area but is not crossed by the route. The Arcola Slave Quarters site is located on land owned by Loudoun County that will be surrounded by proposed commercial and residential uses in Arcola Center. Publicly available site plans for Arcola Center identify this site as part of the open space component of the proposed development. Since the Arcola Slave Quarters are located within one mile of the proposed Evergreen Mills Switching Station, coordination with the Virginia DHR will be conducted as part of the Project. On behalf of the Company, Dewberry has prepared a Pre-Application Analysis addressing the potential impacts of the Proposed Route on this and other nearby historic properties, which is included as an attachment to the DEQ Supplement.

In summary, the Proposed Route is not anticipated to affect existing and planned residential, commercial, and mixed-use development. As the Proposed Route falls within existing ROW, it would be consistent with underlying zoning approved by Loudoun County and approved uses within Arcola Center. The Proposed Route would not require clearing of any forest areas or conversion impacts to any wetland areas. Through the permitting process, adherence to applicable permitting requirements would minimize wetlands impacts to the extent practicable. Potential effects on the Arcola Slave Quarters and Arcola Elementary School historic resources from the Proposed Route are anticipated to be minimal and the Company will coordinate with DHR as is required for the permitting process.

See Section 2.L of the DEQ Supplement for the estimated amount of farmland and forestland within ROW that the Proposed Route would impact.

For additional description of the character of the area that will be traversed by the Proposed Route and the related impacts, see the DEQ Supplement, specifically as to land use (Sections 2.G and 2.L), wetlands (Section 2.D), forests (Section 2.L), agricultural lands (Section 2.L), historic resources (Section 2.I), and wildlife (Sections 2.G and 2.K).


N
TL 2172 / TL 2183
TL 2172 / TL 2213
TL 2137 / TL 2183
YARDLEY RIDGE SUB
TL 2172 / TL 2209
EVERGREEN MILLS SUB
TL 2137 / TL 2183
0
800
1,600 US Feet
EVERGREEN MILLS PROJECT
EXISTING SUBSTATIONS
EXISTING 230 KV TRANSMISSION LINES
PROPOSED 230 KV TRANSMISSION LINE
EXISTING SUBSTATION BOUNDARY
PROJECT AREA

III. IMPACT OF LINE ON SCENIC, ENVIRONMENTAL, AND HISTORIC FEATURES

B. Describe any public meetings the Applicant has had with neighborhood associations and/or officials of local, state or federal governments that would have an interest or responsibility with respect to the affected area or areas.

Response:

Stakeholder Engagement

On November 21, 2024, the Company announced the proposed Project to the public with a postcard that was mailed to residents. The postcard was also posted on an internet website dedicated to the proposed Project at dominionenergy.com/nova. The website includes a description and benefits of the proposed Project, an explanation of need, an interactive map where property owners can search project areas to see changes in their area, copies of the postcard mailed to the community, and information on the Commission review process. The postcard provided a brief overview of the respective proposed Project. Copies of the postcard are included as Attachment III.B.1.

The November 2024 project announcement postcard was sent to approximately 76 property owners and residents within 500 feet of the centerline of the right-of-way. Each postcard included information about the need for the Project and a map. The postcard explained how to contact the Project team to provide any feedback or ask questions. A copy of the November 2024 postcard is available on the Project website, dominionenergy.com/nova.

The Company made available details about construction, project timing, and the Commission approval process. Photo simulations showing the visual impact of the electric transmission project have been posted on GeoVoice since September 2024. The simulations include the proposed Project from key locations. The key location simulations are included as Attachment III.B.2.a - Attachment III.B.2.f.

Environmental Justice

The Company researched the demographics of the surrounding communities using data from the U.S. Census Bureau's American Community Survey 5-Year Estimates (2018-2022). This review revealed that 9 Census Block Groups ("CBGs") are located within one mile of the Proposed Route. A review of census data for several demographic characteristics identified populations within the Project study area that meet the Virginia Environmental Justice Act ("VEJA") thresholds for Environmental Justice Communities ("EJ Communities") (Va. Code §§ 2.2-234, 2.2-235).

Of the 9 CBGs within the Project study area, two CBGs are crossed by the proposed route. Both of the CBGs crossed are reported to contain populations of color and

one meets VEJA low-income thresholds.

As set forth above in this Section, the Company has communicated and provided detailed Project information to the communities within the Project study area, including people in the EJ Community CGBs discussed herein. The Company believes that 1) its work has allowed for the fair treatment and meaningful involvement of all interested people, regardless of race, color, national origin, income, faith, or disability, and 2) the Project's Proposed Route minimizes potential impacts to EJ Communities and other populations and will not result in a disproportionate and significant adverse impact on EJ Communities.

In addition to its evaluation of impacts, the Company has and will continue to engage the EJ Communities in a manner that allows them to meaningfully participate in the Project development and approval process so that the Company can take their views and input into consideration. See Attachment III.B.2 for a copy of the Company's Environmental Justice Policy.

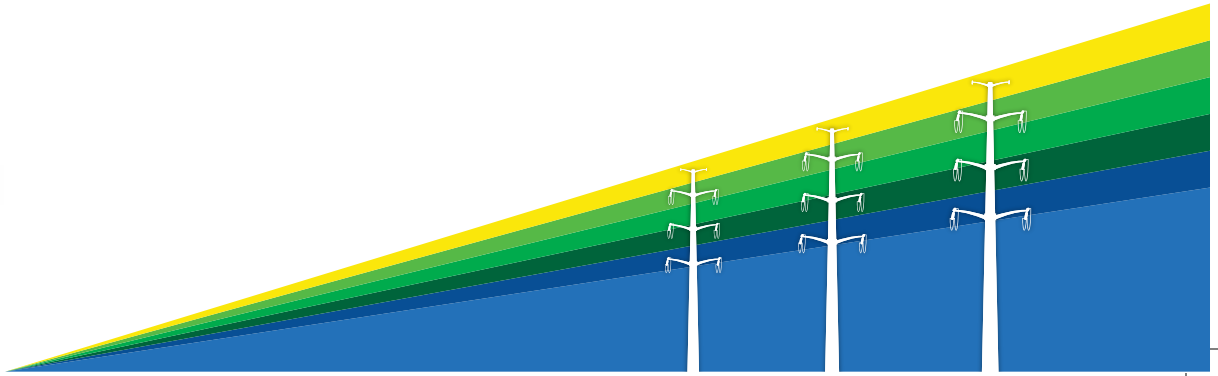
Dominion Energy image. Not project specific.

Dominion Energy®

Electric Transmission
P.O. Box 26666
Richmond, VA 23261

Learn more about a new transmission line project in Loudoun County.

SCAN HERE TO LEARN MORE



We are doing work in your community

Evergreen Mills 230 kV Electric Transmission Project

At Dominion Energy, we are committed to continually reviewing and analyzing our energy infrastructure to provide safe, reliable electricity to our neighbors. To meet the area's increased load demand, we are proposing to co-locate new electric transmission powerlines along an existing corridor west of Dulles Airport. This project will improve grid reliability, enhance operational flexibility, and maintain compliance with federal standards.

SCAN HERE TO LEARN MORE

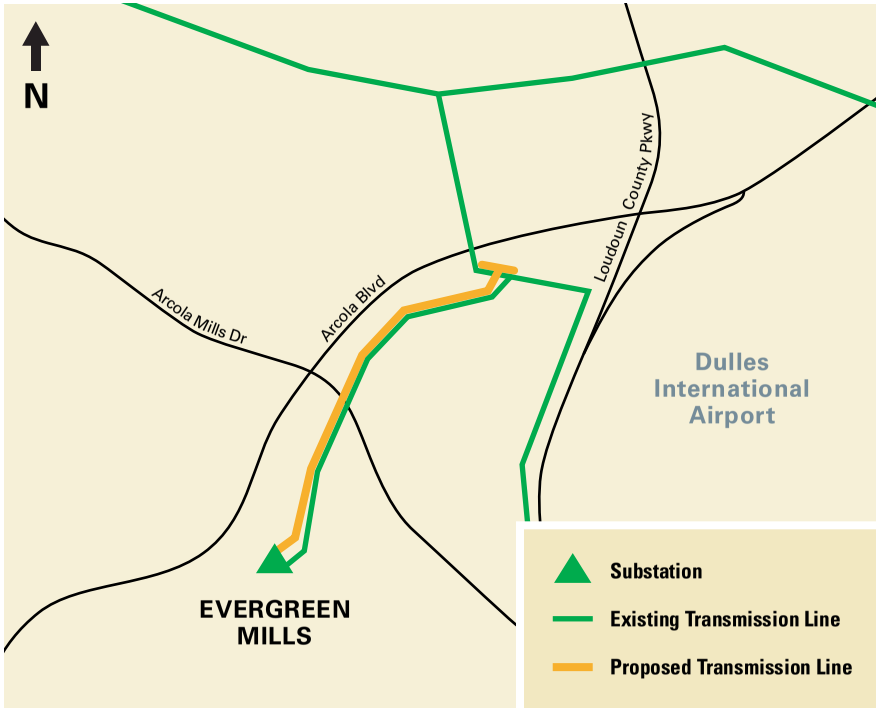
The Evergreen Mills 230 kilovolt (kV) Electric Transmission Project proposes to build a short double circuit 230 kV transmission circuit in an existing right of way in eastern Loudoun County.

- **The existing right of way and substation were constructed 5 years ago.**
- **Current infrastructure was built to bring in bulk electricity and support rapid growth in electrical demand in Loudoun County.**
- **Construction of the proposed transmission line would begin in 2025.**

Protecting the grid against natural and man-made acts is a top priority. You can learn more about our commitment to safety at powerlines101.dominionenergy.com.

CONTACT US

Website: DominionEnergy.com/nova
Email: powerline@dominionenergy.com
Phone: 888-291-0190



This map is intended to serve as a representation of the project area and is not intended for detailed engineering purposes.

Environmental Justice: Ongoing Commitment to Our Communities

At Dominion Energy, we are committed to providing reliable, affordable, clean energy in accordance with our values of safety, ethics, excellence, embrace change and team work. This includes listening to and learning all we can from the communities we are privileged to serve.

Our values also recognize that environmental justice considerations must be part of our everyday decisions, community outreach and evaluations as we move forward with projects to modernize the generation and delivery of energy.

To that end, communities should have a meaningful voice in our planning and development process, regardless of race, color, national origin, or income. Our neighbors should have early and continuing opportunities to work with us. We pledge to undertake collaborative efforts to work to resolve issues. We will advance purposeful inclusion to ensure a diversity of views in our public engagement processes.

Dominion Energy will be guided in meeting environmental justice expectations of fair treatment and sincere involvement by being inclusive, understanding, dedicated to finding solutions, and effectively communicating with our customers and our neighbors. We pledge to be a positive catalyst in our communities.

November 2018

EVERGREEN MILLS B

Transmission Line Project

Photo Location Map

1 Viewpoint Location — Transmission Line

1 Aerial Viewpoint Location

Dominion Energy®

659
607
606
606
ARCOLA BLVD
TRADE W DR
DULLES TRADE CT
ARCOLA MILLS DR
STONE SPRINGS BLVD
YARDLEY RIDGE BLVD
ARCOLA BLVD
1
2
3
4
5
N

EVERGREEN MILLS B

Transmission Line Project

Viewpoint 1

Date: 06/18/2024 **Time:** 5:22 pm **Viewing Direction:** Southeast

1 Aerial Viewpoint Location

Transmission Line

Dominion Energy®

EXISTING CONDITIONS

PROPOSED CONDITIONS

Photo simulations are for discussion purposes only. Final design is subject to change pending public, engineering, and regulatory review.

EVERGREEN MILLS B

Transmission Line Project

Viewpoint 2

Date: 06/18/2024 **Time:** 11:35 am **Viewing Direction:** South

2 Viewpoint Location

Transmission Line

Dominion Energy®

EXISTING CONDITIONS

PROPOSED CONDITIONS

Photo simulations are for discussion purposes only. Final design is subject to change pending public, engineering, and regulatory review.

EVERGREEN MILLS B

Transmission Line Project

Viewpoint 3

Date: 06/18/2024 **Time:** 11:43 am **Viewing Direction:** Southwest

3 Viewpoint Location

Transmission Line

Dominion Energy®

EXISTING CONDITIONS

PROPOSED CONDITIONS

Photo simulations are for discussion purposes only. Final design is subject to change pending public, engineering, and regulatory review.

EVERGREEN MILLS B

Transmission Line Project

Viewpoint 4

Date: 06/18/2024 **Time:** 8:41 am **Viewing Direction:** Southwest

4 Viewpoint Location

Transmission Line

Dominion Energy®

EXISTING CONDITIONS

PROPOSED CONDITIONS

Photo simulations are for discussion purposes only. Final design is subject to change pending public, engineering, and regulatory review.

EVERGREEN MILLS B

Transmission Line Project

Viewpoint 5

Date: 06/18/2024 **Time:** 11:25 am **Viewing Direction:** Southeast

5 Viewpoint Location

Transmission Line

Dominion Energy®

EXISTING CONDITIONS

PROPOSED CONDITIONS

Photo simulations are for discussion purposes only. Final design is subject to change pending public, engineering, and regulatory review.

Environmental Justice: Ongoing Commitment to Our Communities

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To that end, communities should have a meaningful voice in our planning and development process, regardless of race, color, national origin, or income. Our neighbors should have early and continuing opportunities to work with us. We pledge to undertake collaborative efforts to work to resolve issues. We will advance purposeful inclusion to ensure a diversity of views in our public engagement processes.

Dominion Energy will be guided in meeting environmental justice expectations of fair treatment and sincere involvement by being inclusive, understanding, dedicated to finding solutions, and effectively communicating with our customers and our neighbors. We pledge to be a positive catalyst in our communities.

November 2018

III. IMPACT OF LINE ON SCENIC, ENVIRONMENTAL AND HISTORIC FEATURES

C. Detail the nature, location, and ownership of each building that would have to be demolished or relocated if the project is built as proposed.

Response: Not applicable.

III. IMPACT OF LINE ON SCENIC, ENVIRONMENTAL AND HISTORIC FEATURES

D. Identify existing physical facilities that the line will parallel, if any, such as existing transmission lines, railroad tracks, highways, pipelines, etc. Describe the current use and physical appearance and characteristics of the existing ROW that would be paralleled, as well as the length of time the transmission ROW has been in use.

Response: The Proposed Route parallels an existing Loudoun County-maintained sanitary sewer easement for approximately 1,400 linear feet (approximately 0.3 mile). The Proposed Route will also be parallel to an existing Company-owned 230 kV line which has been in place since 2022.

III. IMPACT OF LINE ON SCENIC, ENVIRONMENTAL AND HISTORIC FEATURES

E. Indicate whether the Applicant has investigated land use plans in the areas of the proposed route and indicate how the building of the proposed line would affect any proposed land use.

Response: As discussed in Section I.A, the proposed installation of this new circuit to the Evergreen Mills Switching Station would directly support a load drop violation and further support a customer request for a third and fourth 230kV transmission line delivery.

As depicted on Attachment III.A.1, the Proposed Route would be within existing ROW, parallel to existing transmission lines on parcels that are developed or under construction and would not adversely affect any proposed land use.

III. IMPACT OF LINE ON SCENIC, ENVIRONMENTAL AND HISTORIC FEATURES

F. Government Bodies

1. Indicate if the Applicant determined from the governing bodies of each county, city and town in which the proposed facilities will be located whether those bodies have designated the important farmlands within their jurisdictions, as required by § 3.2-205 B of the Code.

2. If so, and if any portion of the proposed facilities will be located on any such important farmland:

a. Include maps and other evidence showing the nature and extent of the impact on such farmlands;

b. Describe what alternatives exist to locating the proposed facilities on the affected farmlands, and why those alternatives are not suitable; and

c. Describe the Applicant's proposals to minimize the impact of the facilities on the affected farmland.

Response:

1. Coordination with Loudoun County has concluded that no designated important farmlands are located in the study area.

2. Not applicable.

III. IMPACT OF LINE ON SCENIC, ENVIRONMENTAL, AND HISTORIC FEATURES

G. Identify the following that lie within or adjacent to the proposed ROW:

1. **Any district, site, building, structure, or other object included in the National Register of Historic Places maintained by the U.S. Secretary of the Interior;**

2. **Any historic architectural, archeological, and cultural resources, such as historic landmarks, battlefields, sites, buildings, structures, districts or objects listed or determined eligible by the Virginia Department of Historic Resources ("DHR");**

3. **Any historic district designated by the governing body of any city or county;**

4. **Any state archaeological site or zone designated by the Director of the DHR, or its predecessor, and any site designated by a local archaeological commission, or similar body;**

5. **Any underwater historic assets designated by the DHR, or predecessor agency or board;**

6. **Any National Natural Landmark designated by the U.S. Secretary of the Interior;**

7. **Any area or feature included in the Virginia Registry of Natural Areas maintained by the Virginia Department of Conservation and Recreation ("DCR");**

8. **Any area accepted by the Director of the DCR for the Virginia Natural Area Preserves System;**

9. **Any conservation easement or open space easement qualifying under §§ 10.1-1009 – 1016, or §§ 10.1-1700 – 1705, of the Code (or a comparable prior or subsequent provision of the Code);**

10. **Any state scenic river;**

11. **Any lands owned by a municipality or school district; and**

12. **Any federal, state or local battlefield, park, forest, game or wildlife preserve, recreational area, or similar facility. Features, sites, and the like listed in 1 through 11 above need not be identified again.**

Response: Though not adjacent, the alignment of the Proposed Route will be located east of the NRHP-listed Arcola Slave Quarters that is located on land owned by Loudoun County.

