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May 8, 2026

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 transmission facilities: 230 kV Firehouse Lines and Substation
Case No. PUR-2026-00062

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 email to the Commission's Division of Public Utility Regulation on May 7, 2026.

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)

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Dominion Energy®

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

Before the State Corporation Commission of Virginia

230 kV Firehouse Lines and Substation

Application No. 358

Case No. PUR-2026-00062

Filed: May 8, 2026

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 TRANSMISSION FACILITIES

230 kV Firehouse Lines and Substation

Application No. 358

Case No. PUR-2026-00062

Filed: May 8, 2026

COMMONWEALTH OF VIRGINIA

STATE CORPORATION COMMISSION

APPLICATION OF	)	
	)	
VIRGINIA ELECTRIC AND POWER COMPANY	)	Case No. PUR-2026-00062
	)	
For approval and certification of electric transmission facilities: 230 kV Firehouse Lines and Substation	)	

APPLICATION OF VIRGINIA ELECTRIC AND POWER COMPANY FOR APPROVAL AND CERTIFICATION OF ELECTRIC TRANSMISSION FACILITIES: 230 KV FIREHOUSE LINES AND SUBSTATION

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 transmission facilities (the "Application"). In support of its Application, Dominion Energy Virginia respectfully states 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 serve two data center developments for customers ("Customers" or "Customer A" and "Customer B") in Loudoun County, Virginia, to maintain reliable service for 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 Goochland County, Virginia, to:

- Construct one new 230 kilovolt ("kV") double circuit overhead transmission line (for a total of two circuits) extending approximately 0.86 mile on existing 160-foot-wide right-of-way and 0.19 mile on new 100-foot-wide right-of-way for a total of 1.05 miles, by cutting the existing 230 kV Line #2207 (BECO – Paragon Park) and extending a new 230 kV double circuit to Firehouse Substation, resulting in Line #2207 (Paragon Park to Firehouse) and Line #2496 (Firehouse to BECO) (the "Firehouse Lines"). The Firehouse Lines will be constructed primarily with double circuit galvanized steel monopoles utilizing three-phase twin-bundled 768.2 ACSS/TW Aluminum Conductor Steel Supported/Trapezoidal Wire/High Strength ("ACSS/TW/HS") type conductor with a summer transfer capability 1573 MVA.[1]

- Construct a new 230 kV substation in Loudoun County, Virginia designed to accommodate a 230 kV ring bus with an ultimate configuration of four (4) breakers, with all four breakers installed initially, on land provided by Customer A east of the DTC Substation. ("Firehouse Substation").

[1] Apparent power, measured in megavolt amperes ("MVA"), is made up of real power (megawatt or "MW") and reactive power (megavolt ampere reactive or "MVAR"). The power factor ("pf") is the ratio of real power to apparent power. For loads with a high pf (approaching unity), real power will approach apparent power and the two can be used interchangeably. Load loss criteria specify real power (MW) units because that represents the real power that will be dropped; however, MVA is used to describe retail customer projected load, reflecting representative pf, and the equipment ratings to handle the apparent power, which includes the real and reactive load components.

Collectively, the Firehouse Lines and Firehouse Substation, and related work at BECO and Paragon Park Substations are referred to as the "Project."

4. The Project as proposed is needed to ensure that Dominion Energy Virginia can adequately and reliably serve Customers A and B, maintain reliable service for the overall load growth in the Loudoun Load Area, and to comply with mandatory North American Electric Reliability Corporation ("NERC") Reliability Standards. The Project is required to serve the customers' load ramp as the DTC, BECO, and Paragon Park Substations cannot support the total load requested.

5. The Company anticipates that serving Customers A and B and overall load growth in the surrounding area will necessitate a substation solution to relieve load out of the DTC, BECO, and Paragon Park substations in Loudoun County by 2029. The Company's Distribution Planning Group submitted a delivery point ("DP") request for a new 230 kV delivery point, the Firehouse Substation, southwest of the intersection of Russell Branch Pkwy and Kincora Dr in Loudoun County to serve both Data Center Development A and Data Center Development B. The DP request indicates that the sites will have an initial in-service loading of 209 MW and an ultimate loading of 234 MW. In addition to supporting area load and economic growth, a new substation will improve reliability for the surrounding area. Three of the circuits surrounding the Project site (BECO 626, BECO 627, and BECO 405) serving the existing area load are nearing rated capacity and supporting growing native load. Dividing the existing circuits will give Dominion Energy Virginia the opportunity to further improve reliability by implementing new restoration schemes on each affected circuit. It will also positively impact substation transformer contingencies in BECO Substation.

6. The Company identified an approximately 1.05-mile overhead proposed route for the Firehouse Lines (the "Proposed Route"), which the Company is proposing for Commission consideration and notice. Because the Project primarily utilizes existing right-of-way, previously obtained specifically for this project,[2] no alternative routes were considered. Discussion of the Proposed Route is provided in Section II of the Appendix.

7. The Firehouse Substation initially will be constructed with a GIS 230 kV ring bus with four 4000A GIS circuit breakers, two 230 kV line terminals, and other associated equipment, including a GIS/Control enclosure to accommodate GIS equipment, protective relays, communications, and security cabinets. The total area of the proposed Firehouse Substation within the substation fence is approximately 1.8 acres.

8. The desired in-service target date for the proposed Project is February 28, 2029. The Company estimates it will take approximately 25 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 January 13, 2027. Should the Commission issue a final order by January 13, 2027, to accommodate long-lead materials procurement, the Company estimates that construction should begin around March 2027 and be completed by February 28, 2029. 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

[2] The Company specifically planned for the additional 60 feet of right-of-way for this Project when it was allowed to voluntarily obtain the additional right-of-way for future use in *Application of Virginia Electric and Power Company For approval and certification of electric transmission facilities: DTC 230 kV Line Loop and DTC Substation*, Case PUR-2021-00280, Final Order at 13 (July 7, 2022).

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 easements with property owners along the approved route without the need for additional litigation.

9. 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"). The U.S. Fish and Wildlife Service ("USFWS") issued the final guidance, replacing the interim guidance, on October 23, 2024, and the final guidance was fully implemented November 30, 2024. The Company is reviewing the final guidance to the extent it applies to the Company's projects and will coordinate with USFWS during the permitting stage.

10. The Company is also monitoring potential regulatory changes associated with the potential up-listing of the Tricolored bat ("TCB"). On September 14, 2022, the USFWS published the proposed rule to the Federal Register to list the TCB as endangered under the Endangered Species Act. USFWS extended its Final Rule issuance target from September 2023 to September 2024, but as of the date of this filing, the TCB listing decision has not been issued. The Company is actively tracking this ruling and evaluating the effects of potential outcomes on Company projects' permitting, construction, and in-service dates, including electric transmission projects.

11. The review also accounted for regulatory changes and requirements associated with the monarch butterfly (Danaus plexippus) and the proposed USFWS listing of this species as federally threatened. The Company is anticipating the monarch butterfly will be listed; therefore, it assumes any regulatory changes associated with the potential listing of the monarch butterfly

will affect this Project. On December 12, 2024, the monarch butterfly was proposed to be listed as threatened by the USFWS, and the 90-day public comment period was extended and closed on May 19, 2025. The Company is actively tracking this ruling and evaluating the effects of potential outcomes on the permitting, construction, and in-service dates of the Company projects, including electric transmission projects.

12. 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.*, February 28, 2029) and an authorization sunset date (*i.e.*, February 28, 2030) for energization of the Project. [3] Importantly, the request for an authorization sunset date is intended to account for the increasing challenges to approval, permitting, and construction of electric transmission projects that may be beyond the Company's control, such as those described herein. It does not assuage the immediacy of the need for this Project or curtail the Company's commitment to ensure the reliability of its transmission

[3] The Company notes that this request is consistent with the Commission's findings in other recent proceedings. S*ee Application of Virginia Electric and Power Company for approval of electric transmission facilities: Fentress-Yadkin 500 kV Line #588 Rebuild and New 500 kV Fentress-Yadkin Line #5005*, Case No. PUR-2024-00105, Final Order (Feb. 28, 2025), approving an in-service date of January 1, 2027, and a CPCN sunset date of January 1, 2028, for energization of that project in Ordering Paragraph (8); *Application of Virginia Electric and Power Company for approval of electric transmission facilities: 500-230 kV Aspen Substation, 500 kV Aspen-Goose Creek Line #5002, 500 kV and 230 kV Aspen-Golden Lines #5001 and #2333, 500-230 kV Golden Substation, and Lines #2081/#2150 Loop*, Case No. PUR-2024-00032, Final Order (Feb. 6, 2025), approving an in-service date of June 1, 2028, and a CPCN sunset date of June 1, 2029, for energization of that project in Ordering Paragraph (8); and *Application of Virginia Electric and Power Company for approval of electric transmission facilities: 230 kV Apollo-Twin Creeks Lines, and Twin Creeks, Sycolin Creek, Starlight, Lunar, and Apollo Substations*, Case No. PUR-2024-00044, Final Order (Feb. 5, 2025), approving an in service date of September 30, 2028, and a CPCN sunset date of September 30, 2029, for energization of that project in Ordering Paragraph (8); *Application of Virginia Electric and Power Company for approval and certification of electric transmission facilities: Hornbaker 230 kV Line Loop and Hornbaker Switching Station*¸ PUR-2025-00046, Final Order (Dec. 11, 2025), approving an in-service date of June 1, 2029 and a CPCN sunset date of June 1, 2030, for energization of that project in Ordering Paragraph (8).

system. The Company continues to believe at this time that it can reasonably achieve the desired in-service target date.

13. The total estimated conceptual cost of the Project utilizing the Proposed Route is approximately $65 million, which includes approximately $25 million for transmission-related work and approximately $40 million for substation-related work. The estimated cost includes escalation adjustments based on the Project's anticipated test and energization date.

14. 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.

15. 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.

16. 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.

17. In addition to the information provided in the Appendix, and the DEQ Supplement, this Application is supported by the pre-filed direct testimony of Company Witnesses John Jeffrey Koestner, Ebenezer Owusu-Kusi, Joshua A. Pollock, Wesley Strunk, George C. Brimmer, Melissa A. Harreld, and Sandra M. Warner.

18. 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 construction of the Project pursuant to § 56-46.1 of the Code of Virginia; and,

(c) grant a certificate of public convenience and necessity for the Project 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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Counsel for Applicant Virginia Electric and Power Company

May 8, 2026

COMMONWEALTH OF VIRGINIA
BEFORE THE
STATE CORPORATION COMMISSION

APPLICATION OF

VIRGINIA ELECTRIC AND POWER COMPANY

FOR APPROVAL AND CERTIFICATION
OF ELECTRIC TRANSMISSION FACILITIES

230 kV Firehouse Lines and Substation

Application No. 358

Appendix

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

Case No. PUR-2026-00062

Filed: May 8, 2026

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EXECUTIVE SUMMARY

In order to provide service requested by data center customers located in Loudoun County ("Customers" or "Customer A" and "Customer B"), to maintain reliable service for 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 one new 230 kilovolt ("kV") double circuit overhead transmission line (for a total of two circuits) extending approximately 0.86 mile on existing 160-foot-wide right-of-way and 0.19 mile on new 100-foot-wide right-of-way for a total of 1.05 miles, by cutting the existing 230 kV Line #2207 (BECO - Paragon Park) and extending a new 230 kV double circuit to Firehouse Substation, resulting in Line #2207 (Paragon Park - Firehouse) and Line #2496 (Firehouse - BECO) (the "Firehouse Lines"). The Firehouse Lines will be constructed primarily with double circuit galvanized steel monopoles utilizing three-phase twin-bundled 768.2 ACSS/TW Aluminum Conductor Steel Supported/Trapezoidal Wire/High Strength ("ACSS/TW/HS") type conductor with a summer transfer capability 1573 MVA. [1]

(ii) Construct a new 230 kV substation in Loudoun County, Virginia designed to accommodate a 230 kV ring bus with an ultimate configuration of four (4) breakers, with all four breakers installed initially, on land provided by Customer A east of the DTC Substation. ("Firehouse Substation").

Collectively, the Firehouse Lines and Firehouse Substation, and related work at BECO and Paragon Park Substations are referred to as the "Project."

The Project is necessary to (i) ensure that Dominion Energy Virginia can adequately and reliably serve the Customers in Loudoun County, Virginia; and (ii) maintain and ensure reliable electric service in Loudoun County consistent with NERC Reliability Standards for the overall growth in the load area, which for purposes of this Application, is defined generally as the "Loudoun Load Area," thereby supporting economic growth in Loudoun County. As discussed in Section I.C, the Project is required to serve the Customers' load ramp as the DTC, BECO, and Paragon Park Substations cannot support the total load requested. Accordingly, the Company is proposing the Project to serve the Customers' load identified in the delivery point ("DP") request beginning in 2029.

The Company identified an approximately 1.05-mile overhead proposed route for the Firehouse Lines (the "Proposed Route") which the Company is proposing for Commission consideration and notice. Because the Project primarily utilizes existing right-of-way, previously obtained

[1] Apparent power, measured in megavolt amperes ("MVA"), is made up of real power (megawatt or "MW") and reactive power (megavolt ampere reactive or "MVAR"). The power factor ("pf") is the ratio of real power to apparent power. For loads with a high pf (approaching unity), real power will approach apparent power and the two can be used interchangeably. Load loss criteria specify real power (MW) units because that represents the real power that will be dropped; however, MVA is used to describe retail customer projected load, reflecting representative pf, and the equipment ratings to handle the apparent power, which includes the real and reactive load components.

specifically for this project,[2] no alternative routes were considered. Discussion of the Company's routing process is provided in Section II of the Appendix.

The proposed Firehouse Substation initially will be constructed with a gas insulated substation ("GIS") 230 kV ring bus with four 4000 amp ("A") circuit breakers, two 230 kV line terminals, and other associated equipment, including a control enclosure to accommodate the protective relay, communications, and security cabinets. The total area of the proposed Firehouse Substation within the substation fence is approximately 1.8 acres.

The total estimated conceptual cost of the Project utilizing the Proposed Route is approximately $65 million,[3] which includes approximately $25 million for transmission-related work and approximately $40 million for substation-related work. The estimated cost includes escalation adjustments based on the Project's anticipated test and energization date.

The desired in-service target date for the proposed Project is February 28, 2029. The Company estimates it will take approximately 25 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 January 13, 2027. Should the Commission issue a final order by January 13, 2027, to accommodate long-lead materials procurement, the Company estimates that construction should begin around March 2027 and be completed by February 28, 2029. 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. This schedule is also contingent upon the Company's ability to negotiate easements with property owners along the approved route and to obtain property rights 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"). The U.S. Fish and Wildlife Service ("USFWS") issued the final guidance, replacing the interim guidance, on October 23, 2024, and the final guidance was fully implemented November 30, 2024. The Company is reviewing the final guidance to the extent it applies to the Company's projects and will coordinate with USFWS during the permitting stage.

The Company is also monitoring potential regulatory changes associated with the potential up-listing of the Tricolored bat ("TCB"). On September 14, 2022, the USFWS published the proposed

[2] The Company specifically planned for the additional 60 feet of right-of-way for this Project when it was allowed to voluntarily obtain the additional right-of-way for future use in *Application of Virginia Electric and Power Company For approval and certification of electric transmission facilities: DTC 230 kV Line Loop and DTC Substation*, Case PUR-2021-00280, Final Order at 13 (July 7, 2022).

[3] Customer A will pay excess facilities of approximately $24 million which are included in the total costs for the Project.

rule to the Federal Register to list the TCB as endangered under the Endangered Species Act. USFWS extended its Final Rule issuance target from September 2023 to September 2024, but as of the date of this filing, the TCB listing decision has not been issued. The Company is actively tracking this ruling and evaluating the effects of potential outcomes on Company projects' permitting, construction, and in-service dates, including electric transmission projects.

The review also accounted for regulatory changes and requirements associated with the monarch butterfly (Danaus plexippus) and the proposed USFWS listing of this species as federally threatened. The Company is anticipating the monarch butterfly will be listed; therefore, it assumes any regulatory changes associated with the potential listing of the monarch butterfly will affect this Project. On December 12, 2024, the monarch butterfly was proposed to be listed as threatened by the USFWS, and the 90-day public comment period was extended and closed on May 19, 2025. The Company is actively tracking this ruling and evaluating the effects of potential outcomes on the permitting, construction, and in-service dates of the Company projects, including electric transmission projects.

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., February 28, 2029) and an authorization sunset date (i.e., February 28, 2030) for energization of the Project. Importantly, the request for an authorization sunset date is intended to account for the increasing challenges to approval, permitting, and construction of electric transmission projects that may be beyond the Company's control, such as those described herein. It does not assuage the immediacy of the need for this Project or curtail the Company's commitment to ensure the reliability of its transmission system. The Company continues to believe at this time that it can reasonably achieve the desired in-service target date.[4]

[4] The Company notes that this request is consistent with the Commission's findings in other recent proceedings. *See, e.g., Application of Virginia Electric and Power Company for approval of electric transmission facilities: 230 kV Technology Boulevard Lines, Bunker Substation, and Saltwood Switching Station*, Case No. PUR-2025-00042, Final Order (Feb. 19, 2026), approving an in-service date of March 31, 2028, and an authorization sunset date of March 31, 2029, for energization of that project in Ordering Paragraph (8); *Application of Virginia Electric and Power Company for approval of electric transmission facilities: 230 kV Duval-Midlothian Lines and Duval Substation*, Case No. PUR-2025-00073, Final Order (Feb. 9, 2026), approving an in-service date of June 1, 2028, and an authorization sunset date of June 1, 2029, for energization of that project in Ordering Paragraph (8); *Application of Virginia Electric and Power Company for approval of electric transmission facilities: Chickahominy-Elmont Line #557 Rebuild and New Future 230 kV* Lines, Case No. PUR-2025-00077, Final Order (Jan. 30, 2026), approving an in-service date of December 31, 2028, and an authorization sunset date of December 31, 2029, for energization of that project in Ordering Paragraph (8).

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 (i) ensure that Dominion Energy Virginia can adequately and reliably serve the Customer's data center operations in Loudoun County, Virginia; (ii) maintain and ensure reliable electric service in Loudoun County consistent with NERC Reliability Standards for the overall growth in the load area. See Attachment I.A.1 for an overview map of the proposed Project along the Proposed Route, the Company's existing electric transmission facilities located in the vicinity of the Project, the Project study area for the Firehouse Lines, and a general boundary of the Loudoun Load Area.

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 June 24, 2025, the DOM Zone set a record high of 23,826 MW for summer peak demand. On February 9, 2026, the DOM Zone set a winter and all-time record demand of 25,168 MW. Based on the 2026 PJM Load Forecast, the DOM Zone is expected to grow with average growth rates of 5.4% summer and 5.1% winter over

the next 10 years compared to the PJM average of 3.6% and 4.0% over the same period for the summer and winter, respectively.[5]

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 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.

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. 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. 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, Reliability First, SERC Reliability Corporation, PJM, and TOs; (ii) network upgrades are new or upgraded facilities required primarily to eliminate reliability

[5] A copy of the 2026 PJM Load Forecast is available at the following: https://www.pjm.com/-/media/DotCom/library/reports-notices/load-forecast/2026-load-report.pdf. *See, in particular,* page 9 (PJM) and 34 (DOM Zone).

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 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 supplemental project initiated by the TO in order to interconnect new customer load. While supplemental projects are included in the RTEP, the PJM Board does not actually approve such projects. See Section I.J for a discussion of the PJM process as it relates to this Project.

The Project is required to meet data center load growth, as discussed in more detail below, and to support future load growth in the Loudoun Load Area by constructing the Firehouse Lines as a new 230kV double circuit overhead transmission line.

NEED FOR THE PROJECT

The Project is needed to ensure that Dominion Energy Virginia can adequately and reliably serve the Customers' data center operations in Loudoun County, Virginia and maintain and ensure reliable electric service in Loudoun County consistent with NERC Reliability Standards for the overall growth in the load area.

Need to Serve New Customer Load

On August 11, 2023, Dominion Energy Virginia's ("DEV") Distribution Planning Group ("Distribution Planning") submitted a delivery point ("DP") request for a new 230 kV delivery point, the Firehouse Substation, southwest of the intersection of Russell Branch Pkwy and Kincora Dr in Loudoun County. On December 18, 2023, Distribution Planning submitted an updated DP request for a new 230 kV delivery, the Firehouse Substation, southwest of the intersection of Russell Branch Pkwy and Kincora Dr in Loudoun County to serve both Data Center Development A and Data Center Development B. The driver for this delivery is new data center load growth. The DP request indicates that the sites will have an initial in-service loading of 209 MW and an ultimate loading of 234 MW. The anticipated energization date is February 28, 2029. See Attachment I.A.2.

Data Center Development A

The Company proposes to serve Customer A's new data center development by constructing the proposed Firehouse Substation. The development will consist of one data center building, constructed and owned by Customer A and located on Customer A's property in Loudoun County, Virginia. The Company will provide bridging power to Customer A from the Company's BECO Substation. The total bridging power provided from the BECO Substation is 24,500 kVA. The Firehouse Substation is required to serve Customer A's load ramp as the DTC, BECO, and Paragon Park Substations cannot support the load requested.

See Section I.C for Customer A's projected load ramp as identified in the updated DP request.

Data Center Development B

The Company proposes to serve Customer B's new Data Center Development B by constructing the proposed Firehouse Substation. The development will consist of one data center building constructed and owned by Customer B and located on Customer B's property in Loudoun County, Virginia.

See Section I.C for Customer B's projected load as identified in the updated DP request.

***

The proposed Project—specifically, the Firehouse Substation and the Firehouse Lines—is required to serve this need (234 MW) with the projected ramp beginning in 2029.

In addition to supporting area load and economic growth, a new substation will improve reliability for the surrounding area. Three of the circuits surrounding the project site (BECO 626, BECO 627, and BECO 405) serving the existing area load are nearing rated capacity and supporting growing native load.

Dividing the existing circuits will give Dominion Energy Virginia the opportunity to further improve reliability by implementing new restoration schemes on each affected circuit. It will also positively impact substation transformer contingencies in BECO Substation.

Accordingly, to serve the projected load and maintain and ensure reliable service for the overall load growth in the area, consistent with NERC Reliability Standards, the Company is proposing to construct the Firehouse Lines and Firehouse Substation. With the proposed Project, the existing system transformers are not overloaded, and reliability criteria are met.

See Section I.C for discussion of the existing area infrastructure and why it is incapable of serving this need. See Section I.J for a discussion of the PJM process as it relates to this Project.

Area Transmission System

The Company's existing area transmission system is incapable of serving the Customer's projected load without the proposed Project.

The Company's primary sources of distribution power in the Loudoun Load Area—including the existing BECO Substation—cannot serve the identified projected load from existing substations. See Section I.C. Accordingly, the Company is proposing the Project, with the Firehouse Lines constructed as a new

230 kV double circuit overhead transmission line, to serve the approximately 234 MW of projected commercial load growth in the Loudoun Load Area. The proposed Project is the most robust solution to maintain and ensure reliable service for the Customers and overall load growth in the area, as well as prevent the existing system transformers from overloading consistent with reliability criteria.

Attachment I.A.3 provides the existing one-line diagram of the area transmission system in the Loudoun Load Area as of October 2025. Attachment I.A.4 provides a one-line diagram of the transmission system in the Loudoun Load Area after the proposed Project is energized in February 2029, which includes all baseline and supplemental projects in the Project area that have been submitted to PJM as of April 2026.

THE PROPOSED PROJECT

Firehouse Lines

The Company proposes to construct a new 230 kV double circuit overhead transmission line extending approximately 1.05 miles from the Company's existing Line #2207 near the BECO Substation to the proposed new Firehouse Substation in Loudoun County, Virginia, resulting in Line #2207 (Paragon Park to Firehouse) and Line #2496 (Firehouse to BECO).

The Firehouse Lines will be constructed on existing 160 foot-wide right-of-way for approximately 0.86[6] mile and on new 100 foot-wide right-of-way for 0.19 mile. The Firehouse Lines will be constructed primarily with double circuit galvanized steel monopoles utilizing three-phase twin-bundled 768.2 ACSS/TW/HS type conductor with a summer transfer capability of 1,573 MVA. The proposed Firehouse Lines will be constructed to source the new proposed Firehouse Substation, as there is no existing transmission infrastructure source that can feed the proposed substation.

The Company identified an approximately 1.05-mile overhead proposed route for the Firehouse Lines (the "Proposed Route") which the Company is proposing for Commission consideration and notice. Because the Project primarily utilizes existing right-of-way, no alternative routes were considered. The Company specifically planned for the additional 60 feet of right-of-way for this Project when it was allowed to voluntarily obtain the additional right-of-way for future use in *Application of Virginia Electric and Power Company For approval and certification of electric transmission facilities: DTC 230 kV Line Loop and DTC Substation*, Case PUR-2021-00280. Discussion of the Company's routing process is provided in Section II of the Appendix.

For this Project, Customer A has requested the Firehouse Substation be a gas insulated substation ("GIS") instead of an air insulated substation ("AIS") The estimated cost of GIS substation is compared to the estimated cost of AIS

[6] *See supra* n. 2.

substation, and the difference in cost will be collected through an excess facilities charge. Additionally, Customer A has also requested that the data center building on its campus be a totally independent, redundant distribution feed. This is referred to as an alternate feed. At any customer's request, the Company will endeavor to design a distribution system that provides for a back-up source of power should the normal feed have an outage. The estimated cost of this alternate feed arrangement is compared to the normal arrangement of service, and the difference in cost will be collected through an excess facilities charge. The total excess facilities charge is estimated to be $24 million and is included in the total Project cost.

Firehouse Substation

As part of the Project, the Company proposes to construct the new 230-34.5 kV Firehouse Substation in Loudoun County, Virginia, on the Customer A's property. See Section II.C.

***

In summary, the proposed Project will provide electric service to the Customers, maintain and ensure reliable service for the overall load growth in the area thereby supporting economic growth in Loudoun County and Virginia, and comply with mandatory NERC Reliability Standards.

ATTACHMENT 1.A.1
PROJECT OVERVIEW MAP

- 0 kV Transmission Line (Idle)
- 230 kV Transmission Line (Proposed)
- 230 kV Transmission Line
- 500 kV Transmission Line
- Switching Station, Substation, DP

0 0.38 0.75 1.5 2.25 3 Miles

ASHBURN SUB
FIREHOUSE SUB
BEAUMEADE SUB
BECO SUB
NIVO SUB
COMMANDER SUB
DUPONT FABROS TECHNOLOGY
PARAGON PARK SUB
SEVERN SUB
INTERCONNECTION SUB
FARMWELL SUB
WAXPOOL SUB
MERCATOR SUB
AUTO WORLD SUB
NIMBUS SUB
CUMULUS SUB
BUTTERMILK SUB
ROUNDTABLE SUB
GREENWAY SUB
RADAR SUB
ENTERPRISE SUB
SHELLHORN ROAD SUB
PRENTICE DRIVE SUB
LOCKRIDGE SUB
OCEAN COURT SUB
STERLING PARK SUB
PACIFIC SUB
GLOBAL PLAZA SUB
EXPORT SUB
DAVIS DRIVE SUB
DRANESVILLE SUB
HERNDON PARK SUB
NORTHWOODS SUB
RUNWAY DP
HARPOON DRIVE SUB
SOJOURNER SUB
BRAMBLETON SUB
WISHING STAR SUB
CABIN RUN SUB
CELESTIAL SUB
NORTHSTAR SUB
YARDLEY RIDGE SUB
EVERGREEN MILLS SUB
POLAND ROAD SUB
SUNSET HILLS SUB

Sycolin
Dunlin
Gleedsville
Little Washington
Academies of Loudoun
Goose Creek Village
Belmont
Ashburn
University Center
Countryside
Cascades
Sugarland Run
Kincora
Dulles Town Center
Claude Moore Park / Recreation And Community Center / Heritage Farm Museum
Algonkian Regional Park
Sterling
Dranesville
Great Falls
Great Falls Crossing
Oak Grove
Herndon
Reston
Hidden Creek Golf Course
Herndon Centennial Golf Course
1757 Golf Club
Sugarland Run Stream Valley
Colvin Run Mill
Wolftrap Stream Valley
Hunter Mill
Hunters Woods Rec Area
Fire Ring Pavillion
Hunting Horn Rec Area
Clarks Crossing
Evergreen Mills
Broadlands
Brambleton
Loudoun Valley Estates
Royville
Arcola
Lenah
Swansen
Hutchinson
Stone Ridge
Moorefield Station
Butler
Watson
Carlton Club
Brambleton Regional Park and Golf Course
Hovatter ES
South Riding
Dulles International Airport
Floris
McNair
Sully Square
Franklin Farm
Little Difficult
Rushville
Lowes Is
Beach Mill Rd
Corobon Ln
Thomas Ave
Seneca Rd
Utterback Store Rd
Springvale Rd
Reston Ave
Harriman St
Wiehle Ave
Hunter Mill Rd
Monroe St
Fox Mill Rd
Lawyers Rd
W Ox Rd
Worldgate Dr
Autopilot Dr
NW Service Rd
Instrument Rd
Antenna Rd
Radar Rd
Bravo Rd
Echo Rd
Vortac Rd
Willard Rd
Liberator Ln
Tall Cedars Pkwy
Northstar Blvd
Braddock Rd
Peach Orchard Ln
Lenah Rd
Trailhead Dr
Fleetwood Rd
Everfield Dr
Evergreen Mills Rd
Old Ox Rd
Dulles Greenway
Claiborne Pkwy
Gloucester Pkwy
Ashburn Rd
Farmwell Rd
Waxpool Rd
Atwater Dr
Broad Run Dr
Prentice Dr
Sterling Blvd
Relocation Dr
E Beech Rd
Croson Ln
Gleedsville Rd
411 ft
474 ft
433 ft
343 ft
496 ft
409 ft
470 ft
7
28
267
50
286

Dominion Energy®

Customer Request Form

SECTION I – GENERAL

Requestor Name:	Dominion Energy Virginia		
Requestor Address:	600 E Canal St		
	Richmond, VA 23219		
Name of Contact Person:	Joshua Pollock		
Contact's Phone:	571-208-8564	Contact's Cell:	571-208-8564
Contact's Fax:		Contact's Email:	Joshua.a.pollock@dominionenergy.com

Authorizing Signature:	*Joshua Pollock*	Auth. Date:	12/18/2023
Printed Name:	Joshua Pollock	Phone:	571-208-8564

Signature above authorizes Dominion Energy to proceed with design, engineering, and estimation of Project cost as appropriate for Dominion Energy to evaluate and respond to this request. Dominion Energy may, when authorized by the terms and conditions of the Agreement, require a deposit before proceeding. If Dominion Energy requires a deposit, Dominion Energy will provide Customer with a written deposit request.

SECTION II – DESCRIPTION OF REQUEST

Name of Delivery Point if Existing:	New onsite substation Firehouse Sub
Brief Description of Request: (attach detail)	Install three 112MVA 230-34.5kV TX's
Brief Reasoning for Request: (attach detail)	New Data Center Customer Project
Delivery Point Location: (attach detail if DP is new)	Southwest of the intersection of Russell Branch Pkwy and Kincora Dr (East of Broad Run). Lat: 39.038830° Long: -77.435583°
Noteworthy Load Characteristics: (large motors, expected disturbances, etc.)	New data center buildings and native load

Redacted for Customer Information

PRESENT INTERCONNECTION DATA:

Present Delivery Point Voltage: n/a

Present Maximum kVA Capacity of Interconnection Facilities: 0

Present Summer Peak kW Demand: 0 Present Summer Peak kVAR Demand: n/a

Present Winter Peak kW Demand: 0 Present Winter Peak kVAR Demand: n/a

ANTICIPATED NEW INTERCONNECTION FACILITES DATA:

New Delivery Point Voltage: 230kV

New Peak kVA Capacity of Interconnection Facilities: 336 MVA (3x112MVA)

Peak kW and rkVA During First Three Years Following Implementation and Highest Peak Within Ten Years:

	Initial Year:	Second Year:	Third Year:	Highest in First Ten Years:
Enter Year ➔	2028	2029	2030	2038
Summer Peak kW:	209,000	234,000	234,000	234,000
Summer Peak rkVA:	Unity	Unity	Unity	Unity
Winter Peak kW:	160,000	234,000	234,000	234,000
Winter Peak rkVA:	Unity	Unity	Unity	Unity

Interconnection Facilities Route:
(attach detail if new line extension is involved)

New 230kV source will be needed

Additional Comments:

Proposed substation will take over existing distribution circuits with native load (Beco 405, 626, and 627; 85MVA total summing peak load over past 12mo), serve one onsite DC customer [redacted], and partially serve on offsite DC customer [redacted].

SECTION III – CUSTOMER'S EQUIPMENT

Transformer Primary Voltage: 230kV Transformer Secondary Voltage: 34.5kV

Transformer Nameplate Capacity: 3-112MVA Temperature Rise: 65° C

Transformer Taps: 230000 HV, 36500/21070 LV

Connection (e.g. Wye-Wye): DY

Transformer Impedance: 10.5%

Isolation Device Type and Rating: Circuit Switcher

Protection Device Type and Rating: S&C

Required Attachments: [1] One-line diagram [2] Transformer test report [3] Transformer loss curve
[4] Operating procedures description [5] Protection scheme functional diagram
[6] Protection Device information (including device types, serial and model numbers, relay settings, etc.)

SECTION IV – TIMING

Request included in two-year plans submitted to Dominion Energy on:

Most Recent Submission: Dec 2023 Rev 1 Second Most Recent Submission: Aug 2023 Rev 0

Estimated Date Customer's Construction to Commence:

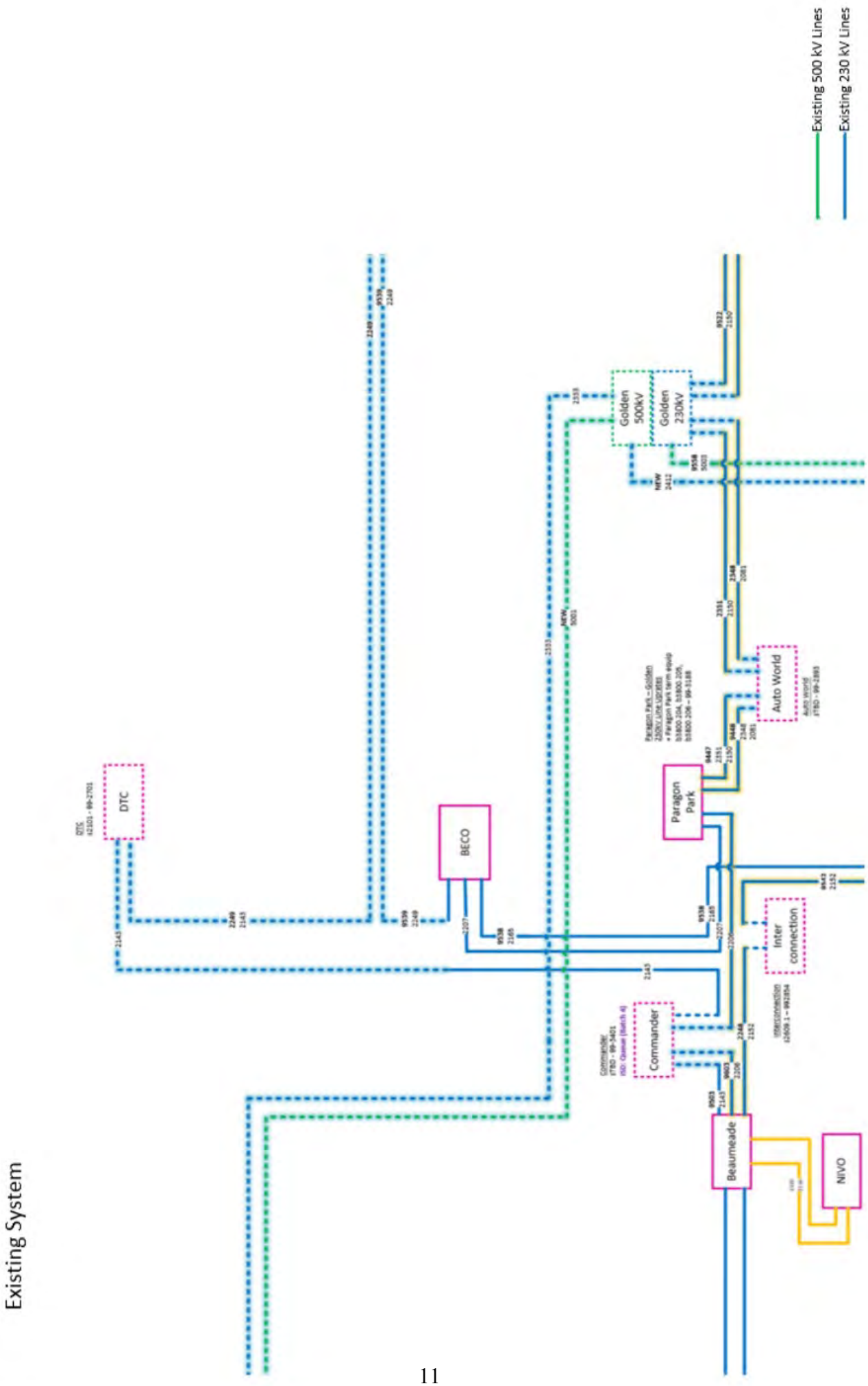
Estimated Completion Date of Customer Work:

Date Requested for Dominion Energy Construction to Commence:

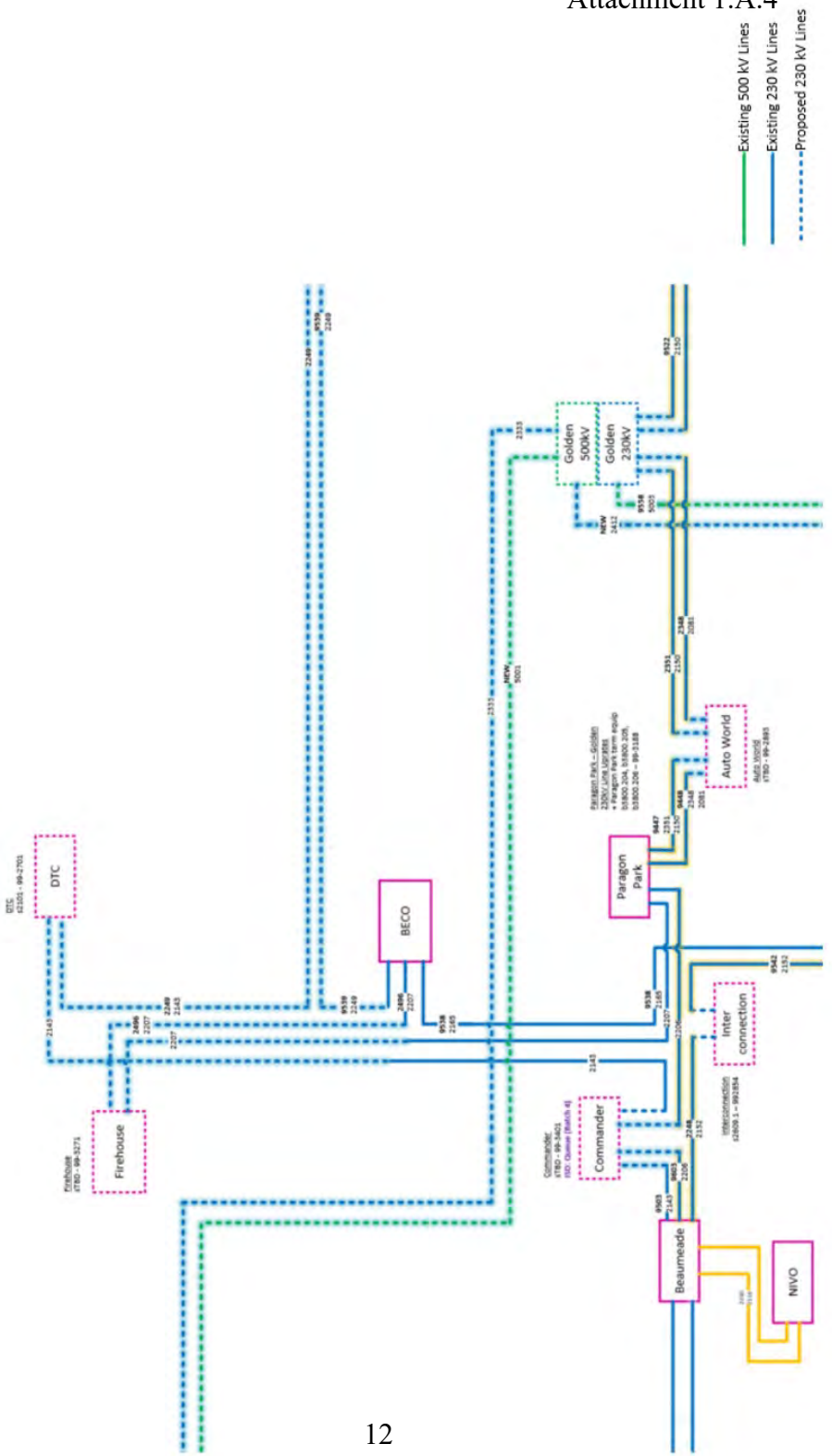
Requested Completion Date of Dominion Energy Work (De-energized):

Requested Date to Energize: 1/31/2028

Other Milestones:



Existing System



System after Proposed 230kV Firehouse DP

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) <u>Engineering Justification for Project</u>**

Requirement: 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) <u>Known Future Projects</u>

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.

