COMMONWEALTH OF VIRGINIA STATE CORPORATION COMMISSION

APPLICATION OF

ECC - CERRO D'ARRENT - COS CARRO L'OTRACO TRANSPO

VIRGINIA ELECTRIC AND POWER COMPANY CASE NO. PUR-2023-00049

For approval and certification of electric transmission facilities: Line #2011 230 kV Partial Rebuild Project

7873 SEP 21 A II: 27

REPORT OF M. RENAE CARTER, HEARING EXAMINER

September 21, 2023

This case concerns a request for approval and certification of transmission facilities in the Cities of Manassas and Manassas Park and the Counties of Prince William and Fairfax, Virginia. The record supports approval of the Company's request. The Project is needed so the Company can continue to provide reliable service in the Project area and comply with standards of the North American Electric Reliability Corporation and with the Company's transmission planning criteria.

HISTORY OF THE CASE

On March 31, 2023, Virginia Electric and Power Company ("Dominion" or "Company") filed with the State Corporation Commission ("Commission") an application ("Application") for approval and for a certificate of public convenience and necessity ("CPCN") for electric transmission facilities in the Cities of Manassas and Manassas Park and the Counties of Prince William and Fairfax, Virginia (the "Manassas Airport Area"). Dominion filed its Application pursuant to § 56-46.1 of the Code of Virginia ("Code") and the Utility Facilities Act, Code § 56-265.1 et seq.²

Specifically, the Company proposed to complete the following, which is collectively referred to as the "Project" or the "Partial Rebuild Project":³

• Rebuild approximately 7.25 miles of existing overhead 230 kilovolt ("kV") Cannon Branch-Clifton Line #2011 from existing Structure #2011/68, which is located one span outside the Company's existing Cannon Branch Substation and is not being replaced, to the Clifton Substation. Specifically, the Company proposes to replace the existing Line #2011 1590 aluminum conductor steel reinforced (45/7) conductor from Structure #2011/68 to Clifton Substation with three-phase twin-bundled 768.2 trapezoidal wire

¹ Application at 1-2. The Company made an Errata Filing to the Application on July 11, 2023.

² Application at 1.

³ Id. at 2-3 and Appendix at 5-6. See also Staff Report at 10.

⁴ In Application of Virginia Electric and Power Company, For approval and certification of electric transmission facilities: Line #2011 Extension from Cannon Branch to Winters Branch, Case No. PUR-2021-00291, 2022 S.C.C. Ann. Rep. 437, Final Order (June 24, 2022), the Commission granted the Company approval to remove approximately 0.06 miles of existing 230 kV Line #2011 between the Cannon Branch Substation and Structure #2011/68. Once that work is complete, Line #2011 will run from the Clifton Substation to the Winters Branch Substation. Application at 2 n.1.

aluminum conductor steel supported type conductor, designed for a maximum operating temperature of 250 degrees Celsius and a minimum summer transfer capacity of 1,573 megavolt amperes ("MVA"). To accommodate the higher capacity of the uprated conductor, the Company also proposes to replace the existing single circuit 230 kV monopoles with all single circuit 230 kV weathering steel monopoles.

- Replace all substation equipment at the Clifton Substation that is associated with Line #2011 and not currently rated for 4000 amperes ("A") to provide a 4000A single breaker rating.
- Uprate the Company's line switches to 4000A at the Prince William Delivery Point and Battery Heights Delivery Point, both of which are the City of Manassas's delivery points tapped from Line #2011.

On April 25, 2023, the Commission issued an Order for Notice and Comment that, among other things, directed Dominion to provide notice of its Application; established a procedural schedule, including the opportunity for interested persons to file comments, notices of participation, and requests for hearing; directed the Commission's Staff ("Staff") to investigate the Application and file a report summarizing Staff's investigation; and appointed a Hearing Examiner to conduct all further proceedings in this matter on behalf of the Commission and to file a report.

As required by the Order for Notice and Comment, on June 6, 2023, Dominion filed proof of notice and service and a certificate of the mailing of notice to owners of property within the route of the proposed Partial Rebuild Project.

On June 13, 2023, the Department of Environmental Quality ("DEQ") filed its report on Dominion's Application ("DEQ Report"), which includes a Wetland Impact Consultation provided by DEQ's Office of Wetlands and Stream Protection.

On June 14, 2023, the Company filed a Motion for Entry of a Protective Ruling, and a Hearing Examiner's Protective Ruling was issued on June 16, 2023.

On July 14, 2023, the Fairfax County Board of Supervisors filed a Notice of Participation in this docket. No public comments or hearing requests on the Application were filed with the Commission.

On August 8, 2023, Staff filed its report ("Staff Report"), and on August 18, 2023, the Company filed its rebuttal testimony.

SUMMARY OF THE FILINGS

Dominion Direct Testimony

Dominion offered the direct testimony of four witnesses: Steven J. Schweiger, Area Planning Engineer in the Electric Transmission Planning Department for the Company; Chloe A. Genova, Engineering Technical Specialist II in the Company's Electric Transmission Line Engineering Department; Aaron C. Kuhn, a contractor for the Company's Substation

Engineering section of the Electric Transmission group; and Craig R. Hurd, a Siting and Permitting Specialist in the Siting and Permitting Group for the Company.

Steven J. Schweiger sponsored those sections of the Application Appendix describing Dominion's electric transmission system and the need for, and benefits of, the proposed Partial Rebuild Project, as follows:

- Section I.B: This section details the engineering justifications for the Project.
- <u>Section I.C</u>: This section describes the present system and details how the Project will effectively satisfy present and projected future electrical load demand requirements.
- <u>Section I.D</u>: This section describes critical contingencies and associated violations due to inadequacy of the existing system.
- Section I.E: This section explains that there are no feasible alternatives to the Project.
- <u>Section I.H</u>: This section provides the desired Project in-service date and the estimated construction time.
- <u>Section I.J</u>: This section provides information about the Project's acceptance by PJM Interconnection, L.L.C. ("PJM").
- Section I.K: This section is not applicable to the Project.
- Section I.M: This section is not applicable to the Project.
- Section I.N: This section is not applicable to the Project.
- <u>Section II.A.10</u>: This section provides details of the construction plans for the Project, including requested and approved line outage schedules.⁵

In addition, Mr. Schweiger co-sponsored the following portions of the Appendix:

- Executive Summary: This section provides a high-level overview of the need for and components of the Project.
- Section I.A: This section details the primary justifications for the Project.
- <u>Section I.F</u>: This section describes the lines or facilities that will be removed, replaced or taken out of service upon completion of the Project.
- Section I.G: This section provides a system map of the affected area.
- <u>Section II.A.3</u>: This section provides a color map of existing and proposed rights-of-way ("ROW") in the Project vicinity.⁶

Chloe A. Genova sponsored those sections of the Appendix providing an overview of the design characteristics of the Project's transmission facilities and discussing electric and magnetic field levels, as follows:

- Section I.L: This section is not applicable to the Project.
- <u>Section II.A.5</u>: This section provides drawings of the ROW cross section showing typical transmission line structure placements.
- <u>Sections II.B.1 through II.B.3</u>: These sections provide the line design and operational features of the Project.

⁵ Schweiger Direct Testimony at 2.

⁶ Id.

- Section II.B.4: This section is not applicable to the Project.
- <u>Section IV</u>: This section provides analysis on the health aspects of electric and magnetic field levels.⁷

In addition, Ms. Genova co-sponsored the following portions of the Appendix:

- Executive Summary: This section provides a high-level overview of the need for and components of the Project.
- Section I.A: This section details the primary justifications for the Project.
- <u>Section I.F</u>: This section describes any lines or facilities that will be removed, replaced or taken out of service upon completion of the Project.
- Section I.I: This section provides the estimated total Project cost.
- <u>Section II.B.5</u>: This section provides the mapping and structure heights for the existing and proposed overhead structures.
- <u>Section V.A</u>: This section provides information related to the Project route, to be used for public notice purposes.⁸

Aaron C. Kuhn sponsored or co-sponsored the following sections of the Appendix describing work to be performed for the Project at an existing substation, as follows:

- Executive Summary: This section provides a high-level overview of the need for and components of the Project.
- <u>Section I.I</u>: This section provides the estimated total Project cost.
- Section II.C: This section describes the station work associated with the Project.⁹

Craig R. Hurd sponsored those sections of the Appendix providing an overview of the design of the Project route and related permitting, as follows:

- <u>Section II.A.1</u>: This section provides the length of the proposed corridor and viable Project alternatives.
- <u>Section II.A.2</u>: This section provides a map showing the Project's route in relation to notable points close to the Project.
- Section II.A.4: This section explains why the existing ROW is inadequate to serve the need of the Project.
- Sections II.A.6 through II.A.8: These sections provide details about the Project ROW.
- <u>Section II.A.9</u>: This section describes the proposed route selection procedures and details alternative routes considered.
- <u>Section II.A.11</u>: This section details how the Project's construction follows the provisions discussed in Attachment 1 to the Transmission Appendix Guidelines.
- <u>Section II.A.12</u>: This section identifies the counties and localities through which the Project will pass and provides General Highway Maps for these localities.