1. None.
2. None.
3. None.
4. None.
5. None.
6. None.
7. None.
8. None.
9. None.
10. None.
11. None.
12. None

III. IMPACT OF LINE ON SCENIC, ENVIRONMENTAL AND HISTORIC FEATURES

H. List any registered aeronautical facilities (airports, helipads) where the proposed route would place a structure or conductor within the federally-defined airspace of the facilities. Advise of contacts, and results of contacts, made with appropriate officials regarding the effect on the facilities' operations.

Response: The Federal Aviation Administration ("FAA") is responsible for overseeing air transportation in the United States. The FAA manages air traffic in the United States and evaluates physical objects that may affect the safety of aeronautical operations through an obstruction evaluation. The prime objective of the FAA in conducting an obstruction evaluation is to ensure the safety of air navigation and the efficient utilization of navigable airspace by aircraft.

The Company has reviewed the FAA's website[7] to identify airports within ten miles of the proposed Project. Based on this review, two FAA-restricted airports are located within ten miles of the project:

Airport Name	Approximate Distance and Direction from Proposed Project (nautical miles (approx.))	Use
Dulles International Airport	○ ~2 miles east of the Project	Public
Leesburg Executive Airport	○ ~9 miles northwest of the Project	Private

The Company reviewed the FAA website to identify public use airports, airports operated by a federal agency, or the U.S. Department of Defense, airports or heliports with at least one FAA-Approved instrument approach procedure, and public use or military airports under construction (FAA 2021). Based on this review, there are no airports, private airstrips, or heliports located within three nautical miles of the proposed alignment. As such, no height limitations are anticipated, and the Company is not expecting to file FAA Form 7460-1, Notice of Proposed Construction or Alteration.

A private helipad associated with the Stone Springs Hospital was identified approximately 0.8 miles southwest of the project area. It is not anticipated the Project will have any adverse impacts to this facility.

[7] https://oeaaa.faa.gov/oeaaa/external/portal.jsp.

III. IMPACT OF LINE ON SCENIC, ENVIRONMENTAL, AND HISTORIC FEATURES

I. Advise of any scenic byways that are in close proximity to or that will be crossed by the proposed transmission line and describe what steps will be taken to mitigate any visual impacts on such byways. Describe typical mitigation techniques for other highways' crossings.

Response: No scenic byways or highways would be crossed by the Proposed Route.

III. IMPACT OF LINE ON SCENIC, ENVIRONMENTAL, AND HISTORIC FEATURES

J. Identify coordination with appropriate municipal, state, and federal agencies.

Response: The Company solicited feedback from Loudoun County regarding the proposed Project. Below is a list of coordination that has occurred with municipal, state, and federal agencies:

- Coordination with the U.S. Army Corps of Engineers, DEQ, VMRC, and VDOT will take place as appropriate to obtain necessary approvals for the Project.

- A letter dated November 18, 2024, was submitted to Loudoun County to describe the Project and request comments. See Section V.D.

- A Stage I Pre-Application Analysis has been prepared and was submitted to VDHR on December 16, 2024. See Attachment 2.I.1 to the DEQ Supplement.

- On November 22, 2024, the Company solicited comments via letter from several federally recognized Native American tribes, including:

    - Cheroenhaka (Nottoway) Indian Tribe
    - Chickahominy Indian Tribe
    - Chickahominy Indian Tribe Eastern Division
    - Mattaponi Tribe
    - Monacan Indian Nation
    - Nansemond Indian Tribe of Virginia
    - Nottoway Indian Tribe of Virginia
    - Pamunkey Indian Museum and Cultural Center
    - Pamunkey Indian Tribe
    - Patawomeck Indian Tribe of Virginia
    - Rappahannock Tribe
    - Upper Mattaponi Indian Tribe
    - Haliwa-Saponi Indian Tribe
    - Meherrin Indian Tribe
    - Sappony
    - Occaneechi Band of the Saponi Nation

A copy of the letter template and map is included as Attachment III.J.1.

See also Sections III.B, III.K and V.D of this Appendix, and the DEQ Supplement.

Dominion Energy Virginia
Electric Transmission
P.O. Box 26666, Richmond, VA 23261
DominionEnergy.com

November 22, 2024

Evergreen Mills 230 kV Electric Transmission Line Project

Dear: Chief Red Hawk,

At Dominion Energy, we are committed to continually reviewing and analyzing our energy infrastructure to provide safe, reliable electricity to our neighbors. As a valued stakeholder with a vested interest in the community**,** we invite you to participate in the development of a less than 1-mile 230 kilovolt (kV) electric transmission line project in Loudoun County, Virginia.

This project is north of the Route 50 corridor and west of Dulles Airport. The Evergreen Mills 230 kilovolt (kV) Electric Transmission Project proposes to build a short double-circuit 230 kV transmission circuit in an existing right of way in eastern Loudoun County. We also propose co-locating new electric transmission powerlines along an existing corridor west of Dulles Airport. This project will improve grid reliability, enhance operational flexibility, and maintain compliance with federal standards.

Construction is scheduled to begin in September 2026, with an anticipated energization date of Q2 2027.

To see a project overview map and photo simulations, please visit our webpage at DominionEnergy.com/NOVA.

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Sincerely,

Robert E. Richardson

Robert Richardson
Communications Consultant
The Electric Transmission Project Team
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Dominion Energy Virginia
Electric Transmission
P.O. Box 26666, Richmond, VA 23261
DominionEnergy.com

November 22, 2024

Evergreen Mills 230 kV Electric Transmission Line Project

Dear: Ms. Wilkerson,

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Dominion Energy Virginia
Electric Transmission
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DominionEnergy.com

November 22, 2024

Evergreen Mills 230 kV Electric Transmission Line Project

Dear: Chief Adkins,

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Communications Consultant
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Dominion Energy Virginia
Electric Transmission
P.O. Box 26666, Richmond, VA 23261
DominionEnergy.com

November 22, 2024

Evergreen Mills 230 kV Electric Transmission Line Project

Dear:Assistant Chief Stewart,

At Dominion Energy, we are committed to continually reviewing and analyzing our energy infrastructure to provide safe, reliable electricity to our neighbors. As a valued stakeholder with a vested interest in the community**,** we invite you to participate in the development of a less than 1-mile 230 kilovolt (kV) electric transmission line project in Loudoun County, Virginia.

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Communications Consultant
The Electric Transmission Project Team
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Dominion Energy Virginia
Electric Transmission
P.O. Box 26666, Richmond, VA 23261
DominionEnergy.com

November 22, 2024

Evergreen Mills 230 kV Electric Transmission Line Project

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Dominion Energy Virginia
Electric Transmission
P.O. Box 26666, Richmond, VA 23261
DominionEnergy.com

November 22, 2024

Evergreen Mills 230 kV Electric Transmission Line Project

Dear: Ms. Philips,

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Communications Consultant
The Electric Transmission Project Team
Robert.E.Richardson@DominionEnergy.com

Dominion Energy Virginia
Electric Transmission
P.O. Box 26666, Richmond, VA 23261
DominionEnergy.com

November 22, 2024

Evergreen Mills 230 kV Electric Transmission Line Project

Dear: Mr. Adkins,

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Communications Consultant
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Robert.E.Richardson@DominionEnergy.com

Dominion Energy Virginia
Electric Transmission
P.O. Box 26666, Richmond, VA 23261
DominionEnergy.com

November 22, 2024

Evergreen Mills 230 kV Electric Transmission Line Project

Dear: Chief Custalow,

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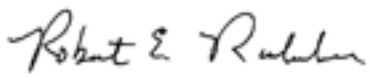

Robert Richardson
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Electric Transmission
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DominionEnergy.com

November 22, 2024

Evergreen Mills 230 kV Electric Transmission Line Project

Dear: Chief Shields,

At Dominion Energy, we are committed to continually reviewing and analyzing our energy infrastructure to provide safe, reliable electricity to our neighbors. As a valued stakeholder with a vested interest in the community**,** we invite you to participate in the development of a less than 1-mile 230 kilovolt (kV) electric transmission line project in Loudoun County, Virginia.

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Sincerely,

Robert E. Richardson

Robert Richardson
Communications Consultant
The Electric Transmission Project Team
Robert.E.Richardson@DominionEnergy.com

Dominion Energy Virginia
Electric Transmission
P.O. Box 26666, Richmond, VA 23261
DominionEnergy.com

November 22, 2024

Evergreen Mills 230 kV Electric Transmission Line Project

Dear: Chief Anderson,

At Dominion Energy, we are committed to continually reviewing and analyzing our energy infrastructure to provide safe, reliable electricity to our neighbors. As a valued stakeholder with a vested interest in the community**,** we invite you to participate in the development of a less than 1-mile 230 kilovolt (kV) electric transmission line project in Loudoun County, Virginia.

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Communications Consultant
The Electric Transmission Project Team
Robert.E.Richardson@DominionEnergy.com

Dominion Energy Virginia
Electric Transmission
P.O. Box 26666, Richmond, VA 23261
DominionEnergy.com

November 22, 2024

Evergreen Mills 230 kV Electric Transmission Line Project

Dear: Chief Allston,

At Dominion Energy, we are committed to continually reviewing and analyzing our energy infrastructure to provide safe, reliable electricity to our neighbors. As a valued stakeholder with a vested interest in the community**,** we invite you to participate in the development of a less than 1-mile 230 kilovolt (kV) electric transmission line project in Loudoun County, Virginia.

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Sincerely,

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Communications Consultant
The Electric Transmission Project Team
Robert.E.Richardson@DominionEnergy.com

Dominion Energy Virginia
Electric Transmission
P.O. Box 26666, Richmond, VA 23261
DominionEnergy.com

November 22, 2024

Evergreen Mills 230 kV Electric Transmission Line Project

Dear: Ms. Roach,

At Dominion Energy, we are committed to continually reviewing and analyzing our energy infrastructure to provide safe, reliable electricity to our neighbors. As a valued stakeholder with a vested interest in the community**,** we invite you to participate in the development of a less than 1-mile 230 kilovolt (kV) electric transmission line project in Loudoun County, Virginia.

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The Electric Transmission Project Team
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Dominion Energy Virginia
Electric Transmission
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DominionEnergy.com

November 22, 2024

Evergreen Mills 230 kV Electric Transmission Line Project

Dear: Chief Gray,

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Dominion Energy Virginia
Electric Transmission
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November 22, 2024

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Dear: Ms. Stevens,

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The Electric Transmission Project Team
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Dominion Energy Virginia
Electric Transmission
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November 22, 2024

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Dear: Chief Bullock,

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November 22, 2024

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Sincerely,

Robert E. Richardson

Robert Richardson
Communications Consultant
The Electric Transmission Project Team
Robert.E.Richardson@DominionEnergy.com

Dominion Energy Virginia
Electric Transmission
P.O. Box 26666, Richmond, VA 23261
DominionEnergy.com

November 22, 2024

Evergreen Mills 230 kV Electric Transmission Line Project

Dear:Assistant Chief,

At Dominion Energy, we are committed to continually reviewing and analyzing our energy infrastructure to provide safe, reliable electricity to our neighbors. As a valued stakeholder with a vested interest in the community**,** we invite you to participate in the development of a less than 1-mile 230 kilovolt (kV) electric transmission line project in Loudoun County, Virginia.

This project is north of the Route 50 corridor and west of Dulles Airport. The Evergreen Mills 230 kilovolt (kV) Electric Transmission Project proposes to build a short double-circuit 230 kV transmission circuit in an existing right of way in eastern Loudoun County. We also propose co-locating new electric transmission powerlines along an existing corridor west of Dulles Airport. This project will improve grid reliability, enhance operational flexibility, and maintain compliance with federal standards.

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DominionEnergy.com

November 22, 2024

Evergreen Mills 230 kV Electric Transmission Line Project

Dear: Chief Adams,

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Communications Consultant
The Electric Transmission Project Team
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Dominion Energy Virginia
Electric Transmission
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DominionEnergy.com

November 22, 2024

Evergreen Mills 230 kV Electric Transmission Line Project

Dear: Ms. Mitchell,

At Dominion Energy, we are committed to continually reviewing and analyzing our energy infrastructure to provide safe, reliable electricity to our neighbors. As a valued stakeholder with a vested interest in the community**,** we invite you to participate in the development of a less than 1-mile 230 kilovolt (kV) electric transmission line project in Loudoun County, Virginia.

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The Electric Transmission Project Team
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Dominion Energy Virginia
Electric Transmission
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DominionEnergy.com

November 22, 2024

Evergreen Mills 230 kV Electric Transmission Line Project

Dear: Ms. Harris,

At Dominion Energy, we are committed to continually reviewing and analyzing our energy infrastructure to provide safe, reliable electricity to our neighbors. As a valued stakeholder with a vested interest in the community**,** we invite you to participate in the development of a less than 1-mile 230 kilovolt (kV) electric transmission line project in Loudoun County, Virginia.

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Electric Transmission
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DominionEnergy.com

November 22, 2024

Evergreen Mills 230 kV Electric Transmission Line Project

Dear: Chief Richardson,

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The Electric Transmission Project Team
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November 22, 2024

Evergreen Mills 230 kV Electric Transmission Line Project

Dear: Chief Caudill,

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The Electric Transmission Project Team
Robert.E.Richardson@DominionEnergy.com

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Electric Transmission
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DominionEnergy.com

November 22, 2024

Evergreen Mills 230 kV Electric Transmission Line Project

Dear: Mr. Desiderio,

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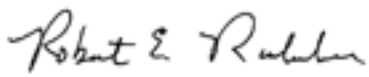

Robert Richardson
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November 22, 2024

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Dear: Chief Martin,

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November 22, 2024

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Dear: Ms. Jeffries,

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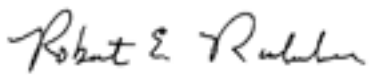

Robert Richardson
Communications Consultant
The Electric Transmission Project Team
Robert.E.Richardson@DominionEnergy.com

Dominion Energy Virginia
Electric Transmission
P.O. Box 26666, Richmond, VA 23261
DominionEnergy.com

November 22, 2024

Evergreen Mills 230 kV Electric Transmission Line Project

Dear: Mr. Hayes,

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Sincerely,

Robert E. Richardson

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Communications Consultant
The Electric Transmission Project Team
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III. IMPACT OF LINE ON SCENIC, ENVIRONMENTAL AND HISTORIC FEATURES

K. Identify coordination with any non-governmental organizations or private citizen groups.

Response: On November 22, 2024, the Company solicited comments via letter from the non-governmental organizations and private citizen groups identified below and the Virginia Department of Historic Resources. A copy of the letter is included as Attachment III.K.1.

Name	Organization
Ms. Elizabeth S. Kostelny	Preservation Virginia
Mr. Thomas Gilmore	American Battlefield Trust
Mr. Jim Campi	American Battlefield Trust
Mr. Max Hokit	American Battlefield Trust
Mr. Steven Williams	Colonial National Historical Park
Ms. Eleanor Breen, PhD, RPA	Council of Virginia Archaeologists
Mr. Alexander Macaulay	Macaulay & Jamerson
Ms. Leighton Powell	Scenic Virginia
Ms. Elaine Chang	National Trust for Historic Preservation
Ms. Julie Bolthouse	Piedmont Environmental Council
Mr. John McCarthy	Piedmont Environmental Council
Mary Frances Wilkerson	Cheroenhaka (Nottoway) Indian Tribe
Dr. Casandra Newby-Alexander, Dean	Norfolk State University
Mr. Roger Kirchen, Archeologist	Virginia Department of Historic Resources
Ms. Adrienne Birge-Wilson	Virginia Department of Historic Resources
Mr. Dave Dutton	Dutton + Associates, LLC

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November 22, 2024

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Thank you for your willingness to join us in our commitment to serving the community.

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Communications Consultant
The Electric Transmission Project Team

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November 22, 2024

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The Electric Transmission Project Team

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November 22, 2024

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November 22, 2024

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The Electric Transmission Project Team

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November 22, 2024

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November 22, 2024

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November 22, 2024

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To see a project overview map and photo simulations, please visit our webpage at DominionEnergy.com/NOVA

Please feel free to notify other relevant organizations that may have an interest in the project area. For reference, recipients of this letter include other county and statewide historic, cultural, and scenic organizations, as well as Native American tribes.

If you would like any additional information, have questions, or would like to set up a meeting to discuss the project, please email me at Robert.E.Richardson@dominionenergy.com or call 888-291-0190.

Thank you for your willingness to join us in our commitment to serving the community.

Sincerely,

Rob Richardson
Communications Consultant
The Electric Transmission Project Team

Dominion Energy Virginia
Electric Transmission
P.O. Box 26666, Richmond, VA 23261
DominionEnergy.com

November 22, 2024

Evergreen Mills 230 kV Electric Transmission Line Project

Dear Ms. Chang,

At Dominion Energy, we are committed to continually reviewing and analyzing our energy infrastructure to provide safe, reliable electricity to our neighbors. As a valued stakeholder with a vested interest in the community**,** we invite you to participate in the development of a less than 1-mile 230 kilovolt (kV) electric transmission line project in Loudoun County, Virginia.

This project is north of the Route 50 corridor and west of Dulles Airport. The Evergreen Mills 230 kilovolt (kV) Electric Transmission Project proposes to build a short double-circuit 230 kV transmission circuit in an existing right of way in eastern Loudoun County. We also propose co-locating new electric transmission powerlines along an existing corridor west of Dulles Airport. This project will improve grid reliability, enhance operational flexibility, and maintain compliance with federal standards.