The proposed Project is needed to ensure that Dominion Energy Virginia can adequately and reliably serve the Customers' data center operations. See Section I.A. As discussed in Section I.A, while the Company is aware of another potential future data center campus development in the immediate area, and additional 230 kV transmission facilities in the Project area required to serve that need and/or address NERC reliability criteria, there are no known future projects that require the proposed Project to be constructed.

(3) <u>Planning Studies</u>

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.

<u>Distribution</u>

For this Project, the Company's Distribution Planning group used historical load

data and existing and proposed development projects in the Load Area to project future load growth. Based on the forecasted load, the Distribution Planning group determined that it was not feasible to serve the Customers using any of the Company's primary sources of distribution power in the Loudoun Load Area due to practical considerations, geographic constraints, and/or lack of available capacity. See Section I.C.

Transmission

To maintain reliable service to the Company's customers and to comply with mandatory NERC Reliability Standards, specifically FAC-001, the Company's facilities interconnection requirements ("FIR") document addresses the interconnection requirements of generation, transmission, and electricity end-user facilities. The purpose of the NERC FAC standards is to avoid adverse impacts on reliability by requiring that each TO establish facility connection and performance requirements in accordance with FAC-001, and the TO's end-users meet and adhere to the established facility connection and performance requirements in accordance with FAC-002.

NERC Reliability Standards TPL-001 requirements R2, R5, and R6 require PJM, the Planning Coordinator ("PC"), and the 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 Attachment 1 of the FIR document.

The four major criteria considered as part of this Project were:

1) Four-breaker ring bus arrangement is required for load interconnections in excess of 100 MW (Company's FIR, Section 6.2);

2) The amount of direct-connected load at any substation is limited to 300 MW (Company's Transmission Planning Criteria Attachment 1, Section C.2.8);

3) 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); and

4) The minimum load levels within a 10-year planning horizon for the direct interconnection to existing transmission lines is 30 MW for a 230 kV delivery (Company's FAC-001 Section 4.3, Load Criteria – End User).

The Project is being constructed as a double circuit 230 kV loop to comply with Section 6.2 of the Company's FIR, which requires a ring bus arrangement for load interconnections in excess of 100 MW.

(4) Facilities List

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

See Attachments I.A.3 and I.A.4 for the existing and planned transmission infrastructure for the Loudoun Load Area. See Attachment I.G.1 for existing and future transmission facilities in the area of the proposed Project.

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: For purposes of this Application, the Firehouse Delivery Point is located within the Company's Loudoun Load Area and is generally bounded to the North by the DTC Substation, to the West by the Company's existing Line #2143/2249 transmission corridor connecting the DTC and BECO Substations, and to the South by BECO and Paragon Substations. The Firehouse Delivery Point will be served from the Company's existing transmission facilities, BECO-Paragon Line #2207, which is cut and looped into Firehouse. See Attachment I.G.1 for a map of the general location of the Firehouse Delivery Point and Attachment I.A.3 for a one-line diagram of the existing area transmission system.

To serve the Customers' projected load identified in the DP request (approximately 234 MW total emerging load) and maintain and ensure reliable service for the overall load growth in the area, consistent with NERC Reliability Standards, the Company is proposing to construct the Firehouse Substation and Firehouse Lines. See Section I.A. for a discussion of the need for the proposed Project, as well as an overview of the area transmission system. With the proposed Project, the existing system transformers are not overloaded, and reliability criteria are met.

Attachments I.C.1.a-d shows loading (MVA and MW) DTC Substation, as follows:

Attachment I.C.1.a shows historical and projected loading at DTC Substation with existing project loads and without the Customers' projected load.

Attachment I.C.1.b shows historical and projected peak loading at DTC substation with existing project loads, with the Customers' full projected load, and without Firehouse Substation.

Attachment I.C.1.c shows historical and projected peak loading at DTC Substation with existing project load and with Customer A's bridging power until Firehouse Substation is energized (2029). At that time, all the Customers' data center development load will move to Firehouse Substation. Customer B will not be receiving bridging power because it is receiving the first half of its requested power from DTC Substation.

Attachment I.C.1.d shows historical and projected peak loading at DTC Substation with existing project load and with Customer A's bridging power until Firehouse

Substation is energized (2029). At that time, all the Customers' data center development load will move to Firehouse Substation.

Attachments I.C.2.a-d shows loading (MVA and MW) BECO Substation, as follows:

Attachment I.C.2.a shows historical and projected peak loading at BECO Substation with existing area project loads and without any of the Customers' projected load.

Attachment I.C.2.b shows historical and projected peak loading at BECO Substation with existing project loads, with the Customers' full projected load, and without Firehouse Substation.

Attachment I.C.2.c shows historical and projected peak loading at BECO Substation with existing project loads and with the Customers' full projected load until Firehouse Substation is energized (2029). At that time, all the Customers' data center development load will move to Firehouse Substation.

Attachment I.C.2.d shows historical and projected peak loading at BECO Substation with existing project load and with Customer A's bridging power until Firehouse Substation is energized (2029). At that time, all the Customers' data center development load will move to Firehouse Substation.

Attachments I.C.3.a-d shows loading (MVA and MW) Paragon Park Substation, as follows:

Attachment I.C.3.a shows historical and projected peak loading at Paragon Park Substation with existing area project loads and without any of the Customers' projected load.

Attachment I.C.3.b shows historical and projected peak loading at Paragon Park Substation with existing project loads, with the Customers' full projected load, and without Firehouse Substation.

Attachment I.C.3.c shows historical and projected peak loading at Paragon Park Substation with existing project loads and with the Customers' full projected load until Firehouse Substation is energized (2029). At that time, all the Customers' data center development load will move to Firehouse Substation.

Attachment I.C.3.d shows historical and projected peak loading at Paragon Park Substation with existing project load and with Customer A's bridging power until Firehouse Substation is energized (2029). At that time, all the Customers' data center development load will move to Firehouse Substation.

Note that all of the Section I.C attachments include only normal feed circuits; they do not include any alternate feed loads. To be clear, that means there are no alternate feed loads from the Customers or from other customers that have existing

alternate feed contracts in any of the Section I.C attachments. Also note that the load tables in the Section I.C attachments show actual and projected peak loading in MVA based on the Customers' anticipated load.

Each substation transformer ("TX") has a nameplate rating and normal overload ("NOL") rating. The Company serves load on substation transformers up to the transformer's nameplate rating. The NOL rating is used for N-1 contingency service restoration scenarios in the event of failure of a substation transformer, and the NOL rating cannot be exceeded. Specifically, substation transformer loading beyond the limits of the NOL ratings for N-1 scenarios can result in unrestorable load, meaning the load exceeds all available capacity in the substation and adjacent circuits which, in turn, results in sustained outages.

Similarly, distribution circuits each have a thermal overload rating (i.e., a nameplate rating) that is based on the type of equipment and the configuration of the equipment in the field. To prevent overloads that could cause equipment damage or failure, the maximum capacity limits of the distribution circuits and the substation transformers cannot be exceeded.

To ensure reliability to its customers, the Company maintains a substation transformer contingency plan. Because of the negative impact to customers due to the outage duration if a substation transformer were to fail, the Company creates a switching plan that allows customer load to be picked up on other equipment for the loss of any substation transformer. There are various switching methods that can be used for these substation transformer contingency plans. If the contingency plan creates overloads in other equipment because of the switching, new substation capacity, such as constructing the proposed Firehouse Substation, is necessary.

As shown in Attachment I.C.1.b, the Company's existing DTC Substation is projected to have transformer overloads by 2029, as well as violate the 300 MW company FIR limit with the addition of the Customers' load.

Additionally, Attachment I.C.2.b shows the Company's existing BECO Substation is projected to have transformer overloads by 2029, as well as violate the 300 MW company FIR limit with the addition of the Customers' load.

Finally, Attachment I.C.3.b shows the Company's existing BECO Substation is projected to have transformer overloads by 2029, as well as violate the 300 MW company FIR limit by 2030 with the addition of the Customers' load.

These overloads and violations will be avoided by limiting bridging capacity to available Customer A to 24,500 kVA from BECO Substation until the proposed Firehouse Substation is energized in 2029 to serve Customer A's full load.

Historical loading at BECO Substation exceeds limitations for transformer NOL and FIR load limits. To remedy these violations, a project is planned to serve

BECO's excess load with the DTC Substation. Attachment I.C.2.b includes this load shift planned for 2026. The energization of the DTC Substation will allow the Company to provide limited bridging capacity to Customer A from BECO Substation until the proposed Firehouse Substation is energized in 2029.

Accordingly, the Firehouse Substation is needed to serve the Customers' projected load.

The Company needs to construct the Firehouse Substation to serve Customer A's Development A and Customer B's new Data Center Development B. The need for the Firehouse Substation to serve Customer A's Development A and Customer B's new Data Center Development B is demonstrated based on the stated projected overloads and the criteria violations identified above. To address these issues until the Firehouse Substation comes online in 2029, the Company's Distribution Planning group has arranged to provide bridging power to the Customer A from BECO Substation as discussed above and in Section I.A.

Table 1.C.1.a																	
DTC Area			(Load and Ratings in MVA)														
DTC Substation (Load contains existing project loads only)																	
			2021 Actual Peak Loading (MVA)	2022 Actual Peak Loading (MVA)	2023 Actual Peak Loading (MVA)	2024 Actual Peak Loading (MVA)	2025 Actual Peak Loading (MVA)	2026 Projected Peak Loading (MVA)	2027 Projected Peak Loading (MVA)	2028 Projected Peak Loading (MVA)	2029 Projected Peak Loading (MVA)	2030 Projected Peak Loading (MVA)	2031 Projected Peak Loading (MVA)	2032 Projected Peak Loading (MVA)	2033 Projected Peak Loading (MVA)	2034 Projected Peak Loading (MVA)	2035 Projected Peak Loading (MVA)
Substation Total								173.6	271.7	309.6	309.6	309.6	309.6	309.6	309.6	309.6	309.6
Substation Total Calculation for 300MW FIR Requirement								166.7	260.8	297.2	297.2	297.2	297.2	297.2	297.2	297.2	297.2
Transfomer	Nameplate	NOL															
TX #1	112	120						18.0	43.7	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5
TX #2	84	90						55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6
TX #3	84	90						55.0	73.6	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3
TX #4	84	90						27.0	55.1	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7
TX #5	112	120						18.0	43.7	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5

Table 1.C.1.b																	
DTC Area			(Load and Ratings in MVA)														
DTC Substation (Load contains existing project loads and new customer load, no Firehouse)																	
			2021 Actual Peak Loading (MVA)	2022 Actual Peak Loading (MVA)	2023 Actual Peak Loading (MVA)	2024 Actual Peak Loading (MVA)	2025 Actual Peak Loading (MVA)	2026 Projected Peak Loading (MVA)	2027 Projected Peak Loading (MVA)	2028 Projected Peak Loading (MVA)	2029 Projected Peak Loading (MVA)	2030 Projected Peak Loading (MVA)	2031 Projected Peak Loading (MVA)	2032 Projected Peak Loading (MVA)	2033 Projected Peak Loading (MVA)	2034 Projected Peak Loading (MVA)	2035 Projected Peak Loading (MVA)
Substation Total								173.6	271.7	309.6	449.0	513.6	513.6	513.6	513.6	513.6	513.6
Substation Total Calculation for 300MW FIR Requirement								166.7	260.8	297.2	428.1	488.8	488.8	488.8	488.8	488.8	488.8
Transfomer	Nameplate	NOL															
TX #1	112	120						18.0	43.7	50.5	78.4	91.3	91.3	91.3	91.3	91.3	91.3
TX #2	84	90						55.6	55.6	55.6	83.5	96.4	96.4	96.4	96.4	96.4	96.4
TX #3	84	90						55.0	73.6	80.3	108.2	121.1	121.1	121.1	121.1	121.1	121.1
TX #4	84	90						27.0	55.1	72.7	100.6	113.5	113.5	113.5	113.5	113.5	113.5
TX #5	112	120						18.0	43.7	50.5	78.4	91.3	91.3	91.3	91.3	91.3	91.3

Table 1.C.1.c																	
DTC Area			(Load and Ratings in MVA)														
DTC Substation (Load contains existing project loads and new customer load until Firehouse is energized)																	
			2021 Actual Peak Loading (MVA)	2022 Actual Peak Loading (MVA)	2023 Actual Peak Loading (MVA)	2024 Actual Peak Loading (MVA)	2025 Actual Peak Loading (MVA)	2026 Projected Peak Loading (MVA)	2027 Projected Peak Loading (MVA)	2028 Projected Peak Loading (MVA)	2029 Projected Peak Loading (MVA)	2030 Projected Peak Loading (MVA)	2031 Projected Peak Loading (MVA)	2032 Projected Peak Loading (MVA)	2033 Projected Peak Loading (MVA)	2034 Projected Peak Loading (MVA)	2035 Projected Peak Loading (MVA)
Substation Total								173.6	271.7	309.6	449.0	309.6	309.6	309.6	309.6	309.6	309.6
Substation Total Calculation for 300MW FIR Requirement								166.7	260.8	297.2	428.1	297.2	297.2	297.2	297.2	297.2	297.2
Transfomer	Nameplate	NOL															
TX #1	112	120						18.0	43.7	50.5	78.4	50.5	50.5	50.5	50.5	50.5	50.5
TX #2	84	90						55.6	55.6	55.6	83.5	55.6	55.6	55.6	55.6	55.6	55.6
TX #3	84	90						55.0	73.6	80.3	108.2	80.3	80.3	80.3	80.3	80.3	80.3
TX #4	84	90						27.0	55.1	72.7	100.6	72.7	72.7	72.7	72.7	72.7	72.7
TX #5	112	120						18.0	43.7	50.5	78.4	50.5	50.5	50.5	50.5	50.5	50.5
Firehouse Substation (Contains new Customer Load)																	
			2021 Actual Peak Loading (MVA)	2022 Actual Peak Loading (MVA)	2023 Actual Peak Loading (MVA)	2024 Actual Peak Loading (MVA)	2025 Actual Peak Loading (MVA)	2026 Projected Peak Loading (MVA)	2027 Projected Peak Loading (MVA)	2028 Projected Peak Loading (MVA)	2029 Projected Peak Loading (MVA)	2030 Projected Peak Loading (MVA)	2031 Projected Peak Loading (MVA)	2032 Projected Peak Loading (MVA)	2033 Projected Peak Loading (MVA)	2034 Projected Peak Loading (MVA)	2035 Projected Peak Loading (MVA)
Substation Total											222.3	249.7	249.7	249.7	249.7	249.7	249.7
Substation Total Calculation for 300MW NERC Limit											209.0	234.0	234.0	234.0	234.0	234.0	234.0
Transfomer	Nameplate	NOL															
TX #1	112	120									82.1	83.1	83.1	83.1	83.1	83.1	83.1
TX #2	112	120									94.8	98.6	98.6	98.6	98.6	98.6	98.6
TX #3	112	120									45.5	67.9	67.9	67.9	67.9	67.9	67.9

Table 1.C.1.d																	
DTC Area			(Load and Ratings in MVA)														
DTC Substation (Load contains existing project loads only)																	
			2021 Actual Peak Loading (MVA)	2022 Actual Peak Loading (MVA)	2023 Actual Peak Loading (MVA)	2024 Actual Peak Loading (MVA)	2025 Actual Peak Loading (MVA)	2026 Projected Peak Loading (MVA)	2027 Projected Peak Loading (MVA)	2028 Projected Peak Loading (MVA)	2029 Projected Peak Loading (MVA)	2030 Projected Peak Loading (MVA)	2031 Projected Peak Loading (MVA)	2032 Projected Peak Loading (MVA)	2033 Projected Peak Loading (MVA)	2034 Projected Peak Loading (MVA)	2035 Projected Peak Loading (MVA)
Substation Total								173.6	271.7	309.6	309.6	309.6	309.6	309.6	309.6	309.6	309.6
Substation Total Calculation for 300MW FIR Requirement								166.7	260.8	297.2	297.2	297.2	297.2	297.2	297.2	297.2	297.2
Transfomer	Nameplate	NOL															
TX #1	112	120						18.0	43.7	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5
TX #2	84	90						55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6
TX #3	84	90						55.0	73.6	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3
TX #4	84	90						27.0	55.1	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7
TX #5	112	120						18.0	43.7	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5
Firehouse Substation (Contains new Customer Load)																	
			2021 Actual Peak Loading (MVA)	2022 Actual Peak Loading (MVA)	2023 Actual Peak Loading (MVA)	2024 Actual Peak Loading (MVA)	2025 Actual Peak Loading (MVA)	2026 Projected Peak Loading (MVA)	2027 Projected Peak Loading (MVA)	2028 Projected Peak Loading (MVA)	2029 Projected Peak Loading (MVA)	2030 Projected Peak Loading (MVA)	2031 Projected Peak Loading (MVA)	2032 Projected Peak Loading (MVA)	2033 Projected Peak Loading (MVA)	2034 Projected Peak Loading (MVA)	2035 Projected Peak Loading (MVA)
Substation Total											222.3	249.7	249.7	249.7	249.7	249.7	249.7
Substation Total Calculation for 300MW NERC Limit											209.0	234.0	234.0	234.0	234.0	234.0	234.0
Transfomer	Nameplate	NOL															
TX #1	112	120									82.1	83.1	83.1	83.1	83.1	83.1	83.1
TX #2	112	120									94.8	98.6	98.6	98.6	98.6	98.6	98.6
TX #3	112	120									45.5	67.9	67.9	67.9	67.9	67.9	67.9

Table 1.C.2.a																	
Beco Area			(Load and Ratings in MVA)														
Beco Substation (Load contains existing project loads only)																	
			2021 Actual Peak Loading (MVA)	2022 Actual Peak Loading (MVA)	2023 Actual Peak Loading (MVA)	2024 Actual Peak Loading (MVA)	2025 Actual Peak Loading (MVA)	2026 Projected Peak Loading (MVA)	2027 Projected Peak Loading (MVA)	2028 Projected Peak Loading (MVA)	2029 Projected Peak Loading (MVA)	2030 Projected Peak Loading (MVA)	2031 Projected Peak Loading (MVA)	2032 Projected Peak Loading (MVA)	2033 Projected Peak Loading (MVA)	2034 Projected Peak Loading (MVA)	2035 Projected Peak Loading (MVA)
Substation Total			337.1	386.7	338.7	360.3	367.7	286.4	287.2	288.0	288.8	289.6	290.4	291.3	292.1	292.9	293.7
Substation Total Calculation for 300MW FIR Requirement			320.3	367.3	321.7	342.3	349.3	272.1	272.9	273.6	274.4	275.1	275.9	276.7	277.5	278.3	279.1
Transfomer	Nameplate	NOL															
TX #1	75	80	70.7	70.7	71.4	77.3	79.2	42.8	43.2	43.7	44.1	44.5	45.0	45.4	45.9	46.3	46.8
TX #2	84	90	69.5	69.5	37.6	42.9	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3
TX #3	84	90	72.1	78.3	74.9	77.4	89.0	72.1	72.5	72.8	73.2	73.6	73.9	74.3	74.7	75.0	75.4
TX #4	84	90	35.3	72.5	60.3	67.0	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5
TX #5	84	90	89.5	95.7	94.4	95.7	82.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7

Table 1.C.2.b																	
Beco Area			(Load and Ratings in MVA)														
Beco Substation (Load contains existing project loads and new customer load, no Firehouse)																	
			2021 Actual Peak Loading (MVA)	2022 Actual Peak Loading (MVA)	2023 Actual Peak Loading (MVA)	2024 Actual Peak Loading (MVA)	2025 Actual Peak Loading (MVA)	2026 Projected Peak Loading (MVA)	2027 Projected Peak Loading (MVA)	2028 Projected Peak Loading (MVA)	2029 Projected Peak Loading (MVA)	2030 Projected Peak Loading (MVA)	2031 Projected Peak Loading (MVA)	2032 Projected Peak Loading (MVA)	2033 Projected Peak Loading (MVA)	2034 Projected Peak Loading (MVA)	2035 Projected Peak Loading (MVA)
Substation Total			337.1	386.7	338.7	360.3	367.7	286.4	287.2	288.0	428.2	493.6	494.5	495.3	496.1	496.9	497.8
Substation Total Calculation for 300MW FIR Requirement			320.3	367.3	321.7	342.3	349.3	272.1	272.9	273.6	405.2	466.7	467.5	468.3	469.0	469.8	470.6
Transfomer	Nameplate	NOL															
TX #1	75	80	70.7	70.7	71.4	77.3	79.2	42.8	43.2	43.7	72.0	85.3	85.8	86.2	86.7	87.2	87.6
TX #2	84	90	69.5	69.5	37.6	42.9	41.3	41.3	41.3	41.3	69.2	82.1	82.1	82.1	82.1	82.1	82.1
TX #3	84	90	72.1	78.3	74.9	77.4	89.0	72.1	72.5	72.8	101.1	114.4	114.7	115.1	115.5	115.8	116.2
TX #4	84	90	35.3	72.5	60.3	67.0	75.5	75.5	75.5	75.5	103.4	116.3	116.3	116.3	116.3	116.3	116.3
TX #5	84	90	89.5	95.7	94.4	95.7	82.7	54.7	54.7	54.7	82.6	95.5	95.5	95.5	95.5	95.5	95.5

Table 1.C.2.c																	
Beco Area			(Load and Ratings in MVA)														
Beco Substation (Load contains existing project loads and new customer load until Firehouse is energized)																	
			2021 Actual Peak Loading (MVA)	2022 Actual Peak Loading (MVA)	2023 Actual Peak Loading (MVA)	2024 Actual Peak Loading (MVA)	2025 Actual Peak Loading (MVA)	2026 Projected Peak Loading (MVA)	2027 Projected Peak Loading (MVA)	2028 Projected Peak Loading (MVA)	2029 Projected Peak Loading (MVA)	2030 Projected Peak Loading (MVA)	2031 Projected Peak Loading (MVA)	2032 Projected Peak Loading (MVA)	2033 Projected Peak Loading (MVA)	2034 Projected Peak Loading (MVA)	2035 Projected Peak Loading (MVA)
Substation Total			337.1	386.7	338.7	360.3	367.7	286.4	287.2	288.0	428.2	289.6	290.4	291.3	292.1	292.9	293.7
Substation Total Calculation for 300MW FIR Requirement			320.3	367.3	321.7	342.3	349.3	272.1	272.9	273.6	405.2	275.1	275.9	276.7	277.5	278.3	279.1
Transfomer	Nameplate	NOL															
TX #1	75	80	70.7	70.7	71.4	77.3	79.2	42.8	43.2	43.7	72.0	44.5	45.0	45.4	45.9	46.3	46.8
TX #2	84	90	69.5	69.5	37.6	42.9	41.3	41.3	41.3	41.3	69.2	41.3	41.3	41.3	41.3	41.3	41.3
TX #3	84	90	72.1	78.3	74.9	77.4	89.0	72.1	72.5	72.8	101.1	73.6	73.9	74.3	74.7	75.0	75.4
TX #4	84	90	35.3	72.5	60.3	67.0	75.5	75.5	75.5	75.5	103.4	75.5	75.5	75.5	75.5	75.5	75.5
TX #5	84	90	89.5	95.7	94.4	95.7	82.7	54.7	54.7	54.7	82.6	54.7	54.7	54.7	54.7	54.7	54.7
Firehouse Substation (Contains new Customer Load)																	
			2021 Actual Peak Loading (MVA)	2022 Actual Peak Loading (MVA)	2023 Actual Peak Loading (MVA)	2024 Actual Peak Loading (MVA)	2025 Actual Peak Loading (MVA)	2026 Projected Peak Loading (MVA)	2027 Projected Peak Loading (MVA)	2028 Projected Peak Loading (MVA)	2029 Projected Peak Loading (MVA)	2030 Projected Peak Loading (MVA)	2031 Projected Peak Loading (MVA)	2032 Projected Peak Loading (MVA)	2033 Projected Peak Loading (MVA)	2034 Projected Peak Loading (MVA)	2035 Projected Peak Loading (MVA)
Substation Total											222.3	249.7	249.7	249.7	249.7	249.7	249.7
Substation Total Calculation for 300MW NERC Limit											209.0	234.0	234.0	234.0	234.0	234.0	234.0
Transfomer	Nameplate	NOL															
TX #1	112	120									82.1	83.1	83.1	83.1	83.1	83.1	83.1
TX #2	112	120									94.8	98.6	98.6	98.6	98.6	98.6	98.6
TX #3	112	120									45.5	67.9	67.9	67.9	67.9	67.9	67.9

Table 1.C.2.d																	
Beco Area			(Load and Ratings in MVA)														
Beco Substation (Load contains existing project loads and customer bridging until Firehouse is energized)																	
			2021 Actual Peak Loading (MVA)	2022 Actual Peak Loading (MVA)	2023 Actual Peak Loading (MVA)	2024 Actual Peak Loading (MVA)	2025 Actual Peak Loading (MVA)	2026 Projected Peak Loading (MVA)	2027 Projected Peak Loading (MVA)	2028 Projected Peak Loading (MVA)	2029 Projected Peak Loading (MVA)	2030 Projected Peak Loading (MVA)	2031 Projected Peak Loading (MVA)	2032 Projected Peak Loading (MVA)	2033 Projected Peak Loading (MVA)	2034 Projected Peak Loading (MVA)	2035 Projected Peak Loading (MVA)
Substation Total			337.1	386.7	338.7	360.3	367.7	286.4	287.2	312.5	313.3	289.6	290.4	291.3	292.1	292.9	293.7
Substation Total Calculation for 300MW FIR Requirement			320.3	367.3	321.7	342.3	349.3	272.1	272.9	296.9	297.6	275.1	275.9	276.7	277.5	278.3	279.1
Transfomer	Nameplate	NOL															
TX #1	75	80	70.7	70.7	71.4	77.3	79.2	42.8	43.2	68.2	68.6	44.5	45.0	45.4	45.9	46.3	46.8
TX #2	84	90	69.5	69.5	37.6	42.9	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3
TX #3	84	90	72.1	78.3	74.9	77.4	89.0	72.1	72.5	72.8	73.2	73.6	73.9	74.3	74.7	75.0	75.4
TX #4	84	90	35.3	72.5	60.3	67.0	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5
TX #5	84	90	89.5	95.7	94.4	95.7	82.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7
Firehouse Substation (Contains new Customer Load)																	
			2021 Actual Peak Loading (MVA)	2022 Actual Peak Loading (MVA)	2023 Actual Peak Loading (MVA)	2024 Actual Peak Loading (MVA)	2025 Actual Peak Loading (MVA)	2026 Projected Peak Loading (MVA)	2027 Projected Peak Loading (MVA)	2028 Projected Peak Loading (MVA)	2029 Projected Peak Loading (MVA)	2030 Projected Peak Loading (MVA)	2031 Projected Peak Loading (MVA)	2032 Projected Peak Loading (MVA)	2033 Projected Peak Loading (MVA)	2034 Projected Peak Loading (MVA)	2035 Projected Peak Loading (MVA)
Substation Total											222.3	249.7	249.7	249.7	249.7	249.7	249.7
Substation Total Calculation for 300MW NERC Limit											209.0	234.0	234.0	234.0	234.0	234.0	234.0
Transfomer	Nameplate	NOL															
TX #1	112	120									82.1	83.1	83.1	83.1	83.1	83.1	83.1
TX #2	112	120									94.8	98.6	98.6	98.6	98.6	98.6	98.6
TX #3	112	120									45.5	67.9	67.9	67.9	67.9	67.9	67.9

Table 1.C.3.a																	
Paragon Park Area			(Load and Ratings in MVA)														
Paragon Park Substation (Load contains existing project loads only)																	
			2021 Actual Peak Loading (MVA)	2022 Actual Peak Loading (MVA)	2023 Actual Peak Loading (MVA)	2024 Actual Peak Loading (MVA)	2025 Actual Peak Loading (MVA)	2026 Projected Peak Loading (MVA)	2027 Projected Peak Loading (MVA)	2028 Projected Peak Loading (MVA)	2029 Projected Peak Loading (MVA)	2030 Projected Peak Loading (MVA)	2031 Projected Peak Loading (MVA)	2032 Projected Peak Loading (MVA)	2033 Projected Peak Loading (MVA)	2034 Projected Peak Loading (MVA)	2035 Projected Peak Loading (MVA)
Substation Total				169.4	170.9	175.5	170.3	170.5	170.8	171.0	171.2	171.5	171.7	172.0	172.2	172.4	172.7
Substation Total Calculation for 300MW FIR Requirement				160.9	162.4	166.7	161.8	162.0	162.2	162.5	162.7	162.9	163.1	163.4	163.6	163.8	164.0
Transfomer	Nameplate	NOL															
TX #1	112	120		100.9	71.7	75.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
TX #2	112	120		68.5	99.2	99.8	93.6	93.8	94.1	94.3	94.5	94.8	95.0	95.3	95.5	95.7	96.0

Table 1.C.3.b																	
Paragon Park Area			(Load and Ratings in MVA)														
Paragon Park Substation (Load contains existing project loads and new customer load, no Firehouse)																	
			2021 Actual Peak Loading (MVA)	2022 Actual Peak Loading (MVA)	2023 Actual Peak Loading (MVA)	2024 Actual Peak Loading (MVA)	2025 Actual Peak Loading (MVA)	2026 Projected Peak Loading (MVA)	2027 Projected Peak Loading (MVA)	2028 Projected Peak Loading (MVA)	2029 Projected Peak Loading (MVA)	2030 Projected Peak Loading (MVA)	2031 Projected Peak Loading (MVA)	2032 Projected Peak Loading (MVA)	2033 Projected Peak Loading (MVA)	2034 Projected Peak Loading (MVA)	2035 Projected Peak Loading (MVA)
Substation Total				169.4	170.9	175.5	170.3	170.5	170.8	171.0	310.6	375.5	375.7	376.0	376.2	376.5	376.7
Substation Total Calculation for 300MW FIR Requirement				160.9	162.4	166.7	161.8	162.0	162.2	162.5	293.5	354.5	354.7	354.9	355.2	355.4	355.6
Transfomer	Nameplate	NOL															
TX #1	112	120		100.9	71.7	75.7	76.7	76.7	76.7	76.7	146.4	178.7	178.7	178.7	178.7	178.7	178.7
TX #2	112	120		68.5	99.2	99.8	93.6	93.8	94.1	94.3	164.2	196.8	197.0	197.3	197.5	197.7	198.0

Table 1.C.3.c																	
Paragon Park Area			(Load and Ratings in MVA)														
Paragon Park Substation (Load contains existing project loads and new customer load until Firehouse is energized)																	
			2021 Actual Peak Loading (MVA)	2022 Actual Peak Loading (MVA)	2023 Actual Peak Loading (MVA)	2024 Actual Peak Loading (MVA)	2025 Actual Peak Loading (MVA)	2026 Projected Peak Loading (MVA)	2027 Projected Peak Loading (MVA)	2028 Projected Peak Loading (MVA)	2029 Projected Peak Loading (MVA)	2030 Projected Peak Loading (MVA)	2031 Projected Peak Loading (MVA)	2032 Projected Peak Loading (MVA)	2033 Projected Peak Loading (MVA)	2034 Projected Peak Loading (MVA)	2035 Projected Peak Loading (MVA)
Substation Total				169.4	170.9	175.5	170.3	170.5	170.8	171.0	310.6	171.5	171.7	172.0	172.2	172.4	172.7
Substation Total Calculation for 300MW FIR Requirement				160.9	162.4	166.7	161.8	162.0	162.2	162.5	293.5	162.9	163.1	163.4	163.6	163.8	164.0
Transfomer	Nameplate	NOL															
TX #1	112	120		100.9	71.7	75.7	76.7	76.7	76.7	76.7	146.4	76.7	76.7	76.7	76.7	76.7	76.7
TX #2	112	120		68.5	99.2	99.8	93.6	93.8	94.1	94.3	164.2	94.8	95.0	95.3	95.5	95.7	96.0
Firehouse Substation (Contains new Customer Load)																	
			2021 Actual Peak Loading (MVA)	2022 Actual Peak Loading (MVA)	2023 Actual Peak Loading (MVA)	2024 Actual Peak Loading (MVA)	2025 Actual Peak Loading (MVA)	2026 Projected Peak Loading (MVA)	2027 Projected Peak Loading (MVA)	2028 Projected Peak Loading (MVA)	2029 Projected Peak Loading (MVA)	2030 Projected Peak Loading (MVA)	2031 Projected Peak Loading (MVA)	2032 Projected Peak Loading (MVA)	2033 Projected Peak Loading (MVA)	2034 Projected Peak Loading (MVA)	2035 Projected Peak Loading (MVA)
Substation Total											222.3	249.7	249.7	249.7	249.7	249.7	249.7
Substation Total Calculation for 300MW NERC Limit											209.0	234.0	234.0	234.0	234.0	234.0	234.0
Transfomer	Nameplate	NOL															
TX #1	112	120									82.1	83.1	83.1	83.1	83.1	83.1	83.1
TX #2	112	120									94.8	98.6	98.6	98.6	98.6	98.6	98.6
TX #3	112	120									45.5	67.9	67.9	67.9	67.9	67.9	67.9

Table 1.C.3.d																	
Paragon Park Area			(Load and Ratings in MVA)														
Paragon Park Substation (Load contains existing project loads only)																	
			2021 Actual Peak Loading (MVA)	2022 Actual Peak Loading (MVA)	2023 Actual Peak Loading (MVA)	2024 Actual Peak Loading (MVA)	2025 Actual Peak Loading (MVA)	2026 Projected Peak Loading (MVA)	2027 Projected Peak Loading (MVA)	2028 Projected Peak Loading (MVA)	2029 Projected Peak Loading (MVA)	2030 Projected Peak Loading (MVA)	2031 Projected Peak Loading (MVA)	2032 Projected Peak Loading (MVA)	2033 Projected Peak Loading (MVA)	2034 Projected Peak Loading (MVA)	2035 Projected Peak Loading (MVA)
Substation Total				169.4	170.9	175.5	170.3	170.5	170.8	171.0	171.2	171.5	171.7	172.0	172.2	172.4	172.7
Substation Total Calculation for 300MW FIR Requirement				160.9	162.4	166.7	161.8	162.0	162.2	162.5	162.7	162.9	163.1	163.4	163.6	163.8	164.0
Transfomer	Nameplate	NOL															
TX #1	112	120		100.9	71.7	75.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
TX #2	112	120		68.5	99.2	99.8	93.6	93.8	94.1	94.3	94.5	94.8	95.0	95.3	95.5	95.7	96.0
Firehouse Substation (Contains new Customer Load)																	
			2021 Actual Peak Loading (MVA)	2022 Actual Peak Loading (MVA)	2023 Actual Peak Loading (MVA)	2024 Actual Peak Loading (MVA)	2025 Actual Peak Loading (MVA)	2026 Projected Peak Loading (MVA)	2027 Projected Peak Loading (MVA)	2028 Projected Peak Loading (MVA)	2029 Projected Peak Loading (MVA)	2030 Projected Peak Loading (MVA)	2031 Projected Peak Loading (MVA)	2032 Projected Peak Loading (MVA)	2033 Projected Peak Loading (MVA)	2034 Projected Peak Loading (MVA)	2035 Projected Peak Loading (MVA)
Substation Total											222.3	249.7	249.7	249.7	249.7	249.7	249.7
Substation Total Calculation for 300MW NERC Limit											209.0	234.0	234.0	234.0	234.0	234.0	234.0
Transfomer	Nameplate	NOL															
TX #1	112	120									82.1	83.1	83.1	83.1	83.1	83.1	83.1
TX #2	112	120									94.8	98.6	98.6	98.6	98.6	98.6	98.6
TX #3	112	120									45.5	67.9	67.9	67.9	67.9	67.9	67.9

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: Not applicable.

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: **Distribution Alternatives:**

Distribution alternatives have not been explored as area substations do not have capacity. See Section I.C.

Transmission Alternatives: *Cut Line #2143 between DTC and Beaumeade.*

Under this alternative, the Company would cut Line #2143 between DTC and Beaumeade to serve the Firehouse Delivery Point. Although electrically feasible, system studies indicate this configuration would precipitate a 300 MW N-1-1 load loss violation if the system were to lose Line #2249 (DTC–BECO) and the remaining segment of Line #2143 (Firehouse–Beaumeade)—an unacceptable reliability outcome for long term planning. Avoiding this violation would require multiple additional lines to be cut into Firehouse, forcing the substation to use a six-breaker ring-bus configuration, which presents multiple station configuration challenges for the substation.

In contrast, Option 1—cutting and looping Line #2207 into Firehouse—maintains corridor transfer capability and avoids major post contingency violations. Accordingly, the Line #2143 cut in is not presented as a preferred solution.

Analysis of Demand-Side Resources:

Pursuant to the Commission's November 26, 2013, Order entered in Case No. PUE-2012-00029,[7] and its November 1, 2018, Final Order entered in Case No. PUR-2018-00075,[8] 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 in order to provide requested service and comply with mandatory NERC Reliability Standards, thereby enabling the Company to maintain and ensure the overall long-term reliability of its transmission system.[9] Notwithstanding, when performing an

[7] *Application of Virginia Electric and Power Company d/b/a Dominion Virginia Power for approval and certification of electric facilities: Surry-Skiffes Creek 500 kV Transmission Line, Skiffes Creek-Whealton 230 kV Transmission Line, and Skiffes Creek 500 kV-230 kV-115 kV Switching Station*, Case No. PUE-2012-00029, Final Order (Nov. 26, 2023).