⁷ Genova Direct Testimony at 2.

⁸ ld.

⁹ Kuhn Direct Testimony at 2.

- <u>Section II.B.6</u>: This section provides photographs of existing facilities, representations of proposed facilities, and visual simulations.
- <u>Section III</u>: This section details the Project's impact on scenic, environmental, and historic features.
- <u>Section V</u>: This section concerns notice of the Project to the public and to agencies and officials.¹⁰

In addition, Mr. Hurd co-sponsored the following sections of the Appendix:

- Executive Summary: This section provides a high-level overview of the need for and components of the Project.
- Section I.G: This section provides a system map of the affected area.
- <u>Section II.A.3</u>: This section provides color maps of existing and proposed ROW in the Project vicinity.
- <u>Section II.B.5</u>: This section provides the mapping and structure heights for the existing and proposed overhead structures.
- <u>Section V.A</u>: This section provides information related to the Project route, to be used for public notice purposes.¹¹

Mr. Hurd also sponsored the DEQ Supplement filed with the Application.¹² Additionally, he stated that the Company complied with Code § 15.2-2202 E by sending letters to officials in the Counties of Prince William and Fairfax, and the Cities of Manassas and Manassas Park, advising them of the Company's intent to file the Application; the letters requested that within 30 days of the date of the letters, the Counties and Cities provide comments or additional information that would bear on the Project.¹³

DEQ Report

On June 13, 2023, DEQ filed the DEQ Report, summarizing the Project's potential impacts to natural and cultural resources in Virginia. DEQ stated that the following agencies joined with DEQ in review of the Project:

- Department of Conservation and Recreation ("DCR");
- Department of Health;
- Department of Historic Resources ("DHR"):
- Virginia Outdoors Foundation (VOF");
- Department of Transportation;
- Department of Aviation; and
- Fairfax County.¹⁵

¹⁰ Hurd Direct Testimony at 2.

¹¹ Id.

¹² Id.

¹³ Id. at 2-3; Application, Appendix at 284-308.

¹⁴ DEQ Report at Cover Letter, p. 1 (unnumbered).

¹⁵ *Id*. at 1.

DEQ indicated the Department of Wildlife Resources, Marine Resources Commission, Department of Forestry, Cities of Manassas and Manassas Park, Prince William County, and the Northern Virginia Regional Commission also were invited to comment on the Application. ¹⁶

The DEQ Report listed numerous permits and approvals that are likely prerequisites to the Project's construction.¹⁷ In addition to these requirements of local, state, or federal law, the DEQ Report included a number of recommendations made by the reviewing agencies for the Commission's consideration. These are:¹⁸

- Conduct an on-site delineation of wetlands and streams within the Project area with verification by the U.S. Army Corps of Engineers, using accepted methods and procedures, and follow DEQ's recommendations to avoid and minimize impacts to wetlands and streams.¹⁹
- Take all reasonable precautions to limit emissions of oxides of nitrogen and volatile organic compounds, principally by controlling or limiting the burning of fossil fuels.
- Further evaluate pollution complaint cases that were identified in the Project area, and listed in the DEQ Report, to establish the location, nature, and extent of petroleum releases and their potential impact to the Project.²⁰
- Reduce solid waste at the source, reuse it, and recycle it to the maximum extent practicable, and follow DEQ's recommendations to manage waste, as applicable.
- Coordinate with DCR for updates to the Biotics Data System database (if the scope of the Project changes or six months passes before the Project is implemented).
- Coordinate with the VOF should the Project change or if construction does not begin within 24 months.
- Employ best management practices for the protection of water supply sources.
- Coordinate with Fairfax County on its recommendations on potential Project impacts to water resources, forest resources, natural resources, real estate, land rights, and site access, heritage resources, and other considerations.²¹
- Follow the principles and practices of pollution prevention to the extent practicable.²²
- Limit the use of pesticides and herbicides to the extent practicable.

In addition to the above summary of recommendations, the DEQ Report incorporated additional recommendations as follows:

 Dominion should conduct an inventory for diabase plants in the Project area, and coordinate survey results with DCR's Division of Natural Heritage.²³

¹⁶ *Id*.

¹⁷ See id. at 3-5.

¹⁸ See generally, id. at 6-7.

¹⁹ See also id. at 9-10.

²⁰ See also id. at 18-19.

²¹ Details of Fairfax County's recommendations are in the May 24, 2023 letter from Leanna H. O'Donnell, Planning Division, Department of Planning and Development, County of Fairfax, Virginia, attached to the DEQ Report.

²² See DEQ Report at 27-28.

²³ *Id*. at 21.

- Unsurveyed portions of the Project ROW should be surveyed for archaeological resources, and identified sites should be assessed for impacts.²⁴
- The Company should undertake comprehensive cultural resources surveys prior to Project construction, evaluate identified resources for listing in the Virginia Landmark Register ("VLR") and National Register of Historic Places ("NRHP") and should assess potential impacts to all VLR/NRHP eligible or listed resources.²⁵
- If the Project will involve work on Land and Water Conservation Fund ("LWCF") protected property, DCR's Division of Planning and Recreational Resources recommends verification of the property boundary.²⁶

Commission Staff Direct Testimony

Carlos A. Gil, Associate Utilities Engineer in the Commission's Division of Public Utility Regulation, prepared the Staff Report on the Application. According to the Staff Report, Staff verified the Company-provided power flow models and confirmed that, without the Project, certain thermal violations are projected to occur. Staff reported it verified the Partial Rebuild Project would resolve these violations. Staff agreed the Project is needed to comply with North American Electric Reliability Corporation ("NERC") Reliability Standards and Dominion's own transmission planning criteria and to provide reliable service in the Project area. Staff also concurred with the Company that demand-side management load reductions do not change the need for the Project.²⁷

Staff reviewed the three transmission alternatives to the Project identified by the Company. Staff did not disagree with any of the Company's assessments as to the infeasibility of these alternatives. As to economic development, Staff concluded the Project would facilitate economic growth in Virginia by continuing to provide reliable electrical service. Since there would be minimal additional work associated with maintaining and operating Line #2011 after the Project is completed, Staff concluded that a negligible impact on long-term job creation may be expected.²⁹

Staff concluded: (1) Dominion has reasonably demonstrated the Project is needed to comply with mandatory NERC Reliability Standards and the Company's transmission planning criteria, and to maintain reliable electric service for load growth projected in the Project area; (2) the Project does not appear to adversely impact any goal established by the Virginia Environmental Justice Act; and (3) since the Project utilizes mostly existing ROW or parallels existing ROW, it appears to avoid or reasonably minimize impacts to scenic assets, historic districts, the environment, and existing residences. The Staff Report stated that Staff does not oppose issuance of a CPCN for the Project.³⁰

²⁴ Id. at 23.

²⁵ Id.

²⁶ Id. at 24.

²⁷ Staff Report at 6-7.

²⁸ Id. at 12-14.

²⁹ *Id.* at 17.

³⁰ Id. at 19.

Dominion Rebuttal Testimony

On August 18, 2023, the Company offered rebuttal testimony of **Craig R. Hurd**, a Siting and Permitting Specialist in the Siting and Permitting Group for the Company, and **James P. Young**, an Environmental Services Electric Transmission Environmental Specialist III for the Company.