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The Electric Transmission Project Team

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DominionEnergy.com

November 22, 2024

Evergreen Mills 230 kV Electric Transmission Line Project

Dear Ms. Bolthouse,

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Communications Consultant
The Electric Transmission Project Team

Dominion Energy Virginia
Electric Transmission
P.O. Box 26666, Richmond, VA 23261
DominionEnergy.com

November 22, 2024

Evergreen Mills 230 kV Electric Transmission Line Project

Dear Mr. McCarthy,

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The Electric Transmission Project Team

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November 22, 2024

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Communications Consultant
The Electric Transmission Project Team

Dominion Energy Virginia
Electric Transmission
P.O. Box 26666, Richmond, VA 23261
DominionEnergy.com

November 22, 2024

Evergreen Mills 230 kV Electric Transmission Line Project

Dear Dr. Newby-Alexander,

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Robert E. Richardson

Rob Richardson
Communications Consultant
The Electric Transmission Project Team

Dominion Energy Virginia
Electric Transmission
P.O. Box 26666, Richmond, VA 23261
DominionEnergy.com

November 22, 2024

Evergreen Mills 230 kV Electric Transmission Line Project

Dear Mr. Kirchen,

At Dominion Energy, we are committed to continually reviewing and analyzing our energy infrastructure to provide safe, reliable electricity to our neighbors. As a valued stakeholder with a vested interest in the community**,** we invite you to participate in the development of a less than 1-mile 230 kilovolt (kV) electric transmission line project in Loudoun County, Virginia.

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Robert E. Richardson

Rob Richardson
Communications Consultant
The Electric Transmission Project Team

Dominion Energy Virginia
Electric Transmission
P.O. Box 26666, Richmond, VA 23261
DominionEnergy.com

November 22, 2024

Evergreen Mills 230 kV Electric Transmission Line Project

Dear Ms. Birge-Wilson,

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Thank you for your willingness to join us in our commitment to serving the community.

Sincerely,

Rob Richardson
Communications Consultant
The Electric Transmission Project Team

Dominion Energy Virginia
Electric Transmission
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DominionEnergy.com

November 22, 2024

Evergreen Mills 230 kV Electric Transmission Line Project

Dear Mr. Dutton,

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Sincerely,

Rob Richardson
Communications Consultant
The Electric Transmission Project Team

III. IMPACT OF LINE ON SCENIC, ENVIRONMENTAL AND HISTORIC FEATURES

L. Identify any environmental permits or special permissions anticipated to be needed.

Response: The permits or special permissions that are likely to be required for the proposed Project are listed below.

Potential Permits

Activity	Permit	Agency/Organization
Impacts to wetlands and other waters of the U.S.	Nationwide Permit 18 or 57	U.S. Army Corps of Engineers
Impacts to wetlands and other waters of the U.S.	Virginia Water Protection Permit	Virginia Department of Environmental Quality
Discharge of stormwater from construction	Construction General Permit	Virginia Department of Environmental Quality
Work within VDOT rights-of-way	Land Use Permit	Virginia Department of Transportation
Airspace obstruction evaluation	FAA 7460-1	Dulles International Airport
Airspace obstruction evaluation	FAA 7460-1	Leesburg Executive Airport

IV. HEALTH ASPECTS OF ELECTROMAGNETIC FIELDS ("EMF")

A. Provide the calculated maximum electric and magnetic field levels that are expected to occur at the edge of the ROW. If the new transmission line is to be constructed on an existing electric transmission line ROW, provide the present levels as well as the maximum levels calculated at the edge of ROW after the new line is operational.

Response: Public exposure to magnetic fields is best estimated by field levels from power lines calculated at annual average loading. For any day of the year, the EMF levels associated with average conditions provide the best estimate of potential exposure. Maximum (peak) values are less relevant as they may occur for only a few minutes or hours each year.

This section describes the levels of EMF associated with the proposed transmission lines. EMF levels are provided for the historical (2023) annual average and maximum (peak) loading conditions.

Proposed Project – Historical Average Loading

Line No.	Historical Average Loading (Amps)
2172	883
2209	1268

Proposed Project – Historical Average Loading (2023)				
	Left Edge Per II.A.5 Drawing		Right Edge Per II.A.5 Drawing	
Attachment	Electric Field (kV/m)	Magnetic Field (mG)	Electric Field (kV/m)	Magnetic Field (mG)
II.A.5.a	0.8531.036	125.531	0.324	29.068

Proposed Project – Projected Average Loading in 2028

EMF levels were calculated for the proposed Project at the ***projected average*** load condition as shown in the table below and at a maximum operating voltage of 242 kV when supported on the proposed Project structures. See Attachment II.A.5.a.

Line No.	Projected Average Loading (Amps)
2172	494
2209	209

Line No.	Projected Average Loading (Amps)
2183	741
2210	387

These field levels were calculated at mid-span where the conductors are closest to the ground at a projected average load operating temperature. Values were calculated under the assumption that the current travels in the same direction for all lines.

EMF levels at the edge of the rights-of-way for the proposed Project at the projected average loading for a typical span:

Proposed Project – Projected Average Loading (2028)				
	Left Edge Per II.A.5 Drawing		Right Edge Per II.A.5 Drawing	
Attachment	Electric Field (kV/m)	Magnetic Field (mG)	Electric Field (kV/m)	Magnetic Field (mG)
II.A.5.a	1.168	21.027	0.513	34.905

Proposed Project – Projected Peak Loading in 2028

EMF levels were calculated for the proposed Project at the ***projected peak*** load condition as shown in the table below and at a maximum operating voltage of 241.5 kV when supported on the proposed Project structures. See Attachment II.A.5.a.

Line No.	Projected Peak Loading (Amps)
2172	823
2209	348
2183	1235
2210	645

These field levels were calculated at mid-span where the conductors are closest to the ground at a projected peak load operating temperature. Values were calculated under the assumption that the current travels in the same direction for all lines.

EMF levels at the edge of the rights-of-way for the proposed Project at the projected peak loading for a typical span:

Proposed Project – Projected Peak Loading (2028)				
	Left Edge Per II.A.5 Drawing		**Right Edge Per II.A.5 Drawing**	
Attachment	Electric Field (kV/m)	Magnetic Field (mG)	Electric Field (kV/m)	Magnetic Field (mG)
II.A.5.a	1.168	35.085	0.511	58.263

IV. HEALTH ASPECTS OF ELECTROMAGNETIC FIELDS ("EMF")

B. If the Applicant is of the opinion that no significant health effects will result from the construction and operation of the line, describe in detail the reasons for that opinion and provide references or citations to supporting documentation.

Response: The conclusions of multidisciplinary scientific review panels assembled by national and international scientific agencies during the past few decades are the foundation of the Company's opinion that no adverse health effects are anticipated to result from the operation of the proposed Project. Each of these panels has evaluated the scientific research related to health and extremely low frequency ("ELF") EMF, also referred to as power-frequency (50/60 Hertz ("Hz")) EMF, and provided conclusions that form the basis of guidance to governments and industries. The Company regularly monitors the recommendations of these expert panels to guide their approach to EMF.

Research on EMF and human health varies widely in approach. Some studies evaluate the effects on biological responses of high, short-term EMF exposure not typically found in people's day-to-day lives, while others evaluate the effects of common, low EMF exposures found throughout communities. Studies also have evaluated the possibility of effects (*e.g.*, cancer, neurodegenerative diseases, and reproductive effects) of long-term exposure. Altogether, this research includes well over 100 epidemiologic studies of people in their natural environment and many more laboratory studies of animals (*in vivo*) and isolated cells and tissues (*in vitro*). Standard scientific procedures, such as weight-of-evidence methods, were used by the expert panels assembled by scientific agencies to identify, review, and summarize the results of this large and diverse research.

The reviews of ELF EMF-related biological and health research have been conducted by numerous scientific and health agencies, including, for example, the European Health Risk Assessment Network on Electromagnetic Fields Exposure ("EFHRAN"), the International Commission on Non-Ionizing Radiation Protection ("ICNIRP"), the World Health Organization ("WHO"), the IEEE's International Committee on Electromagnetic Safety ("ICES"), the Scientific Committee on Health, Environmental and Emerging Risks ("SCHEER") (formerly the Scientific Committee on Emerging and Newly Identified Health Risks ["SCENIHR"]) of the European Commission, and the Swedish Radiation Safety Authority ("SSM") (formerly the Swedish Radiation Protection Authority ["SSI"]) (WHO, 2007; SCENIHR, 2009, 2015; EFHRAN, 2010, 2012; ICNIRP, 2010; SSM, 2015, 2016, 2018, 2019, 2020, 2021, 2022; ICES, 2019; SCHEER, 2023). The general scientific consensus of the agencies that have reviewed this research, relying on generally accepted scientific methods, is that the scientific evidence does not confirm that common sources of EMF in the environment, including transmission lines and other parts of the electric system, appliances, etc., are a cause of any adverse health effects.

The most recent reviews on this topic include the 2015 and 2023 reports by SCENIHR and SCHEER, respectively, and annual reviews published by SSM (i.e., for the years 2015 through 2022). These reports, similar to previous reviews, found that the scientific evidence does not confirm the existence of any adverse health effects caused by environmental or community exposure to EMF.

WHO has recommended that countries adopt recognized international standards published by ICNIRP and ICES. Typical levels of EMF from Dominion Energy Virginia's high voltage power lines outside its property and rights-of-way are far below the screening reference levels of EMF recommended for the general public and still lower than exposures equivalent to restrictions to limits on fields within the body (ICNIRP, 2010; ICES, 2019).

Thus, based on the conclusions of scientific reviews and the levels of EMF associated with the proposed Project, the Company has determined that no adverse health effects are anticipated to result from the operation of the proposed Project.

References

European Health Risk Assessment Network on Electromagnetic Fields Exposure (EFHRAN). Report on the Analysis of Risks Associated to Exposure to EMF: *In Vitro* and *In Vivo* (Animals) Studies. Milan, Italy: EFHRAN, 2010.

European Health Risk Assessment Network on Electromagnetic Fields Exposure (EFHRAN). Risk Analysis of Human Exposure to Electromagnetic Fields (Revised). Report D2 of the EFHRAN Project. Milan, Italy: EFHRAN, 2012.

International Commission on Non-ionizing Radiation Protection (ICNIRP). Guidelines for limiting exposure to time-varying electric and magnetic fields (1 Hz to 100 kHz). Health Phys 99: 818-36, 2010.

International Committee on Electromagnetic Safety (ICES). IEEE Standard for Safety Levels with Respect to Human Exposure to Electromagnetic Fields 0 to 300 GHz. IEEE Std C95.1-2019. New York, NY: IEEE, 2019.

Scientific Committee on Emerging and Newly Identified Health Risks (SCENIHR). Health Effects of Exposure to EMF. Brussels, Belgium: European Commission, 2009.

Scientific Committee on Emerging and Newly Identified Health Risks (SCENIHR). Opinion on Potential Health Effects of Exposure to Electromagnetic Fields (EMF). Brussels, Belgium: European Commission, 2015.

Scientific Committee on Health, Environmental and Emerging Risks (SCHEER). Preliminary Opinion on Potential Health Effects of Exposure to Electromagnetic Fields (EMF): Update with regard to frequencies between 1Hz and 100 kHz. Brussels, Belgium: European Commission, 2023.

Swedish Radiation Safety Authority (SSM). Research 2015:19. Recent Research on EMF and Health Risk - Tenth report from SSM's Scientific Council on Electromagnetic Fields. Stockholm, Sweden: Swedish Radiation Safety Authority (SSM), 2015.

Swedish Radiation Safety Authority (SSM). Research 2016:15. Recent Research on EMF and Health Risk - Eleventh report from SSM's Scientific Council on Electromagnetic Fields, 2016. Including Thirteen years of electromagnetic field research monitored by SSM's Scientific Council on EMF and health: How has the evidence changed over time? Stockholm, Sweden: Swedish Radiation Safety Authority (SSM), 2016.

Swedish Radiation Safety Authority (SSM). Research 2018:09. Recent Research on EMF and Health Risk - Twelfth report from SSM's Scientific Council on Electromagnetic Fields, 2017. Stockholm, Sweden: Swedish Radiation Safety Authority (SSM), 2018.

Swedish Radiation Safety Authority (SSM). Research 2019:08. Recent Research on EMF and Health Risk – Thirteenth Report from SSM's Scientific Council on Electromagnetic Fields, 2018. Stockholm, Sweden: Swedish Radiation Safety Authority (SSM), 2019.

Swedish Radiation Safety Authority (SSM). Research 2020:04. Recent Research on EMF and Health Risk – Fourteenth Report from SSM's Scientific Council on Electromagnetic Fields, 2019. Stockholm, Sweden: Swedish Radiation Safety Authority (SSM), 2020.

Swedish Radiation Safety Authority (SSM). Research 2021:08. Recent Research on EMF and Health Risk – Fifteenth report from SSM's Scientific Council on Electromagnetic Fields, 2020. Stockholm, Sweden: Swedish Radiation Safety Authority (SSM), 2021.

Swedish Radiation Safety Authority (SSM). Research 2022:16. Recent Research on EMF and Health Risk – Sixteenth report from SSM's Scientific Council on Electromagnetic Fields, 2021. Stockholm, Sweden: Swedish Radiation Safety Authority (SSM), 2022.

World Health Organization (WHO). Environmental Health Criteria 238: Extremely Low Frequency (ELF) Fields. Geneva, Switzerland: World Health Organization, 2007.

IV. HEALTH ASPECTS OF ELECTROMAGNETIC FIELDS ("EMF")

C. Describe and cite any research studies on EMF the Applicant is aware of that meet the following criteria:

1. Became available for consideration since the completion of the Virginia Department of Health's most recent review of studies on EMF and its subsequent report to the Virginia General Assembly in compliance with 1985 Senate Joint Resolution No. 126;

2. Include findings regarding EMF that have not been reported previously and/or provide substantial additional insight into findings; and

3. Have been subjected to peer review.

Response: The Virginia Department of Health ("VDH") conducted its most recent review and issued its report on the scientific evidence on potential health effects of extremely low frequency ELF EMF in 2000: "[T]he Virginia Department of Health is of the opinion that there is no conclusive and convincing evidence that exposure to extremely low frequency EMF emanated from nearby high voltage transmission lines is causally associated with an increased incidence of cancer or other detrimental health effects in humans."[8]

The continuing scientific research on ELF EMF exposure and health has resulted in many peer-reviewed publications since 2000. The accumulating research results have been regularly and repeatedly reviewed and evaluated by national and international health, scientific, and government agencies, including most notably:

- WHO, which published one of the most comprehensive and detailed reviews of the relevant scientific peer-reviewed literature in 2007;
- SCHEER (formerly SCENIHR), a committee of the European Commission, which published its assessments in 2009, 2015 and 2023;
- The SSM, which has published annual reviews of the relevant peer-reviewed scientific literature since 2003, with its most recent review published in 2022; and,
- EFHRAN, which published its reviews in 2010 and 2012.

The above reviews provide detailed analyses and summaries of relevant recent peer-reviewed scientific publications. The conclusions of these reviews that the evidence overall does not confirm the existence of any adverse health effects due to exposure to EMF below scientifically established guideline values are consistent with the conclusions of the VDH report. With respect to the statistical association observed in some of the childhood leukemia epidemiologic studies, the most recent

[8] *See* http://www.vdh.virginia.gov/content/uploads/sites/12/2016/02/highfinal.pdf.

comprehensive review of the literature by SCENIHR, published in 2015, concluded that "no mechanisms have been identified and no support is existing [*sic*] from experimental studies that could explain these findings, which, together with shortcomings of the epidemiological studies prevent a causal interpretation" (SCENIHR, 2015, p. 16). In their 2023 Preliminary Opinion providing an update on the potential health effects of exposure to electromagnetic fields in the 1 Hz to 100 kilohertz ("kHz") range, SCHEER concluded that "overall, there is weak evidence concerning the association of ELF-MF [magnetic field] exposure with childhood leukemia" (SCHEER 2023, p. 2).

While research is continuing on multiple aspects of EMF exposure and health, many of the recent publications have focused on an epidemiologic assessment of the relationship between EMF exposure and childhood leukemia and EMF exposure and neurodegenerative diseases. Of these, the following recent publications, published following the inclusion date (June 2014) for the SCENIHR (2015) report through March 2024, provide additional evidence and contribute to clarification of previous findings. Overall, new research studies have not provided evidence to alter the previous conclusions of scientific and health organizations, including WHO and SCENIHR.

Epidemiologic studies of EMF and childhood leukemia published during the above referenced period include:

- Bunch et al. (2015) assessed the potential association between residential proximity to high voltage underground cables and development of childhood cancer in the United Kingdom largely using the same epidemiologic data as in a previously published study on overhead transmission lines (Bunch et al., 2014). No statistically significant associations or trends were reported with either distance to underground cables or calculated magnetic fields from underground cables for any type of childhood cancers.

- Pedersen et al. (2015) published a case-control study that investigated the potential association between residential proximity to power lines and childhood cancer in Denmark. The study included all cases of leukemia (n=1,536), central nervous system tumors, and malignant lymphoma (n=417) diagnosed before the age of 15 between 1968 and 2003 in Denmark, along with 9,129 healthy control children matched on sex and year of birth. Considering the entire study period, no statistically significant increases were reported for any of the childhood cancer types.

- Salvan et al. (2015) compared measured magnetic-field levels in the bedroom for 412 cases of childhood leukemia under the age of 10 and 587 healthy control children in Italy. Although the statistical power of the study was limited because of the small number of highly exposed subjects, no consistent statistical associations or trends were reported between measured magnetic-field levels and the occurrence of leukemia among children in the study.

- Bunch et al. (2016) and Swanson and Bunch (2018) published additional analyses using data from an earlier study (Bunch et al., 2014). Bunch et al. (2016) reported that the association with distance to power lines observed in earlier years was linked to calendar year of birth or year of cancer diagnosis, rather than the age of the power lines. Swanson and Bunch (2018) re-analyzed data using finer exposure categories (*e.g.*, cut-points of every 50-meter distance) and broader groupings of diagnosis date (*e.g.*, 1960-1979, 1980-1999, and 2000 and after) and reported no overall associations between exposure categories and childhood leukemia for the later periods (1980 and after), and consistent pattern for the periods prior to 1980.