[8] *Application of Virginia Electric and Power Company for approval and certification of electric transmission facilities under Va. Code § 56-46.1 and the Utility Facilities Act, Va. Code § 56-265.1 et seq.*, Case No. PUR-2018-00075, Final Order (Nov. 1, 2018).

[9] 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. F urther, because PJM's load forecast

reliability of its transmission system.[9] Notwithstanding, when performing an analysis based on PJM's 50/50 load forecast, there is no adjustment in load for DR programs 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 previously into PJM's capacity market 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.A, the Project's projected load fully built out is approximately 234 MW. By way of comparison, statewide, the Company achieved demand savings of 322.9 MW (net) / 399.0 MW (gross) from its DSM programs in 2024.

[9] 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

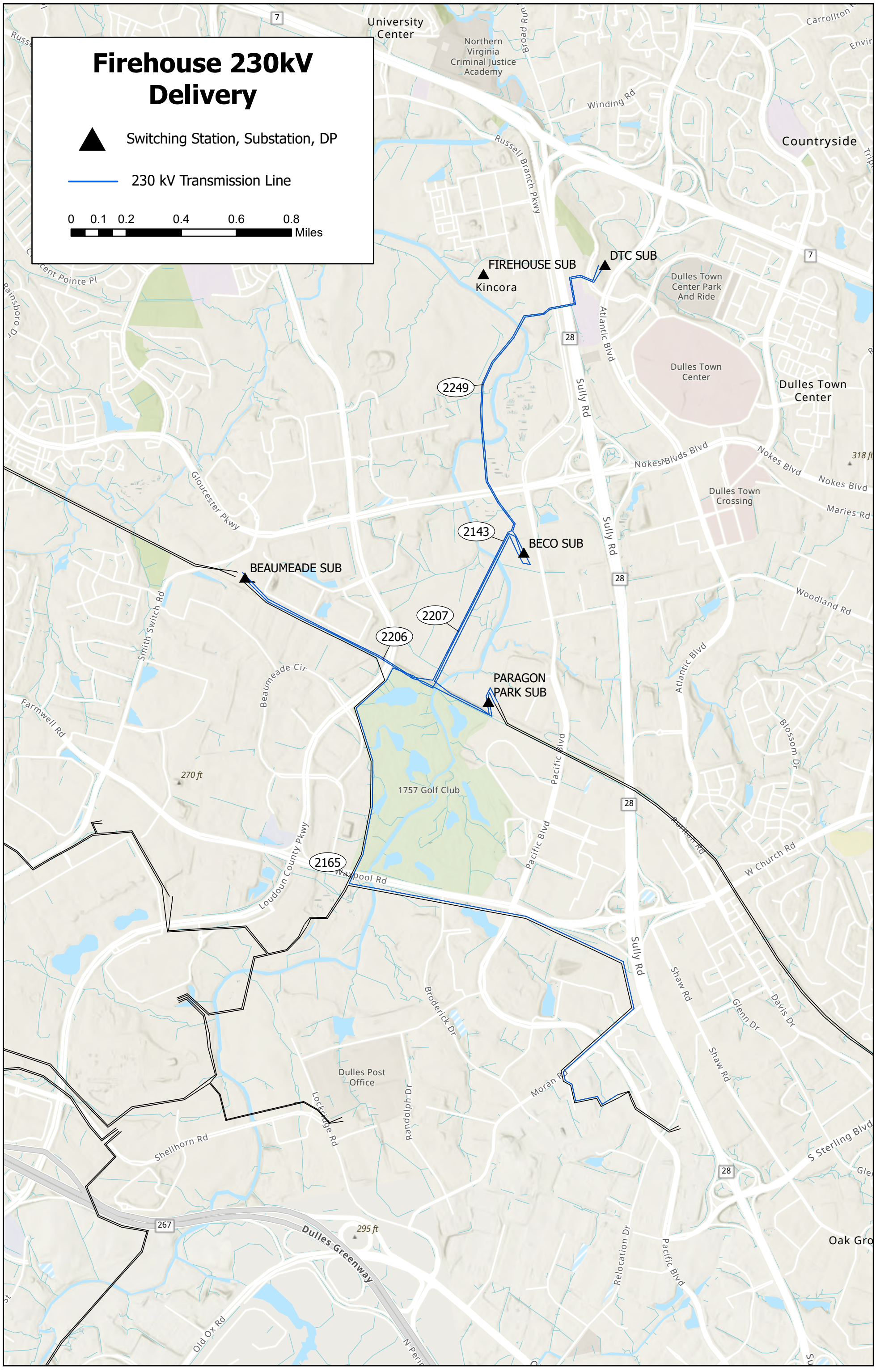
F. Describe any lines or facilities that will be removed, replaced, or taken out of service upon completion of the proposed project, including the number of circuits and normal and emergency ratings of the facilities.

Response: One span of the existing Line #2207, currently built with twin-bundled 636 kcmil ACSR (span 2207/189–2207/196) and rated at 523.4 MVA, will be replaced with twin-bundled 768.2 kcmil ACSS/TW conductor, which provides an upgraded thermal rating of 1,573 MVA.

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.


Firehouse 230kV Delivery
Switching Station, Substation, DP
230 kV Transmission Line
0 0.1 0.2 0.4 0.6 0.8
Miles
FIREHOUSE SUB
Kincora
DTC SUB
BECO SUB
BEAUMEADE SUB
PARAGON PARK SUB
2249
2143
2207
2206
2165
University Center
Northern Virginia Criminal Justice Academy
Countryside
Dulles Town Center Park And Ride
Dulles Town Center
Dulles Town Crossing
1757 Golf Club
Dulles Post Office
Oak Gro
Winding Rd
Russell Branch Pkwy
Broad Run
Carrollton
Nokes Blvd
Maries Rd
Woodland Rd
Gloucester Pkwy
Smith Switch Rd
Beaumeade Cir
Farmwell Rd
Loudoun County Pkwy
Waxpool Rd
Atlantic Blvd
Sully Rd
Pacific Blvd
Relocation Dr
Rumsam Rd
W Church Rd
Blossom Dr
Shaw Rd
Glenn Dr
Davis Dr
Moran Rd
Broderick Dr
Randolph Dr
Lockridge Rd
Shellhorn Rd
S Sterling Blvd
Dulles Greenway
Old Ox Rd
Cent Pointe Pl
Rainsboro Dr
270 ft
295 ft
318 ft
7
28
267

I. NECESSITY FOR THE PROPOSED PROJECT

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

Response: The desired in-service target date for the proposed Project is February 28, 2029.

The Company estimates it will take approximately 25 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 January 13, 2027. Should the Commission issue a final order by January 13, 2027, the Company estimates that construction should begin around March 2027, and be completed by February 28, 2029. 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. This schedule is also contingent upon the Company's ability to negotiate easements with property owners along the approved route and to obtain property rights for substation use without the need for additional litigation.

In addition, the Company is actively monitoring regulatory changes and requirements associated with the NLEB and how they could potentially impact construction timing associated with TOYRs. The USFWS issued the final guidance, replacing the interim guidance, on October 23, 2024, and the final guidance was fully implemented November 30, 2024. The Company is reviewing the final guidance to the extent it applies to the Company's projects and will coordinate with USFWS during the permitting stage.

The Company is also monitoring potential regulatory changes associated with the potential up-listing of the TCB. On September 14, 2022, the USFWS published the proposed rule to the Federal Register to list the TCB as endangered under the Endangered Species Act. USFWS extended its Final Rule issuance target from September 2023 to September 2024, but as of the date of this filing, the TCB listing decision has not been issued. The Company is actively tracking this ruling and evaluating the effects of potential outcomes on Company projects' permitting, construction, and in-service dates, including electric transmission projects.

The review also accounted for regulatory changes and requirements associated with the monarch butterfly (Danaus plexippus) and the proposed USFWS listing of this species as federally threatened. The Company is anticipating the monarch butterfly will be listed; therefore, it assumes any regulatory changes associated with the potential listing of the monarch butterfly will affect this Project. On December 12,

2024, the monarch butterfly was proposed to be listed as threatened by the USFWS, and the 90-day public comment period was extended and closed on May 19, 2025. The Company is actively tracking this ruling and evaluating the effects of potential outcomes on the permitting, construction, and in-service dates of the Company projects, including electric transmission projects.

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.*, February 28, 2029) and an authorization sunset date (*i.e.*, February 28, 2030) for energization of the Project. Importantly, the request for an authorization sunset date is intended to account for the increasing challenges to approval, permitting, and construction of electric transmission projects that may be beyond the Company's control, such as those described herein. It does not assuage the immediacy of the need for this Project or curtail the Company's commitment to ensure the reliability of its transmission system. The Company continues to believe at this time that it can reasonably achieve the desired in-service target date.[10]

[10] *See* supra n. 4.

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 total estimated conceptual cost of the Project utilizing the Proposed Route is approximately $65 million, which includes approximately $25 million for transmission-related work and approximately $40 million for substation-related work. The estimated cost includes escalation adjustments based on the Project's anticipated test and energization date.

As discussed in detail in Section I.A, the total excess facilities charge to Customer A is estimated to be $24 million and is included in the total Project cost.

Substation-related costs are as follows:

- Firehouse Substation: $39.4M
- BECO Substation: $0.2M
- Paragon Park Substation: $0.2M

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: The Project is classified as a supplemental project (Supplemental Project DOM-2024-0016) initiated by the TO in order to interconnect new customer load. The Project need slide was submitted to PJM at the April 02, 2024 TEAC Meeting, and the solution slide was submitted to PJM at the April 07, 2026 TEAC Meeting. See Attachment I.J.1 and Attachment I.J.2, respectively. While the Company has not received a Supplemental ID# for this Project, the Project as originally submitted to PJM on April 7, 2026, is expected to be included in the 2026 Local Plan.

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

Dominion Supplemental Projects

Transmission Expansion Advisory Committee
April 2, 2024

Needs

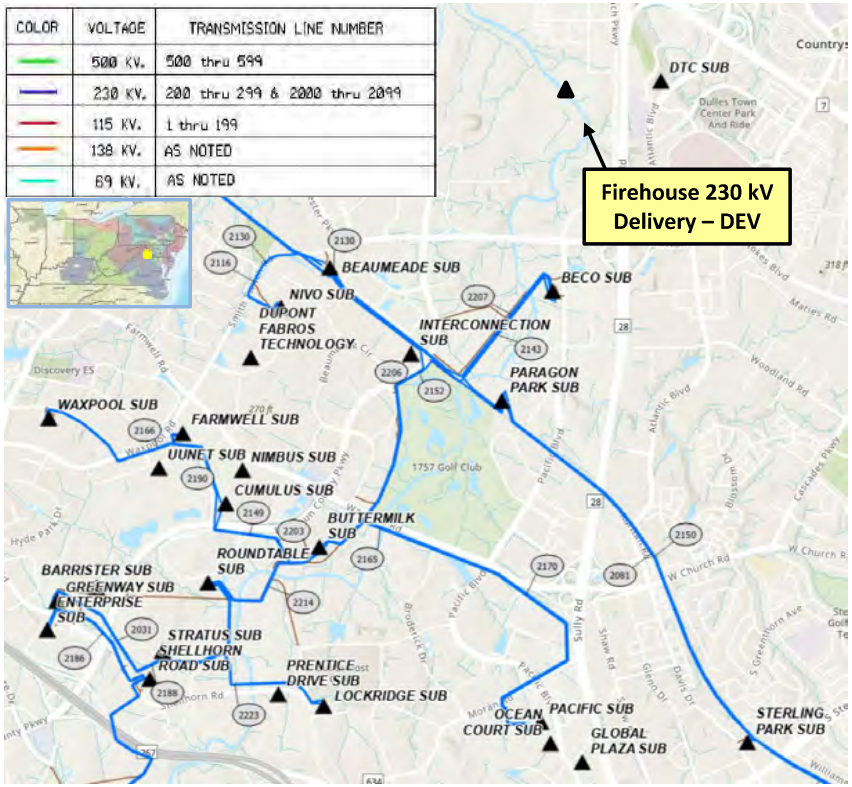
Stakeholders must submit any comments within 10 days of this meeting in order to provide time necessary to consider these comments prior to the next phase of the M-3 process

Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2024-0016
Process Stage: Need Meeting 04/02/2024
Project Driver: Customer Service

Specific Assumption References:
Customer load request will be evaluated per Dominion's Facility Interconnection Requirements Document and Dominion's Transmission Planning Criteria.

Problem Statement:
DEV Distribution has submitted a DP request for a new substation (Firehouse) to serve a data center complex in Loudoun County with a total load in excess of 100 MW. Requested in-service date is 01/31/2028.



Initial In-Service Load	Projected 2028 Load
Summer: 209 MW Winter: 160 MW	Summer: 209 MW Winter: 160 MW

Attachment 1.J.1

Dominion Supplemental Projects

Transmission Expansion Advisory Committee
April 07, 2026

Solutions

Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2024-0016
Process Stage: Solutions Meeting 04/07/2026
Previously Presented: Need Meeting 04/02/2024
Project Driver: Customer Service

Specific Assumption References:

Customer load request will be evaluated per Dominion's Facility Interconnection Requirements Document and Dominion's Transmission Planning Criteria.

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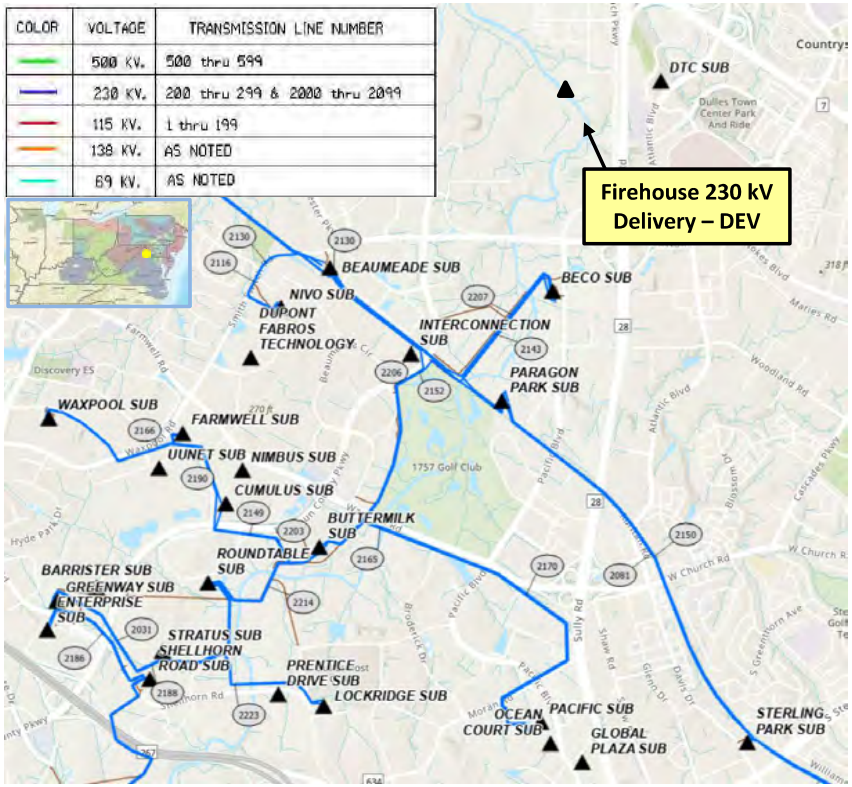
Problem Statement:

DEV Distribution has submitted a DP request for a new substation (Firehouse) to serve a data center complex in Loudoun County with a total load in excess of 100 MW. Requested in-service date is ~~01/31/2028~~ 12/31/2030.

Initial In-Service Load	Projected 2030 Load
Summer: 209 MW Winter: 160 MW	Summer: 234 MW Winter: 234 MW

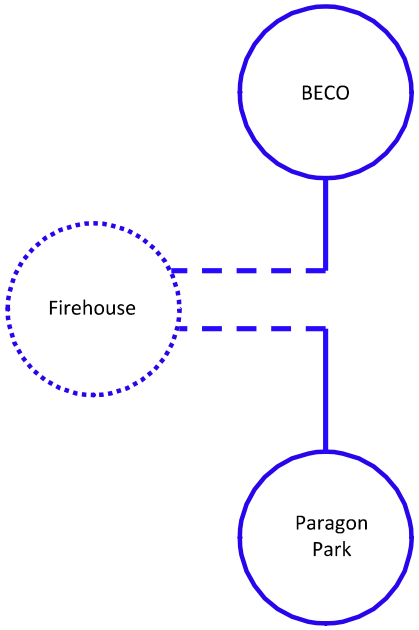


Dominion Transmission Zone: Supplemental Firehouse 230kV Delivery - DEV

Need Number: DOM-2024-0016
Process Stage: Solutions Meeting 04/07/2026
Project Driver: Customer Service

Proposed Solution:

- Construct new Firehouse Substation to accommodate a 230kV ring bus with an ultimate configuration of four (4) breakers, with all breakers initially installed.
- Cut and extend existing Line #2207 (Paragon - Beco) and terminate into the new substation.



48

Estimated Project Cost: $64.3 M
Transmission Line: $23.6 M
230kV Substation: $40.7 M

Alternatives Considered:
No feasible alternative.

Projected In-service Date: 12/31/2030
Project Status: Engineering
Model: 2030 RTEP

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: The proposed Project will serve the significant projected data center load growth in the Loudoun Load Area generally depicted in Attachment I.A.1. This Project may be used to support future load centers in the area. See Sections I.A and I.C.

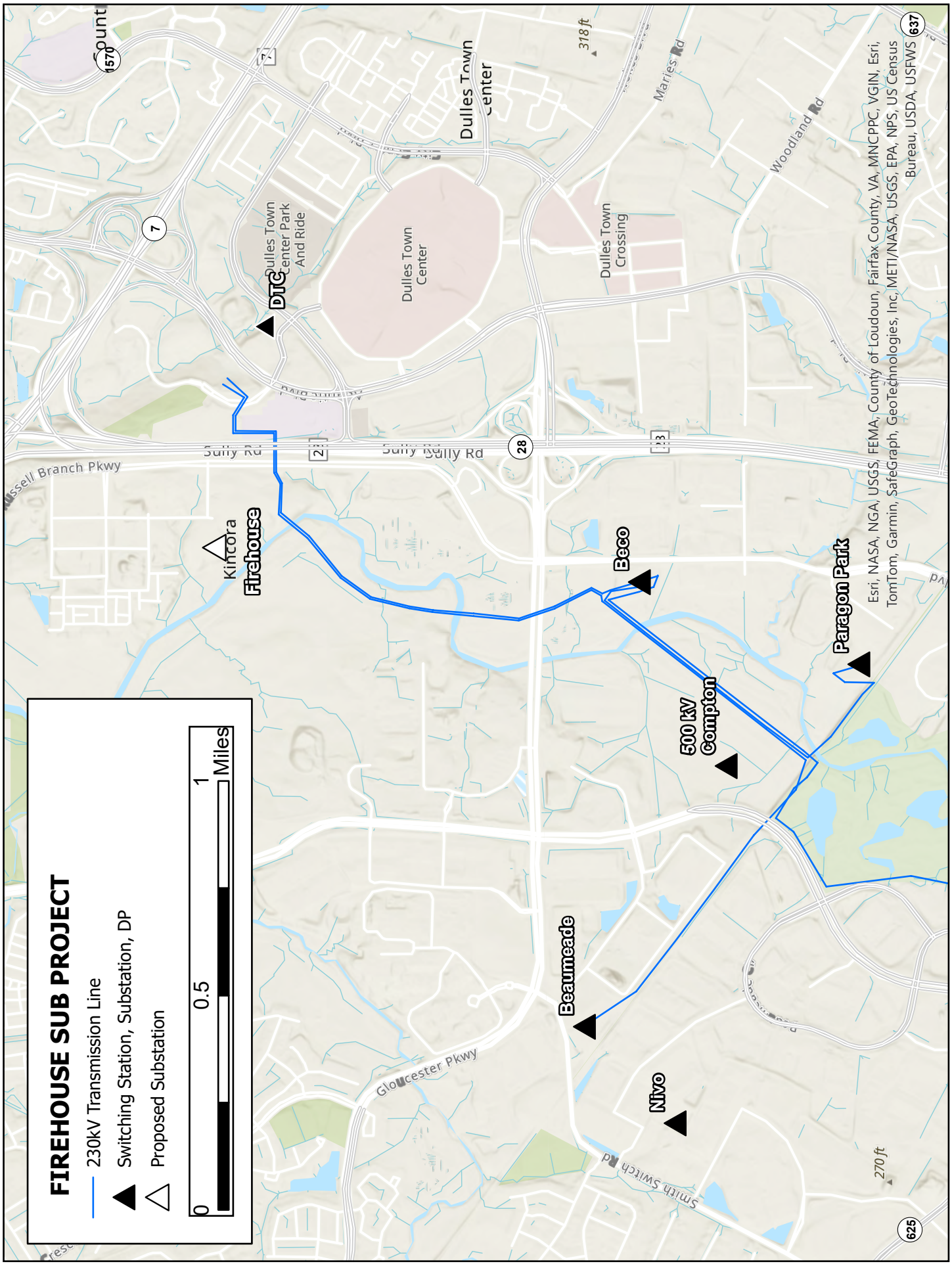
II. DESCRIPTION OF THE PROPOSED PROJECT

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

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

Response: The approximate length of the Proposed Route for the Firehouse Lines is 1.05 miles.

See Section II.A.9 for an explanation of the Company's route selection process. Also, see Attachment II.A.1 for an overview map of the Proposed Route.


FIREHOUSE SUB PROJECT
230kV Transmission Line
Switching Station, Substation, DP
Proposed Substation
0
0.5
1
Miles
Firehouse
Kincora
DTC
Dulles Town Center Park And Ride
Dulles Town Center
Dulles Town Center
Dulles Town Crossing
Sully Rd
Russell Branch Pkwy
Beco
500 kV Compton
Paragon Park
Beaumeade
Nivo
Gloucester Pkwy
Smith Switch Rd
Marlies Rd
Woodland Rd
318 ft
270 ft
Esri, NASA, NGA, USGS, FEMA, County of Loudoun, Fairfax County, VA, MNCPPC, VGIN, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

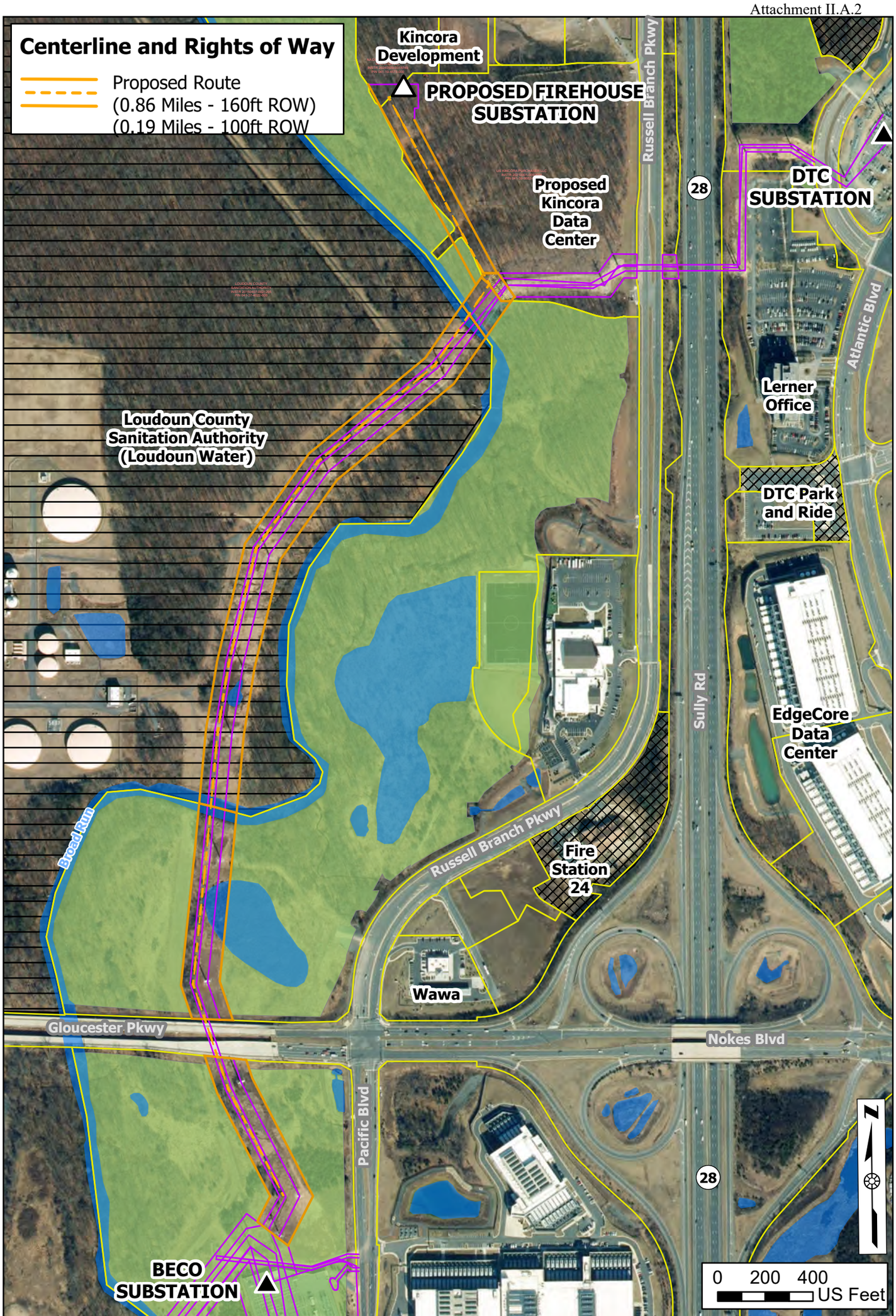
II. DESCRIPTION OF THE PROPOSED PROJECT

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 for public version of the map. The Company is under a non-disclosure agreement with an affected utility. The Company can comply with the provisions of the non-disclosure agreement by producing the map confidentially pursuant to a discovery request from Staff, and upon entry of a protective order. No portion of the right-of-way is proposed to be quitclaimed or relinquished.

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



- Existing Substation
- Proposed Substation
- Existing Dominion Transmission Line
- Parcel Boundaries
- Waterbodies
- Loudoun County Board of Supervisors Easement
- Loudoun County Owned/Leased
- Public Lands

Attachment II.A.2
Overview Map of the Proposed Route
Loudoun County, Virginia

Dominion Energy

CHA

II. DESCRIPTION OF THE PROPOSED PROJECT

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

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

Response: See Attachment I.G.1 for existing transmission line rights-of-way in the Project area.

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: The Company is utilizing primarily existing right-of-way except for 0.19 mile where the proposed lines must leave the existing right-of-way to service the proposed substation.

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;

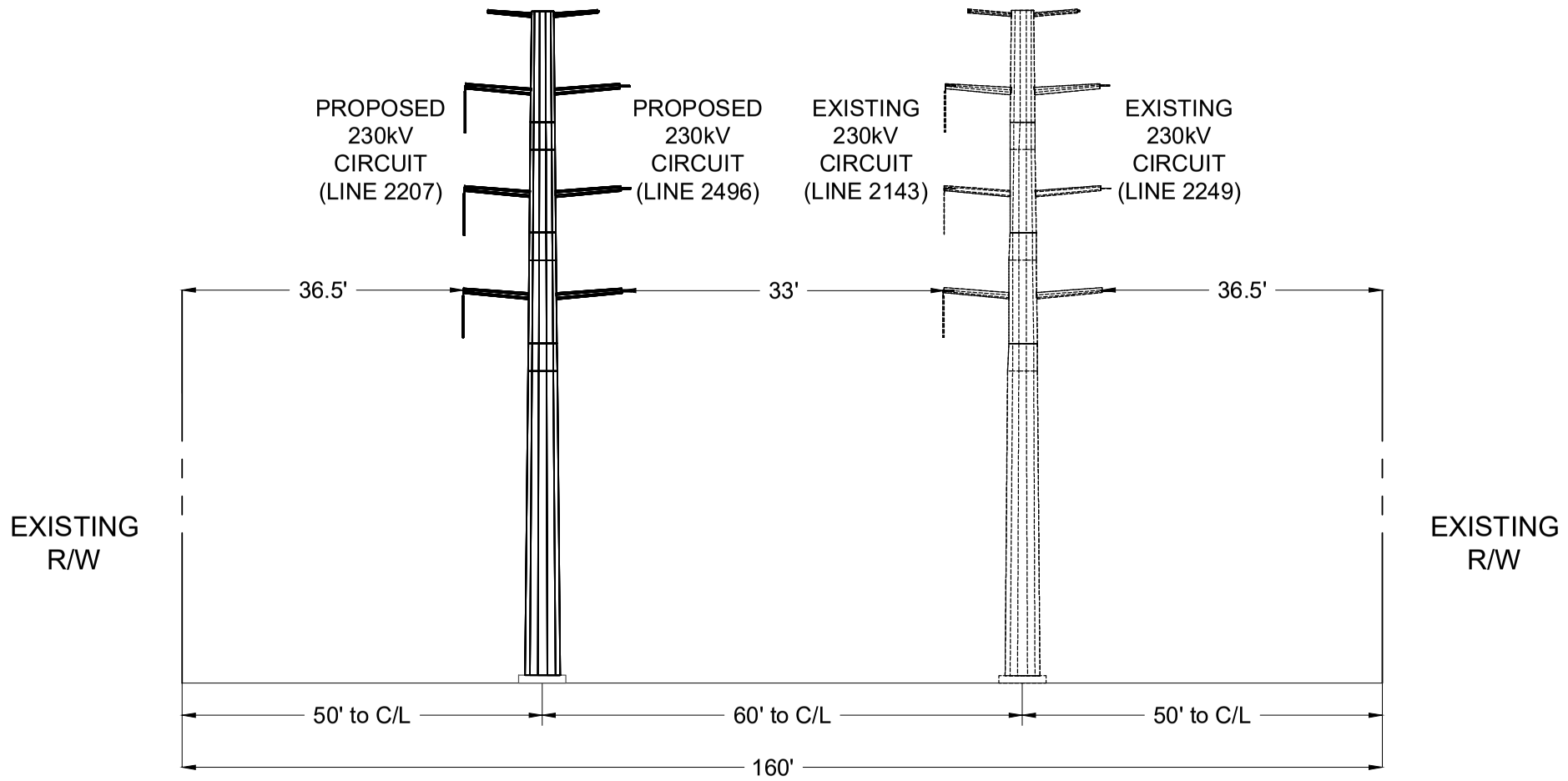
c. Existing utility facilities on the ROW; and

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 -c.

For additional information on the structures, see Section II.B.5.

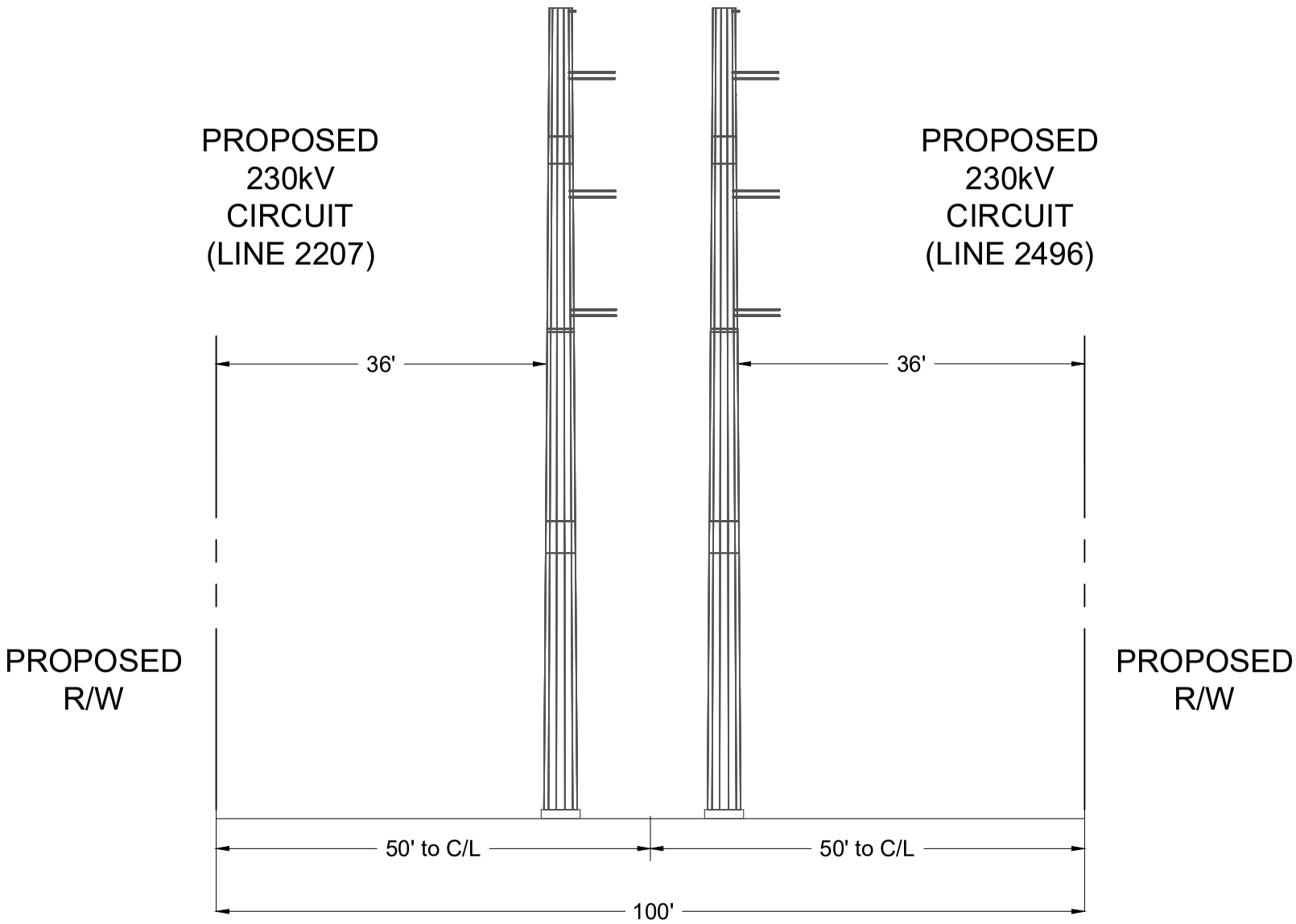
PROPOSED CONFIGURATION
(LOOKING TOWARD FIREHOUSE FROM BECO SUBSTATION)



TYPICAL RIGHT OF WAY

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

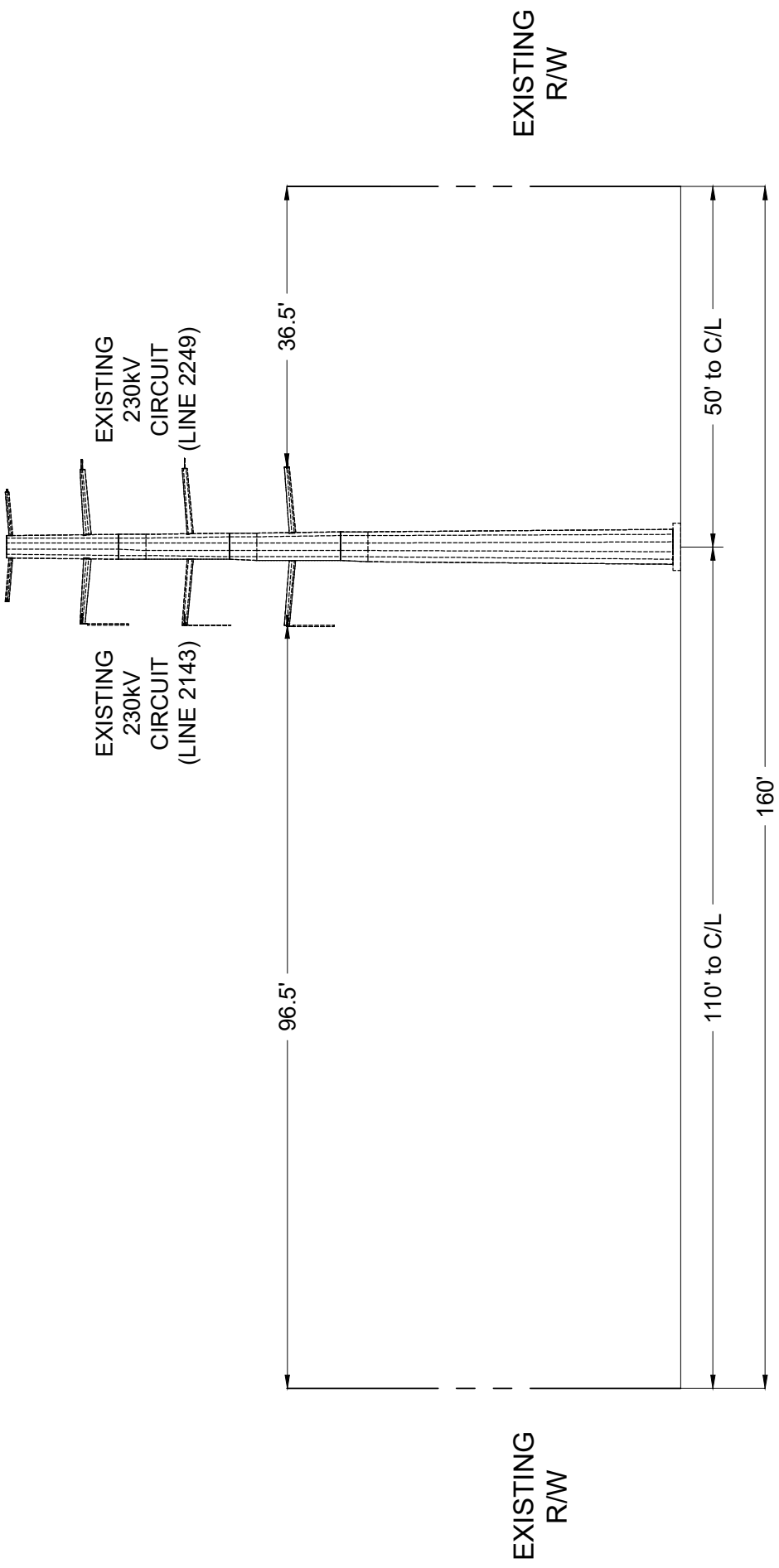
PROPOSED CONFIGURATION
(LOOKING TOWARD FIREHOUSE FROM BECO SUBSTATION)



TYPICAL RIGHT OF WAY

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

EXISTING CONFIGURATION
(LOOKING TOWARD FIREHOUSE FROM BECO SUBSTATION)



TYPICAL RIGHT OF WAY

II. DESCRIPTION OF THE PROPOSED PROJECT

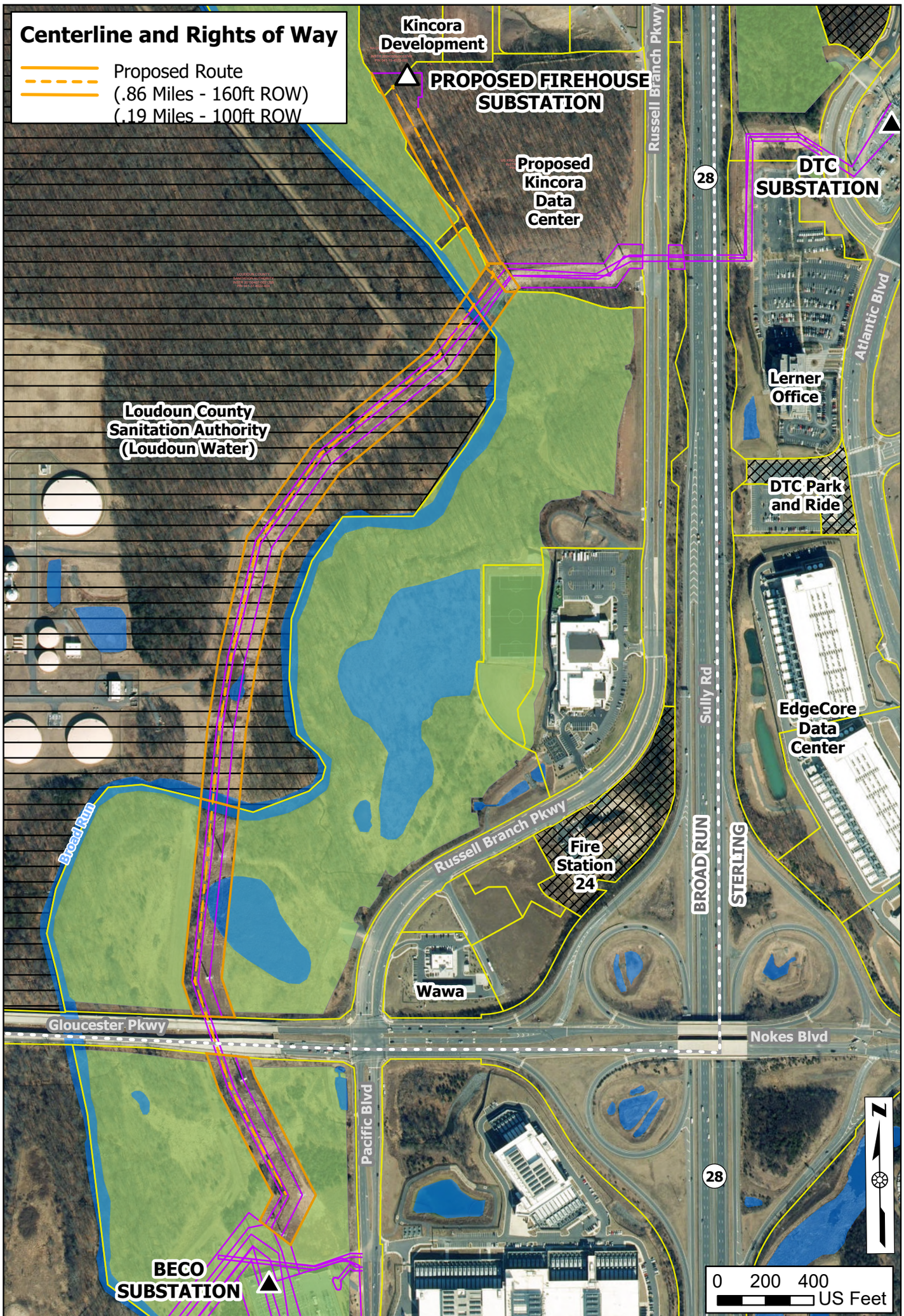
A. Right-of-way ("ROW")

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 0.9 mile over an existing 160-foot-wide electric transmission utility easement which is located perpendicular to Gloucester Parkway to the west of the intersection with Gloucester Parkway and Rt 28. The Proposed Route also overlaps an open space easement. See Attachment II.A.6.