Craig R. Hurd provided an update on the status of the Company obtaining property rights in relation to three structures. He stated that in June 2023, the closing occurred on the purchase agreement for land rights pertaining to Structure #2011/58. He indicated the fee purchase closing for land rights related to Structure #2011/36 is now expected to occur in September 2023. As to Structure #2011/37, Mr. Hurd reported that the Company and landowner have not been able to reach agreement on a land purchase. If an agreement for purchase cannot be made, Mr. Hurd stated the Company will work to expand existing easements or proceed without additional permanent easement acquisition. He reiterated that the existing ROW is adequate at Structures #2011/36 and #2011/37.³¹

Mr. Hurd also addressed two issues in the DEQ Report. First, he discussed the recommendation by DCR's Division of Planning and Recreational Resources that if the Project will involve work on LWCF protected property such as Blooms Park, the Company should verify the property boundary.³² Mr. Hurd requested the Commission reject this recommendation as unnecessary.³³ Mr. Hurd asserted the Project is located adjacent to Blooms Park, the work to be performed for the Project is within existing transmission ROW, and the Company already has sufficient rights to conduct the work it proposes within the existing transmission corridor.³⁴

Next, Mr. Hurd addressed the recommendation that the Company coordinate with Fairfax County on its recommendations related to impacts of the Project on water, forest, and natural resources; land rights, real estate, and site access; heritage resources; and other considerations.³⁵ According to Mr. Hurd, the Company has begun coordinating with Fairfax County personnel about potential impacts of the Project.³⁶ Mr. Hurd emphasized the Company's commitment to ongoing coordination with Fairfax County throughout the construction process.³⁷

James P. Young took issue with three recommendations in the DEQ Report. First, he discussed the recommendation that the Company further evaluate certain pollution complaint cases identified in the Project area by DEQ's Division of Land Protection and Revitalization ("DLPR"), "to establish the exact location, nature and extent of the petroleum releases and their potential to impact the" Project.³⁸ Mr. Young requested the Commission reject this DEQ

³¹ Rebuttal Testimony of Craig R. Hurd at 3 and Rebuttal Schedule 1, pp. 1-2.

³² Id. at 4.

³³ *Id*. at 4-5.

³⁴ Id.

³⁵ Id. at 6.

³⁶ *Id*.

³⁷ Id. at 6-7.

³⁸ Rebuttal Testimony of James P. Young at 3; DEQ Report at 19.

recommendation since "such evaluation has already occurred," and, based on that work, Dominion determined the eight release sites warrant no further concern or evaluation.³⁹

Mr. Young also requested that the Commission reject the DEQ recommendation that the Company should conduct an inventory for diabase plants in the Project area, and coordinate survey results with DCR's Division of Natural Heritage. Mr. Young requested the Commission not adopt this recommendation because of the rarity of diabase communities and the low likelihood of their presence in the Project area, their lack of inclusion on any formal list as endangered or threatened, and their lack of protection by any regulations. It

Third, Mr. Young requested the Commission reject, as duplicative, DEQ's recommendation that the Company consider development of an effective Environmental Management System ("EMS"). Mr. Young asserted Dominion already has a comprehensive EMS manual in place, and the Commission has rejected this recommendation in other cases.⁴²

Finally, Mr. Young seconded the comments of Company witness Hurd that the Company is engaging with Fairfax County to discuss its Project-related concerns and recommendations. Among the items being discussed with Fairfax County are, according to Mr. Young, access rights to Johnny Moore Stream Valley Park, the permitting approval process to complete Project-related bat surveys, and environmental reviews including permits for access for wetland delineations, cultural resources, and geotechnical studies.⁴³

APPLICABLE LAW

The statutory scheme governing the Application is found in several chapters of Title 56 of the Code. Code § 56-265.2 A provides that "it shall be unlawful for any public utility to construct . . . any facilities for use in public utility service, except ordinary extensions or improvements in the usual course of business, without first having obtained a certificate from the Commission that the public convenience and necessity require the exercise of such right or privilege."

Code § 56-46.1 A requires the Commission to consider environmental reports issued by other state agencies, local comprehensive plans, the impact on economic development, and improvements in reliability before approving construction of electrical utility facilities, stating as follows:

Whenever the Commission is required to approve the construction of any electrical utility facility, it shall give consideration to the effect of that facility on the environment and establish such conditions as may be desirable or necessary to minimize adverse environmental impact. . . . In every proceeding under this subsection, the Commission shall receive and give consideration to all reports that

³⁹ Rebuttal Testimony of James P. Young at 3-4.

⁴⁰ Id. at 9; see also DEQ Report at 21.

⁴¹ Rebuttal Testimony of James P. Young at 9-10.

⁴² *Id*. at 11.

⁴³ Id. at 12-13.

relate to the proposed facility by state agencies concerned with environmental protection; and if requested by any county or municipality in which the facility is proposed to be built, to local comprehensive plans that have been adopted pursuant to Article 3 (§ 15.2-2223 et seq.) of Chapter 22 of Title 15.2. Additionally, the Commission (a) shall consider the effect of the proposed facility on economic development within the Commonwealth, including but not limited to furtherance of the economic and job creation objectives of the Commonwealth Clean Energy Policy set forth in § 45.2-1706.1, and (b) shall consider any improvements in service reliability that may result from the construction of such facility.

Code § 56-46.1 B further provides:

As a condition to approval the Commission shall determine that the line is needed and that the corridor or route chosen for the line will avoid or reasonably minimize adverse impact to the greatest extent reasonably practicable on the scenic assets, historic resources recorded with the Department of Historic Resources, and environment of the area concerned. . . . In making the determinations about need, corridor or route, and method of installation, the Commission shall verify the applicant's load flow modeling, contingency analyses, and reliability needs presented to justify the new line and its proposed method of installation.

As provided in Code § 56-46.1 D, the term "[e]nvironment" or "environmental" used in Code § 56-46.1 "shall be deemed to include in meaning 'historic,' as well as a consideration of the probable effects of the line on the health and safety of the persons in the area concerned."

The Code also requires the Commission to consider existing ROW easements when siting transmission lines. Code § 56-46.1 C provides that "[i]n any hearing the public service company shall provide adequate evidence that existing rights-of-way cannot adequately serve the needs of the company." In addition, Code § 56-259 C provides, "Prior to acquiring any easement of right-of-way, public service corporations will consider the feasibility of locating such facilities on, over, or under existing easements of rights-of-way."

Code § 2.2-235 of the Virginia Environmental Justice Act provides that "[i]t is the policy of the Commonwealth to promote environmental justice and ensure that it is carried out throughout the Commonwealth, with a focus on environmental justice communities and fenceline communities."

Code § 2.2-234 defines the following terms, among others, used in the Virginia Environmental Justice Act:

"Community of color" means any geographically distinct area where the population of color, expressed as a percentage of the total population of such area, is higher than the population of color in the Commonwealth expressed as a percentage of the total population of the Commonwealth. . . .

"Environmental justice" means the fair treatment and meaningful involvement of every person, regardless of race, color, national origin, income, faith, or disability, regarding the development, implementation, or enforcement of any environmental law, regulation, or policy.

"Environmental justice community" means any low-income community or community of color.

"Fenceline community" means an area that contains all or part of a low-income community or community of color and that presents an increased health risk to its residents due to its proximity to a major source of pollution.

"Low income" means having an annual household income equal to or less than the greater of (i) an amount equal to 80 percent of the median income of the area in which the household is located, as reported by the Department of Housing and Urban Development, and (ii) 200 percent of the Federal Poverty Level.

"Low-income community" means any census block group in which 30 percent or more of the population is composed of people with low income.