- Crespi et al. (2016) conducted a case-control epidemiologic study of childhood cancers and residential proximity to high voltage power lines (60 kV to 500 kV) in California. Childhood cancer cases, including 5,788 cases of leukemia and 3,308 cases of brain tumor, diagnosed under the age of 16 between 1986 and 2008, were identified from the California Cancer Registry. Controls, matched on age and sex, were selected from the California Birth Registry. Overall, no consistent statistically significant associations for leukemia or brain tumor and residential distance to power lines were reported.

- Kheifets et al. (2017) assessed the relationship between calculated magnetic-field levels from power lines and development of childhood leukemia within the same study population evaluated in Crespi et al. (2016). In the main analyses, which included 4,824 cases of leukemia and 4,782 controls matched on age and sex, the authors reported no consistent patterns, or statistically significant associations between calculated magnetic-field levels and childhood leukemia development. Similar results were reported in subgroup and sensitivity analyses. In two subsequent studies, Amoon et al. (2018a, 2019) examined the potential impact of residential mobility (i.e., moving residences between birth and diagnosis) on the associations reported in Crespi et al. (2016) and Kheifets et al. (2017). Amoon et al. (2018a) concluded that changing residences was not associated with either calculated magnetic-field levels or proximity to the power lines, while Amoon et al. (2019) concluded that while uncontrolled confounding by residential mobility had some impact on the association between EMF exposure and childhood leukemia, it was unlikely to be the primary driving force behind the previously reported associations in Crespi et al. (2016) and Kheifets et al. (2017).

- Amoon et al. (2018b) conducted a pooled analysis of 29,049 cases and 68,231 controls from 11 epidemiologic studies of childhood leukemia and residential distance from high voltage power lines. The authors reported no statistically-significant association between childhood leukemia and proximity to transmission lines of any voltage. Among subgroup analyses, the reported associations were slightly stronger for leukemia cases diagnosed before 5 years of age and in study periods prior to 1980. Adjustment for various potential confounders (*e.g.*, socioeconomic status, dwelling type, residential mobility) had little effect on the estimated associations.

- Kyriakopoulou et al. (2018) assessed the association between childhood acute leukemia and parental occupational exposure to social contacts, chemicals, and electromagnetic fields. The study was conducted at a major pediatric hospital in Greece and included 108 cases and 108 controls matched for age, gender, and ethnicity. Statistically non-significant associations were observed between paternal exposure to magnetic fields and childhood acute leukemia for any of the exposure periods examined (1 year before conception; during pregnancy; during breastfeeding; and from birth until diagnosis); maternal exposure was not assessed due to the limited sample size. No associations were observed between childhood acute leukemia and exposure to social contacts or chemicals.

- Auger et al. (2019) examined the relationship between exposure to EMF during pregnancy and risk of childhood cancer in a cohort of 784,000 children born in Quebec. Exposure was defined using residential distance to the nearest high voltage transmission line or transformer station. The authors reported statistically non-significant associations between proximity to transformer stations and any cancer, hematopoietic cancer, or solid tumors. No associations were reported with distance to transmission lines.

- Crespi et al. (2019) investigated the relationship between childhood leukemia and distance from high voltage lines and calculated magnetic-field exposure, separately and combined, within the California study population previously analyzed in Crespi et al. (2016) and Kheifets et al. (2017). The authors reported that neither close proximity to high voltage lines nor exposure to calculated magnetic fields alone were associated with childhood leukemia; an association was observed only for those participants who were both close to high voltage lines (< 50 meters) and had exposure to high calculated magnetic fields (≥ 0.4 microtesla ["μT"]) (i.e., ≥ 4 milligauss ["mG"]). No associations were observed with low-voltage power lines (< 200 kV). In a subsequent study, Amoon et al. (2020) examined the potential impact of dwelling type on the associations reported in Crespi et al. (2019). Amoon et al. (2020) concluded that while the type of dwelling at which a child resides (*e.g.*, single-family home, apartment, duplex, mobile home) was associated with socioeconomic status and race or ethnicity, it was not associated with childhood leukemia and did not appear to be a potential confounder in the relationship between childhood leukemia and magnetic-field exposure in this study population.

- Swanson et al. (2019) conducted a meta-analysis of 41 epidemiologic studies of childhood leukemia and magnetic-field exposure published between 1979 and 2017 to examine trends in childhood leukemia development over time. The authors reported that while the estimated risk of childhood leukemia initially increased during the earlier period, a statistically non-significant decline in estimated risk has been observed from the mid-1990s until the present (i.e., 2019).

- Talibov et al. (2019) conducted a pooled analysis of 9,723 cases and 17,099

controls from 11 epidemiologic studies to examine the relationship between parental occupational exposure to magnetic fields and childhood leukemia. No statistically significant association was found between either paternal or maternal exposure and leukemia (overall or by subtype). No associations were observed in the meta-analyses.

- Núñez-Enríquez et al. (2020) assessed the relationship between residential magnetic-field exposure and B-lineage acute lymphoblastic leukemia ("B-ALL") in children under 16 years of age in Mexico. The study included 290 cases and 407 controls matched on age, gender, and health institution; magnetic-field exposure was assessed through the collection of 24-hour measurements in the participants' bedrooms. While the authors reported some statistically significant associations between elevated magnetic-field levels and development of B-ALL, the results were dependent on the chosen cut-points.

- Seomun et al. (2021) performed a meta-analysis based on 33 previously published epidemiologic studies investigating the potential relationship between magnetic-field exposure and childhood cancers, including leukemia and brain cancer. For childhood leukemia, the authors reported statistically significant associations with some, but not all, of the chosen cut-points for magnetic-field exposure. The associations between magnetic-field exposure and childhood brain cancer were statistically non-significant. The study provided limited new insight as most of the studies included in the current meta-analysis, were included in previously conducted meta- and pooled analyses.

- Amoon et al. (2022) conducted a pooled analysis of four studies of residential exposure to magnetic fields and childhood leukemia published following a 2010 pooled analysis by Kheifets et al. (2010). The study by Amoon et al. (2022) compared the exposures of 24,994 children with leukemia to the exposures of 30,769 controls without leukemia in California, Denmark, Italy, and the United Kingdom. Exposure was assessed by measured or calculated magnetic fields at their residences. The exposure of these two groups to magnetic fields were found not to significantly differ. A decrease in the combined effect estimates in epidemiologic studies was observed over time, and the authors concluded that their findings, based on the most recent studies, were "not in line" with previous pooled analyses that reported an increased risk of childhood leukemia.

- Brabant et al. (2022) performed a literature review and meta-analysis of studies of childhood leukemia and magnetic-field exposure. The overall analysis included 21 epidemiologic studies published from 1979 to 2020. The authors reported a statistically significant association, which they noted was "mainly explained by the studies conducted before 2000." The authors reported a statistically significant association between childhood leukemia and measured or calculated magnetic-field exposures > 0.4 μT (4 mG); no statistically significant overall associations were reported between childhood leukemia and lower magnetic-field exposure (< 0.4 μT [4 mG]), residential distance from power lines, or wire coding configuration. An association between childhood

leukemia and electric blanket use was also reported. The overall results were likely influenced by the inclusion of a large number of earlier studies; 10 of the 21 studies in the main analysis were published prior to 2000. Studies published prior to 2000 included fewer studies deemed to be of higher study quality, as determined by the authors, compared to studies published after 2000.

- Nguyen et al. (2022) investigated whether potential pesticide exposure from living in close proximity to commercial plant nurseries confounds the association between magnetic-field exposure and childhood leukemia development reported within the California study population previously analyzed in Crespi et al. (2016) and Kheifets et al. (2017). The authors in Nguyen et al. (2022) noted that while the association between childhood leukemia and magnetic-field exposure was "slightly attenuated" after adjusting for nursery proximity or when restricting to subjects living > 300 meters from nurseries, their results "do not support plant nurseries as an explanation for observed childhood leukemia risks." The authors further noted that close residential proximity to nurseries may be an independent risk factor for childhood leukemia.

- Guo et al. (2023) reported conducting a systematic review and meta-analysis of studies published from 2015 to 2022 that evaluated associations between magnetic-field exposure and childhood leukemia development. Three meta-analyses were conducted to evaluate the relationship using different exposure metrics. In the first meta-analysis, magnetic-field levels ranging from 0.4 μT (4 mG) to 0.2 μT (2 mG) were associated with a statistically significant reduced risk of childhood leukemia development (i.e., a protective association). In the second meta-analysis, exposure was based on wiring configuration codes, and the reported pooled relative risk estimates demonstrated a statistically significant increased association with childhood leukemia. In the third meta-analysis, exposure was categorized into groupings of magnetic-field strength; no statistically significant associations with childhood leukemia were reported for any of the groupings, including for magnetic-field levels ≥ 0.4 μT (4 mG). There are significant limitations of this study that prevent meaningful interpretations of the results. Most of the analyses of magnetic fields did not state whether measurements and calculations were included, and the authors provided no description of the methods used for their analyses, no data tables to support their findings, and no references to the number and type of studies included. In fact, much of the article's introduction discusses ionized radiation. The authors also do not report relevant metrics for evaluating meta-analyses such as study heterogeneity.

- Malagoli et al. (2023) examined associations between exposure to magnetic fields from high voltage power lines (≥ 132 kV) and childhood leukemia development in a case-control study of children in Italy. The study included 182 cases diagnosed with childhood leukemia between 1998 and 2019 and 726 controls matched based on age, sex, and Italian province. The authors assessed magnetic-field exposure by calculating the distance from each participant's

residence to the nearest high voltage power line and classifying that distance into one of three exposed categories (participants living < 100 meters, 100 to < 200 meters, or 200 to < 400 meters from the power lines) or as unexposed (participants living ≥ 400 meters from the power lines). The authors reported a non-statistically significant association between childhood leukemia and a residence distance of <100 meters; no statistically significant associations were reported for any distance, including when stratifying by age (< 5 or ≥ 5 years) or when restricting to acute lymphoblastic leukemia (ALL).

- Nguyen et al. (2023) extended their previous investigation (Nguyen et al., 2022) into whether pesticide exposure was an independent risk factor or confounder for childhood leukemia in the presence of magnetic-field exposure from high voltage power lines by examining the potential impact of specific pesticide exposure factors (*e.g.*, intended use, chemical class, active ingredient). The authors found no statistically significant associations between distance to high voltage power lines or magnetic-field exposure and childhood leukemia, including when adjusting for pesticide exposures. Several of the examined pesticides were determined by the authors to be potential independent risk factors for childhood leukemia.

- Zagar et al. (2023) examined the relationship between magnetic fields and childhood cancers, including childhood leukemia, in Slovenia. Cancer cases, including 194 cases of leukemia, were identified from the Slovenian Cancer Registry; cases were then classified into one of five calculated magnetic-field exposure levels (ranging from < 0.1 μT [< 1 mG] to ≥ 0.4 μT [≥ 4 mG]) based on residential distance to high voltage (*e.g.*, 110-kV, 220-kV, and 400-kV) power lines. The authors reported that less than 1% of Slovenian children and adolescents lived in an area near high voltage power lines. No differences in the development of childhood cancers, including leukemia, brain tumors, or all cancers combined, were reported across the five exposure categories.

- Crespi et al. (2024) assessed the association between residential proximity to electricity transformers in multi-story residential buildings and childhood leukemia development in the International Transformer Exposure study. Participants were required to live in an apartment building that contained a built-in transformer; exposure was estimated using the participants' apartment location relative to the transformer and categorized as high exposure (located above or adjacent to the transformer), intermediate exposure (located on the same floor as apartments in the high exposure category), or unexposed (all other apartments). In the pooled analyses of five countries' data, a total of 74 cases and 20,443 controls were included; 18 of the 74 cases were identified in the intermediate or high exposure categories. No significant associations were reported between proximity to residential transformers and childhood leukemia. Sensitivity analyses performed using the data from one of the five countries (Finland) where a cohort study design was used, also reported no significant associations. The authors concluded that the evidence for an elevated risk of childhood leukemia from proximity to residential transformers was "weak."

- Duarte-Rodríguez et al. (2024) conducted a population-based case-control study to examine the geographical distribution of childhood ALL cases in Mexico City, Mexico. Cases and controls were geolocated using the most recent residential address, and a spatial scan statistic was used to detect spatial clusters of cancer cases. The authors identified eight spatial clusters of cases, representing nearly 40% of all cases included in the study (n=1,054 cases). The authors noted that six of the eight spatial clusters were located in proximity to high voltage power lines and high voltage electric installations (distances not specified), and that the remaining two clusters were located near former petrochemical industrial facility sites. Since the study did not directly assess magnetic-field exposure and made no conclusions about magnetic-field exposure and cancer development, this study adds little value to the existing literature regarding a potential association between exposure to ELF EMF and childhood leukemia development.

- Malavolti et al. (2024) examined the association between magnetic-field exposure from transformer stations and childhood leukemia in the same Italian study population as Malagoli et al. (2023). Magnetic-field exposure was estimated based on residential distance to the nearest transformer station, and participants were then categorized as exposed or unexposed using two different distance cut-points: residing within a radius of 15 or 25 meters from the transformer station (exposed); residing ≥ 15 meters or ≥ 25 meters from the transformer station (unexposed). No significant associations were reported for all leukemias, or ALL specifically, when either distance cut-point was used, and in fact no association at all (an odds ratio = 1.0) was observed when the more stringent cut-point of 15 meters was used. In sub-analyses that stratified by participant age (< 5 years vs. ≥ 5 years), no significant associations were reported for either age category.

Epidemiologic studies of EMF and neurodegenerative diseases published during the above referenced period include:

- Seelen et al. (2014) conducted a population-based case-control study in the Netherlands and included 1,139 cases diagnosed with amyotrophic lateral sclerosis ("ALS") between 2006 and 2013 and 2,864 frequency-matched controls. The shortest distance from the case and control residences to the nearest high voltage power line (50 to 380 kV) was determined by geocoding. No statistically significant associations between residential proximity to power lines with voltages of either 50 to 150 kV or 220 to 380 kV and ALS were reported.

- Sorahan and Mohammed (2014) analyzed mortality from neurodegenerative diseases in a cohort of approximately 73,000 electricity supply workers in the United Kingdom. Cumulative occupational exposure to magnetic-fields was calculated for each worker in the cohort based on their job titles and job locations. Death certificates were used to identify deaths from neurodegenerative diseases. No associations or trends for any of the included

neurodegenerative diseases (Alzheimer's disease, Parkinson's disease, and ALS) were observed with various measures of calculated magnetic fields.

- Koeman et al. (2015, 2017) analyzed data from the Netherlands Cohort Study of approximately 120,000 men and women who were enrolled in the cohort in 1986 and followed up until 2003. Lifetime occupational history, obtained through questionnaires, and job-exposure matrices on ELF magnetic fields and other occupational exposures were used to assign exposure to study subjects. Based on 1,552 deaths from vascular dementia, the researchers reported a statistically not significant association of vascular dementia with estimated exposure to metals, chlorinated solvents, and ELF magnetic fields. However, because no exposure-response relationship for cumulative exposure was observed and because magnetic fields and solvent exposures were highly correlated with exposure to metals, the authors attributed the association with ELF magnetic fields and solvents to confounding by exposure to metals (Koeman et al., 2015). Based on a total of 136 deaths from ALS among the cohort members, the authors reported a statistically significant, approximately two-fold association with ELF magnetic fields in the highest exposure category. This association, however, was no longer statistically significant when adjusted for exposure to insecticides (Koeman et al., 2017).

- Fischer et al. (2015) conducted a population-based case-control study that included 4,709 cases of ALS diagnosed between 1990 and 2010 in Sweden and 23,335 controls matched to cases on year of birth and sex. The study subjects' occupational exposures to ELF magnetic fields and electric shocks were classified based on their occupations, as recorded in the censuses and corresponding job-exposure matrices. Overall, neither magnetic fields nor electric shocks were related to ALS.

- Vergara et al. (2015) conducted a mortality case-control study of occupational exposure to electric shock and magnetic fields and ALS. They analyzed data on 5,886 deaths due to ALS and over 58,000 deaths from other causes in the United States between 1991 and 1999. Information on occupation was obtained from death certificates and job-exposure matrices were used to categorize exposure to electric shocks and magnetic fields. Occupations classified as "electric occupations" were moderately associated with ALS. The authors reported no consistent associations for ALS, however, with either electric shocks or magnetic fields, and they concluded that their findings did not support the hypothesis that exposure to either electric shocks or magnetic fields explained the observed association of ALS with "electric occupations."

- Pedersen et al. (2017) investigated the occurrence of central nervous system diseases among approximately 32,000 male Danish electric power company workers. Cases were identified through the national patient registry between 1982 and 2010. Exposure to ELF magnetic fields was determined for each worker based on their job titles and area of work. A statistically significant increase was reported for dementia in the high exposure category when

compared to the general population, but no exposure-response pattern was identified, and no similar increase was reported in the internal comparisons among the workers. No other statistically significant increases among workers were reported for the incidence of Alzheimer's disease, Parkinson's disease, motor neuron disease, multiple sclerosis, or epilepsy, when compared to the general population, or when incidence among workers was analyzed across estimated exposure levels.

- Vinceti et al. (2017) examined the association between ALS and calculated magnetic-field levels from high voltage power lines in Italy. The authors included 703 ALS cases and 2,737 controls; exposure was assessed based on residential proximity to high voltage power lines. No statistically significant associations were reported and no exposure-response trend was observed. Similar results were reported in subgroup analyses by age, calendar period of disease diagnosis, and study area.

