COMMONWEALTH OF VIRGINIA STATE CORPORATION COMMISSION

APPLICATION OF

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VIRGINIA ELECTRIC AND POWER COMPANY

CASE NO. PUR-2022-09.128

For approval and certification of electric transmission facilities: Line #183 Partial Rebuild Project

REPORT OF MICHAEL D. THOMAS, SENIOR HEARING EXAMINER

March 3, 2023

Virginia Electric and Power Company requested a certificate of public convenience and necessity from the Commission to rebuild and operate electric transmission facilities in Fauquier County and Prince William County, Virginia. The Company proposes to rebuild an approximately 15.2-miles segment of the Company's existing 23.6-miles 115 kilovolt ("kV") Bristers-Ox Line #183 between Structure #183/12 and Structure #183/134. The Company proposes to replace Structures #183/13 through #183/23 with 230 kV single circuit weathering steel H-frames, and to replace Structures #183/24 through #183/133 primarily with 230 kV double circuit weathering steel monopoles, which will have a set of three vacant davit arms to allow for a second 230 kV circuit in the future. The rebuild of Line #183 includes an approximately 0.11-miles single circuit 115 kV tap circuit, which feeds the Sowego Delivery Point owned by Northern Virginia Electric Cooperative. The Company proposes to operate the rebuilt Line #183 at 115 kV until such time as 230 kV operation of the line is required. The Company also proposes to upgrade line terminal equipment at its Bristers Substation to support the new line rating of rebuilt Line #183.

The evidence in the record establishes that: (i) the Rebuild Project is needed to replace aging infrastructure that is at the end of its service life, to comply with the Company's Planning Criteria and mandatory NERC Reliability Standards, and to maintain reliable service for overall growth in the Rebuild Project area; (ii) rebuilding Line # 183 to operate in the near-term at 115 kV, but with the capability of converting the line to operate at 230 kV in the future, will promote reliability and provide the capability to meet future load growth; (iii) it is reasonable, prudent, and consistent with long-term transmission planning to rebuild a portion of Line #183 at 230 kV to allow for the future installation of a second 230 kV circuit on the rebuilt line's steel monopoles to support future data center load growth in the area; (iv) incremental demand side management would not obviate the need for the Rebuild Project; (v) the Rebuild Project will be constructed entirely within existing Company ROW; (vi) the Rebuild Project will have no material adverse impact on scenic, environmental, or historic resources; (vii) there are no feasible alternatives to the Rebuild Project; (viii) the Rebuild Project does not represent a hazard to public health or safety; (ix) the Company reasonably addressed the impact of the Rebuild Project on aviation resources; and (x) the Company reasonably considered the requirements of the Virginia Environmental Justice Act. Having met the statutory requirements, I recommend the Commission issue the Company a certificate of public convenience and necessity to construct and operate the Rebuild Project.

HISTORY OF THE CASE

On August 3, 2022, Virginia Electric and Power Company d/b/a Dominion Energy Virginia ("Dominion" or "Company") filed with the State Corporation Commission ("Commission") an application ("Application") for approval and certification of electric transmission facilities in Fauquier and Prince William Counties, Virginia. 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*.

Specifically, the Company proposes the following partial rebuild project located within existing right-of-way or on Company-owned property in Fauquier and Prince William Counties, Virginia (collectively, "Rebuild Project"):

- Rebuild an approximately 15.2-miles segment of the Company's existing 23.6-miles 115 kilovolt ("kV") Bristers-Ox Line #183 between Structure #183/12 and Structure #183/134. Specifically, remove existing Structures #183/13 through #183/133, of which, existing Structures #183/13 through #183/100 are predominantly single circuit 115 kV wood H-frame structures, and existing Structures #183/101 through #183/133 are predominately 115 kV weathering steel (COR-TEN[®]) lattice towers. The existing weathering steel (COR-TEN[®]) lattice towers are framed for double circuit construction; however, the davit arms for one of the circuits are currently vacant. The Company proposes to replace Structures #183/13 through #183/23 with 230 kV single circuit weathering steel H-frames, and to replace Structures #183/24 through #183/133 primarily with 230 kV double circuit weathering steel monopoles. which will have a set of three vacant davit arms available to allow for future load growth. This rebuild of the 15.2-miles segment of the Company's 115 kV Line #183 is inclusive of an approximately 0.11-miles single circuit 115 kV tap circuit, which feeds the Sowego Delivery Point ("DP") owned by Northern Virginia Electric Cooperative ("NOVEC") and will be rebuilt with two 230 kV single circuit weathering steel 3-pole structures. In addition to the structure replacements, the existing 3-phase twin-bundled 636 ACSR, single 636 ACSR, 4/0 ACSR and 740.8 AAAC conductors and existing shield wire on Line #183 between Structures #183/2 and #183/12 and between Structures #183/12 and #183/134 will be replaced with 3-phase twin-bundled 768.2 ACSS conductors and new optical ground wire fiber optic shield wires. The Company proposes to operate the rebuilt Line #183 at 115 kV until such time as 230 kV operation of the line is required.
- Upgrade line terminal equipment at the Company's existing Bristers Substation to support the new line rating of rebuilt Line #183.¹