ANALYSIS

Project Description

Through the Application, the Company has requested approval to rebuild approximately 7.25 miles of overhead 230 kV Line #2011 from Structure #2011/68 to the Clifton Substation. The rebuild portion is indicated by the long-hatched line on the diagram to the right.44 As the diagram indicates, this portion of Line #2011 winds through both Prince William County (5.30 miles) and Fairfax County (1.95 miles). The Prince William County portion of the Project impacts both the City of Manassas (for 3.43 miles) and the City of Manassas Park (for 1.40 miles). The Project also is located in the service territories of two electric utilities in addition to the Company: Northern Virginia Electric Cooperative ("NOVEC") for approximately 3.8 miles, and the City of Manassas for approximately 3.41 miles. 45

Dominion has specifically proposed to replace the existing conductor with a higher capacity conductor, including terminal upgrades, to increase the expected summer normal rating on the line to 1,573 MVA.⁴⁶ Because the conductor will be heavier to

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accommodate the increased energy flow, the Company must replace the structures to which the conductor is attached.⁴⁷ Accordingly, the Company has proposed to replace the existing single circuit 230 kV steel monopoles, which are a mix of weathering steel and galvanized finished poles.⁴⁸ with all single circuit 230 kV weathering steel monopoles.⁴⁹

Through the Application, the Company also requested approval to replace all Clifton Substation equipment associated with Line #2011 and not rated for 4000A to provide a 4000A single breaker rating. The Company asserted it would also need to replace breakers, switches, and other station equipment to support the 4000A single breaker rating on Line #2011. Specifically, the Company stated it will replace four breakers, twelve switches, breaker leads, bus segments, line trap, surge arresters, and line leads. Dominion further stated it will uprate line switches to 4000A at the Prince William and Battery Heights Delivery Points; these are both the City of Manassas's delivery points tapped from Line #2011.50 The Company stated that no service to customers will be interrupted during Project construction since the Company is able to switch all load to alternate sources.51

Need

Need for the Project is addressed in Application Appendix Sections I.A through I.J. Broadly, the Company asserted the proposed Project is needed to comply with mandatory NERC Reliability Standards for transmission facilities and Dominion's planning criteria, and to maintain reliable service for load growth that is projected to occur in the Project area.⁵²

According to the Application, Prince William County and the City of Manassas are becoming hubs in the Northern Virginia data center market; load growth and customers are materializing at a rapid pace. In particular, the Company stated it expects extensive growth in the Manassas Airport Area in the next five to ten years since many large land parcels in this area are owned or under contract by data center developers. The Company also stated it received multiple delivery point requests for new transformers at existing substations, and for new substations, to accommodate the anticipated load growth.

Because of this growth, prior to summer 2020, Dominion presented three supplemental projects to PJM to address load growth in the Manassas Airport Area.⁵⁶ PJM conducted a do no harm ("DNH") analysis before integrating these projects into the Regional Transmission Expansion Plan, to evaluate whether these projects would adversely impact transmission system reliability. The DNH analysis revealed several contingency overloads⁵⁷ on Line #2011 in the Manassas Airport Area caused by the supplemental projects, each of which was accepted into PJM's Local Plan on November 4, 2020.⁵⁸

The Company explained the Project resolves potential thermal violations for the contingency loss of 230 kV Gainesville-Railroad Line #2151 and Liberty-Vint Hill Line #2163 identified in PJM's 2025 Regional Transmission Expansion Plan planning model. The Company averred that "[i]f not relieved by this proposed Project, combined with others proposed

⁴⁴ Application, Appendix at 278. The unfilled line at the top of the diagram relates to a separate project, specifically, a new to-be-built portion of Line #2011, which the Commission approved in Application of Virginia Electric and Power Company, For approval and certification of electric transmission facilities: Line #2011 Extension from Cannon Branch to Winters Branch, Case No. PUR-2021-00291, 2022 S.C.C. Ann. Rep. 437, Final Order (June 24, 2022).

⁴⁵ Application, Appendix at 56.

⁴⁶ Id. at 4 and Appendix at 5-6.

⁴⁷ See, e.g., id., Appendix at 213.

⁴⁸ Id., DEQ Supplement Attachment 2.I.I, p. 3.

⁴⁹ Id., Appendix at 6.

⁵⁰ Id., Appendix at 206.

⁵¹ Id., Appendix at 54.

⁵² Id., Appendix at 1.

⁵³ Id., Appendix at 5.

⁵⁴ *Id.*, Appendix at 4.

⁵⁵ Id., Appendix at 4-5.

⁵⁶ Id., Appendix at 3.

⁵⁷ The Company asserted that overloads would occur on the following portions of Line #2011: Winters Branch Substation-Prince William Delivery Point, Prince William Delivery Point-Battery Heights Delivery Point, and Battery Heights Delivery Point-Clifton Substation. *Id.*, Appendix at 14.

⁵⁸ *Id.*, Appendix at 3, 5.

⁵⁹ Id., Appendix at 5, 27, 30.

or planned in the near term, the identified reliability violations will severely impact the transmission system's ability to provide reliable service to [Dominion's] customers in the Prince William County and Manassas areas."⁶⁰

As part of its need analysis, the Company is required to provide, in the Application, an analysis of demand-side management incorporated into the Company's planning studies. Demand-side management includes both energy efficiency and demand response programs. Dominion's analysis indicated that despite accounting for demand-side management consistent with PJM's methods, the Project remains necessary. Additionally, the Company's analysis indicated that incremental demand-side management would not obviate the need for the Project.⁶¹

Staff verified the Company's power flow models and confirmed that various thermal violations are projected to occur without the Project. Staff verified that the Project resolves these violations. Staff concluded that the Project is necessary to comply with NERC Reliability Standards and Dominion's transmission planning criteria and to provide reliable service in the Project area. Staff also agreed that the anticipated load reduction from demand-side management does not alter the need for the Project.⁶²

Based on this record, I find the Project is needed so the Company can continue to provide reliable service in the Project area and to comply with NERC Reliability Standards and the Company's transmission planning criteria. I also agree with the Company and Staff that anticipated load reductions from demand-side management will not obviate the need for the Project.

Cost

The estimated conceptual cost of the Project is approximately \$31.7 million, including approximately \$27.3 million for transmission-related work and approximately \$4.4 million for substation-related work.⁶³ The Project is being allocated 100% to the PJM DOM Zone.⁶⁴ The reasonableness of the Project cost, and its allocation, are not questioned in this case.

Economic Development

The record reflects that by enabling the Company to continue providing reliable electrical service, the Project would facilitate economic growth. According to the Application, the Project would particularly support delivery of electricity to customers in Prince William County's Data

⁶⁰ Id., Appendix at 5.

⁶¹ Id., Appendix at 17-18.

⁶² Staff Report at 6-7.

⁶³ Application, Appendix at 23. These figures are in 2022 dollars. *Id.*

⁶⁴ *Id.*, Appendix at 24. As defined in the Application Appendix, the DOM Zone consists of Dominion's transmission system, which "is responsible for providing transmission service: (i) for redelivery to the Company's retail customers; (ii) to Appalachian Power Company, Old Dominion Electric Cooperative, [NOVEC], 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." *Id.*, Appendix at 1.

Center Opportunity Zone Overlay District, of which the Manassas Airport Area is a part.⁶⁵ Staff also opined that a negligible impact on long-term job creation might be expected after the Project is completed.⁶⁶ Thus, the record indicates the Project will support economic development in the Project area.

Route/Right-of-Way

The route and ROW for the Project are discussed in Appendix Sections II.A.1 through II.A.12. Generally, the Project will span approximately 7.25 miles from Structure #2011/68, which is not being replaced and is located one span outside of the Cannon Branch Substation, to the Clifton Substation.⁶⁷ This span crosses through portions of the Counties of Fairfax and Prince William, as well as the Cities of Manassas and Manassas Park.⁶⁸ The Project also lies in the service territories of Dominion, NOVEC, and the City of Manassas. NOVEC and the City of Manassas do not object to the Project's construction.⁶⁹ The approximate mapping of the proposed structures for the Project is included in Application Appendix Attachment II.B.3.v.⁷⁰

Dominion asserted there are no alternative routes being proposed for the Project because such alternatives would involve acquisition and construction of a transmission line on entirely new ROW, with additional cost and environmental impacts.⁷¹ The Company asserted the majority of the selected Project route is within existing ROW or existing easements, or is on Company-owned property.⁷² This route, according to the Company, comports with the Code §§ 56-46.1 and 56-259 and with Commission guidelines for transmission line applications, which promote the use of existing ROW.⁷³

Despite the use of existing ROW, there are several places along the Line #2011 Project corridor at which the Company is striving to obtain additional land or ROW or to move existing structures. These acquisitions and moves, and their status, are as follows:

- The Company reported that it will need to acquire property rights for Structure #2011/58.⁷⁴ The Company purchased land for this structure; the real estate closing occurred in June 2023.⁷⁵
- The Company explained it is attempting to negotiate with landowners to acquire parcels or, if that is not possible, to expand existing easements, at the locations of Structures #2011/36 and #2011/37. The Company asserted it is taking this action for safety and constructability reasons, though Dominion stated it could perform the work within

⁶⁵ Id., Appendix at 4.

⁶⁶ Staff Report at 17.

⁶⁷ Application, Appendix at 36.

⁶⁸ Id., Appendix at 56.

⁶⁹ Id.