- Checkoway et al. (2018) investigated the association between Parkinsonism[9] and occupational exposure to magnetic fields and several other agents (endotoxins, solvents, shift work) among 800 female textile workers in Shanghai. Exposure to magnetic fields was assessed based on the participants' work histories. The authors reported no statistically significant associations between Parkinsonism and occupational exposure to any of the agents under study, including magnetic fields.

- Gunnarsson and Bodin (2018) conducted a meta-analysis of occupational risk factors for ALS. The authors reported a statistically significant association between occupational exposures to EMF, estimated using a job-exposure matrix, and ALS among the 11 studies included. Statistically significant associations were also reported between ALS and jobs that involve working with electricity, heavy physical work, exposure to metals (including lead) and chemicals (including pesticides) and working as a nurse or physician. The authors reported some evidence for publication bias. In a subsequent publication, Gunnarsson and Bodin (2019) updated their previous meta-analysis to also include Parkinson's disease and Alzheimer's disease. A slight, statistically significant association was reported between occupational exposure to EMF and Alzheimer's disease; no association was observed for Parkinson's disease.

- Huss et al. (2018) conducted a meta-analysis of 20 epidemiologic studies of ALS and occupational exposure to magnetic fields. The authors reported a weak overall association; a slightly stronger association was observed in a subset analysis of six studies with full occupational histories available. The authors noted substantial heterogeneity among studies, evidence for publication

[9] Parkinsonism is defined by Checkoway et al. (2018) as "a syndrome whose cardinal clinical features are bradykinesia, rest tremor, muscle rigidity, and postural instability. Parkinson disease is the most common neurodegenerative form of [parkinsonism]" (p. 887).

bias, and a lack of a clear exposure-response relationship between exposure and ALS.

- Jalilian et al. (2018) conducted a meta-analysis of 20 epidemiologic studies of occupational exposure to magnetic fields and Alzheimer's disease. The authors reported a moderate, statistically significant overall association; however, they noted substantial heterogeneity among studies and evidence for publication bias.

- Röösli and Jalilian (2018) performed a meta-analysis using data from five epidemiologic studies examining residential exposure to magnetic fields and ALS. A statistically non-significant negative association was reported between ALS and the highest exposed group, where exposure was defined based on distance from power lines or calculated magnetic-field level.

- Gervasi et al. (2019) assessed the relationship between residential distance to overhead power lines in Italy and risk of Alzheimer's dementia and Parkinson's disease. The authors included 9,835 cases of Alzheimer's dementia and 6,810 cases of Parkinson's disease; controls were matched by sex, year of birth, and municipality of residence. A weak, statistically non-significant association was observed between residences within 50 meters of overhead power lines and both Alzheimer's dementia and Parkinson's disease, compared to distances of over 600 meters.

- Peters et al. (2019) examined the relationship between ALS and occupational exposure to both magnetic fields and electric shock in a pooled study of data from three European countries. The study included 1,323 ALS cases and 2,704 controls matched for sex, age, and geographic location; exposure was assessed based on occupational title and defined as low (background), medium, or high. Statistically significant associations were observed between ALS and ever having been exposed above background levels to either magnetic fields or electric shocks; however, no clear exposure-response trends were observed with exposure duration or cumulative exposure. The authors also noted significant heterogeneity in risk by study location.

- Filippini et al. (2020) investigated the associations between ALS and several environmental and occupational exposures, including electromagnetic fields, within a case-control study in Italy. The study included 95 cases and 135 controls matched on age, gender, and residential province; exposure to electromagnetic fields was assessed using the participants' responses to questions related to occupational use of electric and electronic equipment, occupational EMF exposure, and residential distance to overhead power lines. The authors reported a statistically significant association between ALS and residential proximity to overhead power lines and a statistically non-significant association between ALS and occupational exposure to EMF; occupational use of electric and electronic equipment was associated with a statistically non-significant decrease in ALS development.

- Huang et al. (2020) conducted a meta-analysis of 43 epidemiologic studies examining potential occupational risk factors for dementia or mild cognitive impairment. The authors included five cohort studies and seven case-control studies related to magnetic-field exposure. For both study types, the authors reported positive associations between dementia and work-related magnetic-field exposures. The paper, however, provided no information on the occupations held by the study participants, their magnetic-field exposure levels, or how magnetic-field levels were assessed; therefore, the results are difficult to interpret. The authors also reported a high level of heterogeneity among studies. Thus, this analysis adds little, if any, to the overall weight of evidence on a potential association between dementia and magnetic fields.

- Jalilian et al. (2020) conducted a meta-analysis of ALS and occupational exposure to both magnetic fields and electric shocks within 27 studies from Europe, the United States, and New Zealand. A weak, statistically significant association was reported between magnetic-field exposure and ALS; however, the authors noted evidence of study heterogeneity and publication bias. No association was observed between ALS and electric shocks.

- Chen et al. (2021) conducted a case-control study to examine the association between occupational exposure to electric shocks, magnetic fields, and motor neuron disease ("MND") in New Zealand. The study included 319 cases with a MND diagnosis (including ALS) and 604 controls, matched on age and gender; exposure was assessed using the participants' occupational history questionnaire responses and previously developed job-exposure matrices for electric shocks and magnetic fields. The authors reported no associations between MND and exposure to magnetic fields; positive associations were reported between MND and working at a job with the potential for electric shock exposure.

- Grebeneva et al. (2021) evaluated disease rates among electric power company workers in the Republic of Kazakhstan. The authors included three groups of "exposed" workers who "were in contact with equipment generating [industrial frequency EMF]" (a total of 161 workers), as well as 114 controls "who were not associated with exposure to electromagnetic fields." Disease rates were assessed "based on analyzing the sick leaves of employees" from 2010 to 2014 and expressed as "incidence rate per 100 employees." The authors reported a higher "incidence rate" of "diseases of the nervous system" in two of the exposed categories compared to the non-exposed group. No meaningful conclusions from the study could be drawn, however, because no specific diagnoses within "diseases of the nervous system" were identified in the paper and no clear description was provided on how the authors defined and calculated "incidence rate" for the evaluated conditions. In addition, no measured or calculated magnetic-field levels were presented by the authors.

- Filippini et al. (2021) conducted a meta-analysis to assess the dose-response relationship between residential exposure to magnetic fields and ALS. The

authors identified six ALS epidemiologic studies, published between 2009 and 2020, that assessed exposure to residential magnetic fields by either distance from overhead power lines or magnetic-field modeling. They reported a decrease in risk of ALS in the highest exposure categories for both distance-based and modeling-based exposure estimates. The authors also reported that their dose-response analyses "showed little association between distance from power lines and ALS"; the data were too sparse to conduct a dose-response analysis for modeled magnetic-field estimates. The authors noted that their study was limited by small sample size, "imprecise" exposure categories, the potential for residual confounding, and by "some publication bias."

- Jalilian et al. (2021) conducted a meta-analysis of occupational exposure to ELF magnetic fields and electric shocks and development of ALS. The authors included 27 studies from Europe, the United States, and New Zealand that were published between 1983 and 2019. A weak, statistically significant association was reported between magnetic-field exposure and ALS, and no association was observed between electric shocks and ALS. Indications of publication bias and "moderate to high" heterogeneity were identified for the studies of magnetic-field exposure and ALS, and the authors noted that "the results should be interpreted with caution."

- Goutman et al. (2022) examined occupational exposures, including "electromagnetic radiation" exposure, and associations with ALS in a case-control study of Michigan workers across various industries. The study included 381 cases diagnosed with ALS, all patients at the University of Michigan's Pranger ALS clinic, and 272 controls recruited from an online database for the University of Michigan. Participants were enrolled from 2010 to 2020 and completed a written survey of their work history and occupational exposures to nine exposure categories, including electromagnetic fields, particulate matter (PM), and pesticides. Exposure to electromagnetic fields was ascertained with a binary question asking whether they were "[e]xposed to power lines, transformation [*sic*] stations or other EM [electromagnetic radiation]?" The analysis was adjusted for age, sex, and military service. No association was observed between electromagnetic field exposure and ALS, while exposure to PM, pesticides, and metals, among others, were determined by the authors to be "associated with an increased ALS risk in this cohort."

- Sorahan and Nichols (2022) investigated magnetic-field exposure and mortality from MND in a large cohort of employees of the former Central Electricity Generating Board of England and Wales. The study included nearly 38,000 employees first hired between 1942 and 1982 and still employed in 1987. Estimates of exposure magnitude, frequency, and duration were calculated using data from the power stations and the employees' job histories and were described in detail in a previous publication (Renew et al., 2003). Mortality from MND in the total cohort was observed to be similar to national rates. No statistically significant dose-response trends were observed with lifetime, recent, or distant magnetic-field exposure; statistically significant associations

were observed for some categories of recent exposure, but not for the highest exposure category.

- Duan et al. (2023) conducted a meta-summary of ALS and exposure to magnetic fields, which was 1 of 22 non-genetic risk factors evaluated across 67 studies for its association with ALS. Six of the 67 studies examined magnetic-field exposure and associations with ALS; of the six studies identified, the authors included four case-control studies and one cohort study in their meta-analysis. Pooling results from these studies resulted in significant increased odds of ALS among individuals with higher (but undefined) exposure to magnetic fields. However, this pooled odds ratio for magnetic-field exposure (1.22) was below the minimum odds ratio threshold of 1.3 set by the authors as the criterion for defining an exposure as an ALS risk factor. In addition, the authors identified "substantial" heterogeneity between studies evaluating magnetic-field exposure and ALS.

- In a subsequent publication of the same study as Goutman et al. (2022), Goutman et al. (2023) assessed the potential for the same nine exposure categories, including "electromagnetic radiation" exposure, to be risk factors for ALS progression, including survival and onset segment (bulbar, cervical, lumbar). Electromagnetic field exposure was not significantly associated with ALS survival or with bulbar onset compared to lumbar but was significantly associated with cervical onset compared to lumbar. It is worth noting that an association with cervical onset compared to lumbar was observed in the majority (7/9) of the exposure categories. The authors make no concluding statements on electromagnetic field exposure and ALS and instead emphasize that occupational pesticide exposure and working in military operations were significantly associated with worse ALS survival.

- Saucier et al. (2023) carried out three systematic reviews of studies that evaluated relationships between urbanization, air pollution, and water pollution, and ALS development. The authors identified five studies that assessed whether electromagnetic fields (of varying frequencies) and high voltage infrastructure were significant urbanization risk factors for ALS but make no conclusion about magnetic-field exposure and ALS development based on these studies, therefore adding little value to the existing literature.

- Vasta et al. (2023) examined the relationship between residential distance to power lines and ALS development in a cohort study of 1,098 participants in Italy. The authors reported no differences in the age of ALS onset or ALS progression rate between low-exposed and high-exposed participants based on residential distance to power lines at the time of the participants' diagnosis. Similarly, no differences were observed when exposure was based on residential distance to repeater antennas.

- Vitturi et al. (2023) conducted a systematic review and meta-analysis of case-control studies examining potential occupational risk factors related to multiple

sclerosis, including solvents, mercury, pesticides, and low-frequency magnetic fields. The authors included 24 studies in their review, but only one of the included studies investigated exposure to magnetic fields (Pedersen et al., 2017, discussed above), thereby adding little new information to the existing body of research.

References

Amoon AT, Oksuzyan S, Crespi CM, Arah OA, Cockburn M, Vergara X, Kheifets L. Residential mobility and childhood leukemia. Environ Res 164:459-466, 2018a.

Amoon AT, Crespi CM, Ahlbom A, Bhatnagar M, Bray I, Bunch KJ, Clavel J, Feychting M, Hemon D, Johansen C, Kreis C, Malagoli C, Marquant F, Pedersen C, Raaschou-Nielsen O, Röösli M, Spycher BD, Sudan M, Swanson J, Tittarelli A, Tuck DM, Tynes T, Vergara X, Vinceti M, Wunsch-Filho V, Kheifets L. Proximity to overhead power lines and childhood leukaemia: an international pooled analysis. Br J Cancer 119:364-373, 2018b.

Amoon AT, Arah OA, Kheifets L. The sensitivity of reported effects of EMF on childhood leukemia to uncontrolled confounding by residential mobility: a hybrid simulation study and an empirical analysis using CAPS data. Cancer Causes Control 30:901-908, 2019.

Amoon AT, Crespi CM, Nguyen A, Zhao X, Vergara X, Arah OA, and Kheifets L. The role of dwelling type when estimating the effect of magnetic fields on childhood leukemia in the California Power Line Study (CAPS). Cancer Causes Control 31:559-567, 2020.

Amoon AT, Swanson J, Magnani C, Johansen C, Kheifets L. Pooled analysis of recent studies of magnetic fields and childhood leukemia. Environ Res 204(Pt A):111993, 2022.

Auger N, Bilodeau-Bertrand M, Marcoux S, Kosatsky T. Residential exposure to electromagnetic fields during pregnancy and risk of child cancer: A longitudinal cohort study. Environ Res 176:108524, 2019.

Brabant C, Geerinck A, Beaudart C, Tirelli E, Geuzaine C, Bruyère O. Exposure to magnetic fields and childhood leukemia: a systematic review and meta-analysis of case-control and cohort studies. Rev Environ Health 38(2):229-253, 2022.

Bunch KJ, Keegan TJ, Swanson J, Vincent TJ, Murphy MF. Residential distance at birth from overhead high voltage powerlines: childhood cancer risk in Britain 1962-2008. Br J Cancer 110:1402-1408, 2014.

Bunch KJ, Swanson J, Vincent TJ, Murphy MF. Magnetic fields and childhood cancer: an epidemiological investigation of the effects of high voltage underground cables. J Radiol Prot 35:695-705, 2015.

Bunch KJ, Swanson J, Vincent TJ, Murphy MF. Epidemiological study of power lines and childhood cancer in the UK: further analyses. J Radiol Prot 36:437-455, 2016.

Checkoway H, Ilango S, Li W, Ray RM, Tanner CM, Hu SC, Wang X, Nielsen S, Gao DL, Thomas DB. Occupational exposures and parkinsonism among Shanghai women textile workers. Am J Ind Med 61:886-892, 2018.

Chen GX, Mannetje A, Douwes J, Berg LH, Pearce N, Kromhout H, Glass B, Brewer N, McLean DJ. Occupational exposure to electric shocks and extremely low-frequency magnetic fields and motor neurone disease. Am J Epidemiol 190(3):393-402, 2021.

Crespi CM, Vergara XP, Hooper C, Oksuzyan S, Wu S, Cockburn M, Kheifets L. Childhood leukaemia and distance from power lines in California: a population-based case-control study. Br J Cancer 115:122-128, 2016.

Crespi CM, Swanson J, Vergara XP, Kheifets L. Childhood leukemia risk in the California Power Line Study: Magnetic fields versus distance from power lines. Environ Res 171:530-535, 2019.

Crespi CM, Sudan M, Juutilainen J, Roivainen P, Hareuveny R, Huss A, Kandel S, Karim-Kos HE, Thuróczy G, Jakab Z, Spycher BD, Flueckiger B, Vermeulen R, Vergara X, Kheifets L. International study of childhood leukemia in residences near electrical transformer rooms. Environ Res 249:118459, 2024.

Duan QQ, Jiang Z, Su WM, Gu XJ, Wang H, Cheng YF, Cao B, Gao X, Wang Y, Chen YP. Risk factors of amyotrophic lateral sclerosis: a global meta-summary. Front Neurosci 17:1177431, 2023.

Duarte-Rodríguez DA, Flores-Lujano J, McNally RJQ, et al. Evidence of spatial clustering of childhood acute lymphoblastic leukemia cases in Greater Mexico City: report from the Mexican Inter-Institutional Group for the identification of the causes of childhood leukemia. Front Oncol 14:1304633, 2024.

European Health Risk Assessment Network on Electromagnetic Fields Exposure (EFHRAN). Report on the Analysis of Risks Associated to Exposure to EMF: *In Vitro* and *In Vivo* (Animals) Studies. Milan, Italy: EFHRAN, 2010.

European Health Risk Assessment Network on Electromagnetic Fields Exposure (EFHRAN). Risk Analysis of Human Exposure to Electromagnetic Fields (Revised). Report D2 of the EFHRAN Project. Milan, Italy: EFHRAN, 2012.

Filippini T, Tesauro M, Fiore M, Malagoli C, Consonni M, Violi F, Iacuzio L, Arcolin E, Oliveri Conti G, Cristaldi A, Zuccarello P, Zucchi E, Mazzini L, Pisano F, Gagliardi I, Patti F, Mandrioli J, Ferrante M, Vinceti M. Environmental and occupational risk factors of amyotrophic lateral sclerosis: A population-based case-control study. Int J Environ Res Public Health 17(8):2882, 2020.

Filippini T, Hatch EE, Vinceti M. Residential exposure to electromagnetic fields and risk of amyotrophic lateral sclerosis: a dose-response meta-analysis. Sci Rep 11(1):11939, 2021.

Fischer H, Kheifets L, Huss A, Peters TL, Vermeulen R, Ye W, Fang F, Wiebert P, Vergara XP, Feychting M. Occupational Exposure to Electric Shocks and Magnetic Fields and Amyotrophic Lateral Sclerosis in Sweden. Epidemiology 26:824-830, 2015.

Gervasi F, Murtas R, Decarli A, Giampiero Russo A. Residential distance from high voltage overhead power lines and risk of Alzheimer's dementia and Parkinson's disease: a population-based case-control study in a metropolitan area of Northern Italy. Int J Epidemiol 48(6):1949-1957, 2019.

Grebeneva OV, Rybalkina DH, Ibrayeva LK, Shadetova AZ, Drobchenko EA, Aleshina NY. Evaluating occupational morbidity among energy enterprise employees in industrial region of Kazakhstan. Russian Open Medical Journal 10(3): e0319, 2021.