According to the Application, Dominion proposes the Rebuild Project to replace aging infrastructure at the end of its service life, to comply with mandatory North American Electric Reliability Corporation ("NERC") Reliability Standards and the Company's mandatory electric transmission planning criteria, and to maintain reliable service for the overall growth in the area.²

¹ Ex. 1, at 2-3 (Application).

 $^{^{2}}$ *Id.* at 2

The Company states that the desired in-service date for the Rebuild Project is December 31, 2025.³ The Company further states that the estimated conceptual cost of the Rebuild Project (in 2022 dollars) is approximately \$38.2 million, which includes approximately \$38.0 million for transmission-related work and approximately \$0.2 million for substation-related work.⁴

As provided by Code § 62.1-44.15:21 D 2, the Commission and the State Water Control Board ("SWCB") consult on wetland impacts prior to the siting of electric utility facilities that require a CPCN. Acting on behalf of the SWCB, the Department of Environmental Quality ("DEQ") must prepare a Wetland Impacts Consultation on this Application, as required by the Code and Sections 2 and 3 of the Department of Environmental Quality - State Corporation Commission Memorandum of Agreement Regarding Consultation on Wetland Impacts (July 2003).⁵ The Staff of the Commission ("Staff") has requested the Office of Wetlands & Stream Protection at DEQ to provide a Wetland Impacts Consultation for the Rebuild Project.⁶

As provided by Code §§ 10.1-1186.2:1 B and 56-46.1 A, the Commission and DEQ coordinate reviews of the environmental impact of electric generating plants and associated facilities. Pursuant to the Code and consistent with the Department of Environmental Quality - State Corporation Commission Memorandum of Agreement Regarding Coordination of Reviews of the Environmental Impacts of Proposed Electric Generating Plants and Associated Facilities (August 2002),⁷ the Commission receives and considers reports on the proposed facilities from state environmental agencies. The Staff has requested DEQ to coordinate an environmental review of this Application by the appropriate agencies and to provide a report on the review.⁸

On August 25, 2022, the Commission entered an Order for Notice and Hearing, which among other things: docketed the Company's Application; established a procedural schedule; scheduled a telephonic public witness hearing for February 14, 2023; scheduled a public hearing for February 15, 2023, in the Commission's second floor courtroom; required the Company to provide notice of its Application to all owners of property within the route of the Project and to certain local government officials; allowed interested persons an opportunity to file written comments on the Application; allowed any person or entity to participate as a respondent by filing a notice of participation; directed Staff to investigate the Application; and assigned the case to a Hearing Examiner to conduct all further proceedings in this matter on behalf of the Commission and file a final report.

³ *Id.* at 6. The Company requests that the Commission enter a final order by July 30, 2023. *Id.* The Company states that, should the Commission issue a final order by July 30, 2023, construction should begin in August 2024 and be completed in December 2025. *Id.*

⁴ Id.

⁵ In re Receiving comments on a draft memorandum of agreement between the State Water Control Board and the State Corporation Commission, Case No. PUE-2003-00114, 2003 S.C.C. Ann. Rep. 474, Order Distributing Memorandum of Agreement (July 30, 2003).

⁶ Letter from C. Austin Skeens, Esquire, State Corporation Commission, dated August 12, 2022, to David L. Davis, Department of Environmental Quality, filed in Case No. PUR-2022-00123.

⁷ In re Receiving comments on a draft memorandum of agreement between the Department of Environmental Quality and the State Corporation Commission, Case No. PUE-2002-00315, 2002 S.C.C. Ann. Rept. 559, Order Distributing Memorandum of Agreement (Aug. 14, 2002).

⁸ Letter from C. Austin Skeens, Esquire, State Corporation Commission, dated August 12, 2022, to Bettina Rayfield, Department of Environmental Quality, filed in Case No. PUR-2022-00123.

On September 23, 2022, the Company filed a Motion for Entry of a Protective Ruling. A Hearing Examiner's Protective Ruling was entered on September 28, 2022, to facilitate the handling of confidential information and to permit the development of all issues in this proceeding.