The existing easement for the 160-foot-wide right-of-way has been acquired for the majority of the length of the proposed transmission line from the proposed Firehouse substation to the BECO Substation. An approximately 0.16-mile-long temporary line is needed for Line #2143. This temporary line will facilitate the cut in of Line #2207, and the installation of wire over existing Line #2143 wire that needs to be deenergized during construction outside of BECO Substation. The temporary line will require approximately 30 feet of additional temporary right-of-way on the western side of existing Company right-of-way for approximately 0.16 mile for a total of approximately 0.60 acres and will be needed for approximately six (6) months. Attachment II.A.6 depicts the land crossed by the Proposed Route. The cost of the temporary line is included in the total Project costs.

Detuning devices are also needed on the proposed structures from BECO Substation to Firehouse Substation. They were previously installed on the BECO Substation to DTC Substation project per Loudoun County Water's recommendation.



Existing Substation
Proposed Substation
Existing Dominion Transmission Line
Parcel Boundaries
Magisterial District Boundary
Waterbodies
Loudoun County Board of Supervisors Easement
Loudoun County Owned/Leased
Public Lands

Attachment II.A.6
Proposed Route
Loudoun County, Virginia

Dominion Energy®

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 right-of-way for the Proposed Route will be primarily 160 feet wide. The land crossed by the proposed alignment within the existing 100-feet right-of-way has already been cleared of trees. The remaining 60-feet will require tree clearing. This route includes crossing a Broad Run twice, 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. The final 0.19 mile of the Project to connect to the Firehouse Substation will require tree clearing of a new 100-feet right-of-way.

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 avoid land disturbance 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
- 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 primarily within existing ROW (*i.e.*, Lines #2207 and #2496), and construction of a new 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 primarily adequate with the exception of 0.19 mile of new 100-foot-wide right-of-way outside the proposed Firehouse Substation.

Because the existing rights-of-way and Company-owned property are adequate to construct the proposed Project, only 0.19 mile of new right-of-way is necessary to connect the existing right-of-way to the new substation. 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 significant 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 plans to construct the Project in a manner that minimizes outage times on Line #2207. Assuming the Commission issues a final order by January 13, 2027, and construction commences around May 2027, the cut-in of the lines going to Firehouse Substation should occur in February 2029. Two outages on Line #2207 are anticipated during construction. The first outage should occur in the Spring of 2028 and should be no longer than 30 days. The purpose of this outage is to install the cut-in structures within the existing Line #2207 right-of-way, install temporary line configuration for Line #2143 and make ready the existing transmission, static and fiber lines for the new Firehouse line cut-in. The second outage will occur in February 2028 and should last no longer than 30 days. The purpose of this outage will be to return Line #2143 to normal operating configuration, cut in the new lines going to Firehouse and energize the station. No service to customers should be disrupted as a result of these outages, as all distribution service should be maintained. As noted in Section I.H of the Appendix, the Company estimates that construction of the Project will be completed by February 28, 2029.

The Company intends to complete this work during requested outage windows, as described above. However, as with all outage scheduling, these timeframes 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 provides a tool routinely used by the Company in routing its transmission line projects. The Company utilized Guideline #1 (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) by meeting with landowners and developers and minimizing conflict between the proposed right-of-way and present and prospective uses of the land on which the proposed Project is to be located.

The proposed Project is consistent with Guideline #2 (where practical, rights of-way should avoid sites listed on the National Register of Historic Places ("NRHP")), as it will have no impact to any site listed on the NRHP. A Stage I Pre-Application Analysis prepared by Dutton + Associates on behalf of the Company is included as an attachment to the DEQ Supplement was submitted to the Virginia Department of Historic Resources ("VDHR") on May 7, 2026.

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 Water, Loudoun County Planning and Zoning, and Virginia Department of Transportation ("VDOT"). See Sections III. and V. 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 follows 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

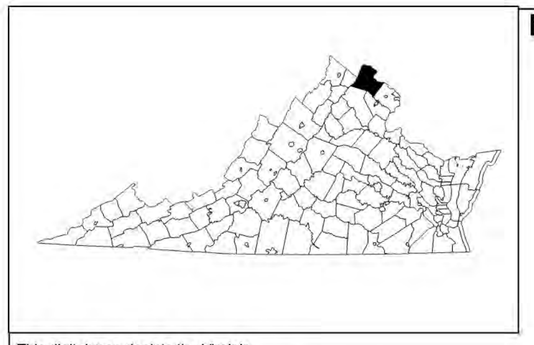
A. Right-of-way ("ROW")

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 1.05-miles proposed Project is located entirely within Loudoun County, Virginia, and Dominion Energy Virginia's service territory.

b. An electronic copy of the VDOT "General Highway Map" for Loudoun County has been marked as required and submitted with the Application. A reduced copy of the map is provided as Attachment II.A.12.b.

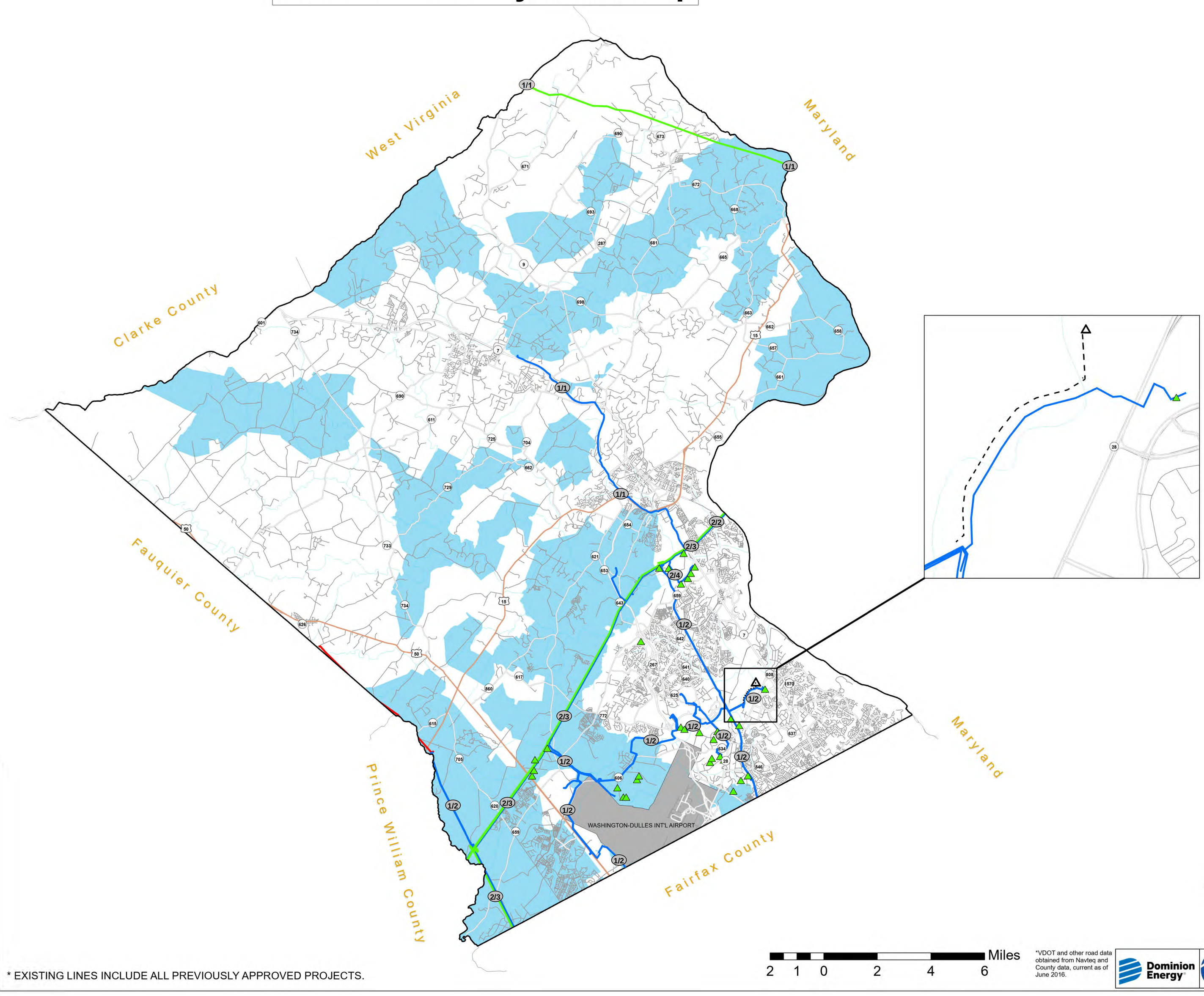


MAP DATE: 4/2/2026

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 12/31/2025. Other Company facilities previously authorized by the SCC may be depicted on prior SCC approved county maps.

Because the Golden-Mars Lines route has not yet been finalized and approved by the Commission, it is not depicted on this map. *See Application of Virginia Electric and Power Company for approval and certification of electric transmission facilities: 500 kV and 230 kV Golden-Mars Lines, Lockridge 230 kV Loop, Sojourner 230 kV Loop, and Related Projects*, Case No. PUR-2025-00056, Order at 26 (Apr. 9, 2026); *see also id.*, Virginia Electric and Power Company's Status Update Pursuant to Ordering Paragraph (4) of April 9, 2026, Motion to Stay Ordering Paragraph (5) of the Same, and Request for Expedited Treatment (Apr. 23, 2026).



Legend

- Proposed 230 kV Transmission Line
- (1/2) Number of Lines of Structures/Number of Circuits
- △ Proposed Substation
- ▲ Existing Substation
- 115 kV *
- 230 kV *
- 500 kV *

Provider Service Territory

- NOVEC
- VEPCO

* EXISTING LINES INCLUDE ALL PREVIOUSLY APPROVED PROJECTS.

Miles
2 1 0 2 4 6

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

Dominion Energy | CHA

Attachment ILA-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: The newly built portions of the proposed Firehouse Lines (a total of two circuits) will be designed and operated at 230 kV with no anticipated voltage upgrade and each circuit will have a transfer capability of 1,573 MVA. The existing portions of Line #2207 also have an existing transfer capacity 1,573 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: The proposed Firehouse Lines will include three-phase twin-bundled 768.2 ACSS/TW/HS type conductor arranged as shown in Attachments II.B.3.a - II.B.3.b. The twin-bundled 768.2 ACSS/TW/HS 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;

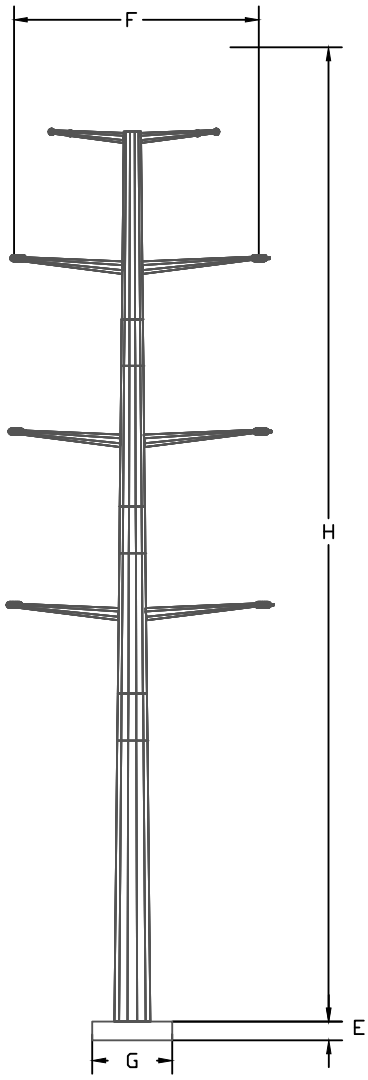
h. the maximum, minimum and average structure heights;

i. the average span length; and

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

Response: See Attachments II.B.3.a-b.

For subpart (a), see Attachment II.B.3.c for approximate mapping of the proposed structures along the Proposed Route, which is subject to change during final engineering.

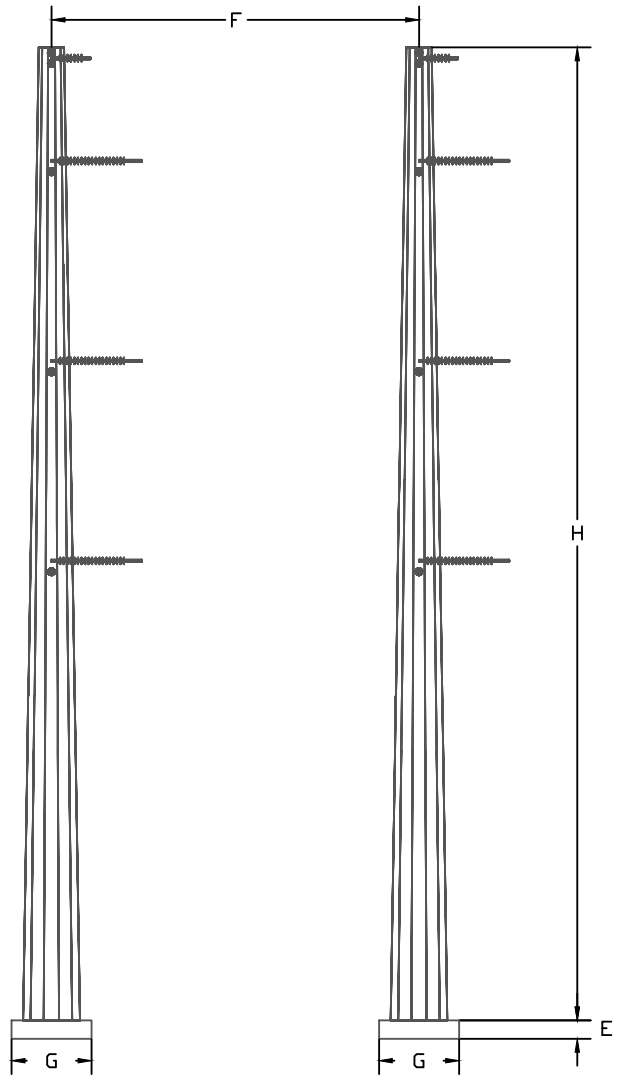


230 kV DC ENGINEERED MONOPOLE DEADEND STRUCTURE

A.	MAPPING OF THE ROUTE:	SEE ATTACHMENT II.B.3
B.	RATIONALE FOR STRUCTURE TYPE:	TYPICAL CONFIGURATION FOR DOUBLE CIRCUIT MONOPOLE DEADEND STRUCTURES.
C.	LENGTH OF R/W (STRUCTURE QTY):	1.05 MILES (10 STRUCTURES)
D.	STRUCTURE MATERIAL:	GALVANIZED STEEL
	RATIONALE FOR MATERIAL:	GALVANIZED STEEL WAS SELECTED TO MATCH OTHER LINES IN THE AREA AND IS COMPANY'S STANDARD.
E.	FOUNDATION MATERIAL:	CONCRETE
	AVERAGE FOUNDATION REVEAL:	SEE NOTE 2
F.	AVERAGE WIDTH AT CROSS ARM:	26'
G.	AVERAGE WIDTH AT BASE:	SEE NOTE 2
H.	MINIMUM STRUCTURE HEIGHT:	105'
	MAXIMUM STRUCTURE HEIGHT:	165'
	AVERAGE STRUCTURE HEIGHT:	120'
	AVERAGE SPAN LENGTH (RANGE):	455' (210'-640') (SEE NOTE 4)
I.	MINIMUM CONDUCTOR-TO-GROUND:	22.5' (AT MAXIMUM OPERATING TEMPERATURE)

NOTES:

1. INFORMATION CONTAINED ON DRAWING IS PRELIMINARY IN NATURE AND SUBJECT TO CHANGE DURING FINAL DESIGN.
2. A MINIMUM FOUNDATION REVEAL SHALL BE 1.5 FEET. FOUNDATION DIAMETER SHALL BE BASED ON FINAL ENGINEERING.
3. STRUCTURE HEIGHTS ARE MEASURED FROM STRUCTURE CENTERLINE AND DO NOT INCLUDE FOUNDATION REVEAL.
4. THE SPAN ASSOCIATED WITH EACH STRUCTURE IS THE AHEAD SPAN.

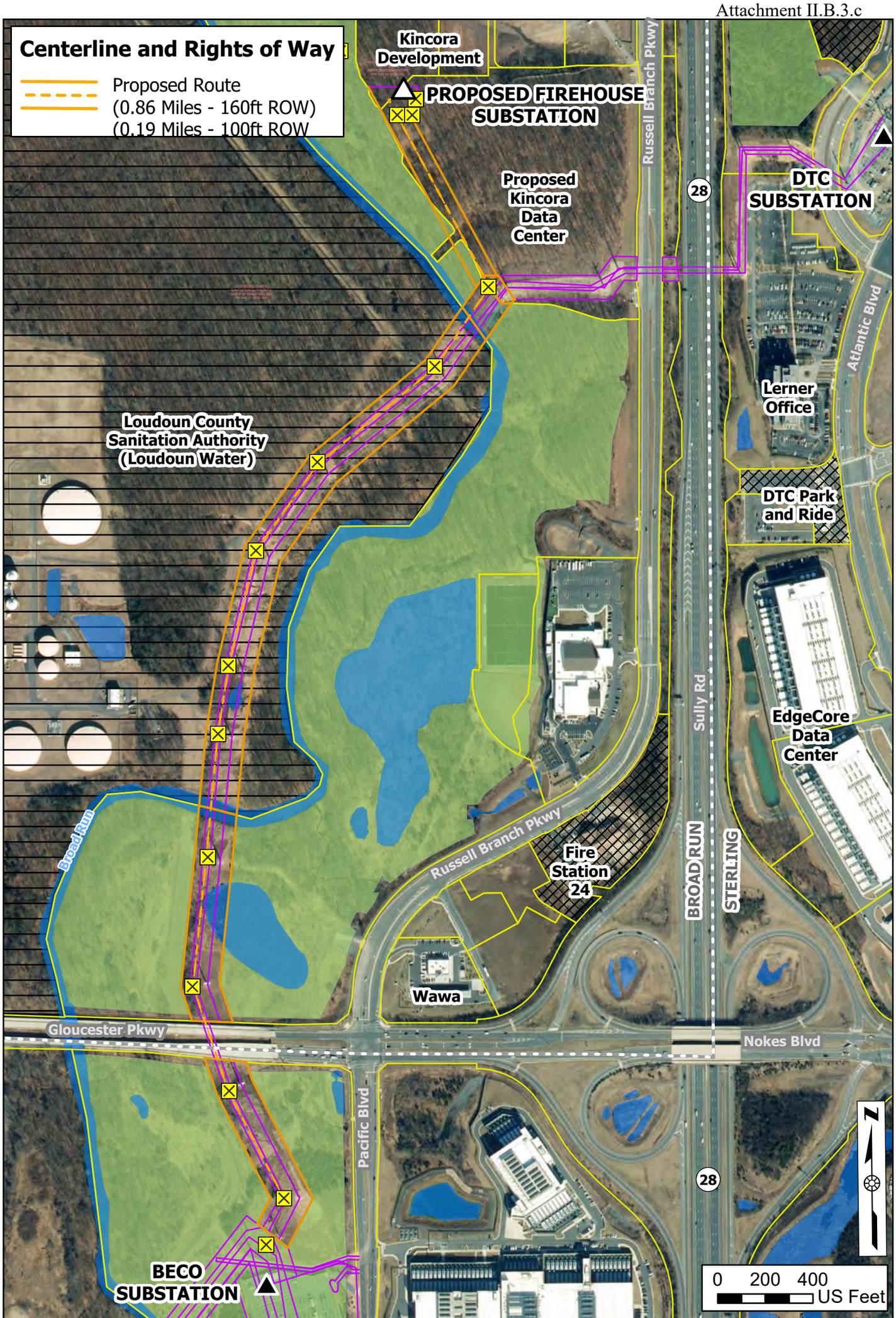


230 kV DC ENGINEERED 2-POLE DEADEND STRUCTURE

A.	MAPPING OF THE ROUTE:	SEE ATTACHMENT II.B.3
B.	RATIONALE FOR STRUCTURE TYPE:	TYPICAL CONFIGURATION FOR DOUBLE CIRCUIT 2-POLE DEADEND STRUCTURES.
C.	LENGTH OF R/W (STRUCTURE QTY):	1.05 MILES (2 STRUCTURES)
D.	STRUCTURE MATERIAL:	GALVANIZED STEEL
	RATIONALE FOR MATERIAL:	GALVANIZED STEEL WAS SELECTED TO MATCH OTHER LINES IN THE AREA AND IS COMPANY'S STANDARD.
E.	FOUNDATION MATERIAL:	CONCRETE
	AVERAGE FOUNDATION REVEAL:	SEE NOTE 2
F.	AVERAGE WIDTH AT TOP:	65' (36'-94') (SEE NOTE 5)
G.	AVERAGE WIDTH AT BASE:	SEE NOTE 2
H.	MINIMUM STRUCTURE HEIGHT:	105'
	MAXIMUM STRUCTURE HEIGHT:	130'
	AVERAGE STRUCTURE HEIGHT:	115'
I.	AVERAGE SPAN LENGTH (RANGE):	360' (60'-895') (SEE NOTE 4)
J.	MINIMUM CONDUCTOR-TO-GROUND:	22.5' (AT MAXIMUM OPERATING TEMPERATURE)

NOTES:

1. INFORMATION CONTAINED ON DRAWING IS PRELIMINARY IN NATURE AND SUBJECT TO CHANGE DURING FINAL DESIGN.
2. A MINIMUM FOUNDATION REVEAL SHALL BE 1.5 FEET. FOUNDATION DIAMETER SHALL BE BASED ON FINAL ENGINEERING.
3. STRUCTURE HEIGHTS ARE MEASURED FROM STRUCTURE CENTERLINE AND DO NOT INCLUDE FOUNDATION REVEAL.
4. THE SPAN ASSOCIATED WITH EACH STRUCTURE IS THE AHEAD SPAN.
5. STRUCTURE WIDTH VARIES.



Legend

- Proposed Structure
- Existing Substation
- Proposed Substation
- Existing Dominion Transmission Line
- Parcel Boundaries
- Magisterial District Boundary
- Waterbodies
- Loudoun County Board of Supervisors Easement
- Loudoun County Owned/Leased
- Public Lands

Attachment II.B.3.c
Approximate Mapping of Proposed Structures
Loudoun County, Virginia

Dominion Energy

CHA

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: The approximate structure heights along the Proposed and Alternative Routes are provided in the table below, based on preliminary conceptual design, not including foundation reveal and subject to change based on final engineering design.

Route	Minimum (ft.)	Maximum (ft.)	Average (ft.)
Proposed Route	105	165	120

The average structure height listed above (120 feet) is higher than the average structure height (106 feet) of existing lines in this right-of-way due to a proposed transmission line crossing outside of the Company's BECO Substation. Aside from the proposed structures on either side of the proposed transmission line crossing, most of the proposed structure heights are the same as the existing DTC Lines structure heights which are on average 106 feet.

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 typical existing facilities to be removed, comparable photographs or representations for proposed structures, and 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]** ***Photographs for typical existing facilities to be removed***

Not applicable.

[b] ***Comparable photographs or representations for proposed structures***

See Attachments II.B.6.b.i-ii for representative photographs of the proposed structures.

[c] ***Visual simulations from historic and other key locations***

Visual simulations showing the appearance of the proposed transmission structures at identified historic locations within 1.05 miles of the proposed centerline of the Proposed Route are provided. See Attachment 2.I.1 to the DEQ Supplement for visual simulations and renderings of key locations evaluated. The simulations were created using Geographic Information Systems modeling to depict whether the proposed structures will be visible from the identified historic locations. 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	Comments
Broad Run Bridge and Toll House /VDHR#053-0110	1	The Proposed Route would have no impact on 053-0110.

II.B.6.b.i – Typical Double Circuit 230kV Monopole – Double Deadend

II.B.6.b.ii – Typical Double Circuit 230kV 2-Pole – Double Deadend

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: The proposed Project requires construction of the new 230-34.5 kV Firehouse Substation in Loudoun County, Virginia, as well as minor substation-related work at the Company's existing BECO and Paragon Park Substations.

Firehouse Substation

The proposed Firehouse Substation initially will be constructed with a GIS 230 kV ring bus with four 4000A GIS circuit breakers, two 230 kV line terminals, and other associated equipment, including a GIS/Control enclosure to accommodate GIS equipment, protective relays, communications, and security cabinets. The total area of the proposed Firehouse Substation within the substation fence is approximately 1.8 acres.

The one-line diagram and general arrangement for the proposed Firehouse Substation are provided as Attachment II.C.1 and Attachment II.C.2, respectively.

Additional Substation-Related Work

In addition to the construction described above, the Company anticipates performing the following tasks:

- Protective relay replacements at the existing BECO and Paragon Park Substations

Cost details associated with the substation work are provided in Section I.I.

ATTACHMENT II.C.1

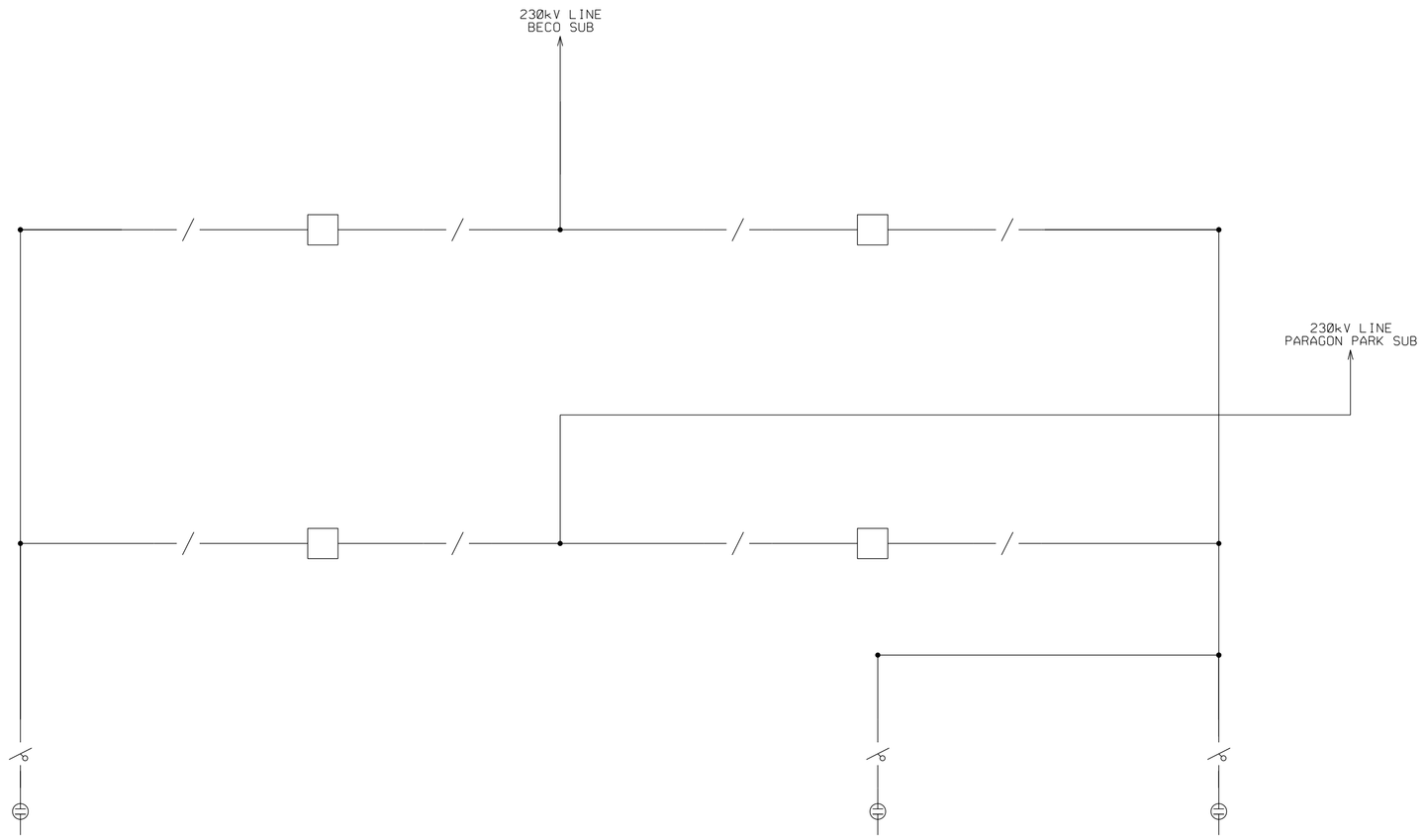
LEGEND

CIRCUIT BREAKER

DISCONNECT SWITCH

DISCONNECT SWITCH WITH MOTOR OPERATOR

CIRCUIT SWITCHER



PRELIMINARY
NOT FOR CONSTRUCTION

Bgn	Approval
Date:	
Project No.	
Network No.	
BM No.	
Description	

Revisions

00	S	DEMARCATION INDICATOR - SEE SUB. OL.	
99	T	DEMARCATION INDICATOR - SEE TLIN. OL.	
98	D	DEMARCATION INDICATOR - SEE DIST. OL.	
97	C	DEMARCATION INDICATOR - SEE CUST. DOC.	

Dominion Energy

PRELIMINARY ONE LINE DIAGRAM

Drawn By: GCB	Date	Substation	FIREHOUSE
Approval	Date	Drawing No.	II.C.1

USERNAME

FILESSSSSSSSSSSSSSS

Attachment II.C.2

PRELIMINARY
NOT FOR CONSTRUCTION

GENERAL ARRANGEMENT PLAN
FIREHOUSE SUBSTATION
LOUDOUN COUNTY, VIRGINIA

Dominion Energy

	Name	Date	Project No.	Sheet No.
Designed by:	GCB			
Approvals			Scale	1 OF 1
Approvals				
Approvals			B/M No.	Revisions

Revisions

No.	Date	By	Description	Checked/Appr.

Project Number
B/M

98

Typical Drawing Information

Library Location	Cell Name	B/M Assembly	Pipe Stand Foundation Cells (Pier)	Pipe Stand Foundation Cells (Spread)	Foundation Cells for Other Typical Structures (Pier) (Spread)	Steel Detail & Assembly

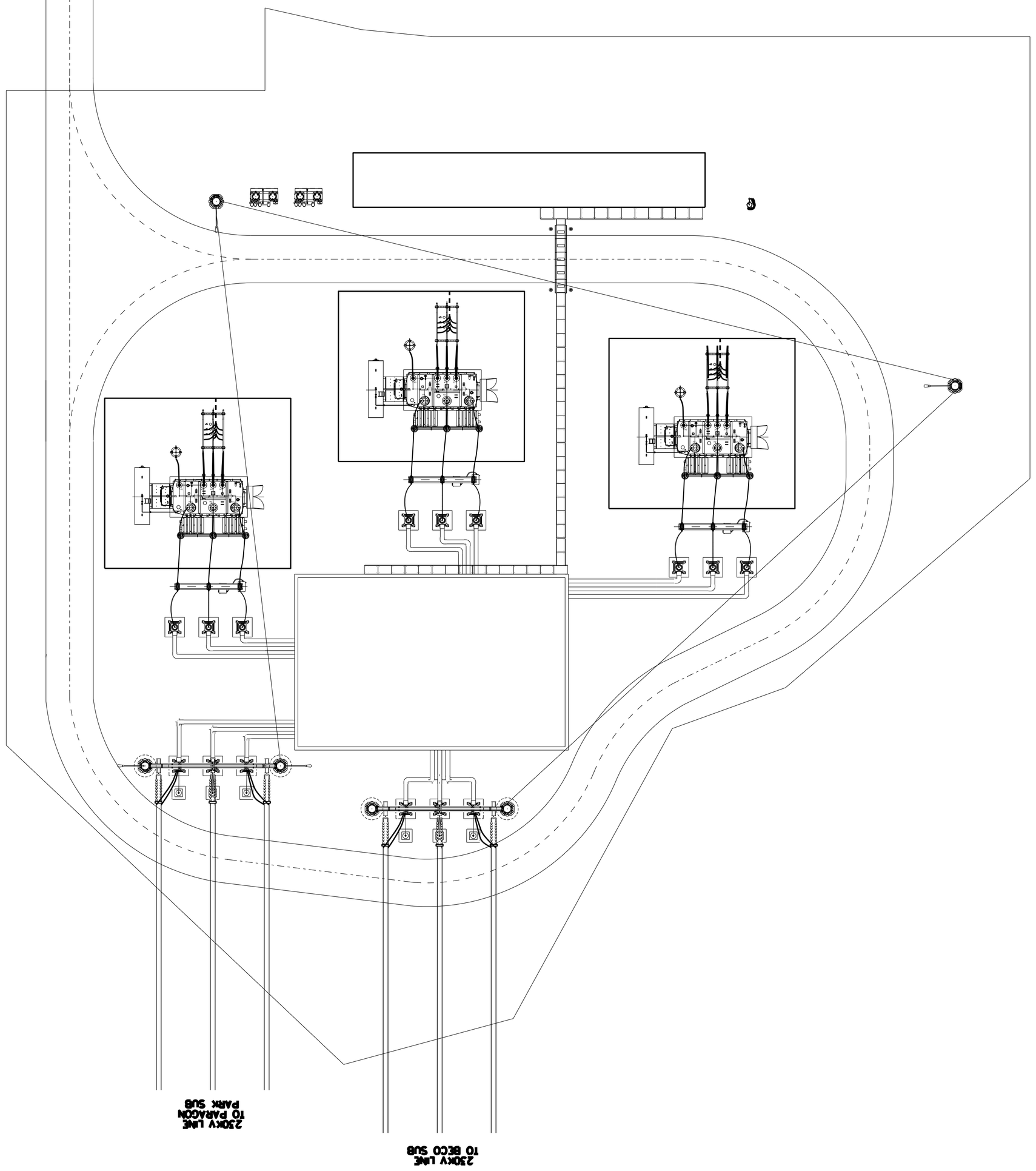
$USERNAME$

Cad File Name

Drawing No.
II.C.2

PLOTTED: $$$$$$$$$$$$SYTIME

$FILENAME$
PLOTTED: $$$$$$$$$$$$SYTIME
$USERNAME$



ATTACHMENT II.C.2

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: Descriptions of the lands crossed by the route and number of dwellings within proximity of the route are described below for the Proposed Route.

For additional description of the character of the area that will be traversed by the Project's Proposed Route and related impacts, see the DEQ Supplement, specifically as to land use (Sections 2.K 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).

See Attachment III.A.1 for a map depicting prime farmland and farmland of statewide importance, and Section 2.L of the DEQ Supplement for the estimated amount of farmland and forestland within the right-of-way of each route alternative.