⁷⁰ *Id.*, Appendix at 66-69.

⁷¹ Id., Appendix at 53.

⁷² Id., Appendix at 40, 53.

⁷³ Id., Appendix at 53.

⁷⁴ Id., Appendix at 40.

⁷⁵ Rebuttal Testimony of Craig R. Hurd at Rebuttal Schedule 1, p. 1.

⁷⁶ Application, Appendix at 40.

existing easements if necessary.⁷⁷ The Company reported it expects to purchase land for Structure #2011/36, with the real estate closing expected in September 2023.⁷⁸ As for Structure #2011/37, the Company reported it has been unable to reach agreement to purchase land from the current landowner. If an agreement cannot be reached, the Company stated it "will work to expand the existing easements or otherwise stay within the existing easements."

- Dominion also stated that per the request of the Cities of Manassas and Manassas Park, the Company is working to slightly shift the location of Structures #2011/25 through #2011/27 in the City of Manassas Park, and Structures #2011/46 through #2011/48 in the City of Manassas, from existing easements while still remaining on the same property owned by the cities.⁸⁰
- Dominion reported it is seeking a varying ROW width of up to 20 feet between some of Structures #2011/33 through #2011/62. The Company claimed the varying ROW would allow it to ensure that the National Electric Safety Code horizontal clearance requirement continues to be met. Specifically, the National Electric Safety Code requires that horizontal clearances be maintained between a 230 kV conductor and other installations over eight-and-one-half feet. The Company clarified that there are no such installations, but averred it is prudent to obtain rights to ensure no such installations are constructed in the future.⁸¹

Staff reviewed the proposed Project route and concluded that the Project "utilizes mostly existing ROW or parallels existing ROW and, therefore, appears to avoid or reasonably minimize impact on existing residences, scenic assets, historic districts, and the environment."⁸²

The evidence in this case shows the Company has selected the route that uses the greatest amount possible of existing ROW and/or land where the Company has existing rights.⁸³ This selection is in keeping with Code §§ 56-46.1 and 56-259 and with Commission guidelines for transmission line applications, which promote the use of existing ROW. The other option, according to the record, would be construction of a new line on new ROW, which would be more expensive for ratepayers and could have additional environmental impacts to this portion of Northern Virginia. Additionally, where the Company is attempting to secure additional land or easements, those rights have been obtained or are being obtained, or, if necessary, the Company "will work to . . . stay within the existing easements." I therefore conclude the Company has considered the feasibility of locating Project facilities on existing ROW as required by law.

⁷⁷ Id.; Rebuttal Testimony of Craig R. Hurd at Rebuttal Schedule 1, p. 2.

⁷⁸ Rebuttal Testimony of Craig R. Hurd at Rebuttal Schedule 1, p. 2.

⁷⁹ Id.

⁸⁰ Application, Appendix at 49.

⁸¹ Id.

⁸² Staff Report at 7-10, 19.

⁸³ See Application, Appendix at 41 for the Company's explanation that at portions of the corridor from Structures #2011/33 to #2011/62, "the Company has land rights but not traditional" ROW.

⁸⁴ Rebuttal Testimony of Craig R. Hurd at Rebuttal Schedule 1, p. 2.

Scenic, Environmental, and Historic Resources

The Project's impact on scenic, environmental, or historic resources is discussed in Appendix Sections III.A through III.L and in the Application's DEQ Supplement. For approximately 6.46 miles, the Project parallels the Norfolk Southern Railroad, before crossing north over the railroad between Structures #2011/14 and #2011/15. From Structures #2011/5 to #2011/14, the line runs parallel to the northern border of Hemlock Overlook Regional Park. The existing Project transmission corridor has been in use at least 30 years and is currently being maintained for the operation of existing transmission facilities. The existing Project transmission of existing transmission facilities.

Land-related aspects of the Project include the following:

- Land use around the existing ROW is mixed commercial, residential, and open space suburban areas from Structure #2011/68 to Structure #2011/25.89
- From Structures #2011/25 to #2011/5, the line passes through several parks. 90 The Company stated it plans to coordinate any required temporary construction access with Bull Run Regional Park, Johnny Moore Stream Valley Park, and Blooms Park, which may have additional impacts on tree clearing. 91 No recreational facilities (such as picnic and camping areas and trails) are within the existing transmission corridor, 92 and Dominion does not anticipate permanent impacts to recreation as a result of the Project. 93
- The Project does not cross any scenic byways and, by using existing ROW, minimizes additional impacts at road crossings. 94
- The Company anticipates, based on existing conditions, that minimal tree clearing may be required at certain locations along the Line #2011 corridor, 95 and that danger trees outside the corridor that are tall enough to potentially impact the transmission facilities also may need to be cut. 96
- The Company does not expect permanent impacts to forest or agricultural resources as a result of the Project.⁹⁷
- The Company reported the Project will not negatively affect geology or any mineral resources, or identified mines.⁹⁸

⁸⁵ Application, Appendix at 235.

⁸⁶ Id., Appendix at 207.

⁸⁷ Id., Appendix at 235.

⁸⁸ Id., Appendix at 51.

⁸⁹ Id., Appendix at 207.

⁹⁰ Id.

⁹¹ Id., DEQ Supplement at 3.

⁹² Id., DEQ Supplement at 25-26.

⁹³ *Id.*, DEQ Supplement at 24.

⁹⁴ *Id.*, Appendix at 246.

⁹⁵ Id., Appendix at 51.

⁹⁶ Id., DEQ Supplement at 3.

⁹⁷ Id., DEO Supplement at 24.

⁹⁸ Id., DEQ Supplement at 29-30.

 As measured from the centerline of the Project, there are 428 dwellings within 500 feet, 169 dwellings within 250 feet, and 63 dwellings within 100 feet.⁹⁹ No buildings will have to be demolished or relocated, however, to construct the Project.¹⁰⁰

As to water-related impacts, the Project crosses over Bull Run, a state scenic river.¹⁰¹ It also crosses Russia Branch at four locations and unnamed tributaries to Russia Branch, Bull Run, and Popes Head Creek. The Company stated that clearing in the vicinity of streams will be done by hand within 100 feet of both sides, and vegetation less than three inches in diameter will be left undisturbed.¹⁰² Dominion also stated that the Project will be rebuilt entirely within the existing transmission line corridor that crosses Bull Run. Further, with an average structure height increase of only five feet, the Project will pose no more than a minimal visual impact to this river.¹⁰³

The Company reported that there are several jurisdictional wetland resources within the Project area. ¹⁰⁴ The Company indicated that to the extent practicable, it has sited structures to avoid wetlands and streams. The Company stated it would obtain any necessary permits to impact these resources. ¹⁰⁵

As to visual impacts, the Company expects the Project will have no more than a minimal visual impact to surrounding communities because generally the replacement structures will be in the same locations as current structures and will be the same height or will be only slightly taller than current structures, with an average height increase of five feet. Additionally, visual impacts to nearby properties have been minimized by the Project's use of existing ROW and areas adjacent to an existing railroad. Among other things, the Company considered the visual impact of the Project on several conservation easements and one non-profit fee simple holding easement within one mile of the Project. The Company concluded that due to distance from the existing transmission corridor and with an average structure height increase of only five feet, the Project is expected to pose no more than a minimal visual impact to these easements. 108

The Company also reported that there are numerous sites in the Project area that fall within the Environmental Protection Agency's ("EPA") hazardous waste, solid waste, remediation, and underground storage tank programs, including Resource Conservation and Recovery Act ("RCRA") sites. ¹⁰⁹ Specifically, there are five RCRA sites within 500 feet of the Project, and one RCRA site that is directly crossed by the existing transmission line. The

⁹⁹ *Id.*, Appendix at 208.

¹⁰⁰ Id., Appendix at 234.

¹⁰¹ *Id.*, Appendix at 239.

¹⁰² Id., DEQ Supplement at 3.

¹⁰³ Id., DEQ Supplement at 26.

¹⁰⁴ Id., DEQ Supplement at 4.

¹⁰⁵ Id., DEQ Supplement at 5.

¹⁰⁶ *Id.*, Appendix at 211.

¹⁰⁷ *Id.*, Appendix at 236.

¹⁰⁸ Id., DEQ Supplement at 27.

¹⁰⁹ Id., DEQ Supplement at 5.