Goutman SA, Boss J, Godwin C, Mukherjee B, Feldman EL, Batterman SA. Associations of self-reported occupational exposures and settings to ALS: a case-control study. Int Arch Occup Environ Health 95(7):1567-1586, 2022.

Goutman SA, Boss J, Godwin C, Mukherjee B, Feldman EL, Batterman SA. Occupational history associates with ALS survival and onset segment. Amyotroph Lateral Scler Frontotemporal Degener 24(3-4):219-229, 2023.

Gunnarsson LG and Bodin L. Amyotrophic lateral sclerosis and occupational exposures: A systematic literature review and meta-analyses. Int J Environ Res Public Health 15(11):2371, 2018.

Gunnarsson LG and Bodin L. Occupational exposures and neurodegenerative diseases: A systematic literature review and meta-analyses. Int J Environ Res Public Health 16(3):337, 2019.

Guo H, Kang L, Qin W, Li Y. Electromagnetic Radiation Exposure and Childhood Leukemia: Meta-Analysis and Systematic Review. Altern Ther Health Med 29(8):75-81, 2023.

Huang LY, Hu HY, Wang ZT, Ma YH, Dong Q, Tan L, Yu JT. Association of occupational factors and dementia or cognitive impairment: A systematic review and meta-analysis. J Alzheimers Dis 78(1):217-227, 2020.

Huss A, Peters S, Vermeulen R. Occupational exposure to extremely low-frequency magnetic fields and the risk of ALS: A systematic review and meta-analysis. Bioelectromagnetics 39:156-163, 2018.

Jalilian H, Teshnizi SH, Röösli M, Neghab M. Occupational exposure to extremely

low frequency magnetic fields and risk of Alzheimer disease: A systematic review and meta-analysis. Neurotoxicology 69:242-252, 2018.

Jalilian H, Najafi K, Khosravi Y, and Röösli M. Amyotrophic lateral sclerosis, occupational exposure to extremely low frequency magnetic fields and electric shocks: A systematic review and meta-analysis. Rev Environ Health 36(1):129-142, 2021.

Kheifets L, Crespi CM, Hooper C, Cockburn M, Amoon AT, Vergara XP. Residential magnetic fields exposure and childhood leukemia: a population-based case-control study in California. Cancer Causes Control 28:1117-1123, 2017.

Koeman T, Schouten LJ, van den Brandt PA, Slottje P, Huss A, Peters S, Kromhout H, Vermeulen R. Occupational exposures and risk of dementia-related mortality in the prospective Netherlands Cohort Study. Am J Ind Med 58:625-635, 2015.

Koeman T, Slottje P, Schouten LJ, Peters S, Huss A, Veldink JH, Kromhout H, van den Brandt PA, Vermeulen R. Occupational exposure and amyotrophic lateral sclerosis in a prospective cohort. Occup Environ Med 74: 578-585, 2017.

Kyriakopoulou A, Meimeti E, Moisoglou I, Psarrou A, Provatopoulou X, Dounias G. Parental Occupational Exposures and Risk of Childhood Acute Leukemia. Mater Sociomed 30: 209-214, 2018.

Malagoli C, Malavolti M, Wise LA, Balboni E, Fabbi S, Teggi S, Palazzi G, Cellini M, Poli M, Zanichelli P, Notari B, Cherubini A, Vinceti M, Filippini T. Residential exposure to magnetic fields from high voltage power lines and risk of childhood leukemia. Environ Res 232:116320, 2023.

Malavolti M, Malagoli C, Wise LA, Poli M, Notari B, Taddei I, Fabbi S, Teggi S, Balboni E, Pancaldi A, Palazzi G, Vinceti M, Filippini T. Residential exposure to magnetic fields from transformer stations and risk of childhood leukemia. Environ Res 245:118043, 2024.

Nguyen A, Crespi CM, Vergara X, Kheifets L. Commercial outdoor plant nurseries as a confounder for electromagnetic fields and childhood leukemia risk. Environ Res 212(Pt C):113446, 2022.

Nguyen A, Crespi CM, Vergara X, Kheifets L. Pesticides as a potential independent childhood leukemia risk factor and as a potential confounder for electromagnetic fields exposure. Environ Res 238(Pt 1):116899, 2023.

Núñez-Enríquez JC, Correa-Correa V, Flores-Lujano J, Pérez-Saldivar ML, Jiménez-Hernández E, Martín-Trejo JA, Espinoza-Hernández LE, Medina-Sanson A, Cárdenas-Cardos R, Flores-Villegas LV, Peñaloza-González JG, Torres-Nava JR, Espinosa-Elizondo RM, Amador-Sánchez R, Rivera-Luna R, Dosta-Herrera JJ, Mondragón-García JA, González-Ulibarri JE, Martínez-Silva SI, Espinoza-Anrubio G, Duarte-Rodríguez DA, García-Cortés LR, Gil-Hernández AE, Mejía-

Aranguré JM. Extremely low-frequency magnetic fields and the risk of childhood B-lineage acute lymphoblastic leukemia in a city with high incidence of leukemia and elevated exposure to ELF magnetic fields. Bioelectromagnetics 41(8):581-597, 2020.

Pedersen C, Johansen C, Schüz J, Olsen JH, Raaschou-Nielsen O. Residential exposure to extremely low-frequency magnetic fields and risk of childhood leukaemia, CNS tumour and lymphoma in Denmark. Br J Cancer 113:1370-1374, 2015.

Pedersen C, Poulsen AH, Rod NH, Frei P, Hansen J, Grell K, Raaschou-Nielsen O, Schüz J, Johansen C. Occupational exposure to extremely low-frequency magnetic fields and risk for central nervous system disease: an update of a Danish cohort study among utility workers. Int Arch Occup Environ Health 90:619-628, 2017.

Peters S, Visser AE, D'Ovidio F, Beghi E, Chio A, Logroscino G, Hardiman O, Kromhout H, Huss A, Veldink J, Vermeulen R, van den Berg LH. Associations of Electric Shock and Extremely Low-Frequency Magnetic Field Exposure With the Risk of Amyotrophic Lateral Sclerosis. Am J Epidemiol 188:796-805, 2019.

Renew DC, Cook RF, Ball MC. A method for assessing occupational exposure to power-frequency magnetic fields for electricity generation and transmission workers. J Radiol Prot 23(3):279-303, 2003.

Röösli M and Jalilian H. A meta-analysis on residential exposure to magnetic fields and the risk of amyotrophic lateral sclerosis. Rev Environ Health 33:295-299, 2018.

Salvan A, Ranucci A, Lagorio S, Magnani C. Childhood leukemia and 50 Hz magnetic fields: findings from the Italian SETIL case-control study. Int J Environ Res Public Health 12:2184-2204, 2015.

Saucier D, Registe PPW, Bélanger M, O'Connell C. Urbanization, air pollution, and water pollution: Identification of potential environmental risk factors associated with amyotrophic lateral sclerosis using systematic reviews. Front Neurol 14:1108383, 2023.

Scientific Committee on Emerging and Newly Identified Health Risks (SCENIHR). Health Effects of Exposure to EMF. Brussels, Belgium: European Commission, 2009.

Scientific Committee on Emerging and Newly Identified Health Risks (SCENIHR). Opinion on Potential Health Effects of Exposure to Electromagnetic Fields (EMF). Brussels, Belgium: European Commission, 2015.

Scientific Committee on Health, Environmental and Emerging Risks (SCHEER). Preliminary Opinion on Potential Health Effects of Exposure to Electromagnetic Fields (EMF): Update with regard to frequencies between 1Hz and 100 kHz.

Brussels, Belgium: European Commission, 2023.

Seelen M, Vermeulen RC, van Dillen LS, van der Kooi AJ, Huss A, de Visser M, van den Berg LH, Veldink JH. Residential exposure to extremely low frequency electromagnetic fields and the risk of ALS. Neurology 83:1767-1769, 2014.

Seomun G, Lee J, Park J. Exposure to extremely low-frequency magnetic fields and childhood cancer: A systematic review and meta-analysis. PLoS One 16: e0251628, 2021.

Sorahan T and Mohammed N. Neurodegenerative disease and magnetic field exposure in UK electricity supply workers. Occup Med (Lond) 64:454-460, 2014.

Sorahan T and Nichols L. Motor neuron disease risk and magnetic field exposures. Occup Med (Lond) 72(3):184-190, 2022.

Swanson J and Bunch KJ. Reanalysis of risks of childhood leukaemia with distance from overhead power lines in the UK. J Radiol Prot 38:N30-N35, 2018.

Swanson J, Kheifets L, and Vergara X. Changes over time in the reported risk for childhood leukaemia and magnetic fields. J Radiol Prot 39:470-488, 2019.

Swedish Radiation Safety Authority (SSM). Research 2019:08. Recent Research on EMF and Health Risk – Thirteenth Report from SSM's Scientific Council on Electromagnetic Fields, 2018. Stockholm, Sweden: Swedish Radiation Safety Authority (SSM), 2019.

Talibov M, Olsson A, Bailey H, Erdmann F, Metayer C, Magnani C, Petridou E, Auvinen A, Spector L, Clavel J, Roman E, Dockerty J, Nikkila A, Lohi O, Kang A, Psaltopoulou T, Miligi L, Vila J, Cardis E, Schüz J. Parental occupational exposure to low-frequency magnetic fields and risk of leukaemia in the offspring: findings from the Childhood Leukaemia International Consortium (CLIC). Occup Environ Med 76:746-753, 2019.

Vasta R, Callegaro S, Grassano M, Canosa A, Cabras S, Di Pede F, Matteoni E, De Mattei F, Casale F, Salamone P, Mazzini L, De Marchi F, Moglia C, Calvo A, Chiò A, Manera U. Exposure to electromagnetic fields does not modify neither the age of onset nor the disease progression in ALS patients. Amyotroph Lateral Scler Frontotemporal Degener 24(3-4):343-346, 2023.

Vergara X, Mezei G, Kheifets L. Case-control study of occupational exposure to electric shocks and magnetic fields and mortality from amyotrophic lateral sclerosis in the US, 1991-1999. J Expo Sci Environ Epidemiol 25:65-71, 2015.

Vinceti M, Malagoli C, Fabbi S, Kheifets L, Violi F, Poli M, Caldara S, Sesti D, Violanti S, Zanichelli P, Notari B, Fava R, Arena A, Calzolari R, Filippini T, Iacuzio L, Arcolin E, Mandrioli J, Fini N, Odone A, Signorelli C, Patti F, Zappia M, Pietrini V, Oleari P, Teggi S, Ghermandi G, Dimartino A, Ledda C, Mauceri C,

Sciacca S, Fiore M, Ferrante M. Magnetic fields exposure from high voltage power lines and risk of amyotrophic lateral sclerosis in two Italian populations. Amyotroph Lateral Scler Frontotemporal Degener 18:583-589, 2017.

Vitturi BK, Montecucco A, Rahmani A, Dini G, Durando P. Occupational risk factors for multiple sclerosis: a systematic review with meta-analysis. Front Public Health 11:1285103, 2023.

World Health Organization (WHO). Environmental Health Criteria 238: Extremely Low Frequency (ELF) Fields. Geneva, Switzerland: World Health Organization, 2007.

Zagar T, Valic B, Kotnik T, Korat S, Tomsic S, Zadnik V, Gajsek P. Estimating exposure to extremely low frequency magnetic fields near high voltage power lines and assessment of possible increased cancer risk among Slovenian children and adolescents. Radiol Oncol 57(1):59-69, 2023.

V. NOTICE

A. Furnish a proposed route description to be used for public notice purposes. Provide a map of suitable scale showing the route of the proposed project. For all routes that the Applicant proposed to be noticed, provide minimum, maximum and average structure heights.

Response:

A map showing the route to be used for the Project is provided as Attachment V.A. A written description of the route is as follows:

The Proposed Route would originate from the existing Brambleton - Yardley Ridge Line #2172 / Brambleton - Poland Road Line #2183 double circuit system at a tap point approximately 0.1 mile west of the Yardley Ridge Switching Station, which is located near Loudoun County Parkway and Arcola Boulevard. The new 230 kV double circuit transmission lines would extend approximately 0.6 mile to the existing Evergreen Mills Switching Station. From the tap point, the Proposed Route would extend for approximately 0.3 mile southwest to Arcola Mills Road (formerly Evergreen Mills Road) within a forested stream valley associated with an unnamed intermittent tributary to Broad Run. The alignment in this section is constrained by planned commercial development to the east and an existing sanitary easement to the west that parallels the stream. Angling to the south, the Proposed Route would span Arcola Mills Road (formerly Evergreen Mills Road) and extend for approximately 0.3 mile to the existing Evergreen Mills Switching Station. This segment would span two unnamed intermittent tributaries to Broad Run and a stormwater management basin, then extend into the proposed station adjacent to the customer's data center facility within Arcola Center. The minimum, maximum, and average proposed structure heights are 40 feet, 130 feet, and 95 feet, respectively.

ATTACHMENT
V.A.

TITLE:

NOTICE MAP

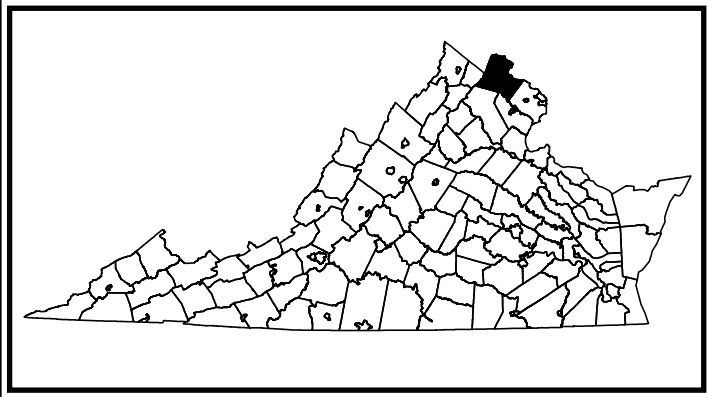
PROJECT:

EVERGREEN MILLS 230 KV LINE LOOP PART B

LEGEND

- EXISTING SUBSTATIONS
- EXISTING 230 KV TRANSMISSION LINES
- PROPOSED 230 KV TRANSMISSION LINE
- EXISTING SUBSTATION BOUNDARY
- PROJECT AREA

KEY PLAN



DOMINION PROJECT NUMBER: NW992802	PROJECT NUMBER: 50184751
DATE: 12/10/2024	
SCALE: 1" = 800 FEET	
PROJECT MANAGER: TL	
DRAWN BY: MGH	

Dominion Energy

Dewberry

Attachment V.A

V. NOTICE

B. List Applicant offices where members of the public may inspect the application. If applicable, provide a link to website(s) where the application may be found.

Response: Shortly after filing, the Application will be made available electronically for public inspection at: https://www.dominionenergy.com/nova.

V. NOTICE

C. List all federal, state, and local agencies and/or officials that may reasonably be expected to have an interest in the proposed construction and to whom the Applicant has furnished or will furnish a copy of the application.

Response:

Ms. Bettina Rayfield
Virginia Department of Environmental Quality
Office of Environmental Impact Review
1111 East Main Street, Suite 1400
Richmond, Virginia 23219

Ms. Michelle Henicheck
Virginia Department of Environmental Quality
Office of Wetlands and Streams
1111 East Main Street, Suite 1400
Richmond, Virginia 23219

Ms. Rene Hypes
Virginia Department of Conservation and Recreation
Division of Natural Heritage
600 East Main Street, Suite 1400
Richmond, Virginia 23219

Environmental Reviewer
Virginia Department of Conservation and Recreation
Planning & Recreation Bureau
600 East Main Street, 17th Floor
Richmond, Virginia 23219

Ms. Amy Martin
Virginia Department of Wildlife Resources
Wildlife Information and Environmental Services
7870 Villa Park, Suite 400
Henrico, Virginia 23228

Mr. Keith Tignor
Virginia Department of Agriculture and Consumer Services
Office of Plant Industry Services
102 Governor Street
Richmond, Virginia 23219

Mr. Clint Folks
Virginia Department of Forestry
Forestland Conservation Division
900 Natural Resources Drive, Suite 800
Charlottesville, Virginia 22903

Scoping at VMRC
Virginia Marine Resources Commission
Habitat Management Division
Building 96, 380 Fenwick Road
Ft. Monroe, Virginia 23651

Mr. Troy Andersen
US Fish and Wildlife Service
Virginia Field Office, Ecological Services
6669 Short Lane
Gloucester, Virginia 23061

Ms. Regena Bronson
U.S. Army Corps of Engineers
Norfolk District
10300 Spotsylvania Parkway, Suite 230
Fredericksburg, Virginia 22408

Arlene Fields Warren
Virginia Department of Health
Office of Drinking Water
109 Governor Street, 6th Floor
Richmond, Virginia 23219

Mr. Roger Kirchen
Virginia Department of Historic Resources
Review and Compliance Division
2801 Kensington Avenue
Richmond, Virginia 23221

Ms. Martha Little
Virginia Outdoors Foundation
600 East Main Street, Suite 402
Richmond, Virginia 23219

Mr. Scott Denny
Virginia Department of Aviation
Airport Services Division
5702 Gulfstream Road
Richmond, Virginia 23250

Mr. Bill Cuttler
District Engineer
Virginia Department of Transportation, Northern Virginia District
4975 Alliance Drive
Fairfax, VA 22030

Loudoun County Supervisors:

Mr. Matthew Letourneau
Dulles District County Supervisor, Loudoun County
P.O. Box 7000
Leesburg, VA 20177

Ms. Laura TeKrony
Little River District County Supervisor, Loudoun County
P.O. Box 7000
Leesburg, VA 20177

V. NOTICE

D. If the application is for a transmission line with a voltage of 138 kV or greater, provide a statement and any associated correspondence indicating that prior to the filing of the application with the SCC the Applicant has notified the chief administrative officer of every locality in which it plans to undertake construction of the proposed line of its intention to file such an application, and that the Applicant gave the locality a reasonable opportunity for consultation about the proposed line (similar to the requirements of § 15.2-2202 of the Code for electric transmission lines of 150 kV or more).