Proposed Route

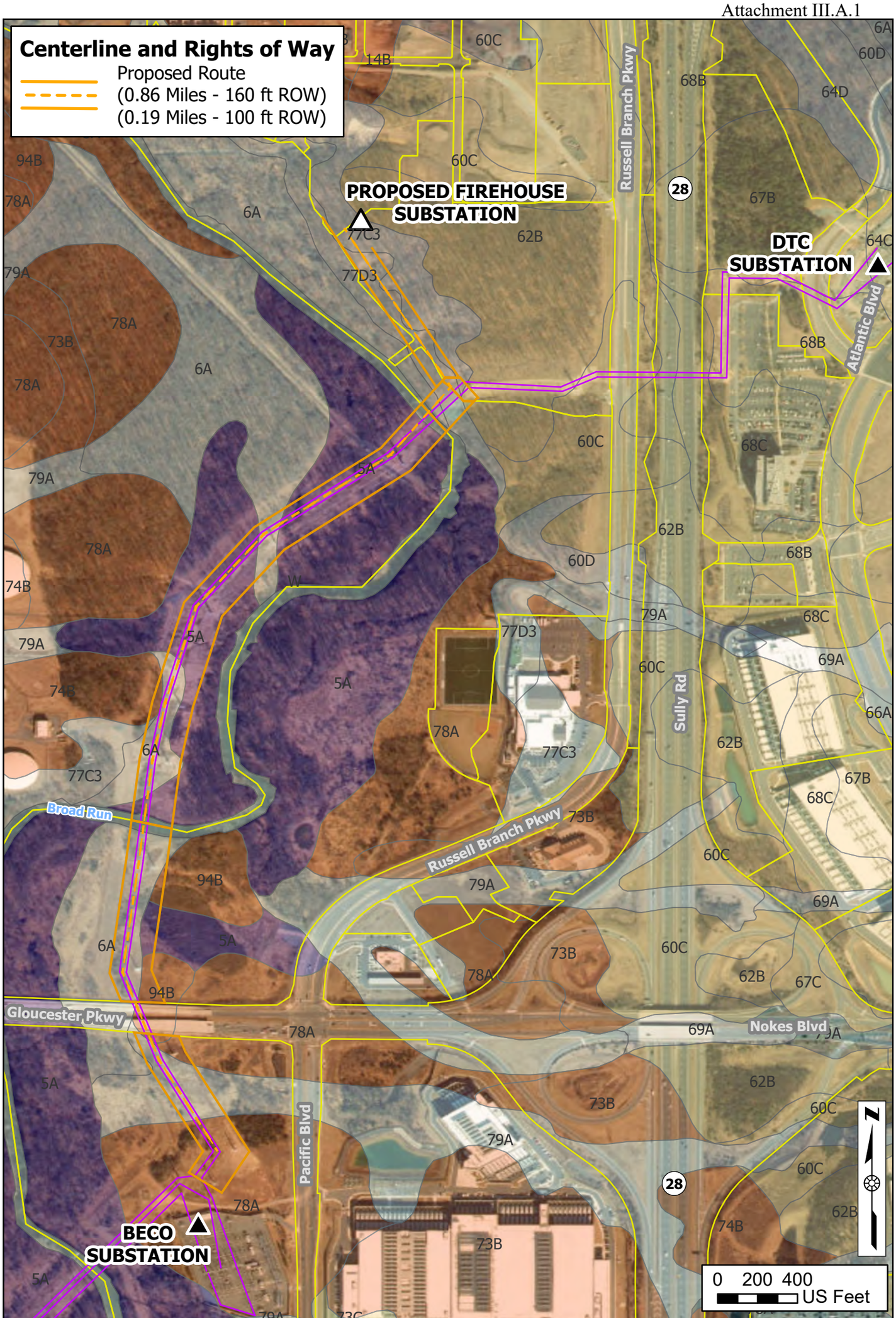
The Proposed Route is approximately 1.05 miles in length and is located entirely within Loudoun County in an area that is largely characterized by industrial and commercial development, the Loudoun Water Ashburn Campus and VDOT rights of way. The area is surrounded by existing data centers, scattered light industrial and other business/commercial land use. The Proposed Route crosses mostly forested lands (about 81% of its total construction footprint) in an existing right-of-way. The Proposed Route crosses Broad Run in two places and Gloucester Parkway.

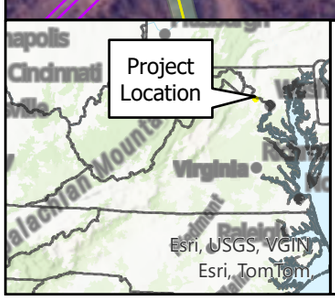
The Proposed Route crosses about 3% of open space easement which is forested. An existing 160-foot transmission line right of way has been cleared to 100-feet wide, but will require an additional 60-feet of clearing. In addition, there is approximately 0.19 mile of new right of way to near the Firehouse Substation that will require up to 100 feet wide of tree clearing. Dominion Energy Virginia will coordinate with state and federal agencies as needed to determine any construction-timing windows or other mitigation would be required for the Project.

Based on the Desktop Wetland Review completed for the project using USGS hydrography Dataset, Loudoun County Hydrology (water features lines and polygons) datasets, and Loudoun County Wetlands (wetland feature polygons) Dataset, the Proposed Route crosses Broad Run, a perennial waterbody in two locations. Approximately 5.5 acres of emerging wetlands, 5.0 acres of forested

wetlands and 0.8 acre of riverine wetlands occur within the right-of way of the Proposed Route.

According to County parcel data, zoning data, and aerial photo analysis, there are no residential dwellings within 500 feet of the centerline of the Proposed Route, one dwelling within 250 feet of the centerline, zero dwellings within 100 feet of the centerline, and zero buildings within the right-of-way of the Proposed Route.





- Existing Substation
- Proposed Substation
- Existing Dominion Transmission Line
- Parcel Boundaries

SSURGO Soils Farmland Class

- All areas are prime farmland
- Prime farmland if protected from flooding
- Farmland of statewide importance
- Not prime farmland

Attachment III.A.1
Prime Farmland
Loudoun County, Virginia

Dominion Energy | CHA

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

At Dominion Energy Virginia, the Company believes stakeholder engagement is critical and robust efforts have taken place to engage with the community and share details on the Project. Outreach with the public involved residential communities, local businesses and organizations, environment organizations, elected officials, governmental bodies, community leaders, and other community members.

Beginning in February 2026, the Company commenced and coordinated community and stakeholder engagement with Loudoun County, regarding the proposed Project.

- The week of February 16, 2026, the Company announced the Project with a mailer to 846 residences and businesses in vicinity of the Project area. The mailer, which invited the public to learn more about the Project, included a route map, announced dates for upcoming meetings and contained other related information to keep the public informed as plans for the Project developed. The mailer included the dates of the March 25, 2026 in-person and April 1, 2026 virtual community meetings. A copy of the February 2026 Project announcement mailer as well as Project and community meeting information, were added to the Company's website at www.dominionenergy.com/beco-firehouse in February 2026.

- The project website www.dominionenergy.com/beco-firehouse was created in early February 2026 to provide a source of accurate information specific to the Project. It includes an overview of the need, timelines, static and interactive maps, photo and structure simulations, community engagement details, a recording of a virtual presentation and the presentation slides, contact information, and information on the SCC process as well as application materials. See Attachment III.B.1 for viewpoint and structure simulations

- On February 17, 2026 and February 18, 2026, the Company had a Project overview meeting with county supervisors and officials. At that meeting, the Company provided an overview of the Project, which included a discussion of need, a map of the Project area, timelines, and an outreach plan. Alignment of homeowners' associations ("HOAs") near the project area were discussed to ensure that they were part of the direct outreach plan.

- On February 18, 2026, the Company introduced the Project to the Loudoun

Reliability Engagement Group (LREG), a stakeholder engagement group that includes local, statewide, and regional cultural and historic resource stewardship organization, the business community and workforce organizations, the environmental community, and organizations that represent the needs of underrepresented communities. The LREG has met approximately every other month since 2022 to discuss electric transmission projects and topics. The discussion in this meeting involved the Project area, timelines, and an outreach plan.

- On March 18, 2026, a virtual presentation of the project was offered to 9 contacts in management positions for the HOAs in the Kincora Community. Multiple efforts were made in reaching out to the contacts to either join or reach out directly with contacts. One representative attended.

- On March 25, 2026, an in-person open house community meeting was held from 5:30 p.m. to 7:30 p.m. at the Embassy Suites North Dulles. The venue is approximately 5 minutes from the project area. Posters at the event offered information specific to the project (overview, timelines, maps, viewpoint and structure simulations, QR code to project website) as well as posters that covered various areas of Dominion Energy projects, e.g., environmental, SCC process, EMF. A computer demonstrating an interactive map and feedback tool was also available. There were seven (7) external attendees, none of which were residents or business owners near the Project area.

- On April 1, 2026, a virtual community meeting was held at 12 p.m. until 12:33 p.m. During the meeting a presentation was shared that included an overview on the electricity industry, governing bodies that the Company works with, drivers for increased load demand, project overview, project timeline, project maps, viewpoint and structure simulations, and contact information. A question-and-answer session was also held to address questions that were asked. Several project team members attended and a few answered questions directly. A recording of the meeting and the slides that were shared have been uploaded to the project webpage – www.dominionenergy.com/beco-firehouse.

- From March 9, 2026 through April 8, 2026, the Company ran a local advertising campaign with digital and print ads to promote awareness of the project and the opportunities to engage with the project team. The mediums included Nextdoor, Facebook, Instagram, Google, Loudoun Times-Mirror, and Washington Post – Local Living. Digital ads included English and Spanish versions. See Attachment III.B.2 for the campaign elements and creative details, including images. See Attachment III.B.3 for the campaign results.

- On April 23, 2026, the Company met with NA Dulles Real Estate Investor, LLC ("NA Dulles"), one of the property owners impacted by the Proposed Route, to

discuss the project, and will continue to communicate NA Dulles regarding the Project.

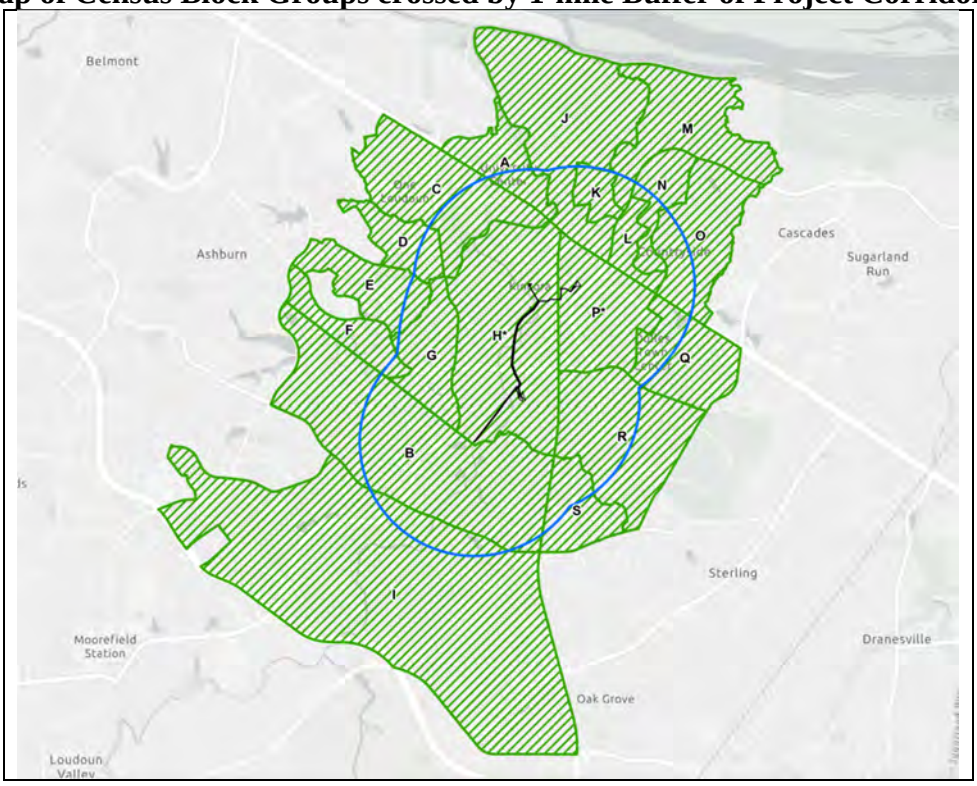
Environmental Justice

The Company researched the demographics of the surrounding communities using data from the U.S. Census Bureau's American Community Survey 5-Year Estimates (2019-2023). This screening identified 19 Census Block Groups ("CBGs") located within one mile of the Project's 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 19 CBGs within one mile of the Project's proposed route, two CBGs are crossed by the route. Both CBGs meet the community of color definition, and one CBG meets the low-income definitions.

See the tables below for the Environmental Justice Community analysis pursuant to VEJA conducted for this Project.

Map of Census Block Groups crossed by 1-mile Buffer of Project Corridor



Map depicts the proposed site in Loudoun County, Virginia. The project boundary has a 1-mile area around it (blue). Each census block group that transects the 1-mile area is shown (green) and labeled with the letter code corresponding to the tables below.

Communities of Color by Census Block Group Table

Identifying Communities of Color by Census Block Group (Source: U.S. Census Bureau, 2019-2023 American Community Survey 5-Year Estimates; Tables B03002, C16002)														
		Race and Ethnicity										Linguistics		
Letter Code	Geographic Area	Total Population	Total Population of Color (%)	White, non-Hispanic (%)	Black/African American, non-Hispanic (%)	American Indian and Alaska Native, non-Hispanic (%)	Asian, non-Hispanic (%)	Native Hawaiian and Other Pacific Islander,non-Hispanic (%)	Some other Race, non-Hispanic (%)	Two or more races, non-Hispanic (%)	Hispanic or Latino (%)	Limited English Speaking Households (count)	Limited English Speaking Households (%)	VEJA EJ Community?
Virginia		8,657,499	41.0%	59.0%	18.4%	0.1%	6.8%	0.1%	0.5%	4.3%	10.7%	89,698	2.7%	--
Loudoun County		427,082	**47.9%**	52.1%	7.4%	**0.1%**	**21.0%**	0.1%	**0.6%**	**4.6%**	**14.2%**	5,640	**4.0%**	--
A	511076110021	1,583	39.2%	60.8%	6.8%	**0.3%**	**7.1%**	0.0%	**0.6%**	0.0%	**24.4%**	0	0.0%	**Yes**
B	511076110061	1,958	**56.5%**	43.5%	16.8%	0.0%	**27.6%**	**0.3%**	**0.7%**	4.0%	7.2%	14	2.6%	**Yes**
C	511076110152	1,460	29.7%	70.3%	2.9%	**0.3%**	**10.2%**	0.0%	0.0%	**9.2%**	7.0%	32	**5.8%**	**Yes**
D	511076110162	2,417	**46.0%**	54.0%	13.1%	**0.6%**	**15.5%**	0.0%	0.0%	**7.6%**	9.2%	26	**2.8%**	**Yes**
E	511076110171	2,212	27.2%	72.8%	1.3%	0.0%	**16.6%**	0.0%	0.0%	1.1%	8.1%	29	**3.2%**	**Yes**
F	511076110181	1,793	38.6%	61.4%	3.1%	0.0%	**13.8%**	0.0%	0.0%	**6.3%**	**15.3%**	142	**21.8%**	**Yes**
G	511076110182	1,886	9.1%	90.9%	0.4%	**0.4%**	**7.1%**	0.0%	0.0%	0.9%	0.4%	92	**7.1%**	**Yes**
H*	511076110183	600	**47.8%**	52.2%	5.7%	0.0%	**19.7%**	0.0%	**5.2%**	1.5%	**15.8%**	45	**12.2%**	**Yes**
I	511076110203	1,982	**65.4%**	34.6%	4.6%	0.0%	**46.7%**	0.0%	0.0%	**4.8%**	9.3%	122	**16.7%**	**Yes**
J	511076111011	3,121	**41.6%**	58.4%	17.9%	0.0%	4.9%	0.0%	0.3%	2.9%	**15.6%**	57	**6.1%**	**Yes**
K	511076111012	1,085	**58.5%**	41.5%	6.8%	0.0%	**20.6%**	0.0%	**1.1%**	**6.6%**	**23.3%**	58	**13.4%**	**Yes**
L	511076111013	927	**50.5%**	49.5%	**25.8%**	0.0%	**8.1%**	0.0%	0.0%	**8.5%**	8.1%	29	**7.7%**	**Yes**
M	511076111021	1,704	20.5%	79.5%	6.1%	0.0%	4.2%	0.0%	0.0%	0.0%	10.2%	62	**10.6%**	**Yes**
N	511076111022	1,155	15.5%	84.5%	0.0%	0.0%	2.7%	0.0%	0.0%	1.0%	**11.9%**	0	0.0%	**Yes**
O	511076111023	3,087	35.0%	65.0%	4.2%	0.0%	**15.7%**	0.0%	0.0%	1.3%	**13.8%**	53	**4.7%**	**Yes**
P*	511076115011	819	**62.3%**	37.7%	11.1%	**2.4%**	**44.8%**	0.0%	0.0%	1.0%	2.9%	88	**18.5%**	**Yes**
Q	511076115013	2,782	**58.4%**	41.6%	10.9%	0.0%	**16.2%**	0.0%	0.0%	**16.5%**	**14.8%**	51	**4.5%**	**Yes**
R	511076115021	1,940	**68.7%**	31.3%	15.4%	0.0%	**35.9%**	0.0%	0.0%	2.2%	**15.2%**	68	**10.8%**	**Yes**
S	511076116011	1,638	**63.6%**	36.4%	2.4%	0.0%	**21.1%**	0.0%	**0.7%**	0.6%	**38.8%**	36	**5.3%**	**Yes**

Letter codes with asterisks (*) indicate that the route directly touches the CBG. Bold cells indicate populations that meet the definition of EJ Communities per the VEJA thresholds.

Low-Income Communities by Census Block Group Table

Identifying Low Income Communities by Census Block Group (Source: HUD MFI 2023, U.S. Census Bureau, 2019-2023 American Community Survey 5-Year Estimates; Tables C17002, B19013)								
Letter Code	Geographic Area	Population under 200% Federal Poverty Threshold (%)	Median Household Income in the past 12 months	80% HUD Median	2026 FPL 200%	VEJA Low Income Threshold	% of VEJA Low Income Threshold	VEJA EJ Community?
Virginia		23.3%	$90,974	--	$64,300	--	--	
Loudoun County		9.0%	$178,707	$97,800	$64,300	HUD	182.7%	
A	511076110021	16.0%	$97,216	$97,800	$64,300	HUD	**99.4%**	**Yes**
B	511076110061	3.3%	$209,236	$97,800	$64,300	HUD	213.9%	No
C	511076110152	1.8%	$230,707	$97,800	$64,300	HUD	235.9%	No
D	511076110162	1.2%	$155,458	$97,800	$64,300	HUD	159.0%	No
E	511076110171	3.8%	$162,321	$97,800	$64,300	HUD	166.0%	No
F	511076110181	28.2%	72,077[1]	$97,800	$64,300	HUD	**73.7%**	**Yes**
G	511076110182	14.8%	$89,191	$97,800	$64,300	HUD	**91.2%**	**Yes**
H*	511076110183	11.7%	$114,618	$97,800	$64,300	HUD	117.2%	No
I	511076110203	4.8%	$118,373	$97,800	$64,300	HUD	121.0%	No
J	511076111011	9.2%	$134,722	$97,800	$64,300	HUD	137.8%	No
K	511076111012	8.2%	$123,704	$97,800	$64,300	HUD	126.5%	No
L	511076111013	**38.1%**	$74,223	$97,800	$64,300	HUD	**75.9%**	**Yes**
M	511076111021	18.7%	$162,330	$97,800	$64,300	HUD	166.0%	No
N	511076111022	3.2%	$222,991	$97,800	$64,300	HUD	228.0%	No
O	511076111023	6.5%	$198,966	$97,800	$64,300	HUD	203.4%	No
P*	511076115011	17.6%	$105,536[1]	$97,800	$64,300	HUD	107.9%	No
Q	511076115013	19.3%	$100,795	$97,800	$64,300	HUD	103.1%	No
R	511076115021	10.3%	$154,850	$97,800	$64,300	HUD	158.3%	No
S	511076116011	3.7%	$139,375	$97,800	$64,300	HUD	142.5%	No

[1] U.S. Census Bureau, 2018-2022 American Community Survey 5-Year Estimate

Letter codes with asterisks (*) indicate that the route directly touches the CBG. Bold cells indicate populations that meet the definition of EJ Communities per the VEJA thresholds.

As set forth above in Section III.B, the Company has extensively engaged all communities within the Project study area, including people in the EJ Community CBGs discussed herein. This engagement includes translations of Project information into Spanish. The Company believes that 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 the Project's Proposed Route minimizes potential impacts to EJ Communities and other populations and will not result in a significantly adverse and disproportionate 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.4 for a copy of the Company's Environmental Justice Policy.

BECO - FIREHOUSE
Transmission Line Project

Photo Location Map

1 Viewpoint Location — Proposed Transmission Line — Existing Transmission Line

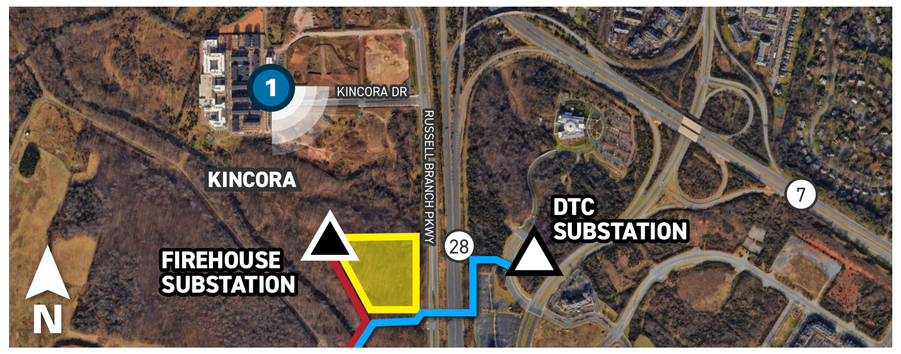
△ Existing Substation ▲ Proposed Substation ▢ Future Data Center

BECO - FIREHOUSE
Transmission Line Project

Viewpoint 1

Date: 1/19/2026 **Time:** 2:35 pm **Viewing Direction:** Southeast
Location: Kincora Dr & Rumbullion Dr

1 Viewpoint Location
Future Data Center
Proposed Transmission Line
Existing Transmission Line



Dominion Energy®

EXISTING CONDITIONS

PROPOSED CONDITIONS

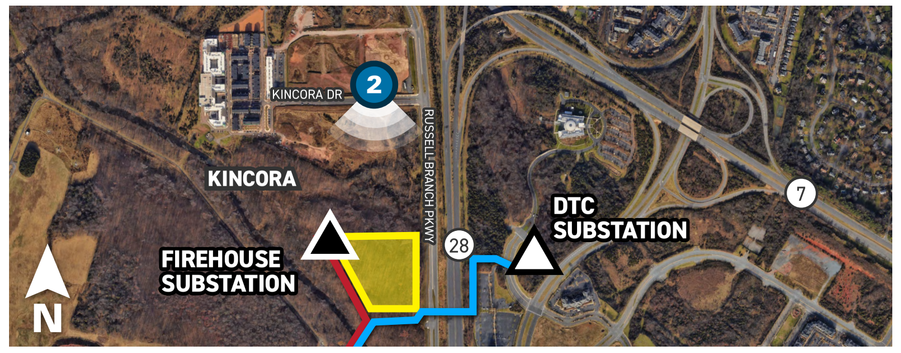
Photo simulations are for discussion purposes only. Final design is subject to change pending public, engineering, and regulatory review.

BECO - FIREHOUSE
Transmission Line Project

Viewpoint 2

Date: 1/19/2026 **Time:** 2:43 pm **Viewing Direction:** South
Location: Kincora Dr & Knowledge Dr

2 Viewpoint Location
Future Data Center
Proposed Transmission Line
Existing 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.

Attachment III.B.1

BECO - FIREHOUSE
Transmission Line Project

Viewpoint 3

Date: 1/19/2026 **Time:** 2:00 pm **Viewing Direction:** Southwest
Location: Russell Branch Pkwy

3 Viewpoint Location — Proposed Transmission Line
Existing Transmission Line

Dominion Energy®

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EXISTING CONDITIONS

PROPOSED CONDITIONS

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

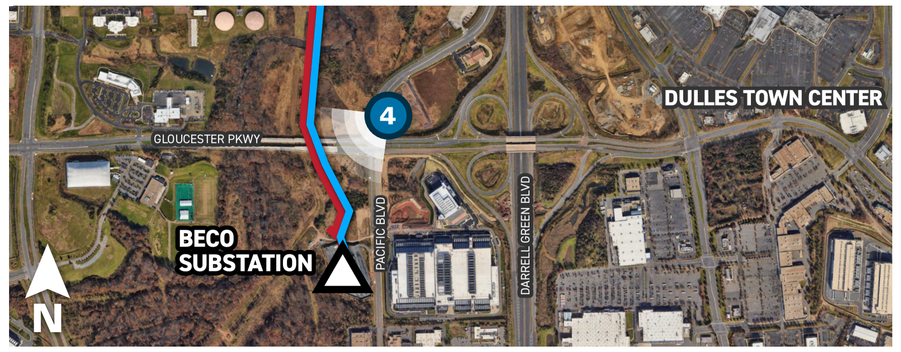
Attachment III B-1

BECO - FIREHOUSE
Transmission Line Project

Viewpoint 4

Date: 1/19/2026 **Time:** 1:25 pm **Viewing Direction:** Southwest
Location: Russell Branch Pkwy & Gloucester Pkwy

4 Viewpoint Location — Proposed Transmission Line
Existing Transmission Line



Dominion Energy®

EXISTING CONDITIONS

PROPOSED CONDITIONS

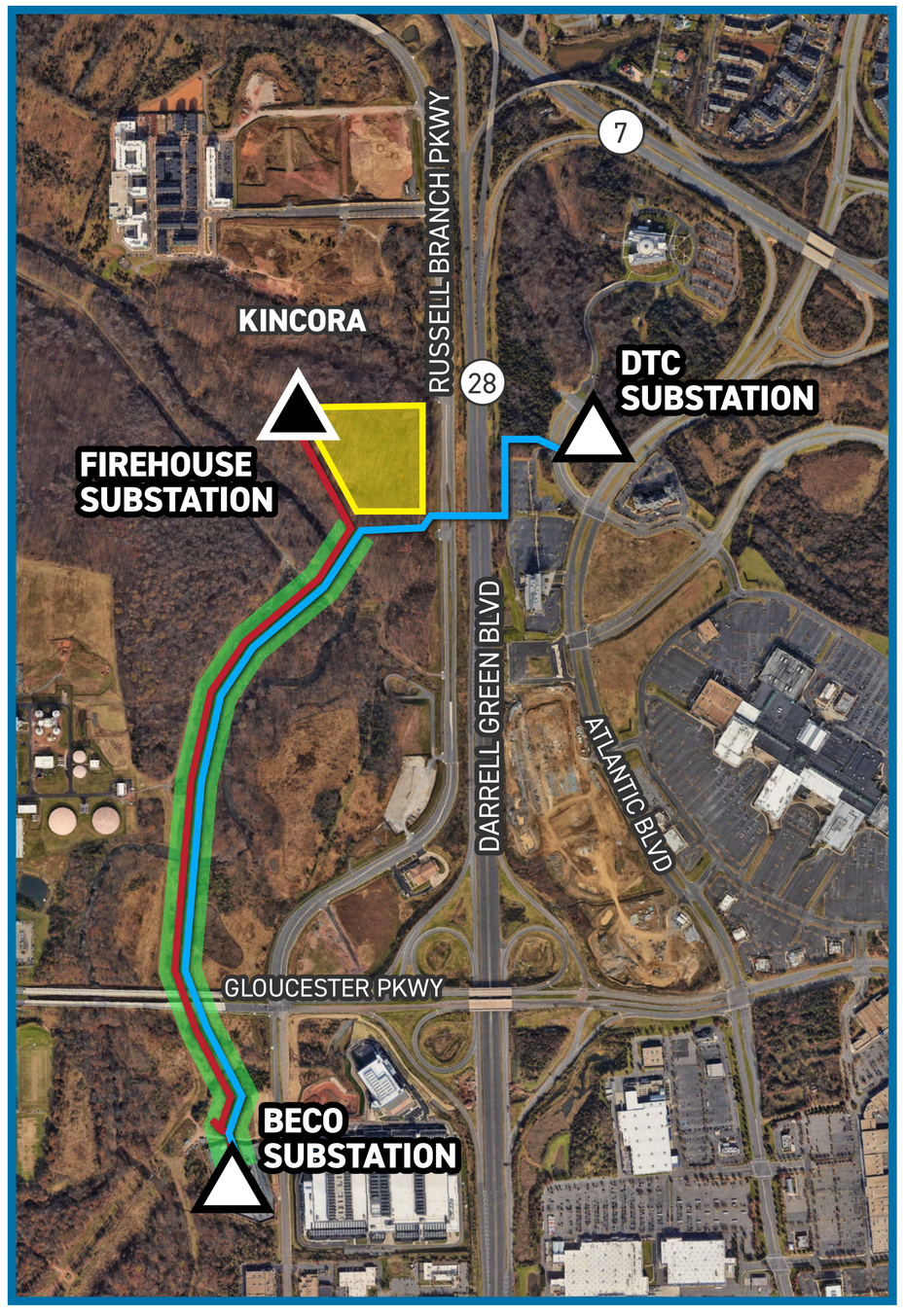
Photo simulations are for discussion purposes only. Final design is subject to change pending public, engineering, and regulatory review.

BECO - FIREHOUSE
Transmission Line Project

Typical Proposed Structure

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

Dominion Energy®

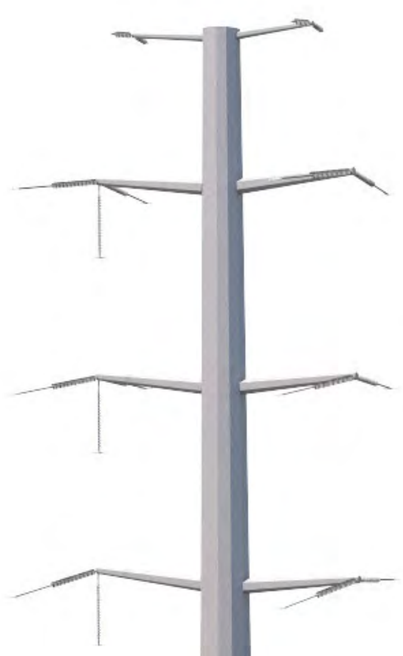


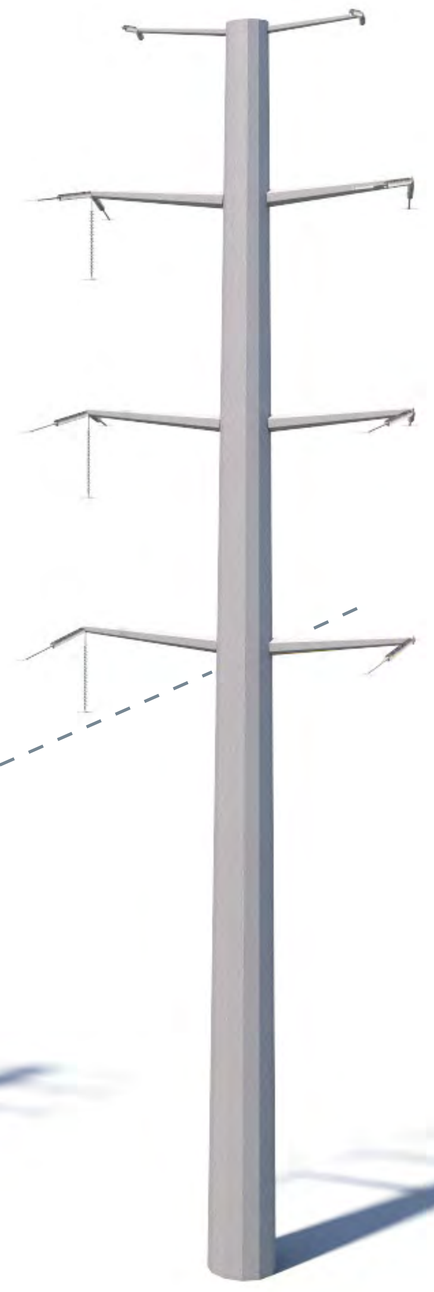
△ Existing Substation
▲ Proposed Substation
Proposed Transmission Line
Existing Transmission Line
Future Data Center
Area With Configuration Shown

105' - 165'
Height Range

Proposed Monopole

Galvanized Steel





85' - 120'
Height Range

Existing Monopole

Galvanized Steel

160’ Existing & Proposed Right-of-Way

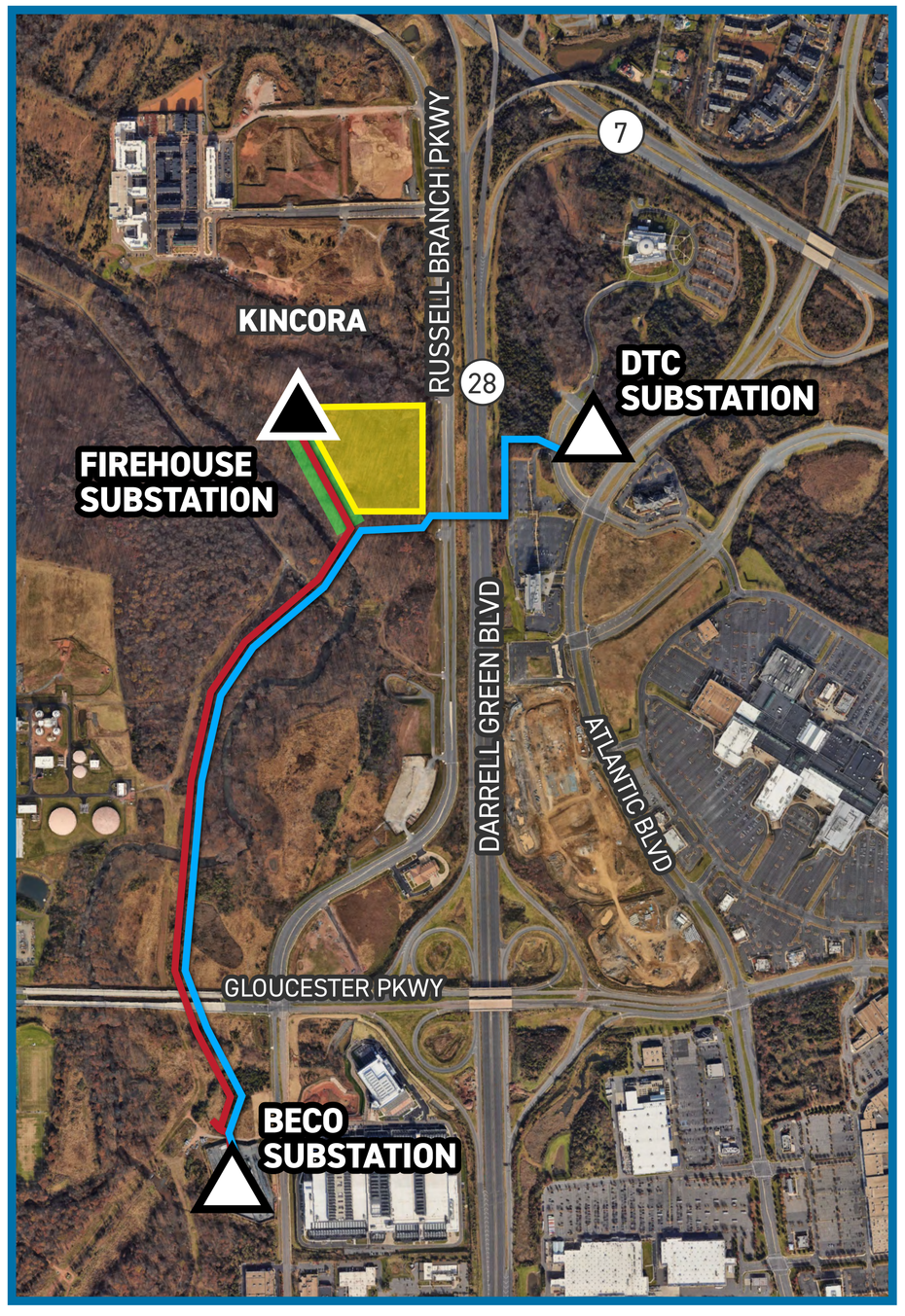
Note: Structure heights are identical to existing except for immediately outside the Firehouse and BECO substations.