On September 30, 2022, the Company filed its Proof of Notice and Certificate of Mailing.⁹

Pursuant to a request by Staff, DEQ conducted a coordinated agency review based on information filed in the DEQ Supplement to the Application, and filed its DEQ Report, including its comments and recommendations, with the Commission on October 19, 2022. In addition to DEQ, comments on the Rebuild Project were submitted by the following state agencies: Department of Conservation and Recreation ("DCR"), Department of Health ("VDH"), Department of Historic Resources ("DHR"), Department of Wildlife Resources ("DWR"), Department of Aviation ("DOAv"), Department of Transportation ("VDOT"), and Virginia Marine Resources Commission ("VMRC")¹⁰

The public hearing was convened as scheduled on February 15, 2023. The Company appeared by its counsel Anne Hampton Haynes, Esquire, Briana M. Jackson, Esquire, Vishwa B. Link, Esquire, and Jennifer D. Valaika, Esquire, with the law firm of McGuireWoods LLP, and David J. DePippo, Esquire, with Dominion Energy Services, Inc. Staff appeared by its counsel William H. Harrison, IV, Esquire, and C. Austin Skeens, Esquire.

SUMMARY OF THE RECORD

Written Comments

No written comments were filed in this case.

Public Witnesses

No public witnesses signed up to testify in this case and the public witness hearing was cancelled.

Virginia Electric and Power Company Direct Testimony

The Company presented the direct testimony of four witnesses: Steven Schweiger, Area Planning Engineer in the Company's Transmission Planning Department; Darren E. Campbell, Associate Transmission Line Engineer with Burns & McDonnell; Santosh Bhattarai, Consulting Engineer in the Company's Substation Engineering Section of the Electric Transmission Group; and Nancy R. Reid, Siting and Permitting Specialist for the Company.

⁹ Ex. 2 (Proof of Notice).

¹⁰ Ex. 8, at 1 (DEQ Report).

In his direct testimony, **Mr. Schweiger** sponsored those sections of the Appendix describing the Company's transmission system and the need for, and benefits of, the proposed Rebuild Project, as follows:

- <u>Section I.B</u>: This section details the engineering justifications for the proposed project.
- <u>Section I.C</u>: This section describes the present system and details how the proposed project will effectively satisfy present and projected future load demand requirement.
- <u>Section I.D</u>: This section describes critical contingencies and associated violations due to the inadequacy of the existing system.
- <u>Section I.E</u>: This section explains feasible project alternatives.
- <u>Section I.H</u>: This section provides the desired in-service date of the proposed project and the estimated construction time.
- <u>Section I.J</u>: This section provides information about the project if approved by PJM.
- <u>Section I.K</u>: Although not applicable, this section 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.
- <u>Section I.M</u>: Although not applicable, this section contains information for transmission lines interconnecting a non-utility generator.
- <u>Section I.N</u>: Although not applicable, 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.
- <u>Section II.A.10</u>: This section provides details of the construction plans for the proposed project, including requested and approved line outage schedules.¹¹

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

- <u>Section I.A (co-sponsored with Company witness Campbell)</u>: This section details the primary justifications for the proposed project.
- <u>Section I.F (co-sponsored with Company witness Campbell)</u>: This section describes 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.
- <u>Section I.G (co-sponsored with Company witness Reid)</u>: This section provides a system map for the affected area.
- <u>Section II.A.3 (co-sponsored with Company witness Reid)</u>: This section provides color maps of existing or proposed rights-of-way in the vicinity of the proposed project.¹²

¹¹ Ex. 3, at 2 (Schweiger Direct).

In his direct testimony, **Mr. Campbell** sponsored those sections of the Appendix providing an overview of the design characteristics of the transmission facilities for the proposed Rebuild Project and discussed the electric and magnetic field levels, as follows:

- <u>Section I.L</u>: This section provides photographs illustrating the deterioration of structures and associated equipment as applicable.
- <u>Section II.A.5</u>: This section provides drawings of the right-of-way cross section showing typical transmission lines structure placements.
- <u>Sections II.B.1 to II.B.3</u>: These sections provide the line design and operational features of the proposed project.
- <u>Section II.B.4</u>: Although not applicable, this section normally provides the line design and operational features of a proposed project.
- <u>Section IV</u>: This section provides analysis on the health aspects of electric and magnetic field levels.¹³