Company claimed these sites do not appear to warrant concern relating to the Project due to their nature and the fact that no violations or recent toxic releases have been found.¹¹⁰

Further, the Company considered data from DEQ's Environmental Data Mapper, which showed two permitted solid waste facilities within 500 feet of the Project area. Dominion's consultant determined these facilities are not expected to present an environmental concern for the Project due to their nature as actively permitted, controlled temporary storage and transfer stations, the nature of the waste accepted, and in one case the facility's location west of the Norfolk Southern Railroad.¹¹¹

The Company reported the Environmental Data Mapper data showed 94 petroleum release sites in the search radius for the Project, 92 of which have been closed. Seventy-five sites are over 500 feet from the transmission corridor; due to their distance and closed status, the Company asserted these do not appear to warrant further concern related to the Project. The other 19 sites are within 500 feet of the Project, and two are less than 50 feet from the transmission corridor. Seventeen of these sites, including the two that are less than 50 feet from the transmission corridor, are closed. The Company explained the two open sites are associated with a Manassas Ice and Fuel Company ("MIFCO") facility. Due to their location, the Company asserted "it is highly unlikely that any material would migrate from the facility to the transmission line corridor," and thus these sites do not appear to warrant additional concern related to the Project. 114

As for potential impacts of the Partial Rebuild Project on species, a Dominion consultant conducted database searches for threatened and endangered species in the Project vicinity. Findings and conclusions were reported as follows: 116

Species	Status	Conclusion
Northern long-eared bat 117	Federal endangered State threatened	No known hibernacula or maternity roosts in the Project area. Dominion will complete surveys for species presence in the Project vicinity and adhere to tree clearing time-of- year restrictions if the species is found.
Monarch butterfly	Federal candidate	No action is required. Vegetation may be temporarily disturbed by construction, but no long-term or adverse effects are expected.
Brook floater	State endangered	No adverse effect is expected. The Project will not require in-stream work, and the

¹¹⁰ Id., DEQ Supplement at 6-7.

¹¹¹ Id., DEQ Supplement at 7-8.

¹¹² Id., DEQ Supplement at 8.

¹¹³ Id., DEQ Supplement at 8-10.

¹¹⁴ Id., DEQ Supplement at 10.

¹¹⁵ Id., DEQ Supplement at 10-11.

¹¹⁶ Id., DEQ Supplement at 11-17.

¹¹⁷ The U.S. Fish and Wildlife Service recategorized the Northern long-eared bat from threatened status to endangered, with the final rule being extended to March 31, 2023. *See id.*, DEQ Supplement at 24.

Species	Status	Conclusion
		Company will use erosion and sediment
		controls to prevent run-off.
Yellow lance	Federal threatened	No adverse effect is expected. The Project
	State threatened	will not require in-stream work, and the
		Company will use erosion and sediment controls to prevent run-off.
Wood turtle	State threatened	Identified as potentially occurring within or near the Project, in and along Bull Run and its unnamed tributaries. Anticipated impacts and requirements associated with the Project will be identified through the permitting and regulatory process.
Torrey's mountain mint	State threatened	No adverse effect is expected given the lack of suitable habitat and documented occurrences of the species in the Project area.
Rusty patched	Federal endangered	No adverse effect is expected. The Project
bumble bee		does not intersect with zones of High Potential
<u> </u>		or Low Potential for this species.
Bald eagle	Covered by Bald and	No adverse effect is expected. The Project
	Golden Eagle	area does not intersect any designated Bald
	Protection Act	eagle concentration areas.

The Company concluded that construction and maintenance of the transmission facilities could have some minor effects on wildlife, though impacts on most species will be short-term and limited to the Project construction period. Dominion stated it will obtain all necessary permits before construction and coordinate with agencies through permitting processes to avoid and minimize impacts to listed species, if any. 118

As part of the Application, Dominion provided a Pre-Application Analysis of Cultural Resources for the Project prepared by Dutton + Associates, LLC ("Dutton"). 119 Concerning architectural resources, Dutton's research revealed that within one mile of the Project lie 14 properties listed in the NRHP and four battlefields. 120 Within a half-mile of the Project are four properties that have been determined to be eligible or potentially eligible for listing in the NRHP. 121 Of all these resources, one NRHP-listed property, one NRHP-eligible property, and three battlefields are directly crossed by the Project. 122 Dutton surmised that the Project will have no more than a minimal impact on any architectural resources that are listed in the NRHP or are eligible or potentially eligible for listing in the NRHP. 123 Reasons for this determination include:

¹¹⁸ Id., DEQ Supplement at 18.

¹¹⁹ See generally id., DEO Supplement Attachment 2.I.1.

¹²⁰ Id., DEO Supplement at 21.

¹²¹ Id. A complete listing of all resources within both a half-mile and one mile of the Project is located id. at DEQ Supplement at 22-23.

¹²² Id., DEQ Supplement at 21.

¹²³ Id.

- Most of these resources are located in the vicinity of the City of Manassas and associated urban and suburban areas;
- Most resources already exist in a setting that includes a wide variety of non-historic features, including dense development and modern infrastructure;
- The existing transmission line and multiple structures already can be seen from many of the resources, particularly those in close proximity to or crossed by the Project;
- For resources further away from the Project, the transmission line and related structures currently are partially to completely screened from view by development and vegetation in the area;
- Since the Project's replacement structures will generally be in the same locations and of the same height or a minimal increase in height, there will not be a substantial change in visibility because of the Project.¹²⁴

Dutton did not perform field work related to archaeological resources but reported that portions of the Project transmission corridor have been subject to survey in the past, while other portions have not. Based on previous surveys, Dutton stated that 11 previously recorded resources are located directly within the transmission corridor or are within 100 feet of the corridor's centerline. Dutton reported that DHR has determined one resource is not eligible for NRHP status, while the other ten resources vary in nature; some are unknown, while others include camps, earthworks, roads, a bridge, and a school. These have not been formally evaluated. 127

Commission Staff reviewed the environmental, scenic, and historic impacts of the Project and concluded the Project appears to avoid or reasonably minimize impact on existing residences, scenic assets, historic districts, and the environment.¹²⁸

Considering the record, including the facts and representations discussed above, I find that the Project avoids or reasonably minimizes adverse impact to the greatest extent reasonably practicable on the scenic assets, historic resources recorded with DHR, and the environment of the area concerned.

DEO Report

The DEQ Report discussed a number of recommendations made by reviewing agencies for the Commission's consideration. ¹²⁹ I find that Dominion should be required to comply with the uncontested recommendations included in the DEQ Report's "Summary of Findings and

¹²⁴ Id.

¹²⁵ Id., DEQ Supplement at 23.

¹²⁶ Id.

¹²⁷ Id.

¹²⁸ Staff Report at 15-17, 19.

¹²⁹ Some of these are listed in the DEQ Report at pp. 6-7. Additional recommendations are sprinkled throughout the DEQ Report. See, e.g., id. at 23 (recommending that unsurveyed portions of the Project ROW be surveyed for archaeological resources).

Recommendations." I conclude the Company should not be required to comply with several contested recommendations, as discussed below.

Blooms Park Boundary. Dominion requested the Commission reject the recommendation of DCR's Division of Planning and Recreational Resources that the Company verify the property boundary of Blooms Park, which is an LWCF-funded recreation access area. The Company argued that property boundary verification is needed for LWCF property that is "acquired and/or developed," but the Company is neither acquiring nor developing LWCF property. Nor, Dominion argued, is it proposing to change the use of Blooms Park from public outdoor recreation use. The Company maintained the Project-related work is adjacent to Blooms Park and within the Company's existing transmission ROW that is subject to an existing easement. Dominion claimed it already has sufficient rights to perform the work needed within the existing ROW in Blooms Park. Should the Company need a temporary construction access easement to conduct work outside the existing ROW, the Company claimed it would coordinate with the City of Manassas Park to obtain an agreement. 135

Based on the Company's representations that it is not acquiring or developing LWCF-funded property, is not changing the property's use from public outdoor recreation, and is performing work within existing ROW, I find this recommendation is unwarranted. I further find that the Company should coordinate with the City of Manassas Park if the Company requires a temporary construction access easement to conduct work outside the existing ROW.