BECO - FIREHOUSE
Transmission Line Project

Typical Proposed Structure

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

Dominion Energy®

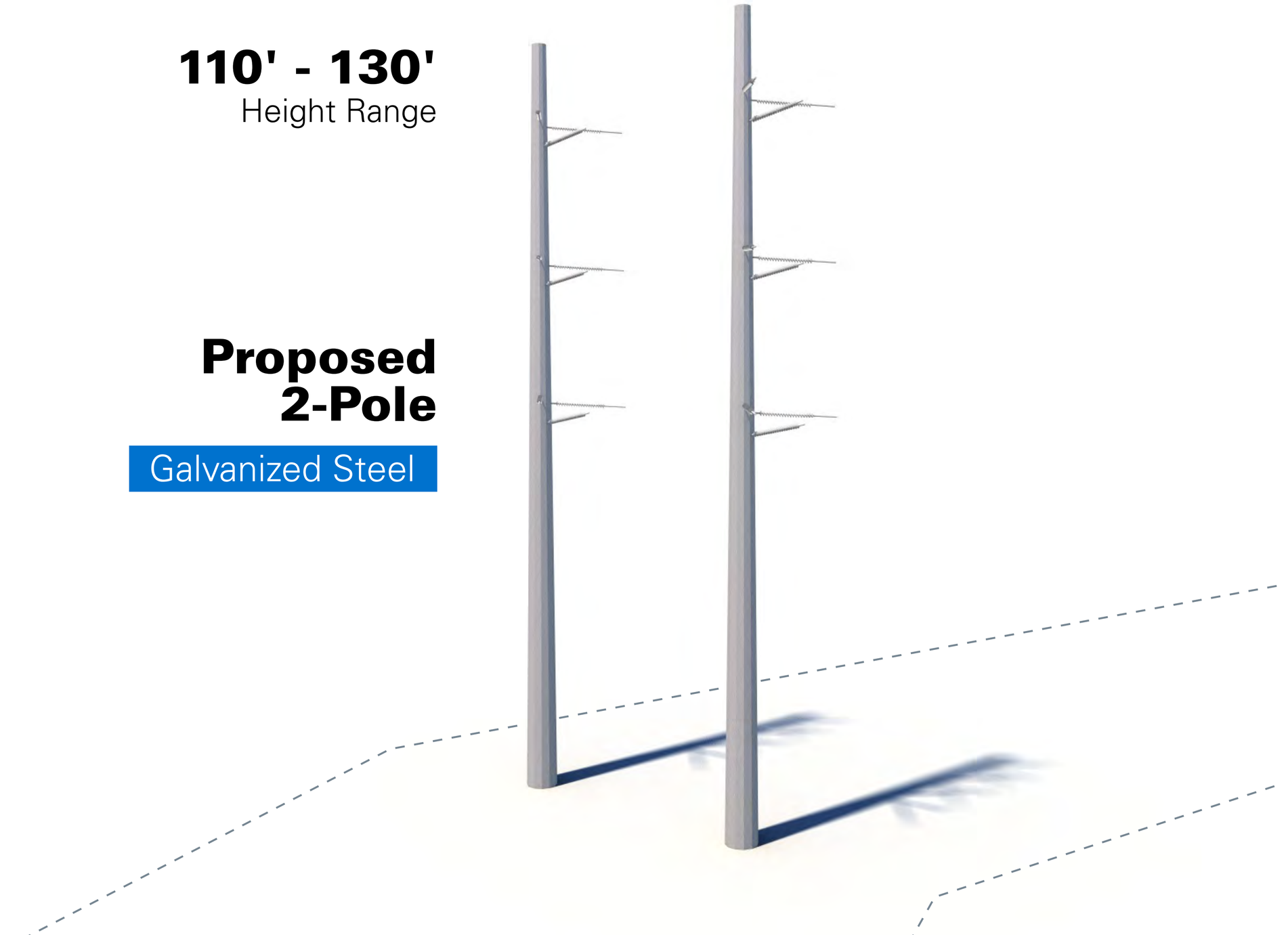


Existing Substation
Proposed Substation
Proposed Transmission Line
Existing Transmission Line
Future Data Center
Area With Configuration Shown

110' - 130'
Height Range

Proposed 2-Pole

Galvanized Steel



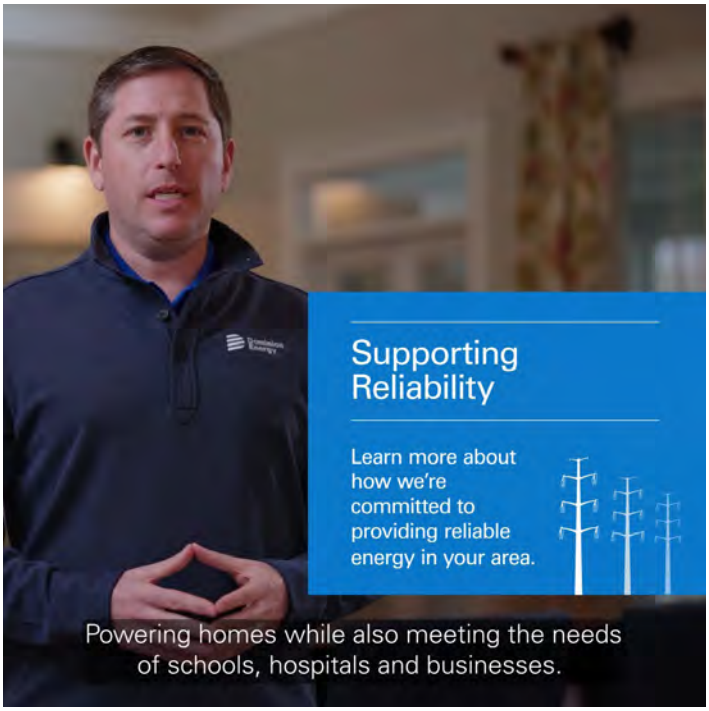
100’ Proposed Right-of-Way

CHARLES RYAN ASSOCIATES

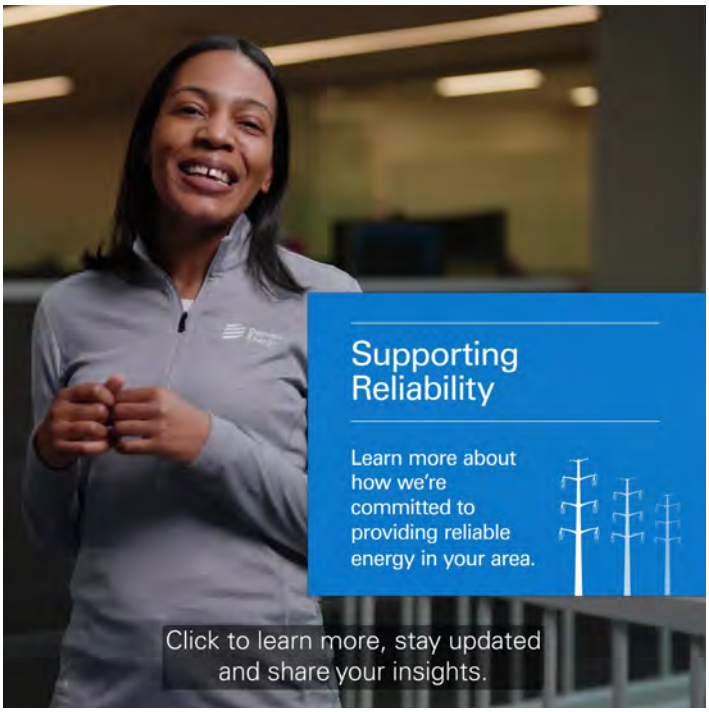
Dominion Energy Electric Transmission Contact:
Sean Doherty, sean.r.doherty@dominionenergy.com

Dominion Energy
Electric Transmission
Beco-Firehouse
Announcement Videos
Facebook/IG & Google Video
March 9, 2026 – March 15, 2026

Announcement A (Click to Play)



Announcement B (Click to Play)



CHARLES RYAN ASSOCIATES

Dominion Energy
Electric Transmission
Beco-Firehouse
Announcement Videos
Facebook/IG & Google Video
March 9, 2026 – March 15, 2026

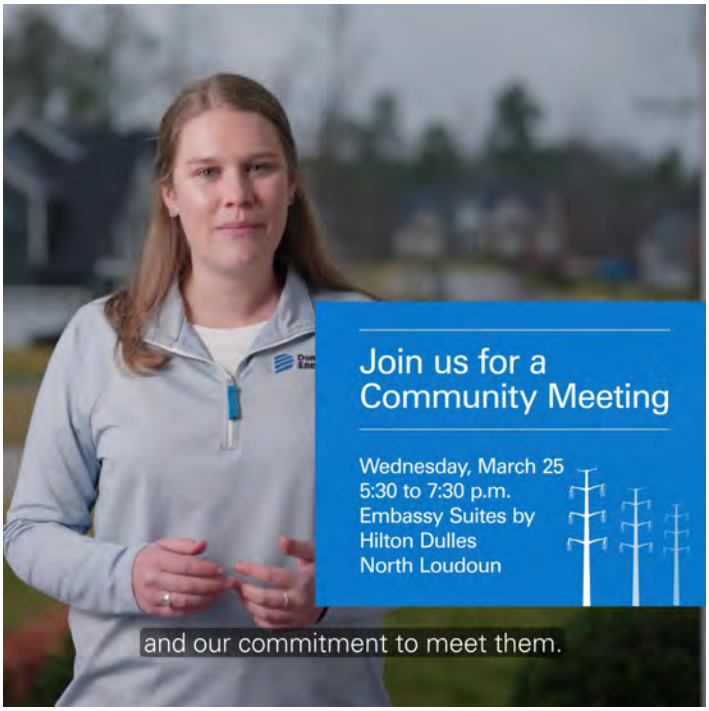
Announcement A Spanish (Click to Play)

Announcement B Spanish (Click to Play)

CHARLES RYAN ASSOCIATES

Dominion Energy
Electric Transmission
Beco-Firehouse
Pre-Event Videos
Meeting 1
Facebook/IG & Google Video
March 16, 2026 – March 25, 2026

Pre-Event A (Click to Play)

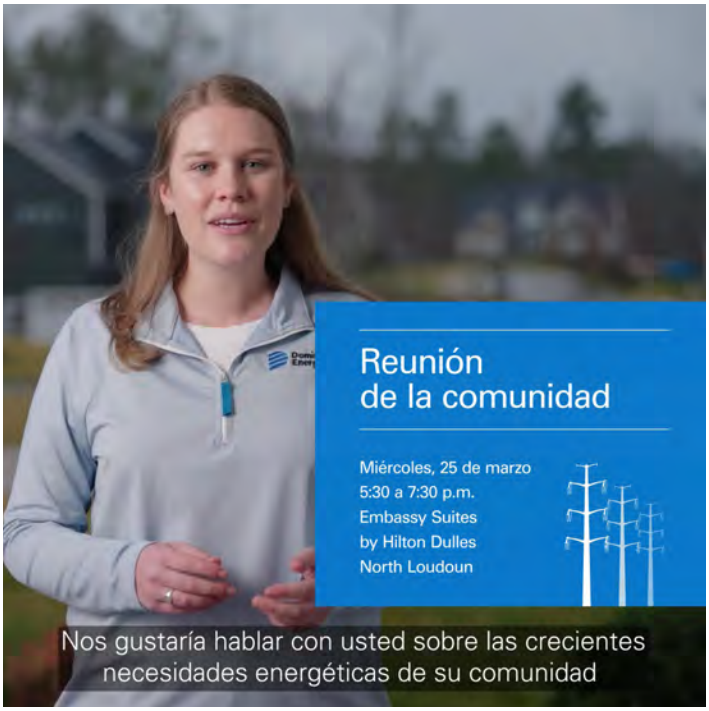


Pre-Event B (Click to Play)

CHARLES RYAN ASSOCIATES

Dominion Energy
Electric Transmission
Beco-Firehouse
Pre-Event Videos
Meeting 1
Facebook/IG & Google Video
March 16, 2026 – March 25, 2026

Pre-Event A Spanish (Click to Play)



Pre-Event B Spanish (Click to Play)

CHARLES RYAN ASSOCIATES

Dominion Energy
Electric Transmission
Beco-Firehouse
Pre-Event Videos
Meeting 2
Facebook/IG & Google Video
March 23, 2026 – April 1, 2026

Pre-Event A (Click to Play)

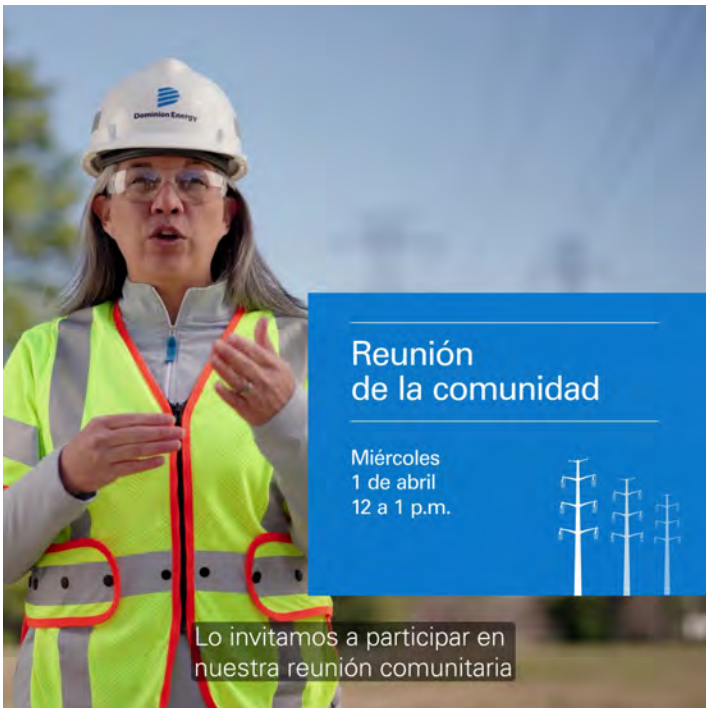
Pre-Event B (Click to Play)

CHARLES RYAN ASSOCIATES

Dominion Energy
Electric Transmission
Beco-Firehouse
Pre-Event Videos
Meeting 2
Facebook/IG & Google Video
March 23, 2026 – April 1, 2026

Pre-Event A Spanish (Click to Play)

Pre-Event B Spanish (Click to Play)



CHARLES RYAN ASSOCIATES

Dominion Energy
Electric Transmission

Beco-Firehouse
Post-Event Videos
April 2, 2026 – April 8, 2026

Post-Event A (Click to Play)

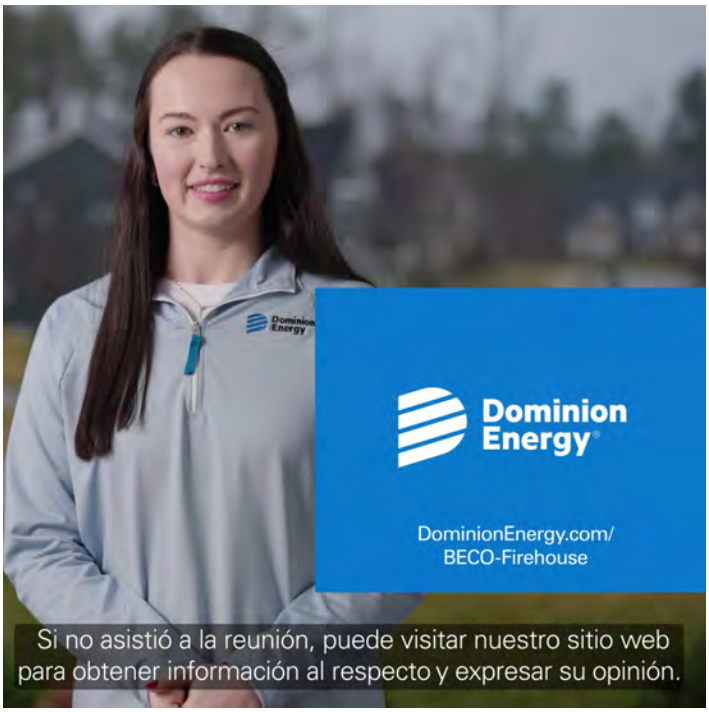
Post-Event B (Click to Play)

CHARLES RYAN ASSOCIATES

Dominion Energy
Electric Transmission
Beco-Firehouse
Post-Event Videos
Facebook/IG & Google Video
April 2, 2026 – April 8, 2026

Post-Event A Spanish (Click to Play)

Post-Event B Spanish (Click to Play)



CHARLES RYAN ASSOCIATES

Dominion Energy Electric Transmission

Beco-Firehouse Announcement

Nextdoor

Nextdoor 1200x628

CHARLES RYAN ASSOCIATES

Dominion Energy Electric Transmission

Beco-Firehouse Pre-Event

Meeting 1

Nextdoor

Nextdoor 1200x628

CHARLES RYAN ASSOCIATES

Dominion Energy Electric Transmission

Beco-Firehouse Pre-Event

Meeting 2

Nextdoor

Nextdoor 1200x628

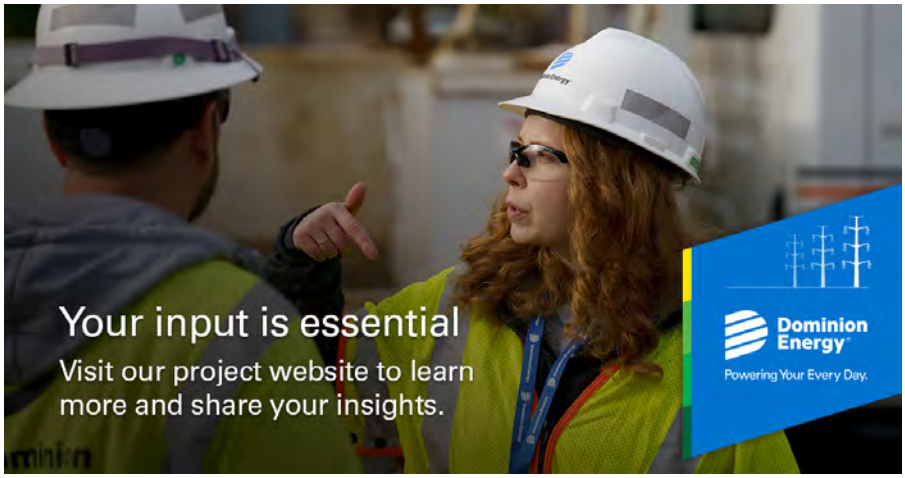
CHARLES RYAN ASSOCIATES

Dominion Energy Electric Transmission

Beco-Firehouse
Post-Event

Nextdoor

Nextdoor 1200x628



CHARLES RYAN ASSOCIATES

Dominion Energy
Electric Transmission

Beco-Firehouse
Pre-Event

Print Ad

Publications & Run Dates:
Loudoun Times Mirror – (29,713 circulation on Friday)
March 20, 2026 Run Dates
Half Page 4c (9.5"x6.5")

Washington Post – Local Living – (17,000 circulation on Thursday)
March 19, 2026 Run Dates
Half Page 4c (7.98"x10")

DE Transmission

BECO-Firehouse

Report Date: March 9, 2026 – April 8, 2026

DET | BECO-Firehouse | 3/9/26 – 4/8/26 | Overall Report

The BECO-Firehouse campaigns ran on Facebook, Google and Nextdoor through 4/8/26. These campaigns were targeted at customers over the age of 25 who resided in and around Kincora and Sterling cities in Virginia, as well as Loudoun County, Virginia.

2,036,985 impressions
of ads were delivered to target audiences.

41,782 clicks
have taken audiences to the landing pages.

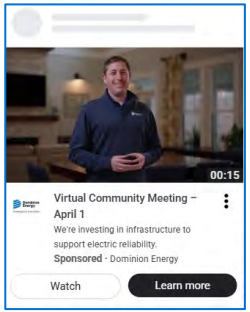
99,710 video views with an average 19.88% VCR.

2.05% CTR
Most CTRs near or above benchmarks.

89,947 ad engagements
such as reactions, likes, comments, shares and saves have been made on the ads.

Notable Creative

The DET BECO-Firehouse Pre-Event #2 ad had the highest CTR at 2.96%, which is 543% higher than the 0.46% Responsive Display benchmark.



Notable Insights

- Facebook ads had a CTR of 1.50% and 15,869 completed video views for a 19.98% VCR.
- Nextdoor ads performed well with a CTR of 0.73%, which is 387% above benchmark.
- Google Display ads had a CTR of 2.51%, which is 446% above benchmark.
- Ads were engaging with males aged 35-44 on Facebook and males 25-34 on Google.

Facebook CTR Benchmark: 0.90% | Google Responsive Display CTR Benchmark: 0.46% | Nextdoor CTR Benchmark: 0.15%

DET | BECO-Firehouse | 3/9/26 – 3/15/26 | English Announcement

The BECO-Firehouse campaigns ran on Facebook, Google and Nextdoor through 3/15/26. These campaigns were targeted at customers over the age of 25 who resided in and around Kincora and Sterling cities in Virginia, as well as Loudoun County, Virginia.

297,116 impressions
of ads were delivered to target audiences.

6,234 clicks
have taken audiences to the landing pages.

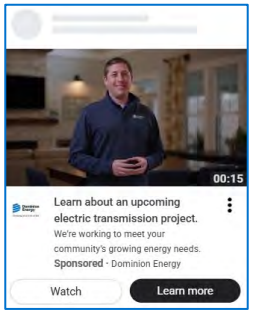
17,460 video views with an average 19.56% VCR.

2.10% CTR
Most CTRs near or above benchmarks.

15,819 ad engagements
such as reactions, likes, comments, shares and saves have been made on the ads.

Notable Creative

The DET BECO-Firehouse Announcement ad had the highest CTR at 2.80%, which is 509% higher than the 0.46% Responsive Display benchmark.



Notable Insights

- Facebook ads had a CTR of 1.51% and 2,726 completed video views for a 19.34% VCR.
- Nextdoor ads performed well with a CTR of 0.67%, which is 347% above benchmark.
- Google Display ads had a CTR of 2.74%, which is 496% above benchmark.
- Ads were engaging with males aged 35-44 on Facebook and males 25-34 on Google.

Facebook CTR Benchmark: 0.90% | Google Responsive Display CTR Benchmark: 0.46% | Nextdoor CTR Benchmark: 0.15%

DET | BECO-Firehouse | 3/9/26 – 3/15/26 | Spanish Announcement

The BECO-Firehouse campaigns ran on Facebook and Google through 3/15/26. These campaigns were targeted at customers over the age of 25 who resided in and around Kincora and Sterling cities in Virginia, as well as Loudoun County, Virginia.

99,151 impressions
of ads were delivered to target audiences.

2,008 clicks
have taken audiences to the landing pages.

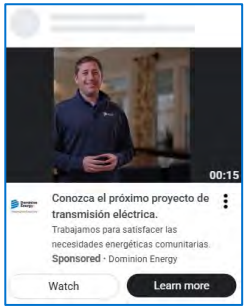
6,034 video views with an average 16.08% VCR.

2.03% CTR
Most CTRs near or above benchmarks.

5,408 ad engagements
such as reactions, likes, comments, shares and saves have been made on the ads.

Notable Creative

The DET BECO-Firehouse Announcement ad had the highest CTR at 2.88%, which is 526% higher than the 0.46% Responsive Display benchmark.



Notable Insights

- Facebook ads had a CTR of 1.59% and 970 completed video views for a 20.59% VCR.
- Google Display ads had a CTR of 2.54%, which is 452% above benchmark.
- Ads were engaging with males aged 35-44 on Facebook and males 25-34 on Google.

Facebook CTR Benchmark: 0.90% | Google Responsive Display CTR Benchmark: 0.46% | Nextdoor CTR Benchmark: 0.15%

DET | BECO-Firehouse | 3/16/26 – 3/25/26 | English Pre-Event #1

The BECO-Firehouse campaigns ran on Facebook, Google and Nextdoor through 3/25/26. These campaigns were targeted at customers over the age of 25 who resided in and around Kincora and Sterling cities in Virginia, as well as Loudoun County, Virginia.

423,497 impressions

of ads were delivered to target audiences.

8,553 clicks

have taken audiences to the landing pages.

20,492 video views with an average 19.36% VCR.

2.02% CTR

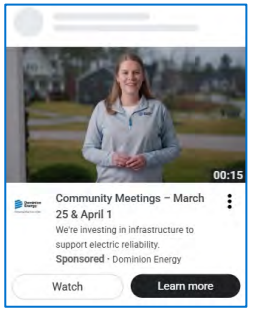
Most CTRs near or above benchmarks.

18,758 ad engagements

such as reactions, likes, comments, shares and saves have been made on the ads.

Notable Creative

The DET BECO-Firehouse Pre-Event #1 ad had the highest CTR at 2.72%, which is 491% higher than the 0.46% Responsive Display benchmark.



Notable Insights

- Facebook ads had a CTR of 1.35% and 3,136 completed video views for a 18.56% VCR.
- Nextdoor ads performed well with a CTR of 0.71%, which is 373% above benchmark.
- Google Display ads had a CTR of 2.56%, which is 457% above benchmark.
- Ads were engaging with males aged 35-44 on Facebook and males 25-34 on Google.

Facebook CTR Benchmark: 0.90% | Google Responsive Display CTR Benchmark: 0.46% | Nextdoor CTR Benchmark: 0.15%

DET | BECO-Firehouse | 3/16/26 – 3/25/26 | Spanish Pre-Event #1

The BECO-Firehouse campaigns ran on Facebook and Google through 3/25/26. These campaigns were targeted at customers over the age of 25 who resided in and around Kincora and Sterling cities in Virginia, as well as Loudoun County, Virginia.

177,778 impressions
of ads were delivered to target audiences.

3,360 clicks
have taken audiences to the landing pages.

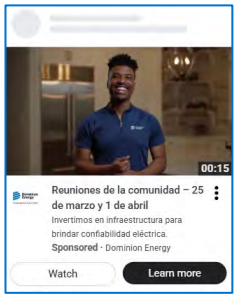
6,238 video views with an average 20.90% VCR.

1.89% CTR
Most CTRs near or above benchmarks.

6,498 ad engagements
such as reactions, likes, comments, shares and saves have been made on the ads.

Notable Creative

The DET BECO-Firehouse Pre-Event #1 ad had the highest CTR at 2.58%, which is 461% higher than the 0.46% Responsive Display benchmark.



Notable Insights

- Facebook ads had a CTR of 1.44% and 1,225 completed video views for a 21.50% VCR.
- Google Display ads had a CTR of 2.17%, which is 372% above benchmark.
- Ads were engaging with males aged 35-44 on Facebook and males 25-34 on Google.

Facebook CTR Benchmark: 0.90% | Google Responsive Display CTR Benchmark: 0.46% | Nextdoor CTR Benchmark: 0.15%

DET | BECO-Firehouse | 3/23/26 – 4/1/26 | English Pre-Event #2

The BECO-Firehouse campaigns ran on Facebook, Google and Nextdoor through 4/1/26. These campaigns were targeted at customers over the age of 25 who resided in and around Kincora and Sterling cities in Virginia, as well as Loudoun County, Virginia.

395,022 impressions
of ads were delivered to target audiences.

8,846 clicks
have taken audiences to the landing pages.

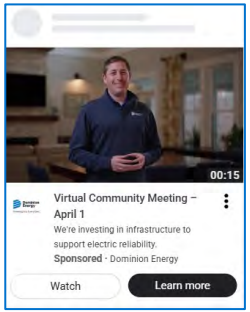
19,814 video views with an average 19.42% VCR.

2.24% CTR
Most CTRs near or above benchmarks.

16,982 ad engagements
such as reactions, likes, comments, shares and saves have been made on the ads.

Notable Creative

The DET BECO-Firehouse Pre-Event #2 ad had the highest CTR at 2.96%, which is 543% higher than the 0.46% Responsive Display benchmark.



Notable Insights

- Facebook ads had a CTR of 1.45% and 2,900 completed video views for a 19.28% VCR.
- Nextdoor ads performed well with a CTR of 0.80%, which is 433% above benchmark.
- Google Display ads had a CTR of 2.88%, which is 526% above benchmark.
- Ads were engaging with males aged 35-44 on Facebook and males 25-34 on Google.

Facebook CTR Benchmark: 0.90% | Google Responsive Display CTR Benchmark: 0.46% | Nextdoor CTR Benchmark: 0.15%

DET | BECO-Firehouse | 3/23/26 – 4/1/26 | Spanish Pre-Event #2

The BECO-Firehouse campaigns ran on Facebook and Google through 4/1/26. These campaigns were targeted at customers over the age of 25 who resided in and around Kincora and Sterling cities in Virginia, as well as Loudoun County, Virginia.

175,750 impressions
of ads were delivered to target audiences.

3,454 clicks
have taken audiences to the landing pages.

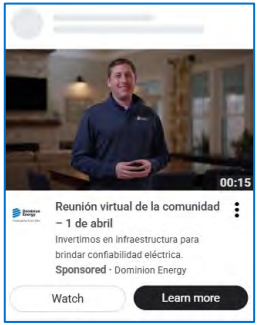
6,783 video views with an average 21.09% VCR.

1.97% CTR
Most CTRs near or above benchmarks.

6,348 ad engagements
such as reactions, likes, comments, shares and saves have been made on the ads.

Notable Creative

The DET BECO-Firehouse Pre-Event #2 ad had the highest CTR at 2.42%, which is 426% higher than the 0.46% Responsive Display benchmark.



Notable Insights

- Facebook ads had a CTR of 1.59% and 1,207 completed video views for a 21.96% VCR.
- Google Display ads had a CTR of 2.18%, which is 374% above benchmark.
- Ads were engaging with males aged 35-44 on Facebook and males 25-34 on Google.

Facebook CTR Benchmark: 0.90% | Google Responsive Display CTR Benchmark: 0.46% | Nextdoor CTR Benchmark: 0.15%

DET | BECO-Firehouse | 4/2/26 – 4/8/26 | English Post-Event

The BECO-Firehouse campaigns ran on Facebook, Google and Nextdoor through 4/8/26. These campaigns were targeted at customers over the age of 25 who resided in and around Kincora and Sterling cities in Virginia, as well as Loudoun County, Virginia.

349,308 impressions
of ads were delivered to target audiences.

6,657 clicks
have taken audiences to the landing pages.

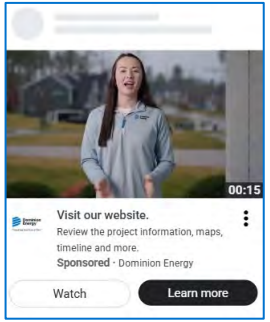
17,854 video views with an average 20.98% VCR.

1.91% CTR
Most CTRs near or above benchmarks.

15,069 ad engagements
such as reactions, likes, comments, shares and saves have been made on the ads.

Notable Creative

The DET BECO-Firehouse Post-Event ad had the highest CTR at 2.19%, which is 376% higher than the 0.46% Responsive Display benchmark.



Notable Insights

- Facebook ads had a CTR of 1.57% and 2,694 completed video views for a 20.39% VCR.
- Nextdoor ads performed well with a CTR of 0.71%, which is 373% above benchmark.
- Google Display ads had a CTR of 2.18%, which is 374% above benchmark.
- Ads were engaging with males aged 35-44 on Facebook and males 25-34 on Google.

Facebook CTR Benchmark: 0.90% | Google Responsive Display CTR Benchmark: 0.46% | Nextdoor CTR Benchmark: 0.15%

DET | BECO-Firehouse | 4/2/26 – 4/8/26 | Spanish Post-Event

The BECO-Firehouse campaigns ran on Facebook and Google through 4/8/26. These campaigns were targeted at customers over the age of 25 who resided in and around Kincora and Sterling cities in Virginia, as well as Loudoun County, Virginia.

119,363 impressions
of ads were delivered to target audiences.

2,670 clicks
have taken audiences to the landing pages.

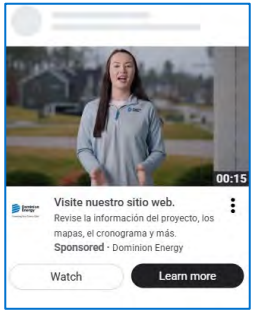
5,035 video views with an average 22.57% VCR.

2.24% CTR
Most CTRs near or above benchmarks.

5,065 ad engagements
such as reactions, likes, comments, shares and saves have been made on the ads.

Notable Creative

The DET BECO-Firehouse Post-Event ad had the highest CTR at 2.73%, which is 493% higher than the 0.46% Responsive Display benchmark.



Notable Insights

- Facebook ads had a CTR of 1.74% and 1,011 completed video views for a 23.58% VCR.
- Google Display ads had a CTR of 2.61%, which is 467% above benchmark.
- Ads were engaging with males aged 35-44 on Facebook and males 25-34 on Google.

Facebook CTR Benchmark: 0.90% | Google Responsive Display CTR Benchmark: 0.46% | Nextdoor CTR Benchmark: 0.15%

DET | BECO-Firehouse | Print

The BECO-Firehouse print ad ran in the below publications to provide added support and drive event awareness.

Washington Post

Run Date: 3/19/2026

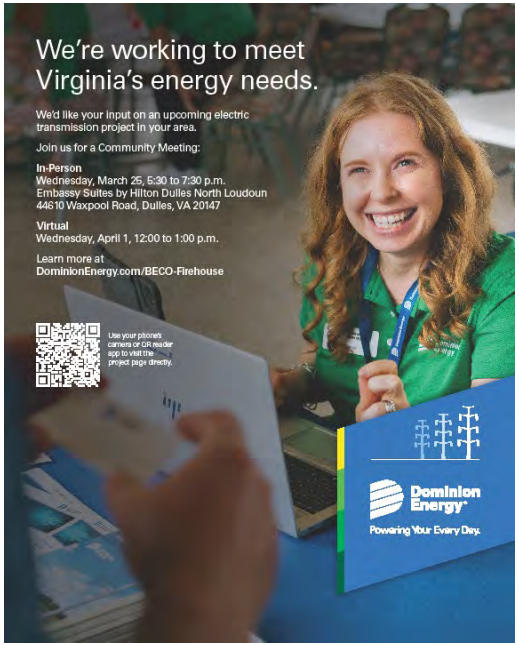
Facebook CTR Benchmark: 0.90% | Google Responsive Display CTR Benchmark: 0.46% | Nextdoor CTR Benchmark: 0.15%

DET | BECO-Firehouse | Print

The BECO-Firehouse print ad ran in the below publications to provide added support and drive event awareness.

Loudoun Times Mirror

Run Date: 3/20/2026



Facebook CTR Benchmark: 0.90% | Google Responsive Display CTR Benchmark: 0.46% | Nextdoor CTR Benchmark: 0.15%

Summary:

- The DET BECO-Firehouse Pre-Event Meeting #2 Google Responsive Display ad had the highest CTR at 2.96%.
- The ads in this campaign were most engaged with males aged 35-44 on Facebook and males 25-34 on Google campaigns.
- All campaigns were over the platform benchmarks in all three phases. Google Responsive Display was the top-performing platform for the campaign and ended the campaign with a CTR 446% over the 0.46% benchmark.
- The media & entertainment, fashion, and news & politics audience segments had the highest number of clicks on Google.
- The Greg creative performed best in the announcement and pre-event #2 campaigns. The Jenna creative was the top performer in the pre-event campaigns overall while the Taylor creative performed best in the post-event campaigns.

Facebook CTR Benchmark: 0.90% | Google Responsive Display CTR Benchmark: 0.46% | Nextdoor CTR Benchmark: 0.15%

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

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: The Company did not identify any buildings that would have to be demolished or relocated to construct the proposed Project along the Proposed Route.

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 would be collocated for a total of about 0.86 mile, including 0.59 mile of paralleled Loudoun Water Lines, 0.24 mile of paralleling and crossing roads and 0.09 mile paralleling both County Water lines and roads. The Loudoun Water line rights-of way are currently maintained cleared of large trees for their entire length. The Proposed Route also crosses Gloucester Parkway. These are all public roads maintained by VDOT and consist of paved multi-lane roads.

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: The Loudoun County 2019 Comprehensive Plan (General Plan) and the Loudoun County 2019 Countywide Transportation Plan (2019 CTP) were reviewed to evaluate the potential effect the Proposed Route could have on future development. The General Plan and 2019 CTP do not address electric transmission lines within their land use policies and strategies explicitly; however, the General Plan recognizes that the area in proximity to the Proposed Route north of Washington Dulles International Airport is expected to continue to be a key location for industrial uses, airport-related businesses and data center development. Future demand for data centers will need to be accommodated in places that have access to utilities, including electricity. The General Plan acknowledges that electrical demand in the County has grown dramatically in recent years with the development of data centers in eastern Loudoun County.

Review of publicly available information (including the 2019 CTP) and consulting with Loudoun County Department of Transportation and Capital Infrastructure ("DTCI") and VDOT staff were completed to determine the impact of the Proposed Route on future road projects. No future road projects were identified in the Project area. 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

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) Loudoun County designates important farmland based on soil type. The Company coordinated with Loudoun County staff who did not identify any important farmlands that the Project will impact.

(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:

1. None
2. None
3. None
4. One archaeological site (44LD0107) lies within or adjacent to the proposed right of way, which is not recommended eligible for inclusion in the NRHP.
5. None
6. None
7. None
8. None
9. One Loudoun County BOS managed open space easement is crossed by the Proposed Route for approximately 0.35 mile.
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[11] to identify airports within 10.0 nautical miles of the proposed Project. Based on this review, the following FAA-registered aeronautical facilities are located within 10.0 nautical miles of the Project:

Airport Name	Approximate Nearest Distance and Direction from Proposed Project (nautical miles ("nm") (approx.))	Use
Dulles International Airport	approximately 4 miles south of the proposed Project	Public
Leesburg Executive Airport	Approximately 6.6 miles west of the Project	Private

Based on this review, there are no public or private airports or heliports located within three nautical miles of the proposed alignment, and no impacts to FAA regulated airspace from the proposed structures are anticipated. The Company filed an FAA Form 7460-1 for the following structures, and a determination was made of no hazard to air navigation.

1. 2207/96 – Study 2025-AEA-9098-OE
2. 2207/95 – Study 2025-AEA-9099-OE

In summary, none of the structures along the Proposed Route is anticipated to penetrate civil airport imaginary surfaces or interfere with terminal instrument procedures established by the FAA. Therefore, no impacts to navigable airspace

[11] *See* https://oeaaa.faa.gov/oeaaa/external/portal.jsp and https://adip.faa.gov/agis/public/#/public.

from the Project are anticipated, and no special features or design alterations are expected to be required for the transmission structures installed for the Project.

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: Below is a list of coordination that has occurred or will occur with municipal, state, and federal agencies regarding the proposed Project:

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

- On February 17, 2026 and February 18, 2026, the Company had a Project overview meeting with county supervisors and officials. At that meeting, the Company provided an overview of the Project, which included a discussion of need, a map of the Project area, timelines, and an outreach plan. Alignment of homeowners' associations ("HOAs") near the project area were discussed to ensure that they were part of the direct outreach plan.

- A letter dated March 16, 2026, was submitted to Loudoun County to describe the Project and request comments. See Section V.D.

- Coordination with Loudoun County's Planning and Zoning department took place on March 16, 2026, as discussed in Section III.E.

- Company representatives met with VDOT on April 1, 2026, to determine if there were any proposed road projects along the Proposed Route. There are no proposed road projects along the Proposed Route. A Stage I Pre-Application Analysis has been prepared and was submitted to VDHR on May 7, 2026. See Attachment 2.I.1 to the DEQ Supplement.

- On February 9, 2026, the Company solicited comments via letter from several state and federally recognized Native American tribes, including:

Name	Tribe
Chief Walt "Red Hawk" Brown	Cheroenhaka (Nottoway) Indian Tribe
Mary Frances Wilkerson	Cheroenhaka (Nottoway) Indian Tribe
Chief Stephen Adkins	Chickahominy Indian Tribe
Assistant Chief Reginald Stewart	Chickahominy Indian Tribe
Chief Joanne Howard	Chickahominy Indian Tribe Eastern Division
Jessica Phillips	Chickahominy Indian Tribe Eastern Division
Dana Adkins	Chickahominy Tribe
Chief Mark Custalow	Mattaponi Tribe
Chief Diane Shields	Monacan Indian Nation

Name	Tribe
Chief Keith Anderson	Nansemond Indian Nation
Chief Lynette Allston	Nottoway Indian Tribe of Virginia
Ms. Beth Roach	Nottoway Indian Tribe of Virginia
Chief Kevin Brown	Pamunkey Indian Tribe
Kendall Stevens	Pamunkey Indian Tribal Resource Office
Chief Charles (Bootsie) Bullock	Patawomeck Indian Tribe of Virginia
Chief G. Anne Richardson	Rappahannock Tribe
Jack Ryan	Rappahannock Tribe
Chief W. Frank Adams	Upper Mattaponi Indian Tribe
Desiree Dyer	Upper Mattaponi Indian Tribe
Kathy Harris	Haliwa-Saponi Indian Tribe
Dr. Ogletree Richardson	Haliwa-Saponi Indian Tribe
Jonathan Caudill, Jr.	Meherrin Indian Tribe
Dante Desiderio	Sappony
Otis K. Martin	Sappony
Vickie Jeffries	Occaneechi Band of the Saponi Nation
W.A. “Tony” Hayes	Occaneechi Band of the Saponi Nation
Chief Brian Harris	Catawba Indian Nation
Elizabeth Toombs	Cherokee Nation
Katelyn Lucas	Delaware Nation, Oklahoma
Larry Heady	Delaware Tribe of Indians
Russell Townsend	Eastern Band of Cherokee Indians
Lora Nuckolls	Eastern Shawnee Tribe of Oklahoma
David Hill	Muscogee (Creek) 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.

[MM DD, 2026]

Proposed BECO-Firehouse 230 Kilovolt (kV) Electric Transmission Project

Dear [recipient],

Dominion Energy is dedicated to maintaining safe, reliable, and affordable electric service in the communities we serve. You are receiving this project announcement letter as part of our efforts to proactively communicate early with Tribal Nations. Your unique perspective can help us better plan projects in their earliest stages. Please note, this letter is not a notification of formal government-to-government consultation from any state or federal agency. Dominion Energy has been, and continues to be, committed to creating and maintaining strong, open, supportive, and mutually beneficial relationships with Tribal Nations.

We are reaching out now because we have an upcoming project in Loudoun County, Virginia, and you may have an interest in this area. To enhance the local electric grid and ensure ongoing reliability for homes and businesses, new energy infrastructure is being planned near Kincora/Sterling. The project involves adding two 230 kV lines primarily in an existing right of way (ROW) that will connect a new substation, Firehouse, to the existing BECO Substation. The total project length is about one mile, with approximately 0.9 miles located within the existing ROW.

Enclosed is an overview map showing the project area. Providing your input now allows us to consider any concerns you may have as we work to meet the project's needs. Please feel free to notify other relevant organizations that may have an interest in the project area. For reference, other recipients of this letter include county and state historic, cultural, and scenic organizations, as well as Tribal Nations. This project requires review by the Virginia State Corporation Commission (SCC) and the target date for filing with the SCC is April 2026.