Response: In accordance with Va. Code § 15.2-2202 E, a letter dated November 18, 2024, was delivered to Tim Hemstreet, County Administrator of Loudoun County, where the Project is located. The letter stated the Company's intention to file this Application and invited the County to consult with the Company about the Project. This letter is included as Attachment V.D.1. On December 12, 2024, the Company received a response letter from the County, which is included as Attachment V.D.2.

Dominion Energy Services, Inc.
5000 Dominion Boulevard, Glen Allen, Virginia 23060
DominionEnergy.com

Mr. Tim Hemstreet
County Administrator
Loudoun County
1 Harrison Street, SE
Mail Stop #02
Leesburg, Virginia 20175

November 18, 2024

RE: Dominion Energy Virginia's Evergreen Mills 230 kV Line Loop Part B
Notice Pursuant to Va. Code § 15.2-2202 E

Dear Mr. Hemstreet:

Dominion Energy Virginia (the "Company") is proposing to construct a new approximately 0.6-mile 230 kV transmission line (the "Evergreen Mills Part B Lines") by cutting the 230 kV Brambleton-Poland Road Line (#2183) at Evergreen Mills Junction and looping it into the Evergreen Mills Switching Station in Loudoun County, Virginia (collectively, the "Project"). This will result in (i) 230 kV Brambleton - Evergreen Mills Line #2210 and (ii) 230 kV Evergreen Mills - Poland Road Line #2183. The Project will be utilizing the existing Company right-of-way.

The Project is necessary to ensure that Dominion Energy Virginia can provide service requested by a retail electric service customer (the "Customer") in Loudoun County, Virginia, to maintain reliable service for the overall growth in the load area surrounding the Company's existing Brambleton and Shellhorn Substations, and to comply with mandatory North American Electric Reliability Corporation Reliability Standards.

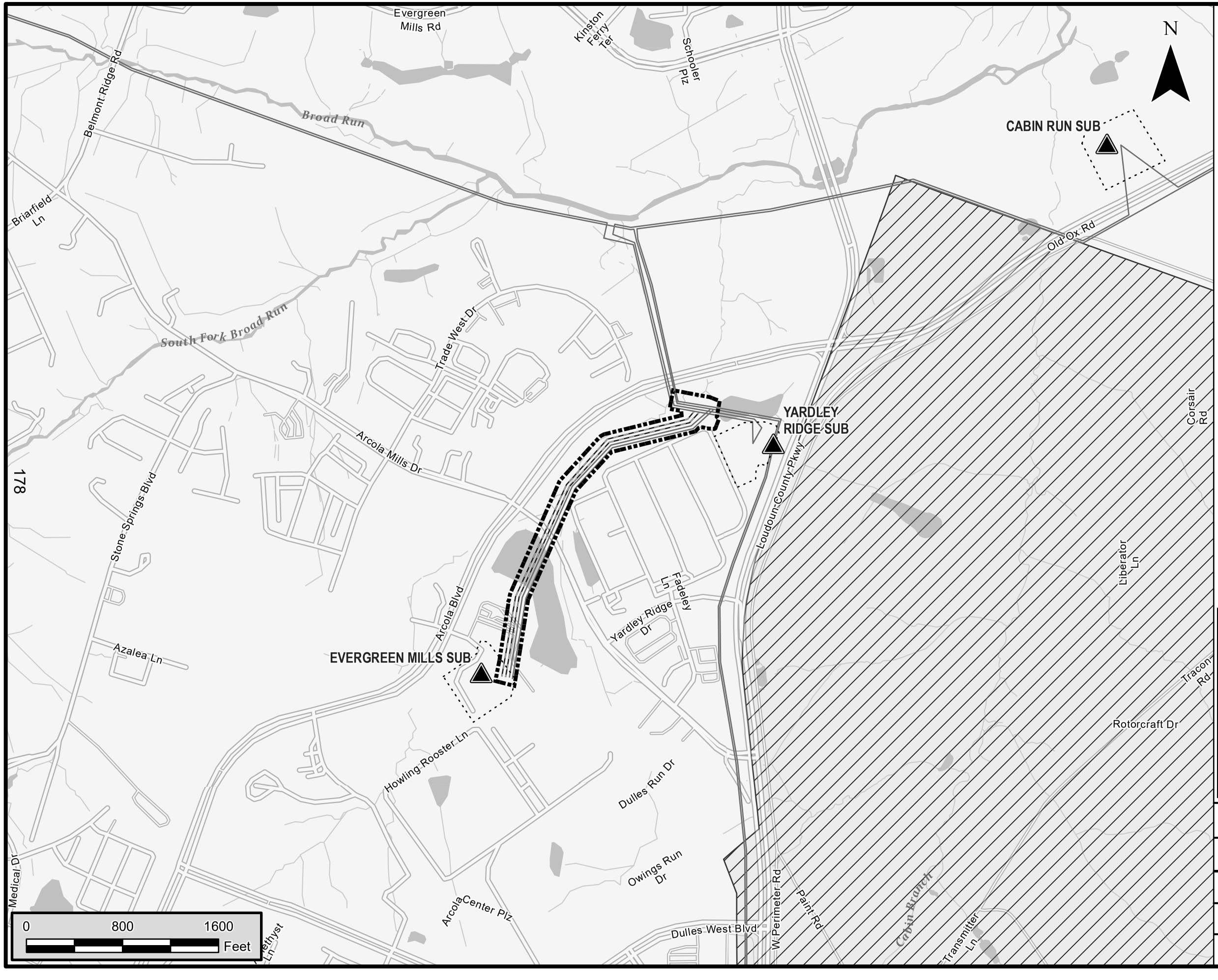
The Company is preparing to file an application for a certificate of public convenience and necessity ("CPCN") with the State Corporation Commission of Virginia (the "Commission"). In advance of filing an application for a CPCN from the Commission, the Company respectfully requests that you submit any comments or additional information that would have bearing on the proposed Project within 30 days of the date of this letter.

Enclosed is a Project Overview Map depicting the proposed route of the Evergreen Mills Part B lines, as well as the general Project location. All final materials, including maps, will be available in the Company's application filing with the Commission.

If you would like to receive a GIS shapefile of the transmission line route to assist in the project review or if there are any questions, please do not hesitate to contact Stefan Brooks at (804) 514-3129 or Stefan.r.brooks@dominionenergy.com. We appreciate your assistance with this project review and look forward to any additional information you may have to offer.

Regards,

Stefan R. Brooks, P.E.
Contractor – Siting & Permitting
Attachment: Project Overview Map



ATTACHMENT
V.A.

TITLE:

NOTICE MAP

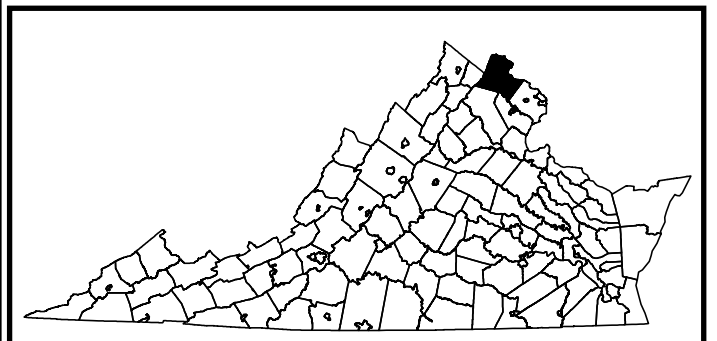
PROJECT:

EVERGREEN MILLS 230 KV LINE LOOP PART B

LEGEND

- EXISTING SUBSTATIONS
- EXISTING 230 KV TRANSMISSION LINES
- PROPOSED 230 KV TRANSMISSION LINE
- EXISTING SUBSTATION BOUNDARY
- PROJECT AREA

KEY PLAN



DOMINION PROJECT NUMBER: NW992802	PROJECT NUMBER: 50184751
DATE: 11/18/2024	
SCALE: 1" = 800 FEET	
PROJECT MANAGER: TL	
DRAWN BY: MGH	

Dominion Energy

Dewberry

Attachment V.D.1

LOUDOUN COUNTY VIRGINIA | Planning and Zoning

1 Harrison Street, SE, PO Box 7000, Leesburg, VA 20177-7000
703-777-0246 O | 703-777-0441 F | dpz@loudoun.gov
loudoun.gov/planningandzoning

December 12, 2024

Stefan R. Brooks, P.E.- Siting and Permitting
Dominion Energy Virginia
5000 Dominion Boulevard, 3rd Floor
Glen Allen, VA 23060

Re: **Dominion Energy Virginia's Proposed Evergreen Mills 230 kilovolt (kV) Line Loop Part B, Loudoun County, Virginia, Notice Pursuant to VA Code 15.2-2202 E.**

Mr. Brooks:

Enclosed are Loudoun County's Department of Planning and Zoning comments regarding Dominion Energy Virginia's (Dominion) Proposed Evergreen Mills 230kV Line Loop Part B.

Our understanding is that the proposed electrical transmission line is needed to meet current and future electrical demand to support data center uses in the area and to comply with mandatory North American Electric Reliability Corporation Standards (Figure 1). The proposed approximate 0.6-mile overhead 230kV transmission line parallels an existing overhead 230kV transmission line located east of Arcola Boulevard that originates west of the existing Yardley Ridge Substation (PIN: 162-39-2026) and proceeds southeast to the existing Evergreen Mills substation (PIN: 162-17-6713), in Arcola, Virginia (Loudoun County). The existing 230kV transmission line consists of galvanized steel monopoles that are approximately 115 feet in height located within a 160 foot right-of-way that will be shared with the proposed transmission line. The proposed transmission line will be located immediately west of the existing 230kV transmission line and will feature identical galvanized steel monopoles that are approximately 115 feet in height, which will be placed to align with the existing monopoles. The utilization of the existing 160 foot right-of-way minimizes environmental impacts and does not disturb the existing perimeter landscape buffers for the data center uses adjoining Arcola Boulevard. The existing 115-foot galvanized steel monopoles and the additional monopoles associated with the proposed new transmission line are located approximately 800 feet east and within the viewshed of the Arcola Quarters for the Enslaved (VDHR #053-0894), which is listed on the Virginia Landmarks Register (VLR) and National Register of Historic Places (NRHP). Loudoun County acknowledges that the proposed transmission line will have a visual impact on the Arcola Quarters for the Enslaved, but the impacts are commensurate with the current visual impact associated with the existing 230kV overhead transmission line. County policies encourage the grouping and collocation of the high voltage transmission lines and electrical infrastructure to minimize impacts on key travel corridors, sensitive cultural and historic resources, and existing residential communities.[1]

Loudoun County supports Dominion's proposed Evergreen Mills 230kV Line Loop Part B and the collocation of the proposed 115-feet tall steel galvanized poles within the existing right-of-way. The additional 230kV transmission line will assist in meeting local electric demand while ensuring the structural

[1] *Loudoun County 2019 General Plan*, Chapter 6, Electrical, Action 6.1.B. and Action 6.1.C.

integrity and reliability of the transmission system. Loudoun County recommends that Dominion commit to the placement of the proposed monopoles to closely align with the locations of the existing monopoles to minimize environmental and visual impacts on the surrounding area. The County requests that Dominion continue to work with County staff and provide additional details regarding the expected construction as they become available.

If you have any questions regarding these comments, please contact Pat Giglio, Senior Planner, Loudoun County Department of Planning and Zoning, at 703-737-8563 or patrick.giglio@loudoun.gov.

Thank you for the opportunity to provide comments.

Sincerely,

Daniel Galindo, Director
Department of Planning and Zoning

cc: *via email only*
Tim Hemstreet, County Administrator
Joe Kroboth, III, PE, Deputy County Administrator
Leo Rogers, County Attorney
Buddy Rizer, Director, Economic Development
Betsy Smith, Director, Building and Development

Enclosure: Figure 1. Vicinity map depicting proposed Transmission Route, provided by Dominion.
Figure 2. Proposed Pole Configuration, provide by Dominion.

Figure 1.

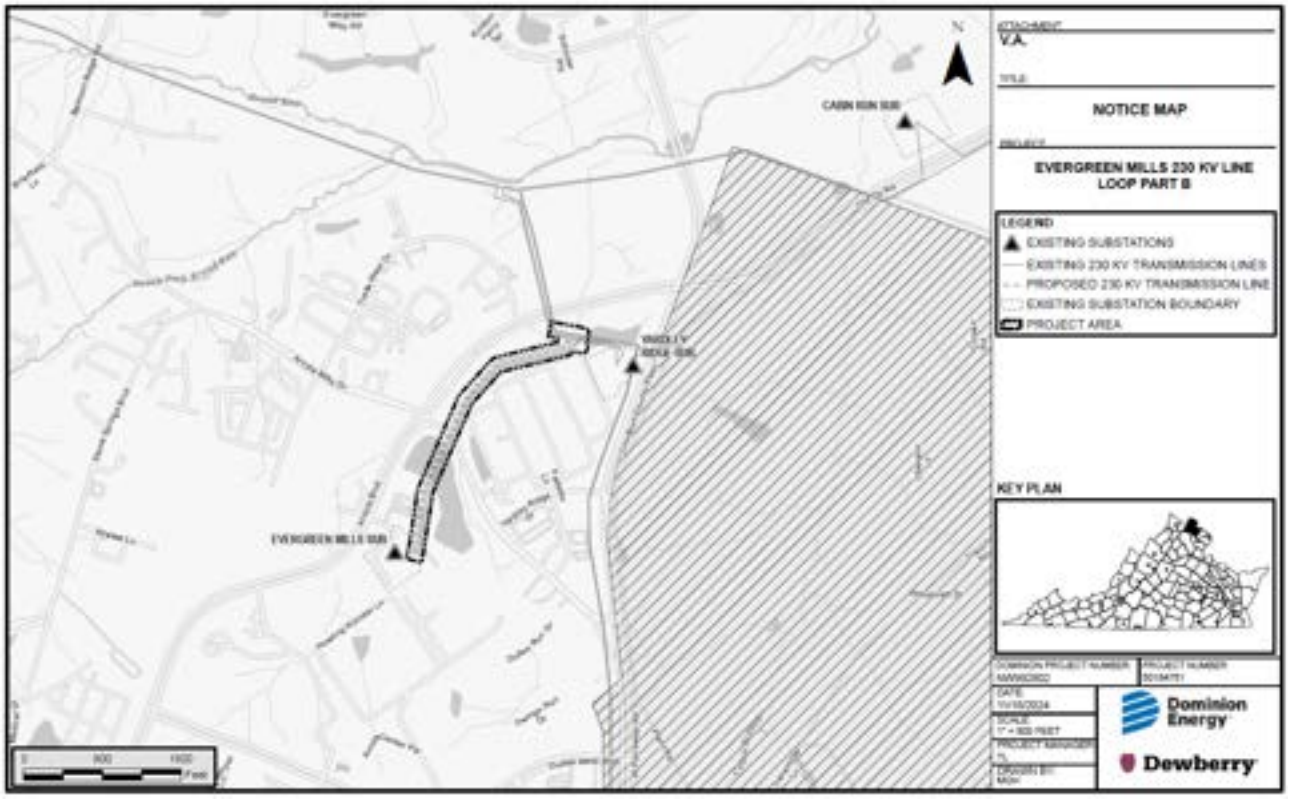
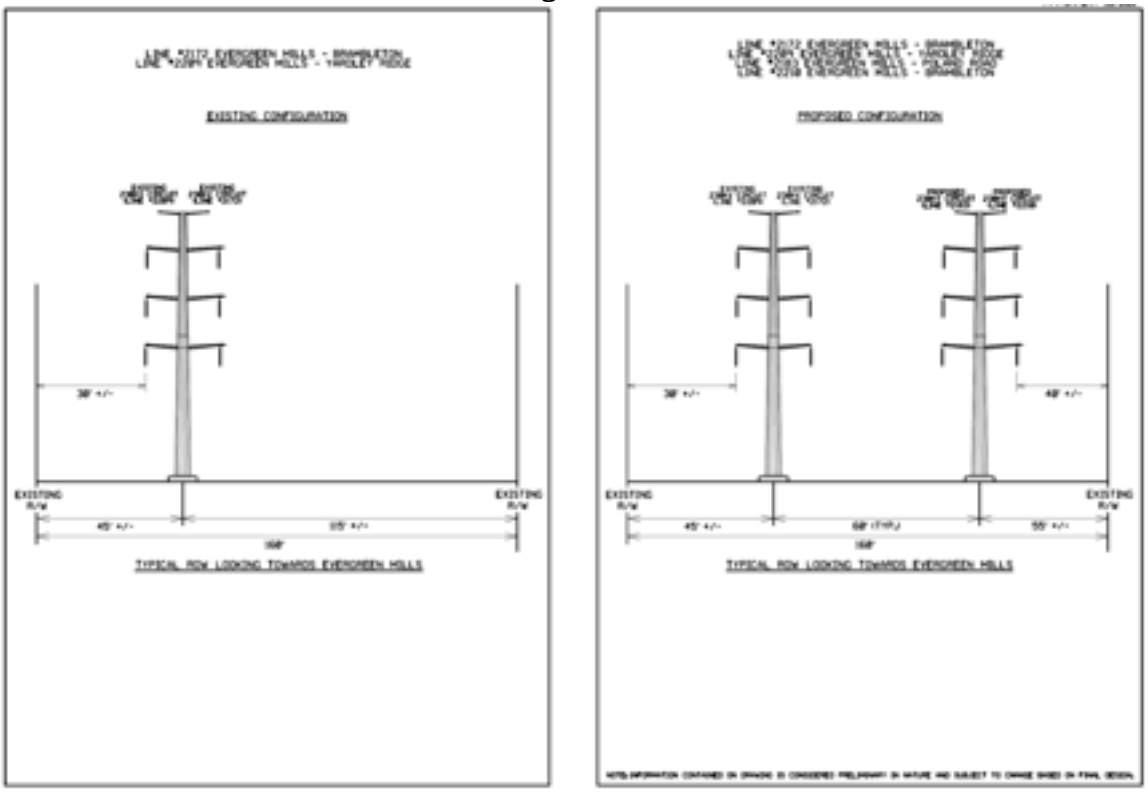


Figure 2.