Rare Plants in Diabase Glades. DCR's Division of Natural Heritage reviewed the Project and concluded it will not affect any documented state-listed plants or insects and does not cross any State Natural Area Preserves under DCR's jurisdiction. However, a DCR biologist asserted there are several rare plants, which typically inhabit semi-open diabase glades in Virginia, that may be present if suitable habitat exists in the Project area. Thus, DCR recommended the Company conduct an inventory for rare plants associated with diabase glades in the study area so DCR can more accurately evaluate potential impacts to natural heritage resources and offer recommendations to protect and minimize impacts to documented resources.

According to the Company, diabase associated plant species are not formally listed as endangered or threatened and thus are not protected by any regulations. The Company also asserted there is a low likelihood of diabase plants in the Project area. The Company further claimed the areas associated with the Project have been disturbed previously, during initial

¹³⁰ Id. at 24; Rebuttal Testimony of Craig R. Hurd at 4.

¹³¹ Rebuttal Testimony of Craig R. Hurd at 4-5 (internal citation omitted).

¹³² Id. at 5.

¹³³ Id.

¹³⁴ Id.

¹³⁵ Id.

¹³⁶ Application, DEQ Supplement at 18.

¹³⁷ Id.

¹³⁸ Id.

¹³⁹ Rebuttal Testimony of James P. Young at 9.

¹⁴⁰ Id. at 9-10.

installation and maintenance of infrastructure, including access paths that will be utilized by the Company and/or landowners. ¹⁴¹ Dominion also asserted that a requirement to conduct a preconstruction inventory for rare plants associated with diabase glades would significantly delay the construction schedule, potentially increasing Project costs. ¹⁴² The Company suggested, in lieu of conducting an inventory, that it provide its construction team with information about the rare diabase plant species and coordinate with DCR's Division of Natural Heritage if species of concern are observed. ¹⁴³

Based on the above-described representations by the Company, I find the recommendation for a pre-construction inventory for rare plants associated with diabase glades is unnecessary. I find that the Company should educate its construction personnel regarding the plant species prior to the commencement of construction activities and coordinate with DCR if the species is found within the Project area.¹⁴⁴

Petroleum Release Sites. DEQ's DLPR conducted a search to identify waste sites within a 200-foot radius of the Project area, and identified eight petroleum release sites. These include six closed sites and two open sites associated with MIFCO. DEQ DLPR commented that these petroleum releases "should be further evaluated by the project engineer or manager to establish the exact location, nature and extent of the petroleum release and the potential to impact the" Project. 147

Dominion requested the Commission reject this DEQ recommendation, asserting that evaluation of the petroleum release sites already has occurred and the Company has determined these sites do not warrant further concern in relation to the Project. Additional reasons the Company provided for its position include the sites' location in relation to the Project ROW; the status of several sites as closed (meaning, according to the Company, that DEQ has identified no further risk to the general public); and the Company's existing procedure in the event it encounters petroleum contaminated sediments during construction.

Dominion asserted that, if any contaminated soils are identified during construction, it will utilize Best Management Practices to ensure such soils are properly disposed of and will coordinate with the associated regulatory agency. 152

¹⁴¹ Id. at 10.

¹⁴² Application, DEQ Supplement at 19.

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¹⁴⁴ The Commission held similarly in regard to rare plant species 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 No. PUR-2021-00280, 2022 S.C.C. Ann. Rep. 419, 425, Final Order (July 7, 2022).

¹⁴⁵ See pp. 1-2 of the May 19, 2023 Memorandum to John Fisher, DEQ/EIR Environmental Program Planner from Nikolas I. Churchill, DLPR Review Coordinator, attached to the DEQ Report.
¹⁴⁶ Id. at 2.

¹⁴⁷ *Id*.

¹⁴⁸ Rebuttal Testimony of James P. Young at 3-4.

¹⁴⁹ *Id.* at 4-6.

¹⁵⁰ Id. at 6-7.

¹⁵¹ Id. at 7.

¹⁵² Id. at 8.

Dominion provided a review of petroleum release sites in its DEQ Supplement, including specific site locations by latitude and longitude, nature of the site (such as pump station or auto repair facility), when the complaint was reported and closed, and distance in feet to the Project. The evaluation included the eight specific sites of concern to DEQ DLPR. Thus, I find that DEQ DLPR's recommendation for further evaluation of eight petroleum release sites is unnecessary based on Dominion's representation that such evaluation has already occurred. 155

Environmental Management System. DEQ recommended that the Company consider development of an effective EMS. The Company urged the Commission to reject this recommendation, stating that Dominion already has a comprehensive EMS Manual "that ensures the Company is committed to complying with environmental laws and regulations, reducing risk, minimizing adverse environmental impacts, setting environmental goals, and achieving improvements in its environmental performance, consistent with the Company's core values." The Company noted the Commission has rejected this recommendation in other cases. 158

Given the Company's existing EMS Manual and the Commission's prior rejection of a comparable recommendation, I conclude the Commission should reject DEQ's recommendation for the Company to consider developing an effective EMS.¹⁵⁹

Coordination with Fairfax County. The DEQ Report recommended that the Company coordinate with Fairfax County on its recommendations concerning potential impacts from the Project to water, forest, and natural resources; real estate; land rights and site access; heritage resources; and other considerations. The Company clarified that it has begun coordination with Fairfax County as to its comments and recommendations. Specifically, the Company has begun outreach with Fairfax County Park Authority personnel and others to discuss: the Phase I cultural resources study for the Project; a site visit and access rights within Johnny Moore Stream Valley Park; bat surveys and the results thereof; and environmental reviews for the Project, including wetland delineations, cultural resources, and geotechnical studies. The Company committed to coordinating with Fairfax County through the Project construction process. 162

¹⁵³ See generally, Application, DEQ Supplement Attachment 2.F.1 and specifically pp. 22-29 therein.

¹⁵⁴ See, e.g., id., DEQ Supplement Attachment 2.F.1, pp. 4-6.

¹⁵⁵ The Commission has rejected this recommendation in other cases on the same basis. See, e.g., Application of Virginia Electric and Power Company, For approval and certification of electric transmission facilities: Butler Farm to Clover 230 kV Line, Butler Farm to Finneywood 230 kV Line and Related Projects, Case No. PUR-2022-00175, Doc. Con. Cen. No. 230560138, Final Order (May 31, 2023); Application of Virginia Electric and Power Company, For approval and certification of electric transmission facilities: 230 kV Line #293 and 115 kV Line #83 Rebuild Project, Case No. PUR-2021-00272, 2022 S.C.C. Ann. Rep. 406, 409, Final Order (Aug. 31, 2022).

¹⁵⁶ DEQ Report at 27-28.

¹⁵⁷ Rebuttal Testimony of James P. Young at 10-11. 158 Id

¹⁵⁹ See, e.g., Application of Virginia Electric and Power Company, For approval and certification of electric transmission facilities: 500-230 kV Unity Switching Station, 230 kV Tunstall-Unity Lines #2259 and #2262, 230.36.5 kV Tunstall, Evans Creek, Raines Substations, and 230 kV Substation Interconnect Lines, Case No. PUR-2022-00167, Doc. Con. Cen. No. 230630077, Final Order (June 14, 2023).

¹⁶⁰ DEQ Report at 6. The May 24, 2023 letter from Fairfax County's Department of Planning and Development to DEQ is an attachment to the DEQ Report.

Rebuttal Testimony of Craig R. Hurd at 6-7; Rebuttal Testimony of James P. Young at 12-13.

¹⁶² Rebuttal Testimony of Craig R. Hurd at 7; Rebuttal Testimony of James P. Young at 13.

I find the Company should continue coordinating with Fairfax County to address its Project-related concerns, as the Company has committed to do.

Alternatives to the Project

Dominion reported that it considered three alternatives to the Project, all of which were rejected as unsuccessful in resolving the projected contingency violations on Line #2011. The alternatives and results were as follows:

- 230 kV Line Extension from Cannon Branch to Nokesville The Company stated this alternative would not resolve the thermal capacity constraints on the Battery Heights Delivery Point-Clifton Substation segment of Line #2011.¹⁶⁴
- The conversion of Line #163 from 115 kV to 230 kV The Company stated this alternative was rejected due to its complexity and the minimal overall relief it would provide for the capacity constraints driving the need for the Project. In particular, this option would result in a loading percentage of 98-99% under certain contingency conditions. Since PJM does not consider solutions that leave the impacted transmission asset above an approximately 95% thermal constraint to be an acceptable mitigation, this option would require PJM's acceptance as well as considerable coordination between the City of Manassas and NOVEC to upgrade certain equipment. 165
- The use of 2782 Athens conductor, a non-standard conductor The Company stated this alternative was rejected because the Athens conductor would not be sufficient to serve planned and potential future load growth in the Manassas Airport Area and would still require replacement of the majority of the structures supporting the conductor. In particular, the Company reported that the 49 MVA difference in transfer capacity between the Athens conductor (at 1,524 MVA) and the Company's standard conductor (1,573 MVA) "would cause a potential overload to occur sooner as a result of the decreased capacity and flows on the line based off the impedance characteristics." 167

Staff did not disagree with the Company's assessment of these alternatives. 168

Based on the record, I find there are no feasible alternatives to the Project.