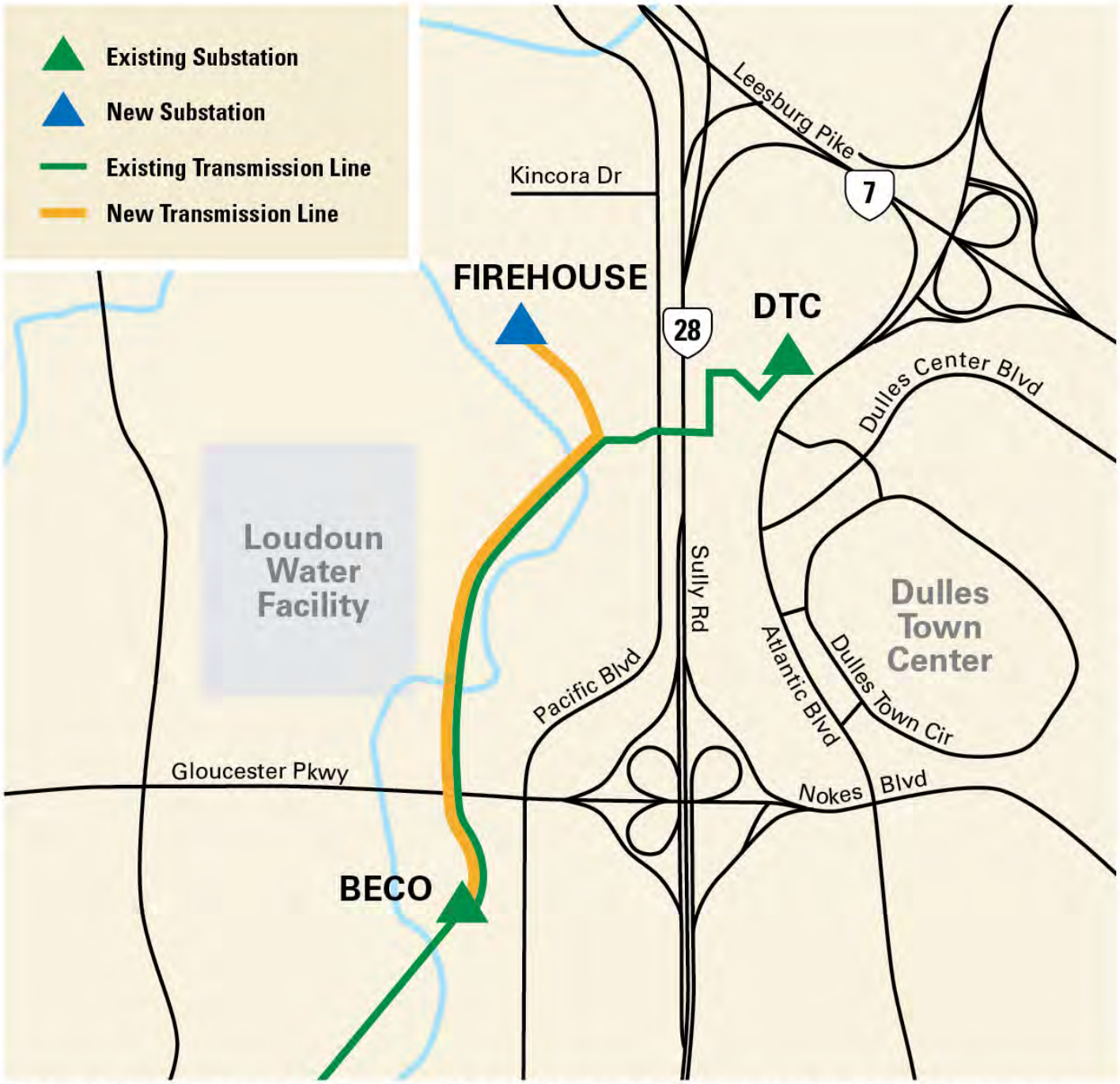
If you have questions or would like to schedule a meeting to discuss the project, please contact me by calling 888-291-0190 or emailing sean.r.doherty@dominionenergy.com. You may also contact Tribal Relations Manager Ken Custalow by emailing Ken.Custalow@dominionenergy.com.

Sincerely,

Sean Doherty
Electric Transmission Communications

Enclosures: Project Overview Map
cc Ken Custalow

Illustrated Project Area Map:



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

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

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

Response: On February 9, 2026, the Company solicited comments via letter from the community leaders, environmental groups, and business groups identified in the table below. A copy of the letter template and map is included as Attachment III.K.1.

Name	Organization
Mr. Will Glasco	Preservation Virginia
Mr. Dave Brown	Council of Virginia Archaeologists
Ms. Leighton Powell	Scenic Virginia
Ms. Elaine Chang	National Trust for Historic Preservation
Mr. John McCarthy	Piedmont Environmental Council
Ms. Julie Bolthouse	Piedmont Environmental Council
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
Dr. Cassandra Newby-Alexander	Norfolk State University
Mr. Roger Kirchen, Archaeologist	Virginia Department of Historic Resources
Ms. Adrienne Birge-Wilson	Virginia Department of Historic Resources
Mr. Dave Dutton	Dutton and Associates, LLC

[MM DD, 2026]

Proposed BECO-Firehouse 230 Kilovolt (kV) Electric Transmission Project

Dear [recipient],

Dominion Energy is dedicated to maintaining safe, reliable, and affordable electric service in the communities we serve. You are receiving this project announcement letter as part of our efforts to proactively communicate early with cultural, historic, and scenic organizations. Your unique perspective can help us better plan projects in their earliest stages. Please note, this letter is not a notification of formal consultation from any state or federal agency. Dominion Energy has been, and continues to be, committed to creating and maintaining strong, open, and respectful relationships with cultural and historic stakeholders.

We are reaching out now because we have an upcoming project in Loudoun County, Virginia, and you may have an interest in this area. To enhance the local electric grid and ensure ongoing reliability for homes and businesses, new energy infrastructure is being planned near Kincora/Sterling. The project involves adding two 230 kV lines primarily in an existing right of way (ROW) that will connect a new substation, Firehouse, to the existing BECO Substation. The total project length is about one mile, with approximately 0.9 miles located within the existing ROW.

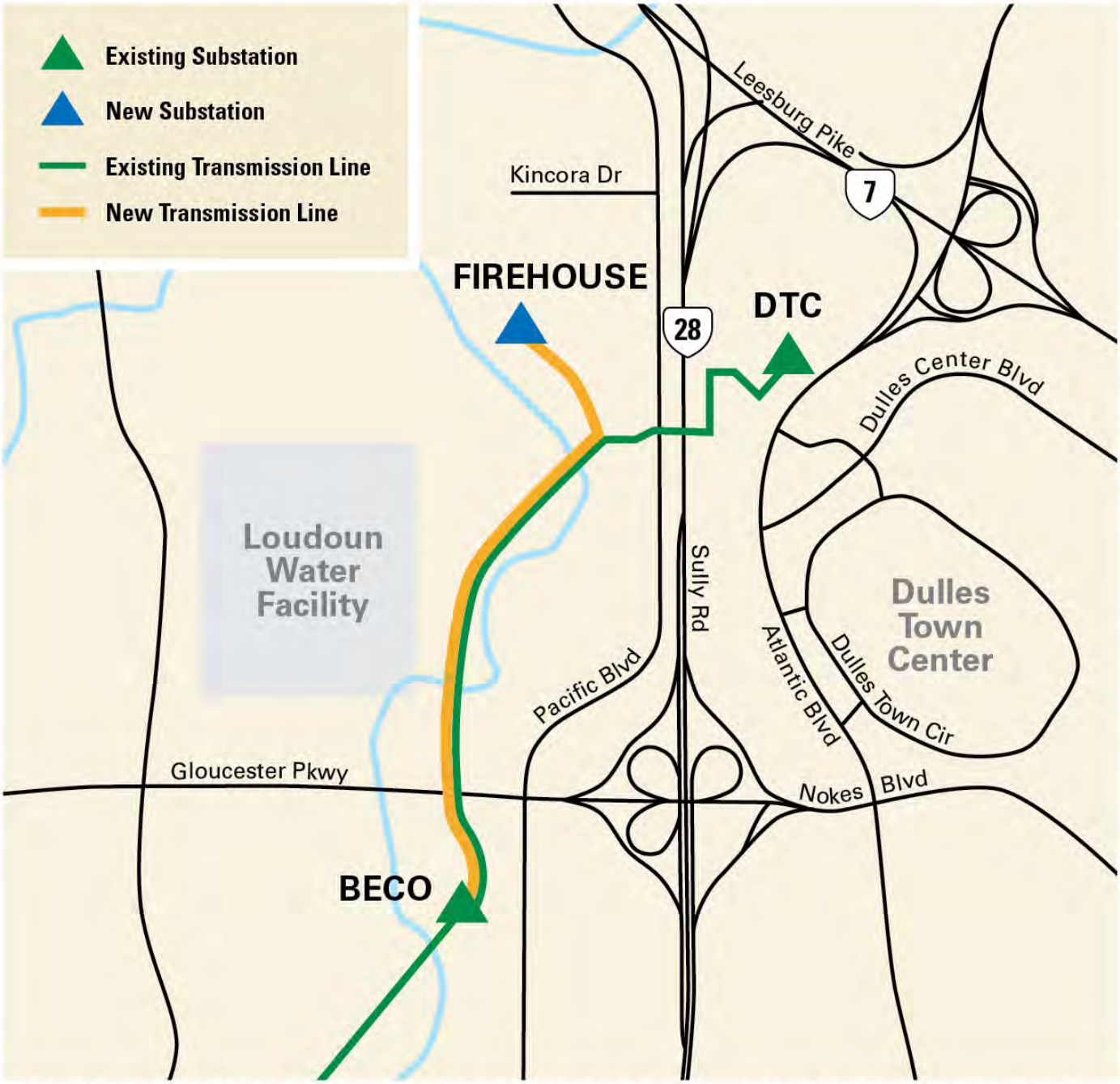
Enclosed is an overview map showing the project area. Providing your input now allows us to consider any concerns you may have as we work to meet the project's needs. Please feel free to notify other relevant organizations that may have an interest in the project area. For reference, other recipients of this letter include countywide and statewide historic, cultural, and scenic organizations, as well as Tribal Nations. This project requires review by the Virginia State Corporation Commission (SCC) and the target date for filing with the SCC is April 2026. If you have questions or would like to schedule a meeting to discuss the project, please contact me by calling 888-291-0190 or emailing sean.r.doherty@dominionenergy.com.

Sincerely,

Sean Doherty
Electric Transmission Communications

Enclosure: Project Overview Map

Illustrated Project Area Map:



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

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	Potential Permit	Agency/Organization
Impacts to wetlands and other waters of the U.S.	Nationwide Permit 57	U.S. Army Corps of Engineers
Impacts to State surface waters	Virginia Water Protection Permit	Virginia Department of Environmental Quality
Discharge of stormwater from construction	Construction General Permit	Virginia Department of Environmental Quality
Aerial crossing over state-owned bottomlands	Subaqueous Habitat Management Permit (VGP5)	Virginia Marine Resources Commission
Work within VDOT rights-of-way	Land Use Permit	Virginia Department of Transportation
Airspace obstruction evaluation	FAA 7460-1	Federal Aviation Administration
Substation Construction	Site Plan Approval	Loudoun County

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 associated with high voltage power lines is best estimated by field levels 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 existing and proposed transmission lines. EMF levels are provided for historical (2025) annual average and maximum (peak) and future (2029) annual average and maximum (peak) loading conditions. The EMF values provided in this section were calculated based on the Company's proposed line characteristics of a typical span in both average and peak loading conditions.

Proposed Project – Existing average loading in 2025

EMF levels were calculated for the proposed Project at the *existing **average*** load condition (602.16 amps for Line #2143, 424.80 amps for Line #2165, 662.21 amps for Line #2207, and 602.20 amps for Line #2249) and at an operating voltage of 241.5 kV when supported on the proposed Project structures. See Attachment II.A.5.c.

These field levels were calculated at mid-span where the conductors are closest to the ground and the conductors are at a projected average load operating temperature.

Proposed Project - Existing Average Loading (2025)				
Attachment	**Left Edge**		**Right Edge**	
	Electric Field (kV/m)	Magnetic Field (mG)	Electric Field (kV/m)	Magnetic Field (mG)
II.A.5.c	0.079	13.204	0.496	28.699

Proposed Project – Existing peak loading in 2025

EMF levels were calculated for the proposed Project at the *existing **peak*** load condition (1003.60 amps for Line #2143, 708.00 amps for Line #2165, 1103.68 amps for Line #2207, and 1003.67 amps for Line #2249) and at an operating voltage

of 241.5 kV when supported on the proposed Project structures. See Attachment II.A.5.c.

These field levels were calculated at mid-span where the conductors are closest to the ground and the conductors are at a projected peak load operating temperature.

Proposed Project - Existing Peak Loading (2025)				
Attachment	**Left Edge**		**Right Edge**	
	Electric Field (kV/m)	Magnetic Field (mG)	Electric Field (kV/m)	Magnetic Field (mG)
II.A.5.c	0.077	22.159	0.504	48.510

Proposed Project – Projected average loading in 2029

EMF levels were calculated for the proposed Project at the ***projected average*** load condition (965.82 amps for Line #2143, 445.74 amps for Line #2165, 1419.53 amps for Line #2207, 520.60 amps for Line #2249, and 825.59 amps for Line #2496) and at an operating voltage of 241.5 kV when supported on the proposed Project structures. See Attachments II.A.5.a and b.[12]

These field levels were calculated at mid-span where the conductors are closest to the ground and the conductors are at a projected average load operating temperature.

Proposed Project - Projected Average Loading (2029)				
Attachment	**Left Edge**		**Right Edge**	
	Electric Field (kV/m)	Magnetic Field (mG)	Electric Field (kV/m)	Magnetic Field (mG)
II.A.5.a	1.109	101.175	0.793	84.304
II.A.5.b	1.149	89.056	1.132	77.149

Proposed Project – Projected peak loading in 2029

EMF levels were calculated for the proposed Project at the ***projected peak*** load condition (1609.70 amps for Line #2143, 742.90 amps for Line #2165, 2365.88 amps for Line #2207, 867.67 amps for Line #2249, and 1375.98 amps for Line #2496) and at an operating voltage of 241.5 kV when supported on the proposed

[12] The EMF calculations provided in this section are based on the 160-foot-wide right-of-way illustrated in Attachments II.A.5.a and b.

Project structures. See Attachments II.A.5.a and b.

These field levels were calculated at mid-span where the conductors are closest to the ground and the conductors are at a projected peak load operating temperature.

Proposed Project - Projected Peak Loading (2029)				
Attachment	**Left Edge**		**Right Edge**	
	Electric Field (kV/m)	Magnetic Field (mG)	Electric Field (kV/m)	Magnetic Field (mG)
II.A.5.a	1.122	152.510	0.795	121.633
II.A.5.b	1.162	135.072	1.141	111.913

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") electric and magnetic fields ("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 biological and health research related to ELF EMF 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 Institute of Electrical and Electronics Engineers' ("IEEE") 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, 2024a, 2024b, 2025, 2026; ICES, 2020; SCHEER, 2024). 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 2024 reports by SCENIHR and SCHEER, respectively, and annual reviews published by SSM (i.e., for the years 2015 through 2026). 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, 2020).

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 Electric, Magnetic, and Electromagnetic Fields, 0 Hz to 300 GHz, Corrigenda 2. IEEE Std. C95.1-2019/Cor 2-2020 (Corrigenda to IEEE Std C95.1-2019). New York: IEEE, 2020.

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.

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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.

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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.

Swedish Radiation Safety Authority (SSM). 2024:05 Recent Research on EMF and Health Risk, Seventeenth report from SSM's Scientific Council on Electromagnetic Fields, 2022. Stockholm, Sweden: SSM, 2024a.

Swedish Radiation Safety Authority (SSM). 2024:12 Recent Research on EMF and Health Risk, Eighteenth report from SSM's Scientific Council on Electromagnetic Fields, 2023. Stockholm, Sweden: SSM, 2024b.

Swedish Radiation Safety Authority (SSM). 2025:04 Recent Research on electromagnetic fields and Health Risk, Nineteenth report from SSM's Scientific Council on Electromagnetic Fields, 2024. Stockholm, Sweden: SSM, 2025.

Swedish Radiation Safety Authority (SSM). 2026:03 Recent Research on electromagnetic fields and Health Risk, Twentieth report from SSM's Scientific Council on Electromagnetic Fields, 2025. Stockholm, Sweden: SSM, 2026

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."[13]

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 2024;
- The SSM, which has published annual reviews of the relevant peer-reviewed scientific literature since 2003, with its most recent reviews published in 2026; 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

[13] *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 2024 report 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 leukaemia" (SCHEER 2024, p. 9).

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 11, 2026, 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 kilovolts ["kV"] to 500 kV) in California. Childhood cancer cases, including 5,788 leukemia cases and 3,308 brain tumor cases, 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 leukemia cases 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 residence 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 Québec. 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 power lines (e.g., 110 kV, 220 kV, and 400 kV). 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.

- Norzaee et al. (2024) conducted a hospital-based case-control study that investigated the association between residential proximity to urban land uses (such as highways, petrol stations, power lines, and bus stations) and childhood leukemia and lymphoma in Tehran, Iran. The study population included 428 childhood leukemia and 428 childhood lymphoma cases, diagnosed between 2016 and 2021, and 428 controls, selected from the same hospitals as the cases. To be eligible for inclusion in the study, cases and controls had to have been living at their residence for at least 1 year prior to enrollment and be between 1 and 15 years of age. Logistic regression models adjusting for parental smoking, sex, birth year, and family history of cancer, indicated some statistically significant associations with proximity to petrol stations and highways but not with proximity to power lines. Children living within 100 meters of highways had increased odds of developing leukemia and lymphoma compared to children living at a further distance from highways, while proximity to petrol stations (< 100 meters) was associated with leukemia development but not lymphoma. The authors reported an association between

childhood leukemia development and living within 50 meters of power lines compared to living further away, but contrary to the authors' description, this finding was not statistically significant.[14] The authors also noted that this evaluation was based on a limited sample size of only 12 cases. No associations were observed between proximity to power lines and childhood lymphoma development.

- Mancini et al. (2025) investigated the relationship between residential exposure to ELF magnetic fields from high-voltage transmission lines (63–400 kV) and childhood leukemia in France. The study included 4,117 cases under the age of 15 diagnosed with childhood leukemia between 2002 and 2010 and 44,838 controls, all drawn from the French national registry-based GEOCAP study. Exposure to ELF magnetic fields was estimated using residential distance to the nearest high-voltage overhead power line; for those study participants living within pre-specified distances from the lines, ELF magnetic-field exposure levels were further calculated using modeling software and professional judgement, as described elsewhere (Deschamps and Deambrogio, 2023). The authors reported no associations between distance to the nearest power line and childhood leukemia risk when the full study population was examined. When the authors included only children less than 5 years of age with high-quality geocoded addresses in their analysis, a statistical association was reported for children living less than 50 meters from the nearest line. However, the authors cautioned this finding may be due to the fact that the number of children exposed to levels ≥ 0.3 μT (≥ mG) was very small and represented only 0.3% of the study population. The authors concluded that their study "brings new evidence that ELF-MF are probably not associated with AL [acute leukemia] risk, and cannot explain an association with distance to [high-voltage overhead power lines.]" Therefore, based on the results, exposure to magnetic fields is not responsible for the reported association with distance, and the results do not support a causal relationship between exposure to magnetic fields and leukemia development.

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

[14] In Table 2 of the paper, the reported adjusted odds ratio for living within 50 meters of power lines was 2.90, with a 95% confidence interval ranging from 0.92 to 9.14. An odd ratio with a 95% confidence interval including 1.0 is considered statistically non-significant. A 95% confidence interval reflects a range of values that is expected to include the true value 95% of the times.

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, 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[15] 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

[15] 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]."

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 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 2,704controls 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.

- Jones et al. (2025) conducted an "umbrella review," which is a review of systematic reviews and meta-analyses of environmental risk factors for various types of dementia and mild cognitive impairment. The authors included 19 review articles, containing 37 meta-analyses, published between 2008 and 2023, in their analysis, and identified nine exposures associated with higher risk of all-cause dementia, including particulate matter, carbon monoxide, shift work, chronic noise, and ELF magnetic fields; several of these exposures, including ELF magnetic fields, were also identified as being associated with Alzheimer's disease dementia. The authors' analysis of ELF magnetic-field exposure and all-cause dementia, however, was based on a single study, and the analysis of ELF magnetic-field exposure and Alzheimer's disease dementia was based on only four studies, three of which were rated as being of "low" or "moderate" study quality, thereby adding little valuable information to the existing body of research. The authors did not identify any systematic reviews reporting associations between any of these environmental factors and mild cognitive impairment.

- Liimatainen et al. (2025) investigated the relationship between residential ELF magnetic-field exposure from indoor transformer stations and Alzheimer's disease in Finland. The study included over 155,000 participants, aged 30 or older at the start of the study, identified using the Database of Finnish Buildings with Indoor Transformer Stations (DaFBITS); all study participants lived in apartment buildings with a transformer for at least 6 months between January 1971 and December 2016. To assess exposure to ELF magnetic fields, the authors assigned the participants' apartments into one of five categories, based on proximity to the transformer room. No association with Alzheimer's disease was reported, including in sensitivity analyses that restricted the population by duration of exposure (in years), age at the start of residence, or location of the apartment in relation to the transformer.

- Sandoval-Diez et al. (2026) used data from the Swiss National Cohort to examine the relationship between "long-term" residential ELF magnetic-field

exposure from high-voltage power lines (220–380 kV) and mortality from several neurodegenerative diseases, including Alzheimer's disease, ALS, Parkinson's disease, multiple sclerosis, and "other types of dementia." The study included over 3.5 million Swiss adults, aged 30 years or older at the start of the study, who were followed from January 2001 through December 2018. Time-weighted average exposures to ELF magnetic fields over 10-year intervals were estimated using models that incorporated residential distance to the nearest high-voltage power line or railway line and measurement data obtained from the published literature. The analysis was adjusted for multiple variables, including age, sex, education level, and air pollution. The authors reported statistical associations between ELF magnetic-field exposure and Alzheimer's disease and "other types of dementia" among the full study population. No association was observed between ELF magnetic-field exposure and ALS, Parkinson's disease, or multiple sclerosis. When stratified by intensity of ELF magnetic-field exposure, no statistical associations were reported among the highest exposed (≥ 0.3 μT [≥ 3 mG]) group for any of the diseases examined; further, the risk estimates were often lower (i.e., closer to 1.0 or less than 1.0) for the highest exposed group compared to the lower exposed groups, demonstrating a lack of a dose-response trend. The results indicated that less than 1% of the study population was exposed to ELF magnetic-field levels ≥ 0.3 μT (≥ 3 mG) from high-voltage transmission lines. The authors concluded that "[t]he current lack of established biological mechanisms supporting [their] findings leaves the likelihood of a true causal relationship uncertain."

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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.

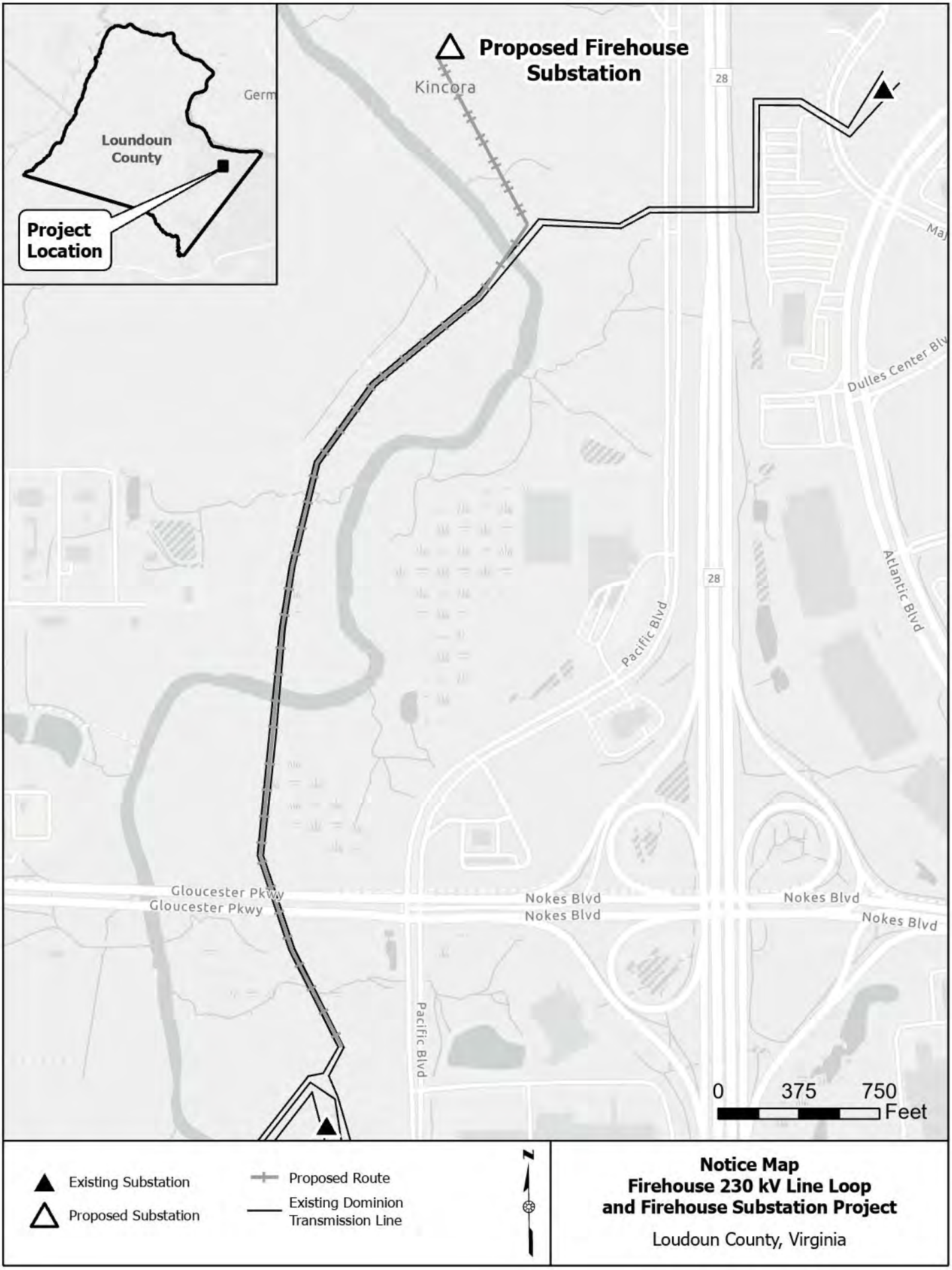
Response: Dominion Energy Virginia's 230 kV BECO-Firehouse Lines and Substation Project includes construction of a new double circuit overhead 230 kV transmission line primarily in existing right-of-way (Firehouse Lines) and a new substation (Firehouse Substation) in Loudoun County, Virginia.

A map is provided in Attachment V.A showing the Proposed Route, as well as the location of the proposed Firehouse Substation and existing Line #2207. A written description of the overhead Proposed and Alternative Routes is as follows:

Proposed Route

The Proposed Route is approximately 1.05 miles in length. Beginning at the cut-in location along the Company's existing Line #2207 at BECO Substation, located west of Pacific Boulevard, the Proposed Route heads north for about 0.2 mile and crosses Gloucester Parkway. Continuing north, the Proposed Route continues for approximately 0.2 mile before crossing Broad Run. The Proposed Route then follows the existing right-of-way north for another 0.5 mile before crossing Broad Run a second time. After crossing Broad Run the second time, the Proposed Route is no longer collated with the existing transmission line and continues northwest for approximately 0.19 mile to reach the Firehouse Substation.

The Proposed Route will be constructed on an existing 160-foot-wide right-of-way, except the final 0.19 miles will be on new 100-foot wide right of way, primarily supported by double circuit weathering steel monopoles with a minimum structure height of 105 feet, a maximum structure height of 165 feet, and an average structure height of 120 feet, based on preliminary conceptual design, not including foundation reveal, and subject to change based on final engineering design.


Proposed Firehouse Substation
Kincora
Loundoun County
Project Location
28
Dulles Center Blv
Pacific Blvd
Atlantic Blvd
Gloucester Pkwy
Gloucester Pkwy
Nokes Blvd
Nokes Blvd
Nokes Blvd
Nokes Blvd
Pacific Blvd
0
375
750
Feet
Existing Substation
Proposed Substation
Proposed Route
Existing Dominion Transmission Line
N
Notice Map
Firehouse 230 kV Line Loop and Firehouse Substation Project
Loudoun County, Virginia

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: www.dominionenergy.com/beco-firehouse

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
bettina.rayfield@deq.virginia.gov

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, 24th Floor
Richmond, Virginia 23219

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

Ms. Hannah Schul
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
U.S. Fish and Wildlife Service
Virginia Field Office, Ecological Services
6669 Short Lane
Gloucester, Virginia 23061

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

Mr. Phil Skorupa
Virginia Department of Energy
1100 Bank Street
Washington Building, 8th Floor
Richmond, Virginia 23219

Ms. Arlene Fields Warren
Virginia Department of Health
Office of Drinking Water
109 Governor Street, 6th Floor
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Mr. Roger Kirchen
Department of Historic Resources
Review and Compliance Division
2801 Kensington Avenue
Richmond, Virginia 23221

Virginia Outdoors Foundation
600 East Main Street, Suite 402
Richmond, Virginia, 23219

Ms. Julie Morgan
FAA MMAC (AJV-A5)
PO Box 25082
Oklahoma City, OK 73125-0082

Metropolitan Washington Airport Authority
PO Box 17045, MA-224
Washington DC 20041

Mr. John D. Lynch
District Engineer
Virginia Department of Transportation,
Northern Virginia District
4975 Alliance Drive
Fairfax, Virginia 22030

Mr. Tim Hemstreet
County Administrator
1 Harrison St. SE,
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 March 16, 2026, was delivered to Mr. 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. Loudoun County Department of Planning and Zoning provided comments on the Project in a letter dated April 13, 2026. Both letters are included as Attachment V.D.1.

Dominion Energy Services, Inc.
5000 Dominion Boulevard, 3rd Floor
Glen Allen, VA 23060
DominionEnergy.com

Tim Hemstreet
Loudoun County Administrator
P.O. Box 7000
Leesburg, VA 20177-7000

March 16, 2026

RE: Dominion Energy Virginia's Proposed 230 kV Firehouse Lines and Substation Project

Notice Pursuant to Va. Code § 15.2-2202 E

Dear Mr. Hemstreet,

Virginia Electric and Power Company d/b/a Dominion Energy Virginia (the "Company") is proposing to construct a new 230 kilovolt ("kV") substation on land provided by an existing customer in Loudoun County ("the Firehouse Substation"), and a new 230 kV double circuit overhead transmission line extending approximately 1.05 mile from the Company's existing Line #2207 near the BECO substation to the proposed new Firehouse Substation in Loudoun County, Virginia, resulting in Line #2207 (Paragon Park to Firehouse) and Line #2496 (Firehouse to BECO) (collectively referred to as the "Project"). New monopoles will be installed in the existing right-of-way. The Project is needed to supply service requested by a customer and to comply with mandatory North American Electric Reliability Corporation ("NERC") reliability standards and to maintain reliable service to accommodate overall growth in the Project area.

The Company is preparing to file an application for a certificate of public convenience and necessity ("CPCN") from the State Corporation Commission of Virginia ("the Commission"). Pursuant to § 15.2-2202 E of the Code of Virginia, the Company is writing to notify Loudoun County of the proposed Project in advance of the CPCN application and respectfully requests that you submit any comments or additional information you feel would have bearing on the Project within 30 days of the date of this letter.

Once filed, the Company's application and supporting materials will be available for review on the Company website at https://www.dominionenergy.com/beco-firehouse

Enclosed is a Project Overview Map depicting the Project and its general location. If you would like to receive a GIS shapefile of the Project route to assist in your review, or if there are any questions, please do not hesitate to contact me at 804-316-0367 or melissa.a.harreld@dominionenergy.com. We appreciate your assistance with the review of the Project and look forward to any additional information you may have to offer.

Regards,

Melissa Harreld

melissa.a.harreld@dominionenergy.com

Enclosure: Project Overview Map

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

April 13, 2026

Ms. Melissa Harreld, Siting and Permitting Specialist
Dominion Energy Virginia
5000 Dominion Boulevard, 3rd Floor
Glen Allen, VA 23060

Re: Dominion Energy Virginia's Proposed 230 kilovolt (kV) BECO to Firehouse Line and Related Projects, Loudoun County, Virginia, Notice Pursuant to VA Code 15.2-2202 E. (PCOR-2026-0046)

Ms. Harreld:

Enclosed are Loudoun County's Department of Planning and Zoning comments regarding Dominion Energy Virginia's (Dominion) proposed BECO to Firehouse, comprised of Line #2207 (Paragon Park to Firehouse) and Line #2496 (Firehouse to BECO) (collectively Project), located in the community of Sterling within Loudoun County (County).

Based on the Project review request dated March 16, 2026 the proposed electrical transmission lines are needed to supply a customer service request and to comply with mandatory North American Electric Reliability Corporation Standards (Figure 1). The proposed 1.05-mile transmission line corridor parallels the western side of an existing double-circuit 230kV transmission line (BECO to Dulles Town Center) within a 160 foot right-of-way (ROW) easement. The new double circuit 230 kV line originates at the existing BECO substation and proceeds north within the existing ROW in the Broad Run floodplain to the future Firehouse substation located west of Russel Branch Parkway and south of Kincora Drive. The Project will utilize the existing transmission corridor ROW to accommodate new galvanized steel monopoles that are approximately 105- to 165-foot high which match the existing monopoles within the ROW. A new approximate .18 mile, 100-foot wide transmission corridor ROW will be established to the rear of a future data center to access the future Firehouse substation at the northern terminus of the proposed route. A small portion of the new 100-foot transmission corridor, adjacent to the data center property, bisects land which is subject to an Open Space Easement held by the County. The County Attorney's Office is in negotiations with Dominion for the use of the easement.

COMPREHENSIVE PLAN CONFORMANCE

The County views electrical service as an essential component of daily life and supports the construction of necessary electrical transmission infrastructure to ensure the capacity and reliability of the electrical transmission system to support existing and future business and residential uses.[1] Specifically, the electrical policies in the *Loudoun County 2019 General Plan* (2019 GP) call for the County to work with electrical providers to upgrade and utilize existing transmission corridors to minimize community, visual and environmental impacts.[2] The electrical policies in the 2019 GP call

[1] 2019 GP, Chapter 6, Energy, text
[2] 2019 GP, Chapter 6, Electrical, Strategy 6.1 and Strategy 6.1 Action B.

for additional consideration of the appearance of electrical transmission lines and substations to ensure they are adequately sited and screened to reduce the visual impact on the surrounding community.[3]

The Project is located in the Suburban Policy Area and bisects areas identified as the Suburban Employment, Suburban Industrial/Mineral Extraction, and the Suburban Mixed Use Place Types.[4] Surrounding uses include Loudoun Water's Broad Run Water Reclamation Facility, Temple Baptist Church of Herndon, and Kincora Village Center. Kincora Village Center is a large, planned, vertically integrated mixed use community with approved residential, retail, service, office and civic uses that are in the early development phases. Most of the Project is located within the Broad Run Floodplain. The floodplain, with its vegetation, forest cover, wetlands, intermittent streams and steep slopes comprise a natural ecosystem that contributes to the overall health and quality of the Broad Run.[5] A 100-foot portion of the transmission ROW is currently cleared and maintained for the existing 230 kV transmission lines and an additional 60-feet located to the west of the existing line will be cleared to accommodate the new transmission lines. The construction of the new transmission monopoles and clearing of the ROW will impact existing environmental features, wildlife habitat, and have a visual impact on residents in Kincora Village Center.

The County's electrical policies identify colocation within existing high voltage transmission lines as the County's first preference to expand transmission capacity before considering alternative routing of new transmission corridors.[6] The County acknowledges that introduction of an additional transmission line will have a visual impact on the surrounding area, but the impacts are commensurate with the current visual impact associated with the existing 230kV overhead transmission line. The utilization of the existing transmission corridor minimizes environmental impacts and the overall visual impact on the surrounding community by grouping these tall structures within an existing transmission corridor ROW.

SUMMARY RECOMMENDATION

County policies support the proposed BECO to Firehouse transmission lines and the colocation of the proposed monopole structures within the existing ROW. The additional double circuit 230kV transmission lines will assist in meeting local electric demand while ensuring the structural integrity and reliability of the transmission system. The County recommends that Dominion commit to the placement of the new monopoles to align with the locations of the existing monopoles to minimize environmental and visual impacts on the surrounding area. Dominion should also commit to a vegetation and habitat management plan which prioritizes native plant species and pollinators to enhance the natural environment, minimize erosion, and provide wildlife habitat within the ROW.[7] Further coordination between the County's Natural Resources Team (NRT) and Dominion is recommended to achieve policy goals in the 2019 GP regarding the protection and enhancement of

[3] 2019 GP, Chapter 6, Energy, text
[4] 2019 GP, Chapter 2, Suburban Policy Area Place Types Map
[5] 2019 GP, Chapter 3, River and Stream Resources, Strategy 2.1
[6] 2019 GP, Chapter 6, Electrical, Strategy 6.1.
[7] 2019 GP, Chapter 3, Plant and Wildlife Habitats, text and 2019 GP, and Chapter 6, Electrical, Strategy 6.5 Action D.

environmental features within the ROW and the preservation of stream habitat and water quality of the Broad Run.

If you have any questions regarding these comments, please contact Pat Giglio, Senior Planner, Loudoun County Department of Planning and Zoning, at 571-627-8068 or patrick.giglio@loudoun.gov.

Thank you for the opportunity to provide comments.

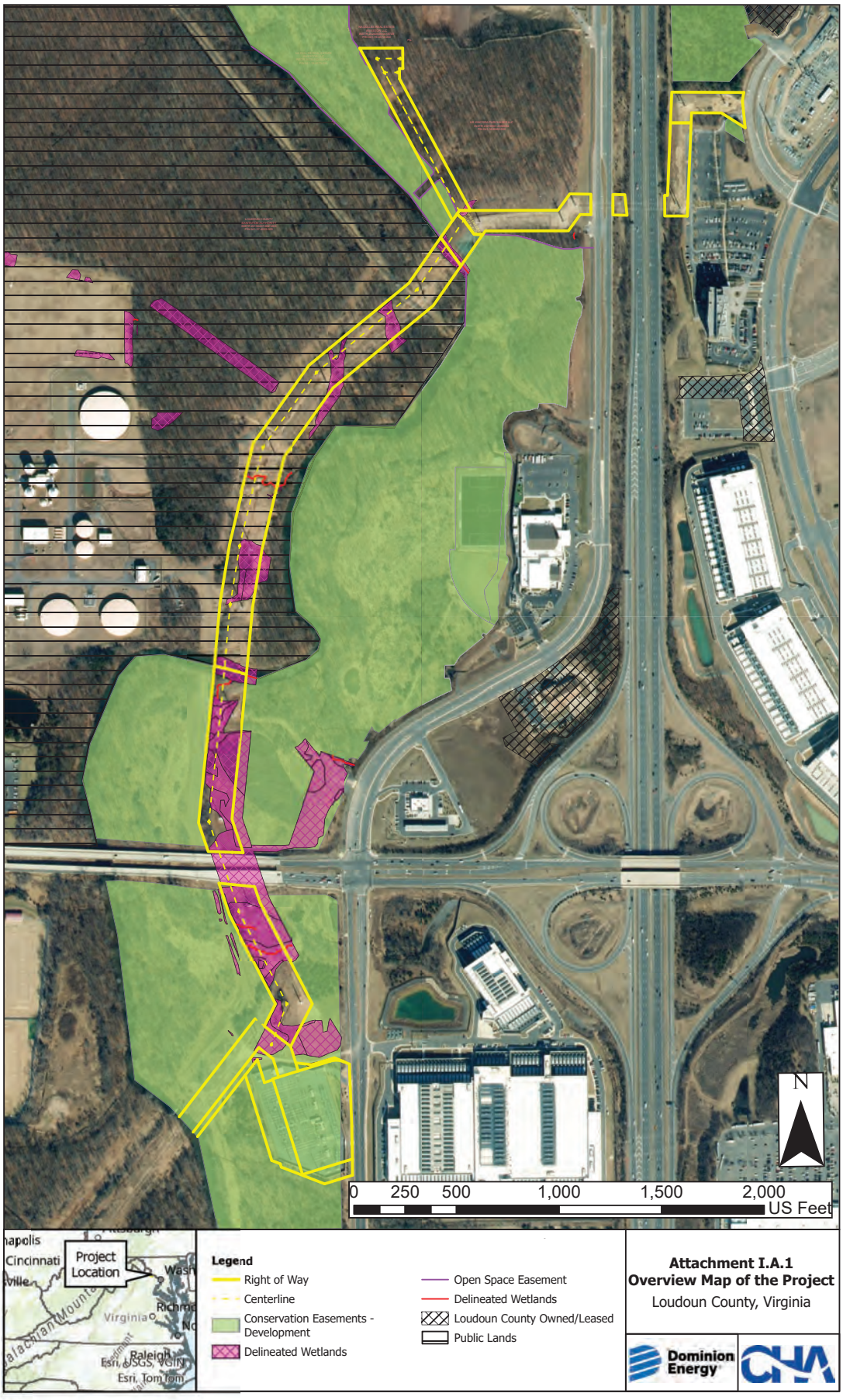
Sincerely,

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
Steve Torpy, Director, Parks, Recreation, and Community Services
Betsy Smith, Director, Building and Development
Melissa Harreld, Siting and Permitting Specialist, Dominion
Kathleen R. Leonard, External Affairs Representative, Dominion

Enclosure: Figure 1. Vicinity map depicting proposed Transmission Route, provided by Dominion.