COMMONWEALTH OF VIRGINIA

STATE CORPORATION COMMISSION

APPLICATION OF	)	
	)	
VIRGINIA ELECTRIC AND POWER COMPANY	)	Case No. PUR-2024-00225
	)	
For approval and certification of electric facilities: Line #2183 230 kV Evergreen Mills Loop	)	
	)	

IDENTIFICATION, SUMMARIES, AND TESTIMONY OF DIRECT WITNESSES OF VIRGINIA ELECTRIC AND POWER COMPANY

Bradley S. Lowe

Witness Direct Testimony Summary
Direct Testimony
Appendix A: Background and Qualifications

Shannon L. Snare

Witness Direct Testimony Summary
Direct Testimony
Appendix A: Background and Qualifications

Stefan R. Brooks

Witness Direct Testimony Summary
Direct Testimony
Appendix A: Background and Qualifications

WITNESS DIRECT TESTIMONY SUMMARY

Witness: Bradley S. Lowe

Title: Engineer III – Electric Transmission Planning

Summary:

Company Witness Bradley S. Lowe sponsors those portions of the Appendix describing the Company's electric transmission system and the need for, and benefits of, the proposed Project, as follows:

- Section I.B: This section details the engineering justifications for the proposed projects.
- Section I.C: This section describes the present system and details how the proposed projects will effectively satisfy present and projected future load demand requirements.
- Section I.D: This section, when applicable, describes critical contingencies and associated violations due to the inadequacy of the existing system.
- Section I.E: This section explains feasible project alternatives, when applicable
- Section I.G: This section provides a system map for the affected area.
- Section I.H: This section provides the desired in-service date of the proposed projects and the estimated construction time.
- Section I.J: This section provides information about the projects if approved by the RTO.
- Section I.K: This section, when applicable, provides outage history and maintenance history for existing transmission lines if the proposed project is a rebuild and is due in part to reliability issues.
- Section I.M: This section, when applicable, contains information for transmission lines interconnecting a non-utility generator.
- Section I.N: This section provides the proposed and existing generating sources, distribution circuits or load centers planned to be served by all new substations, switching stations, and other ground facilities associated with the proposed project.
- Section II.A.3: This section provides color maps of existing or proposed rights-of-way in the vicinity of the proposed projects.
- Section II.A.10: This section provides details of the construction plans for the proposed projects, including requested line outage schedules.

Additionally, Company Witness Lowe co-sponsors the following sections of the Appendix:

- Section I.A (co-sponsored with Company Witnesses Shannon L. Snare and Stefan R. Brooks): This section details the primary justifications for the proposed projects.
- Section I.L (co-sponsored with Company Witness Shannon L. Snare): This section, when applicable, provides details on the deterioration of structures and associated equipment.

A statement of Mr. Lowe's background and qualifications is attached to his testimony as Appendix A.

DIRECT TESTIMONY
OF
BRADLEY S. LOWE
ON BEHALF OF
VIRGINIA ELECTRIC AND POWER COMPANY
BEFORE THE
STATE CORPORATION COMMISSION OF VIRGINIA
CASE NO. PUR-2024-00225

Q. Please state your name, position with Virginia Electric and Power Company ("Dominion Energy Virginia" or the "Company"), and business address.

A. My name is Bradley S. Lowe, and I am an Engineer III in the Electric Transmission Planning Department for the Company. My business address is 5000 Dominion Boulevard, Glen Allen, Virginia 23060. A statement of my qualifications and background is provided as Appendix A.

Q. Please describe your areas of responsibility with the Company.

A. I am responsible for planning the Company's electric transmission system for voltages of 69 kilovolt ("kV") through 500 kV.

Q. What is the purpose of your testimony in this proceeding?

A. In order to maintain reliable service for the overall growth in the area and to comply with mandatory North American Electric Reliability Corporation ("NERC") Reliability Standards, Virginia Electric and Power Company ("Dominion Energy Virginia" or the "Company") proposes, in Loudoun County, Virginia, to:

i. Construct a new approximately 0.6-mile 230 kV Line #2183 Loop by cutting the 230 kV Brambleton-Poland Road Line #2183 at Evergreen Mills Junction and looping in and out of the Evergreen Mills Switching Station, resulting in: (i) 230 kV Brambleton - Evergreen Mills Line #2210 and (ii) 230 kV Evergreen Mills - Poland Road Line #2183; and

ii. Install two additional strings of breakers (totaling four) in a breaker-and-a-half scheme at Evergreen Mills Switching Station to allow for two additional 230 kV

terminations of 230 kV Brambleton - Evergreen Mills Line #2210 and 230kV Evergreen Mills - Poland Road Line #2183. The third and fourth string will consist of two 230 kV breakers with make ready work for a third breaker on each string to be added in the future to allow for the customer's third and fourth 230 kV delivery.

The Line #2183 Loop and breaker installation are collectively referred to as "the Project."

The purpose of my testimony is to describe the Company's electric transmission system and the need for, and benefits of, the proposed Project. I sponsor Sections I.B, I.C, I.D, I.E, I.G, I.H., I.J, I.K, I.M, I.N, II.A.3, and II.A.10 of the Appendix. Additionally, I co-sponsor the Executive Summary and Section I.A with Company Witnesses Shannon L. Snare and Stefan R Brooks; and Section I.L with Company Shannon L. Snare.

Q. Does this conclude your pre-filed direct testimony?

A. Yes, it does.

APPENDIX A

BACKGROUND AND QUALIFICATIONS
OF
BRADLEY S. LOWE

Bradley S. Lowe received his Bachelor of Science and Master of Science degrees in Electrical Engineering from Virginia Polytechnic Institute and State University in 2014 and 2015 respectively. Mr. Lowe received his NERC Reliability Coordinator and PJM Interconnection Owner/Operator certifications in 2019. Mr. Lowe has been employed by Dominion Energy since 2015 where he has worked on several teams within the Power Delivery group including System Protection, Substation Control Design, Substation Engineering, Transmission Operations, and Transmission Planning. He has been with the Transmission Area Planning team since February 2023.

WITNESS DIRECT TESTIMONY SUMMARY

Witness: Shannon L. Snare

Title: Engineer III – Electric Transmission Line Engineering

Summary:

Company Witness Shannon L. Snare sponsors those sections of the Appendix providing an overview of the design characteristics of the transmission facilities for the proposed Project, and discussing electric and magnetic field levels, as follows:

- Section I.F: This section, when applicable, describes any lines or facilities that will be removed, replaced, or taken out of service upon completion of the proposed project.
- Section I.I.: This section provides the estimated total cost of the proposed projects.
- Section II.A.5: This section provides drawings of the right-of-way cross section showing typical transmission lines structure placements.
- Sections II.B.1 to II.B.2: These sections provide the line design and operational features of the proposed projects, as applicable.
- Section IV: This section provides analysis on the health aspects of electric and magnetic field levels.

Additionally, Company Witness Snare co-sponsors the following sections of the Appendix:

- Section I.A (co-sponsored with Company Witnesses Bradley S. Lowe and Stefan R. Brooks): This section details the primary justifications for the proposed projects.
- Section I.L (co-sponsored with Company Witness Bradley S. Lowe): This section, when applicable, provides details on the deterioration of structures and associated equipment.
- Section II.A.4 (co-sponsored with Company Witness Stefan R. Brooks): This section explains why the existing right-of-way is not adequate to serve the need.
- Sections II.B.3 to II.B.5 (co-sponsored with Company Witness Stefan R. Brooks): These sections, when applicable, provide supporting structure details along the proposed and alternative routes.
- Section II.B.6 (co-sponsored with Company Witness Stefan R. Brooks): This section provides photographs of existing facilities, representations of proposed facilities, and visual simulations.
- Section V.A (co-sponsored with Company Witness Stefan R. Brooks): This section provides the proposed route descriptions and structure heights for notice purposes.

A statement of Ms. Snare's background and qualifications is attached to his testimony as Appendix A.

DIRECT TESTIMONY
OF
SHANNON L. SNARE
ON BEHALF OF
VIRGINIA ELECTRIC AND POWER COMPANY
BEFORE THE
STATE CORPORATION COMMISSION OF VIRGINIA
CASE NO. PUR-2024-00225

Q. Please state your name, business address and position with Virginia Electric and Power Company ("Dominion Energy Virginia" or the "Company").

A. My name is Shannon L. Snare, and I am an Engineer III in the Electric Transmission Line Engineering Department of the Company. My business address is 5000 Dominion Boulevard, Glen Allen, Virginia 23060. A statement of my qualifications and background is provided as Appendix A.

Q. Please describe your areas of responsibility with the Company.

A. I am responsible for the estimating and conceptual design of high voltage transmission line projects from 69 kilovolt ("kV") to 500 kV.

Q. What is the purpose of your testimony in this proceeding?

A. In order to maintain reliable service for the overall growth in the area and to comply with mandatory North American Electric Reliability Corporation ("NERC") Reliability Standards, Virginia Electric and Power Company ("Dominion Energy Virginia" or the "Company") proposes, in Loudoun County, Virginia, to:

i. Construct a new approximately 0.6-mile 230 kV Line #2183 Loop by cutting the 230 kV Brambleton-Poland Road Line #2183 at Evergreen Mills Junction and looping in and out of the Evergreen Mills Switching Station, resulting in: (i) 230 kV Brambleton - Evergreen Mills Line #2210 and (ii) 230 kV Evergreen Mills - Poland Road Line #2183; and

ii. Install two additional strings of breakers (totaling four) in a breaker-and-a-half scheme at Evergreen Mills Switching Station to allow for two additional 230 kV

terminations of 230 kV Brambleton - Evergreen Mills Line #2210 and 230kV Evergreen Mills - Poland Road Line #2183. The third and fourth string will consist of two 230 kV breakers with make ready work for a third breaker on each string to be added in the future to allow for the customer's third and fourth 230 kV delivery.

The Line #2183 Loop and breaker installation are collectively referred to as "the Project."

The purpose of my testimony is to describe the design characteristics of the transmission facilities for the proposed Projects and to discuss electric and magnetic field levels. I sponsor Sections I.F, I.I, II.A.5, II.B.1, II.B.2, and IV of the Appendix. Additionally, I co-sponsor the Executive Summary and Section I.A with Company Witnesses Bradley S. Lowe and Stefan R. Brooks; Section I.L with Company Bradley S. Lowe; Sections II.A.4, II.B.3 to II.B.5, II.B.6 and V.A with Company Witness Stefan R. Brooks.

Q. Does this conclude your pre-filed direct testimony?

A. Yes, it does.

APPENDIX A

BACKGROUND AND QUALIFICATIONS
OF
SHANNON L. SNARE

Shannon L. Snare graduated from Virginia Polytechnic Institute and State University in 2016. She joined the Company in 2016 as an electric transmission engineer in the Electric Transmission Engineering department. Ms. Snare is a licensed engineer in the Commonwealth of Virginia.

WITNESS DIRECT TESTIMONY SUMMARY

Witness: Stefan R. Brooks

Title: Electric Transmission Siting and Permitting Contractor

Summary:

Company Witness Stefan R. Brooks sponsors those portions of the Appendix providing an overview of the design of the route for the proposed Project, and related permitting, as follows:

- Section II.A.1: This section provides the length of the proposed corridor and viable alternatives to the proposed project.
- Section II.A.2: This section provides a map showing the route of the proposed projects in relation to notable points close to the proposed project.
- Sections II.A.6 to II.A.8: These sections provide detail regarding the right-of-way for the proposed project.
- Section II.A.9: This section describes the proposed route selection procedures and details alternative routes considered.
- Section II.A.11: This section details how the construction of the proposed project follows the provisions discussed in Attachment 1 of the Transmission Appendix Guidelines.
- Section II.A.12: This section identifies the counties and localities through which the proposed project will pass and provides General Highway Maps for these localities.
- Section III: This section details the impact of the proposed project on scenic, environmental, and historic features.
- Sections V.B–D: These sections provide information related to public notice of the proposed project.

Additionally, Company Witness Brooks co-sponsors the following portion of the Appendix:

- Section I.A (co-sponsored with Company Witnesses Bradley S. Lowe and Shannon L. Snare): This section details the primary justifications for the proposed project.
- Section II.A.4 (co-sponsored with Company Witness Shannon L. Snare): This section explains why the existing right-of-way is not adequate to serve the need.
- Sections II.B.3 to II.B.5 (co-sponsored with Company Witness Shannon L. Snare): These sections, when applicable, provide supporting structure details along the proposed and alternative routes.
- Section II.B.6 (co-sponsored with Company Witness Shannon L. Snare): This section provides photographs of existing facilities, representations of proposed facilities, and visual simulations.
- Section V.A (co-sponsored with Company Witness Shannon L. Snare): This section provides the proposed route description and structure heights for notice purposes.

Finally, Mr. Brooks sponsors the DEQ Supplement filed with the Application. A statement of Mr. Brooks' background and qualifications is attached to her testimony as Appendix A.

DIRECT TESTIMONY
OF
STEFAN R. BROOKS
ON BEHALF OF
VIRGINIA ELECTRIC AND POWER COMPANY
BEFORE THE
STATE CORPORATION COMMISSION OF VIRGINIA
CASE NO. PUR-2024-00225

Q. Please state your name, position with Virginia Electric and Power Company ("Dominion Energy Virginia" or the "Company"), and business address.

A. My name is Stefan R. Brooks, and I am an Electric Transmission Siting and Permitting Contractor for the Company. My business address is 5000 Dominion Boulevard, Glen Allen, Virginia 23060. A statement of my qualifications and background is provided as Appendix A.

Q. Please describe your areas of responsibility with the Company.

A. I am responsible for identifying appropriate routes for transmission lines and obtaining necessary federal, state, and local approvals and environmental permits for those facilities. In this position, I work closely with government officials, permitting agencies, property owners, and other interested parties, as well as with other Company personnel, to develop facilities needed by the public so as to reasonably minimize environmental and other impacts on the public in a reliable, cost-effective manner.

Q. What is the purpose of your testimony in this proceeding?

A. In order to maintain reliable service for the overall growth in the area and to comply with mandatory North American Electric Reliability Corporation ("NERC") Reliability Standards, Virginia Electric and Power Company ("Dominion Energy Virginia" or the "Company") proposes, in Loudoun County, Virginia, to:

i. Construct a new approximately 0.6-mile 230 kV Line #2183 Loop by cutting the 230 kV Brambleton-Poland Road Line #2183 at Evergreen Mills Junction and looping in and out of the Evergreen Mills Switching Station, resulting in: (i) 230 kV Brambleton - Evergreen Mills Line #2210 and (ii) 230 kV Evergreen Mills - Poland Road Line #2183; and

ii. Install two additional strings of breakers (totaling four) in a breaker-and-a-half scheme at Evergreen Mills Switching Station to allow for two additional 230 kV terminations of 230 kV Brambleton - Evergreen Mills Line #2210 and 230kV Evergreen Mills - Poland Road Line #2183. The third and fourth string will consist of two 230 kV breakers with make ready work for a third breaker on each string to be added in the future to allow for the customer's third and fourth 230 kV delivery.

The Line #2183 Loop and breaker installation are collectively referred to as "the Project."

The purpose of my testimony is to provide an overview of the routes and permitting for the proposed Projects. I sponsor Sections II.A.1, II.A.2, II.A.6 to II.A.9, II.A.11, II.A.12, III, and V.B to V.D of the Appendix. Additionally, I co-sponsor the Executive Summary and Section I.A with Company Witnesses Bradley S. Lowe and Shannon L. Snare; SectionsII.A.4, II.B.3 to II.B.5, II.B.6, and V.A with Company Witness Shannon L. Snare. Finally, I co-sponsor the DEQ Supplement.

Q. Has the Company complied with Va. Code § 15.2-2202 E?

A. Yes. In accordance with Va. Code § 15.2-2202 E, a letter dated November 18, 2024, was sent to Tim Hemstreet, County Administrator of Loudoun County, where the Project is located. The letter stated the Company's intention to file this Application and invited the County to consult with the Company about the Project. This letter is included as Appendix Attachment V.D.1.

Q. Does this conclude your pre-filed direct testimony

A. Yes, it does.

APPENDIX A

BACKGROUND AND QUALIFICATIONS
OF
STEFAN R. BROOKS

Mr. Stefan Brooks graduated from Old Dominion University in 1997 with a Bachelor of Science degree in Engineering Technology. He also holds an Associates Degree in Architectural Engineering Technology from John Tyler Community College which was received in 1994. While attending John Tyler Community College he also obtained two Career Studies Certificates, one in Transportation, Location & Design and the other in Surveying. From 1997 until 2011 he worked in various roles from designer to Project Manager as a Civil Engineer in Richmond, Virginia. In 2005 he obtained his license as a Professional Engineer in the State of Virginia. Mr. Brooks joined the Company in 2011 as a Civil Engineer in the Transmission Right-of-Way group. In 2019 he joined Dewberry but works as a Contractor supporting the Company in the Transmission Right-of-Way group.

Mr. Brooks has previously submitted pre-filed testimony to the Virginia State Corporation Commission.