Public Health and Safety

The Company's consideration of the health effects of electromagnetic fields is found in Sections IV.A through IV.C of the Application Appendix. Based on studies discussed by the

¹⁶³ Application, Appendix at 16, 28.

¹⁶⁴ Id., Appendix at 16.

¹⁶⁵ Id

¹⁶⁶ Id., Appendix at 17.

¹⁶⁷ Staff Report, Appendix A, Company Response to Staff Set No. 2, Question 11.

¹⁶⁸ Id. at 12-14.

Company therein, and the levels of electromagnetic fields associated with the Project, Dominion determined that no adverse health effects are anticipated as a result of operating the Project. 169

I find the Project does not represent a hazard to public health or safety.

Aviation Resources

The Company identified eight airports within ten nautical miles of the Project, as well as five helipads in the Project vicinity. Dominion asserted that based on its preliminary review, air navigation impacts are not anticipated, but filings with the Federal Aviation Administration are required for construction cranes. The Company stated it will apply for obstruction evaluation determinations for these structures. The Company explained that no structures exceed obstruction standards, yet all require the Company to submit Form 7460-2 Part 2 within five days of construction reaching its greatest height.¹⁷⁰

The Company reported that the Federal Aviation Administration advised the Project would require notice through the agency's obstruction evaluation website if the Project both (1) requires structures to be moved or raised, and (2) the Project meets certain notice requirements in the Code of Federal Regulations; moreover, "any construction equipment that exceeds the height of the structure may need to be filed." The Company also stated that, per the Department of Aviation, since the Project is within 20,000 linear feet of Manassas Regional Airport, the Company must submit a Form 7460 to the Federal Aviation Administration for a determination whether the Project would constitute a hazard to air navigation. The Company committed to filing this form and to working with private entities as appropriate. 172

I find the Company has reasonably addressed the impact of the Project on aviation resources.

Virginia Environmental Justice Act

Dominion addressed environmental justice in Section III.B of the Appendix. ¹⁷³ The Company stated that when preparing its Application, it researched the demographics of communities surrounding the Project using the 2021-2026 Esri Updated Demographics data, the EPA's Environmental Justice mapping and screening tool (EJScreen 2.0), and census data from the U.S. Census Bureau 2015-2019 American Community. ¹⁷⁴ This research revealed there are 40 Census Block Groups ("CBGs") within one mile of the existing transmission line, and ten of these are intersected by the Project. The Company then determined that 31 of the 40 CBGs are communities of color, and 22 of the 40 CBGs appear to be low income communities. Of the ten CBGs intersected by the Project, six CBGs are communities of color and five appear to be low income communities. ¹⁷⁵ The Company concluded the Project is not expected to have

¹⁶⁹ Application, Appendix at 264.

¹⁷⁰ Id., DEQ Supplement at 31-32.

¹⁷¹ Id., DEQ Supplement at 32.

¹⁷² Id.

¹⁷³ Id., Appendix at 210-11, 233.

¹⁷⁴ Id., Appendix at 211.

¹⁷⁵ Id.

disproportionately high or adverse impacts to the surrounding community, including Environmental Justice communities, due to the lack of substantial change in visibility as a result of the Project largely using existing ROW along a railroad, using weathering steel structures to blend into the surrounding area, using structures with an average increase in heights of five feet, screening of structures by development and vegetation patterns in the area, and placing new structures in the same locations as current structures.¹⁷⁶

The Application described the Company's outreach efforts in relation to the Project, including: developing a Project-related website; mailing Project announcements to property owners and residents within 1,000 feet of the Project ROW; and advertising and hosting a virtual community meeting. 177

The Company committed that it has been and will continue engaging Environmental Justice communities and others affected by the Project in a way that allows them to meaningfully participate in the Project development and approval process so their input can be considered.¹⁷⁸ Dominion provided a copy of its environmental justice policy as Attachment III.B.5.¹⁷⁹

After reviewing the Company's assertions as to environmental justice, Staff concluded that the Project does not appear to adversely impact any goal established by the Virginia Environmental Justice Act. 180

I find that the Company reasonably considered the requirements of the Virginia Environmental Justice Act in its Application.

FINDINGS AND RECOMMENDATIONS

Based on the evidence received, I FIND that:

- (1) The Project is needed so the Company can continue to provide reliable service in the Project area and to comply with North American Electric Reliability Corporation Reliability Standards and the Company's transmission planning criteria.
- (2) Anticipated load reductions from demand-side management will not obviate the need for the Project.
 - (3) The Project will support economic development in the Project area.
- (4) The Company has considered the feasibility of locating Project facilities on existing ROW as required by law.

¹⁷⁶ Id.

¹⁷⁷ Id. at 210.

¹⁷⁸ Id.

¹⁷⁹ Id. at 233.

¹⁸⁰ Staff Report at 19.

- (5) The Project avoids or reasonably minimizes adverse impact to the greatest extent reasonably practicable on the scenic assets, historic resources recorded with the Department of Historic Resources, and the environment of the area concerned.
- (6) The Company should be required to comply with the uncontested recommendations included in the Department of Environmental Quality Report's "Summary of Findings and Recommendations."
- (7) The recommendation that the Company verify the property boundary for Blooms Park is unwarranted, and the Company should coordinate with the City of Manassas Park if the Company requires a temporary construction access easement to conduct work outside the existing rights-of-way.
- (8) The recommendation for a pre-construction inventory for rare plants associated with diabase glades is unnecessary, and the Company should educate its construction personnel regarding the plant species prior to the commencement of construction activities and coordinate with the Department of Conservation and Recreation if the species is found within the Project area.
- (9) The recommendation that the Company further evaluate eight petroleum release sites is unnecessary based on Dominion's representation that such evaluation has already occurred.
- (10) Given the Company's existing Environmental Management System Manual and the Commission's prior rejection of a comparable recommendation, the Commission should reject the Department of Environmental Quality's recommendation for the Company to consider developing an effective Environmental Management System.
- (11) The Company should continue coordinating with Fairfax County to address its Project-related concerns, as the Company has committed to do.
 - (12) There are no feasible alternatives to the Project.
 - (13) The Project does not represent a hazard to public health or safety.
- (14) The Company has reasonably addressed the impact of the Project on aviation resources.
- (15) The Company reasonably considered the requirements of the Virginia Environmental Justice Act in its Application.

Accordingly, I **RECOMMEND** the Commission enter an Order:

- (1) ADOPTING the findings in this Report;
- (2) **GRANTING** the Company's Application to construct the Project;

- (3) *ISSUING* a certificate of public convenience and necessity to the Company to construct and operate the Project; and
 - (4) **DISMISSING** this case from the Commission's docket of active cases.

COMMENTS

The parties are advised that, pursuant to Rule 5 VAC 5-20-120 C of the Commission's Rules of Practice and Procedure ("Rules of Practice") and § 12.1-31 of the Code, any comments to this Report must be filed on or before September 29, 2023. To promote administrative efficiency, the parties are encouraged to file electronically in accordance with Rule 5 VAC 5-20-140 of the Commission's Rules of Practice. If not filed electronically, an original and fifteen (15) copies must be submitted in writing to the Clerk of the Commission, c/o Document Control Center, P.O. Box 2118, Richmond, Virginia 23218. Any party filing such comments shall attach a certificate to the foot of such document certifying that copies have been served by electronic mail to all counsel of record and any such party not represented by counsel.

Respectfully submitted,

M. Renae Carter
Hearing Examiner

The Clerk of the Commission is requested to send a copy of this Report to all persons on the official Service List in this matter. The Service List is available from the Clerk of the Commission, c/o Document Control Center, 1300 East Main Street, First Floor, Tyler Building, Richmond, Virginia 23219.