Figure 1


N
0 250 500 1,000 1,500 2,000
US Feet
Project Location
Legend
Right of Way
Centerline
Conservation Easements - Development
Delineated Wetlands
Open Space Easement
Delineated Wetlands
Loudoun County Owned/Leased
Public Lands
Attachment I.A.1
Overview Map of the Project
Loudoun County, Virginia
Dominion Energy
CHA

COMMONWEALTH OF VIRGINIA

STATE CORPORATION COMMISSION

APPLICATION OF	)	
	)	
VIRGINIA ELECTRIC AND POWER COMPANY	)	Case No. PUR-2026-00062
	)	
For approval and certification of electric transmission facilities: 230 kV Firehouse Lines and Substation	)	

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

John Jeffrey Koestner

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

Ebenezer Owusu-Kusi

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

Joshua A. Pollock

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

Wesley Strunk

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

George C. Brimmer

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

Melissa A. Herald

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

Sandra M. Warner

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

WITNESS DIRECT TESTIMONY SUMMARY

Witness: John Jeffrey Koestner

Title: Electric Transmission Strategic Projects Advisor

Summary:

Company Witness John Jeffrey Koestner 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.G: This section provides a system map for the affected area.
- Section I.J: This section provides information about the project 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 II.A.10: This section provides details of the construction plans for the proposed project, including requested line outage schedules.

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

- Section I.A (co-sponsored with Company Witnesses Joshua A. Pollock, Ebenezer Owusu-Kusi, Wesley Strunk, George C. Brimmer, Melissa A. Harreld, and Sandra M. Warner): This section details the primary justifications for the proposed project.
- Section I.B (co-sponsored with Company Witness Joshua A. Pollock and Ebenezer Owusu-Kusi): This section details the engineering justifications for the proposed project.
- Section I.C (co-sponsored with Company Witness Joshua A. Pollock and Ebenezer Owusu-Kusi): This section describes the present system and details how the proposed project will effectively satisfy present and projected future load demand requirements.
- Section I.D (co-sponsored with Company Witness Joshua A. Pollock and Ebenezer Owusu-Kusi): This section, when applicable, describes critical contingencies and associated violations due to the inadequacy of the existing system.
- Section I.E (co-sponsored with Company Witnesses Joshua A. Pollock and Ebenezer Owusu-Kusi): This section explains feasible project alternatives, when applicable.
- Section I.H (co-sponsored with Company Witness Ebenezer Owusu-Kusi): This section provides the desired in-service date of the proposed project and the estimated construction time.
- Section I.L (co-sponsored with Company Witness Wesley Strunk): This section, when applicable, provides details on the deterioration of structures and associated equipment.
- Section I.N (co-sponsored with Company Witness Joshua A. Pollock and Ebenezer Owusu-Kusi): 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.

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

DIRECT TESTIMONY
OF
JOHN JEFFREY KOESTNER
ON BEHALF OF
VIRGINIA ELECTRIC AND POWER COMPANY
BEFORE THE
STATE CORPORATION COMMISSION OF VIRGINIA
CASE NO. PUR-2026-00062

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 John Jeffrey Koestner, and I am an Electric Transmission Strategic Projects Advisor 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 managing major electric transmission projects from conception through completion for the Company.

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

A. In order to provide service requested by two data center customers in Loudoun County (the "Customers" or "Customer A" and "Customer B"), to maintain reliable service for 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:

(1) Construct one new 230 kilovolt ("kV") double circuit overhead transmission line (for a total of two circuits) extending approximately 0.86 mile on existing 160-foot-wide right-of-way and 0.19 mile on new 100-foot-wide right-of-way for a total of 1.05 miles, by cutting the existing 230 kV Line #2207 (BECO –

Paragon Park) and extending a new 230 kV double circuit to Firehouse Substation, resulting in Line #2207 (Paragon Park - Firehouse) and Line #2496 (Firehouse - BECO) (the "Firehouse Lines"). The Firehouse Lines will be constructed primarily with double circuit galvanized steel monopoles utilizing three-phase twin-bundled 768.2 ACSS/TW Aluminum Conductor Steel Supported/Trapezoidal Wire/High Strength ("ACSS/TW/HS") type conductor with a summer transfer capability 1573 MVA.

(2) Construct a new 230 kV substation in Loudoun County, Virginia designed to accommodate a 230 kV ring bus with an ultimate configuration of four (4) breakers, with all four breakers installed initially, on land provided by Customer A east of the DTC Substation. ("Firehouse Substation").

Collectively, the Firehouse Lines and Firehouse Substation, and related work at BECO and Paragon Park Substations are referred to as the "230 kV Firehouse Lines and Substation" or the "Project."

The Project is necessary to ensure that Dominion Energy Virginia can provide electric service requested by the Customers in Loudoun County, Virginia, maintain reliable electric service consistent with NERC Reliability Standards for the overall load growth in the Loudoun County load area ("the Loudoun Load Area") and comply with mandatory NERC Reliability Standards.

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.G, I.J, I.K, I.M, and II.A.10 of the Appendix. Additionally, I co-sponsor the Executive Summary and Section I.A with Company Witnesses Ebenezer Owusu-Kusi, Joshua A. Pollock, Wesley Strunk, George C. Brimmer, Melissa A. Harreld, and Sandra M. Warner; Sections I.B, I.C, I.D, I.E, I.H and I.N with Company Witnesses Ebenezer Owusu-Kusi and Joshua A. Pollock; and Section I.L with Company Witness Wesley Strunk.

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

A. Yes, it does.

APPENDIX A

BACKGROUND AND QUALIFICATIONS
OF
JOHN JEFFREY KOESTNER

John Jeffrey Koestner earned a Bachelor of Science in Mechanical Engineering from Northern Arizona University in 2006 and a Master of Business Administration from the University of Lynchburg in 2014. Mr. Koestner is responsible for managing major electric transmission projects from conception through completion. His work includes developing and directing project scope, schedules, and budgets; assembling and leading project teams; and overseeing engineering, permitting, real estate, construction, and regulatory activities. Mr. Koestner began managing projects for Dominion Energy as a contracted employee in 2022. In 2024, he joined Dominion Energy as a full-time employee and currently serves as an Electric Transmission Strategic Projects Advisor.

WITNESS DIRECT TESTIMONY SUMMARY

Witness: Ebenezer Owusu-Kusi

Title: Staff Engineer and Area Planner

Summary:

Company Witness Ebenezer Owusu-Kusi co-sponsors those sections of the Appendix describing the Company's electric transmission system and the need for, and benefits of, the proposed project, as follows:

- Section I.A (co-sponsored with Company Witnesses John Jeffrey Koestner, Joshua A. Pollock, Wesley Strunk, George C. Brimmer, Melissa A. Harreld, and Sandra M. Warner): This section details the primary justifications for the proposed project.

- Section I.B (co-sponsored with Company Witness John Jeffrey Koestner and Joshua A. Pollock): This section details the engineering justifications for the proposed project.

- Section I.C (co-sponsored with Company Witness John Jeffrey Koestner and Joshua A. Pollock): This section describes the present system and details how the proposed project will effectively satisfy present and projected future load demand requirements.

- Section I.D (co-sponsored with Company Witness John Jeffrey Koestner and Joshua A. Pollock): Although not applicable to the proposed project, this section, when applicable, describes critical contingencies and associated violations due to the inadequacy of the existing system.

- Section I.E (co-sponsored with Company Witnesses John Jeffrey Koestner and Joshua Pollock): This section explains feasible project alternatives, when applicable.

- Section I.H (co-sponsored with Company Witness John Jeffrey Koestner): This section provides the desired in-service date of the proposed project and the estimated construction time.

- Section I.N (co-sponsored with Company John Jeffrey Koestner and Joshua A. Pollock): 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.

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

1

DIRECT TESTIMONY
OF
EBENEZER OWUSU-KUSI
ON BEHALF OF
VIRGINIA ELECTRIC AND POWER COMPANY
BEFORE THE
STATE CORPORATION COMMISSION OF VIRGINIA
CASE NO. PUR-2026-00062

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 Ebenezer Owusu-Kusi, and I am a Staff Engineer and Area Planner 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 the estimating and conceptual design on 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 provide service requested by two data center customers in Loudoun County (the "Customers" or "Customer A" and "Customer B"), to maintain reliable service for 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:

(1) Construct one new 230 kilovolt ("kV") double circuit overhead transmission line (for a total of two circuits) extending approximately 0.86 mile on existing 160-foot-wide right-of-way and 0.19 mile on new 100-foot-wide right-of-way for a total of 1.05 miles, by cutting the existing 230 kV Line #2207 (BECO –

Paragon Park) and extending a new 230 kV double circuit to Firehouse Substation, resulting in Line #2207 (Paragon Park - Firehouse) and Line #2496 (Firehouse - BECO) (the "Firehouse Lines"). The Firehouse Lines will be constructed primarily with double circuit galvanized steel monopoles utilizing three-phase twin-bundled 768.2 ACSS/TW Aluminum Conductor Steel Supported/Trapezoidal Wire/High Strength ("ACSS/TW/HS") type conductor with a summer transfer capability 1573 MVA.

(2) Construct a new 230 kV substation in Loudoun County, Virginia designed to accommodate a 230 kV ring bus with an ultimate configuration of four (4) breakers, with all four breakers installed initially, on land provided by Customer A east of the DTC Substation. ("Firehouse Substation").

Collectively, the Firehouse Lines and Firehouse Substation, and related work at BECO and Paragon Park Substations are referred to as the "230 kV Firehouse Lines and Substation" or the "Project."

The Project is necessary to ensure that Dominion Energy Virginia can provide electric service requested by the Customers in Loudoun County, Virginia, maintain reliable electric service consistent with NERC Reliability Standards for the overall load growth in the Loudoun County load area ("the Loudoun Load Area") and comply with mandatory NERC Reliability Standards.

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 co-sponsor the Executive Summary and Section I.A with Company Witnesses John Jeffrey Koestner, Wesley Strunk, George C. Brimmer, Melissa A. Harreld, and Sandra M. Warner. Additionally, I co-sponsor Sections I.B, I.C, I.D, I.E, and I.N of the Appendix with Company Witnesses John Jeffrey Koestner and Joshua A. Pollock; and Section I.H with Company Witness John Jeffrey Koestner.

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

A. Yes, it does.

APPENDIX A

BACKGROUND AND QUALIFICATIONS OF EBENEZER OWUSU-KUSI

Ebenezer Owusu-Kusi earned a Bachelor of Science in Electrical and Electronic Engineering from Kwame Nkrumah University of Science and Technology (KNUST), Ghana, in 2014 and a Master of Science in Electrical and Computer Engineering from North Carolina Agricultural and Technical State University in 2024. Mr. Owusu-Kusi joined Dominion Energy in 2025 and currently serves as a Staff Engineer and Area Planner with the Electric Transmission Planning Group. In this role, he is responsible for electric transmission planning and system reliability assessments. He also supports project scoping and sequencing efforts to address both present and future system needs.

WITNESS DIRECT TESTIMONY SUMMARY

Witness: Joshua A. Pollock

Title: Senior Engineer – Electric Distribution Planning

Summary:

Company Witness Joshua A. Pollock co-sponsors those sections of the Appendix describing the Company's electric distribution system and the need for, and benefits of, the proposed project, as follows:

- Section I.A (co-sponsored with Company Witnesses John Jeffrey Koestner, Ebenezer Owusu-Kusi, Wesley Strunk, George C. Brimmer, Melissa A. Harreld, and Sandra M. Warner): This section details the primary justifications for the proposed project.

- Section I.B (co-sponsored with Company Witness John Jeffrey Koestner and Ebenezer Owusu-Kusi): This section details the engineering justifications for the proposed project.

- Section I.C (co-sponsored with Company Witness John Jeffrey Koestner and Ebenezer Owusu-Kusi): This section describes the present system and details how the proposed project will effectively satisfy present and projected future load demand requirements.

- Section I.D (co-sponsored with Company Witness John Jeffrey Koestner and Ebenezer Owusu-Kusi): Although not applicable to the proposed project, this section, when applicable, describes critical contingencies and associated violations due to the inadequacy of the existing system.

- Section I.E (co-sponsored with Company Witnesses John Jeffrey Koestner and Ebenezer Owusu-Kusi): This section explains feasible project alternatives, when applicable.

- Section I.N (co-sponsored with Company John Jeffrey Koestner and Ebenezer Owusu-Kusi): 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.

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

DIRECT TESTIMONY
OF
JOSHUA A. POLLOCK
ON BEHALF OF
VIRGINIA ELECTRIC AND POWER COMPANY
BEFORE THE
STATE CORPORATION COMMISSION OF VIRGINIA
CASE NO. PUR-2026-00062

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 Joshua A. Pollock, and I am a Senior Engineer in the Electric Distribution 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 the estimating and conceptual design on 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 provide service requested by two data center customers in Loudoun County (the "Customers" or "Customer A" and "Customer B"), to maintain reliable service for 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:

(3) Construct one new 230 kilovolt ("kV") double circuit overhead transmission line (for a total of two circuits) extending approximately 0.86 mile on existing 160-foot-wide right-of-way and 0.19 mile on new 100-foot-wide right-of-way

for a total of 1.05 miles, by cutting the existing 230 kV Line #2207 (BECO – Paragon Park) and extending a new 230 kV double circuit to Firehouse Substation, resulting in Line #2207 (Paragon Park - Firehouse) and Line #2496 (Firehouse - BECO) (the "Firehouse Lines"). The Firehouse Lines will be constructed primarily with double circuit galvanized steel monopoles utilizing three-phase twin-bundled 768.2 ACSS/TW Aluminum Conductor Steel Supported/Trapezoidal Wire/High Strength ("ACSS/TW/HS") type conductor with a summer transfer capability 1573 MVA.

(4) Construct a new 230 kV substation in Loudoun County, Virginia designed to accommodate a 230 kV ring bus with an ultimate configuration of four (4) breakers, with all four breakers installed initially, on land provided by Customer A east of the DTC Substation. ("Firehouse Substation").

Collectively, the Firehouse Lines and Firehouse Substation, and related work at BECO and Paragon Park Substations are referred to as the "230 kV Firehouse Lines and Substation" or the "Project."

The Project is necessary to ensure that Dominion Energy Virginia can provide electric service requested by the Customers in Loudoun County, Virginia, maintain reliable electric service consistent with NERC Reliability Standards for the overall load growth in the Loudoun County load area ("the Loudoun Load Area") and comply with mandatory NERC Reliability Standards.

The purpose of my testimony is to describe the Company's electric distribution system and the need for, and benefits of, the proposed Project. I co-sponsor the Executive Summary and Section I.A with Company Witnesses John Jeffrey Koestner, Ebenezer Owusu-Kusi, Wesley Strunk, George C. Brimmer, Melissa A. Harreld, and Sandra M. Warner. Additionally, I co-sponsor Sections I.B, I.C, I.D, I.E, and I.N of the Appendix with Company Witnesses John Jeffrey Koestner and Ebenezer Owusu-Kusi.

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

A. Yes, it does.

APPENDIX A

BACKGROUND AND QUALIFICATIONS
OF
JOSHUA A. POLLOCK

Joshua A. Pollock earned a Bachelor of Science in Mechanical Engineering from Virginia Commonwealth University in 2020. Mr. Pollock is responsible for planning electric distribution projects from conception through completion. His work includes developing and directing project scope and initiating Delivery Point Requests. In 2020, Mr. Pollock joined Dominion Energy as a full-time employee and currently serves as a Senior Engineer in Electric Distribution Planning. He began planning projects for Dominion Energy in 2023.

WITNESS DIRECT TESTIMONY SUMMARY

Witness: Wesley Strunk
Title: Transmission Line Design Engineer

Summary:

Company Witness Wesley Strunk 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.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 II.A.3: This section provides color maps of existing or proposed rights-of-way in the vicinity of the proposed project.
- Section II.A.4: This section explains why the existing right-of-way is not adequate to serve the need.
- 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 project, as applicable.
- Section IV: This section provides analysis on the health aspects of electric and magnetic field levels.

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

- Section I.A (co-sponsored with Company Witnesses John Jeffrey Koestner, Joshua A. Pollock, Ebenezer Owusu-Kusi, George C. Brimmer, Melissa A. Harreld, and Sandra M. Warner): This section details the primary justifications for the proposed project.
- Section I.I. (co-sponsored with Company Witness George C. Brimmer): This section provides the estimated total cost of the proposed project.
- Section I.L (co-sponsored with Company Witness John Jeffrey Koestner): This section, when applicable, provides details on the deterioration of structures and associated equipment.
- Sections II.B.3 to II.B.5 (co-sponsored with Company Witness Melissa A. Harreld): These sections, when applicable, provide supporting structure details along the proposed and alternative routes.
- Section II.B.6 (co-sponsored with Company Witnesses Melissa A. Harreld, and Sandra M. Warner): This section provides photographs of existing facilities, representations of proposed facilities, and visual simulations.
- Section V.A (co-sponsored with Company Witnesses Melissa A. Harreld, and Sandra M. Warner): This section provides the proposed route description and structure heights for notice purposes.

A statement of Mr. Strunk's background and qualifications is attached as Appendix A.

DIRECT TESTIMONY
OF
WESLEY STRUNK
ON BEHALF OF
VIRGINIA ELECTRIC AND POWER COMPANY
BEFORE THE
STATE CORPORATION COMMISSION OF VIRGINIA
CASE NO. PUR-2026-00062

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 Wesley Strunk, and I am a Senior Engineer with Strunk Robertson Consulting Group engaged on behalf of the Company. In this capacity, 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, conceptual, and final 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 provide service requested by two data center customers in Loudoun County (the "Customers" or "Customer A" and "Customer B"), to maintain reliable service for 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:

(1) Construct one new 230 kilovolt ("kV") double circuit overhead transmission line (for a total of two circuits) extending approximately 0.86 mile on existing 160-foot-wide right-of-way and 0.19 mile on new 100-foot-wide right-of-way for a total of 1.05 miles, by cutting the existing 230 kV Line #2207 (BECO –

Paragon Park) and extending a new 230 kV double circuit to Firehouse Substation, resulting in Line #2207 (Paragon Park - Firehouse) and Line #2496 (Firehouse - BECO) (the "Firehouse Lines"). The Firehouse Lines will be constructed primarily with double circuit galvanized steel monopoles utilizing three-phase twin-bundled 768.2 ACSS/TW Aluminum Conductor Steel Supported/Trapezoidal Wire/High Strength ("ACSS/TW/HS") type conductor with a summer transfer capability 1573 MVA.

(2) Construct a new 230 kV substation in Loudoun County, Virginia designed to accommodate a 230 kV ring bus with an ultimate configuration of four (4) breakers, with all four breakers installed initially, on land provided by Customer A east of the DTC Substation. ("Firehouse Substation").

Collectively, the Firehouse Lines and Firehouse Substation, and related work at BECO and Paragon Park Substations are referred to as the "230 kV Firehouse Lines and Substation" or the "Project."

The Project is necessary to ensure that Dominion Energy Virginia can provide electric service requested by the Customers in Loudoun County, Virginia, maintain reliable electric service consistent with NERC Reliability Standards for the overall load growth in the Loudoun County load area ("the Loudoun Load Area") and comply with mandatory NERC Reliability Standards.

The purpose of my testimony is to describe the design characteristics of the transmission facilities for the proposed Project and to discuss electric and magnetic field levels. I sponsor Sections I.F, II.A.3, II.A.4, 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 John Jeffrey Koestner, Joshua A. Pollock, Ebenezer Owusu-Kusi, George C. Brimmer, Melissa A. Harreld, and Sandra M. Warner; Section I.I with Company Witness George C. Brimmer; Section I.L with Company Witness John Jeffrey Koestner; Sections II.B.3 to II.B.5 with Company Witness Melissa A. Harreld; and Sections II.B.6 and V.A

with Company Witnesses Melissa A. Harreld and Sandra M. Warner.

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

A. Yes, it does.

APPENDIX A

BACKGROUND AND QUALIFICATIONS
OF
WESLEY STRUNK

Wesley Strunk received a Bachelor of Science degree in Civil Engineering from the University of Kentucky in 2014 and is a licensed Professional Engineer in the state of Virginia. Mr. Strunk worked as a transmission line design engineer at Kentucky Utilities part-time during college for four years, then worked as a transmission line design consulting engineer for eight years before becoming a Dominion Energy contractor in January 2021. Mr. Strunk's experience with the Company includes Overhead Electric Transmission Line Design.

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

WITNESS DIRECT TESTIMONY SUMMARY

Witness: George C. Brimmer

Title: Engineer III—Substation Engineering

Summary:

Company Witness George Brimmer sponsors or co-sponsors the following sections of the Appendix describing the substation work to be performed for the proposed project as follows:

- Section I.A (co-sponsored with Company Witnesses John Jeffrey Koestner, Joshua A. Pollock, Ebenezer Owusu-Kusi, Wesley Strunk, Melissa A. Harreld, and Sandra M. Warner): This section details the primary justifications for the proposed project.

- Section I.I (co-sponsored with Company Witness Wesley Strunk): This section provides the estimated total cost of the proposed project.

- Section II.C: This section describes and furnishes a one-line diagram of the substation associated with the proposed project.

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

DIRECT TESTIMONY
OF
GEORGE C. BRIMMER
ON BEHALF OF
VIRGINIA ELECTRIC AND POWER COMPANY
BEFORE THE
STATE CORPORATION COMMISSION OF VIRGINIA
CASE NO. PUR-2026-00062

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 George C. Brimmer, and I am an Engineer III in the Substation Engineering section of the Electric Transmission group of the Company. My business address is 2400 Grayland Avenue, Richmond, Virginia 23220. 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 evaluation of the substation project requirements, feasibility studies, conceptual physical design, scope development, preliminary engineering, and cost estimating for high voltage transmission and distribution substations.

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

A. In order to provide service requested by two data center customers in Loudoun County (the "Customers" or "Customer A" and "Customer B"), to maintain reliable service for 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:

(1) Construct one new 230 kilovolt ("kV") double circuit overhead transmission line (for a total of two circuits) extending approximately 0.86 mile on existing

160-foot-wide right-of-way and 0.19 mile on new 100-foot-wide right-of-way for a total of 1.05 miles, by cutting the existing 230 kV Line #2207 (BECO – Paragon Park) and extending a new 230 kV double circuit to Firehouse Substation, resulting in Line #2207 (Paragon Park - Firehouse) and Line #2496 (Firehouse - BECO) (the "Firehouse Lines"). The Firehouse Lines will be constructed primarily with double circuit galvanized steel monopoles utilizing three-phase twin-bundled 768.2 ACSS/TW Aluminum Conductor Steel Supported/Trapezoidal Wire/High Strength ("ACSS/TW/HS") type conductor with a summer transfer capability 1573 MVA.

(2) Construct a new 230 kV substation in Loudoun County, Virginia designed to accommodate a 230 kV ring bus with an ultimate configuration of four (4) breakers, with all four breakers installed initially, on land provided by Customer A east of the DTC Substation. ("Firehouse Substation").

Collectively, the Firehouse Lines and Firehouse Substation, and related work at BECO and Paragon Park Substations are referred to as the "230 kV Firehouse Lines and Substation" or the "Project."

The Project is necessary to ensure that Dominion Energy Virginia can provide electric service requested by the Customers in Loudoun County, Virginia, maintain reliable electric service consistent with NERC Reliability Standards for the overall load growth in the Loudoun County load area ("the Loudoun Load Area") and comply with mandatory NERC Reliability Standards.

The purpose of my testimony is to describe the work to be performed as part of the Project. As it pertains to station work, I sponsor Section II.C of the Appendix. Additionally, I co-sponsor the Executive Summary and Section I.A with Company Witnesses John Jeffrey Koestner, Joshua A. Pollock, Ebenezer Owusu-Kusi, Wesley Strunk, Melissa A. Harreld, and Sandra M. Warner; and Section I.I of the Appendix with Company Witness Wesley Strunk.

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

A. Yes, it does.

APPENDIX A

BACKGROUND AND QUALIFICATIONS
OF
GEORGE C. BRIMMER

George Brimmer received a Bachelor of Science degree in Electrical Engineering from Virginia Commonwealth University in 2014. Mr. Brimmer also received a Bachelor of Science degree in Psychology in 2008. Prior to joining the Company, he worked as Cable Technician for American Systems Corporation from 2010 to 2011. Mr. Brimmer has been employed by the Company since 2013. He joined the Dominion Energy Substation Engineering department in November 2016 as an Engineer II. He was promoted to Engineer III in July 2021. Mr. Brimmer's responsibilities includes the evaluation of the substation project requirements, development of project scope documents, estimates, development of detailed physical drawings, bill of materials, electrical schematics and wiring diagrams. His areas of expertise are substation and grounding design.

WITNESS DIRECT TESTIMONY SUMMARY

Witness: Melissa A. Harreld

Title: Senior Siting and Permitting Specialist – Siting and Permitting Group

Summary:

Company Witness Melissa A. Harreld will sponsor 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.12: This section provides a map showing the route of the proposed project in relation to notable points close to the proposed project.
- Sections V.B–D: These sections provide information related to public notice of the proposed project.

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

- Section I.A (co-sponsored with Company Witnesses John Jeffrey Koestner, Joshua A. Pollock, Ebenezer Owusu-Kusi, Wesley Strunk, George C. Brimmer, and Sandra M. Warner): This section details the primary justifications for the proposed project.
- Section II.A.1 (co-sponsored with Company Witness Sandra M. Warner): This section provides the length of the proposed corridor and viable alternatives to the proposed project.
- Section II.A.2 (co-sponsored with Company Witness Sandra M. Warner): This section provides a map showing the route of the proposed project in relation to notable points close to the proposed project.
- Sections II.A.6 to II.A.8 (co-sponsored with Company Sandra M. Warner): These sections provide detail regarding the right-of-way for the proposed project.
- Section II.A.9 (co-sponsored with Company Witness Sandra M. Warner): This section describes the proposed route selection procedures and details alternative routes considered.
- Section II.A.11 (co-sponsored with Company Witness Sandra M. Warner): This section details how the construction of the proposed project follows the provisions discussed in Attachment 1 of the Transmission Appendix Guidelines.
- Sections II.B.3 to II.B.5 (co-sponsored with Company Witness Wesley Strunk): These sections, when applicable, provide supporting structure details along the proposed and alternative routes.
- Section II.B.6 (co-sponsored with Company Witnesses Wesley Strunk and Sandra M. Warner): This section provides photographs of existing facilities, representations of proposed facilities, and visual simulations.
- Section III (co-sponsored with Company Witness Sandra M. Warner): This section details the impact of the proposed project on scenic, environmental, and historic features.
- Section V.A (co-sponsored with Company Witnesses Wesley Strunk and Sandra M. Warner): This section provides the proposed route description and structure heights for notice purposes.

Finally, Ms. Harreld co-sponsors the DEQ Supplement filed with the Application with Company Witness Sandra M. Warner. A statement of Ms. Harreld's background and qualifications is attached to her testimony as Appendix A.

DIRECT TESTIMONY
OF
MELISSA A. HARRELD
ON BEHALF OF
VIRGINIA ELECTRIC AND POWER COMPANY
BEFORE THE
STATE CORPORATION COMMISSION OF VIRGINIA
CASE NO. PUR-2026-00062

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 Melissa A. Harreld, and I am a Siting and Permitting Specialist in the Siting and Permitting Group for the Company. My business address is 5000 Dominion Blvd., 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 provide service requested by two data center customers in Loudoun County (the "Customers" or "Customer A" and "Customer B"), to maintain reliable service for 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:

(1) Construct one new 230 kilovolt ("kV") double circuit overhead transmission line (for a total of two circuits) extending approximately 0.86 mile on existing 160-foot-wide right-of-way and 0.19 mile on new 100-foot-wide right-of-way for a total of 1.05 miles, by cutting the existing 230 kV Line #2207 (BECO – Paragon Park) and extending a new 230 kV double circuit to Firehouse Substation, resulting in Line #2207 (Paragon Park - Firehouse) and Line #2496 (Firehouse - BECO) (the "Firehouse Lines"). The Firehouse Lines will be constructed primarily with double circuit galvanized steel monopoles utilizing three-phase twin-bundled 768.2 ACSS/TW Aluminum Conductor Steel Supported/Trapezoidal Wire/High Strength ("ACSS/TW/HS") type conductor with a summer transfer capability 1573 MVA.

(2) Construct a new 230 kV substation in Loudoun County, Virginia designed to accommodate a 230 kV ring bus with an ultimate configuration of four (4) breakers, with all four breakers installed initially, on land provided by Customer A east of the DTC Substation. ("Firehouse Substation").

Collectively, the Firehouse Lines and Firehouse Substation, and related work at BECO and Paragon Park Substations are referred to as the "230 kV Firehouse Lines and Substation" or the "Project."

The Project is necessary to ensure that Dominion Energy Virginia can provide electric service requested by the Customers in Loudoun County, Virginia, maintain reliable electric service consistent with NERC Reliability Standards for the overall load growth in the Loudoun County load area ("the Loudoun Load Area") and comply with mandatory NERC Reliability Standards.

The purpose of my testimony is to provide an overview of the route and permitting for the proposed Project. I sponsor Sections II.A.12 and V.B to V.D of the Appendix. Additionally, I co-sponsor the Executive Summary and Section I.A with Company Witnesses John Jeffrey Koestner, Joshua A. Pollock, Ebenezer Owusu-Kusi, Wesley

Strunk, George C. Brimmer, and Sandra M. Warner; Sections II.A.1, II.A.2, II.A.6 to II.A.9, II.A.11, and III with Company Witness Sandra M. Warner; Sections II.B.3 to II.B.5 with Company Witness Wesley Strunk; and Sections II.B.6 and V.A with Company Witnesses Wesley Strunk and Sandra M. Warner. Finally, I co-sponsor the DEQ Supplement with Company Witness Sandra M. Warner.

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 March 16, 2026, was sent to Mr. Tim Hemstreet, Loudoun County Administrator, 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. A copy of the letter is included in Appendix Attachment V.D.1.

Q. Does this conclude your pre-filed direct testimony

A. Yes, it does.

APPENDIX A

BACKGROUND AND QUALIFICATIONS
OF
MELISSA A. HARRELD

Melissa A. Harreld received a Bachelor of Science degree in Business Administration with a concentration in Real Estate and Urban Land Development from Virginia Commonwealth University in 2005. She has been employed by the Company since 2023 and prior to that was employed by a consultant from 2021-2023. Ms. Harreld's experience with the Company includes Distribution Land Use Lead (2021-2023) and Siting and Permitting Specialist (2023-Present).

WITNESS DIRECT TESTIMONY SUMMARY

Witness: Sandra M. Warner

Title: Southeast Environmental Team Leader, CHA Consulting Inc.

Summary:

Company Witness Sandra M. Warner co-sponsors the following portion of the Appendix:

- Section I.A (co-sponsored with Company Witnesses John Jeffrey Koestner, Ebenezer Owusu-Kusi, Joshua A. Pollock, Wesley Strunk, George C. Brimmer, and Melissa A. Harreld): This section details the primary justifications for the proposed project.
- Section II.A.1 (co-sponsored with Company Witness Melissa A. Harreld): This section provides the length of the proposed corridor and viable alternatives to the proposed project.
- Section II.A.2 (co-sponsored with Company Witness Melissa A. Harreld): This section provides a map showing the route of the proposed project in relation to notable points close to the proposed project.
- Sections II.A.6 to II.A.8 (co-sponsored with Company Witness Melissa A. Harreld): These sections provide detail regarding the right-of-way for the proposed project.
- Section II.A.9 (co-sponsored with Company Witness Melissa A. Harreld): This section describes the proposed route selection procedures and details alternative routes considered.
- Section II.A.11 (co-sponsored with Company Witness Melissa A. Harreld): This section details how the construction of the proposed project follows the provisions discussed in Attachment 1 of the Transmission Appendix Guidelines.
- Section II.B.6 (co-sponsored with Company Witnesses Wesley Strunk and Melissa A. Harreld): This section provides photographs of existing facilities, representations of proposed facilities, and visual simulations.
- Section III (co-sponsored with Company Witness Melissa A. Harreld): This section details the impact of the proposed project on scenic, environmental, and historic features.
- Section V.A (co-sponsored with Company Witnesses Josh Pollock and Melissa A. Harreld): This section provides the proposed route description and structure heights for notice purposes.

Finally, Ms. Warner co-sponsors the DEQ Supplement filed with this Application with Company Witness Melissa A. Harreld.

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

DIRECT TESTIMONY
OF
SANDRA M. WARNER
ON BEHALF OF
VIRGINIA ELECTRIC AND POWER COMPANY
BEFORE THE
STATE CORPORATION COMMISSION OF VIRGINIA
CASE NO. PUR-2026-00062

Q. Please state your name, position and place of employment and business address.

A. My name is Sandra Warner. I am employed as a Project Manager and Team Leader at CHA Consulting Inc. ("CHA"). My business address is 1341 Research Park Dr., Suite 2100, Blacksburg, Virginia, 24060. A statement of my qualifications and background is provided as Appendix A.

Q. What professional experience does CHA have with the routing of linear energy transportation facilities?

A. CHA has extensive experience in the permitting, feasibility assessments, routing and design of transmission line projects. It has assisted its clients in the identification, evaluation and development of linear energy facilities and has been in business for over 70 years. CHA has consistently provided complete solutions for transmission line routing and siting work. CHA uses data-intensive Geographic Information System spatial and dimensional analysis and the most current and refined data layers and aerial photography resources available for the identification, evaluation and selection of transmission line routes.

CHA works on both small and large energy projects and has assisted in or conducted the routing and route evaluation and design of some of the largest electric transmission line and pipeline facilities in North America.

CHA served as a consultant to various utilities for the design, permitting and siting of transmission line projects including:

- New York Power Authority – Lake Champlain PV-20 Submarine Cable Replacement;
- Orange and Rockland Utilities, Inc. – North Rockland 345kv GIS Substation Feasibility Study;
- Central Hudson Gas & Electric, Inc. – Kerhonkson Substation Expansion;
- Orange and Rockland Utilities, Inc. – Transmission Line Upgrade and Visual Assessment Project;
- Hoosier Energy Rural Electric Cooperative – Pleasant Grove-Spurgeon's Line 3417;
- Orange & Rockland Utilities, Inc. – Port Jervis Line 18/141 & 111 Modification Design;

In Virginia, CHA served as a consultant to the Company for two projects over the last 18 months with a primary focus on permitting transmission line projects including:

- Access Plans for Lees Hill Delivery Point Project and Erosion and Sediment Control Plans; and
- Meteor Substation FAA – Obstruction Evaluation.

Q. What were you asked to do in connection with this case?

A. In order to provide service requested by two data center customers in Loudoun County (the "Customers" or "Customer A" and "Customer B"), to maintain reliable service for 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:

(1) Construct one new 230 kilovolt ("kV") double circuit overhead transmission line (for a total of two circuits) extending approximately 0.86 mile on existing 160-foot-wide right-of-way and 0.19 mile on new 100-foot-wide right-of-way for a total of 1.05 miles, by cutting the existing 230 kV Line #2207 (BECO – Paragon Park) and extending a new 230 kV double circuit to Firehouse Substation, resulting in Line #2207 (Paragon Park - Firehouse) and Line #2496 (Firehouse - BECO) (the "Firehouse Lines"). The Firehouse Lines will be constructed primarily with double circuit galvanized steel monopoles utilizing three-phase twin-bundled 768.2 ACSS/TW Aluminum Conductor Steel Supported/Trapezoidal Wire/High Strength ("ACSS/TW/HS") type conductor with a summer transfer capability 1573 MVA.

(2) Construct a new 230 kV substation in Loudoun County, Virginia designed to accommodate a 230 kV ring bus with an ultimate configuration of four (4) breakers, with all four breakers installed initially, on land provided by Customer A east of the DTC Substation. ("Firehouse Substation").

Collectively, the Firehouse Lines and Firehouse Substation, and related work at BECO and Paragon Park Substations are referred to as the "230 kV Firehouse Lines and Substation" or the "Project."

The Project is necessary to ensure that Dominion Energy Virginia can provide electric service requested by the Customers in Loudoun County, Virginia, maintain reliable electric service consistent with NERC Reliability Standards for the overall load growth in the Loudoun County load area ("the Loudoun Load Area") and comply with mandatory NERC Reliability Standards.

The purpose of my testimony is to introduce and sponsor the Proposed Route for this Project. Additionally, I co-sponsor the Executive Summary and Section I.A with Company Witnesses John Jeffrey Koestner, Ebenezer Owusu-Kusi, Joshua A. Pollock, Wesley Strunk, George C. Brimmer, and Melissa A. Harreld; Sections II.A.1, II.A.2, II.A.6 to II.A.9, II.A.11, and III with Company Witness Melissa A. Harreld; and Sections II.B.6 and V.A with Company Witnesses Wesley Strunk and Melissa A. Harreld. Lastly,

I co-sponsor the DEQ Supplement with Company Witness Melissa A. Harreld.

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

A. Yes, it does.

APPENDIX A

BACKGROUND AND QUALIFICATIONS OF SANDRA M. WARNER

Sandra M. Warner received a Bachelor of Science degree in Geosciences from Penn State University in 2001 and a Master of Science degree from Virginia Tech in 2004. She is a licensed professional geologist in the State of Virginia (License number: 2801001698; Originally Issued 11-21-2006). Ms. Warner's responsibilities include the management of environmental data collection, preparation of permit applications and environmental reviews for infrastructure and utility projects, development of scope documents and schedules for environmental projects, and preparation of estimates and proposals. Ms. Warner joined CHA Consulting in 2004 as a Project Geologist and was later promoted to her current role as Project Manager and Team Leader.