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

- <u>Section I.A (co-sponsored with Company witness Schweiger)</u>: This section details the primary justifications for the proposed project.
- <u>Section I.F (co-sponsored with Company witness Schweiger)</u>: This section describes 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.
- <u>Section I.I (co-sponsored with Company witness Bhattarai)</u>: This section provides the estimated total cost of the proposed project.
- <u>Section II.B.5 (co-sponsored with Company witness Reid)</u>: This section provides the mapping and structure heights for existing overhead structures.
- <u>Section V.A (co-sponsored with Company witness Reid)</u>: This section provides information related to public notice of the proposed project.¹⁴

In his direct testimony, **Mr. Bhattarai** sponsored or co-sponsored the following sections of the Appendix describing the work to be performed at an existing substation for the proposed Rebuild Project, as follows:

- <u>Section II.C</u>: This section describes and furnishes a one-line diagram of the substation(s) associated with proposed project.
- <u>Section I.I (co-sponsored with Company witness Campbell)</u>: This section provides the estimated total cost of the proposed project.¹⁵

¹³ Ex. 4, at 2 (Campbell Direct).

¹⁴ Id.

¹⁵ Ex. 5, at 2 (Bhattarai Direct).

In her direct testimony, **Ms. Reid** sponsored those sections of the Appendix providing an overview of the design of the route for the proposed Rebuild Project, and related permitting, as follows:

- <u>Section II.A.1</u>: This section provides the length of the proposed corridor and viable alternatives to the proposed project.
- <u>Section II.A.2</u>: This section provides a map showing the route of the proposed project in relation to notable points close to the proposed project.
- <u>Section II.A.4</u>: This section explains why the existing right-of-way is not adequate to serve the need, to the extent applicable.
- <u>Sections II.A.6 to II.A.8</u>: These sections provide detail regarding the right-of-way for the proposed project.
- <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 construction of the proposed project follows the provisions discussed in Attachment 1 of the Transmission Appendix Guidelines.
- <u>Section II.A.12</u>: This section identifies the counties and localities through which the proposed project will pass and provides General Highway Maps for these localities.
- <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 impact of the proposed project on scenic, environmental, and historic features.¹⁶

In addition, Ms. Reid co-sponsored the following sections of the Appendix:

- <u>Section I.G (co-sponsored with Company witness Schweiger)</u>: This section provides a system map for the affected area.
- <u>Section II.A.3 (co-sponsored with Company witness Schweiger)</u>: This section provides color maps of existing or proposed rights-of-way in the vicinity of the proposed project.
- <u>Section II.B.5 (co-sponsored with Company witness Campbell</u>: This section provides the mapping and structure heights for existing overhead structures.
- <u>Section V.A (co-sponsored with Company witness Campbell)</u>: This section provides information related to public notice of the proposed project.¹⁷

Ms. Reid sponsored the DEQ Supplement filed with the Application.¹⁸

Lastly, Ms. Reid confirmed that, in accordance with § 15.2-2202 E of the Code, letters dated June 22, 2022, were sent to local county administrators and federal government officials advising them of the Rebuild Project and inviting them to consult with the Company on the project.¹⁹

¹⁶ Ex. 6, at 2 (Reid Direct).

¹⁷ Id.

¹⁸ Id.

¹⁹ *Id*. at 3.

Commission Staff Direct Testimony

Staff presented the direct testimony of Schuyler M. Ingram, a Utilities Engineer with the Division of Public Utility Regulation. Mr. Ingram sponsored the Staff Report on the Company's Application.²⁰

After investigating the Application, Staff concluded that the Company reasonably demonstrated the need to construct the Rebuild Project to replace aging infrastructure. The Rebuild Project utilizes existing ROW and appears to reasonably minimize impact on existing residences, scenic assets, historic districts, and the environment and does not appear to adversely impact any goal established by the Virginia Environmental Justice Act. Staff does not oppose the Company's request that the Commission issue the CPCN necessary for the construction of the Rebuild Project. Staff noted that the Company will seek an amendment to any CPCN issued in this proceeding prior to converting the rebuilt line to 230 kV operation.²¹

Virginia Electric and Power Company Rebuttal Testimony

The Company submitted the rebuttal testimony of James P. Young, Environmental Services Electric Transmission Environmental Specialist III. Mr. Young's rebuttal testimony provided general comments in support of the conclusion in the Staff Report that the Company has reasonably demonstrated the need for the Rebuild Project. In addition, Mr. Young addressed specific recommendations included in the DEQ Report. Lastly, Mr. Young clarified that the Company has completed a further evaluation of a petroleum release site that DEQ identified near the Rebuild Project area.²²

The Company appreciates that Staff does not oppose its request that the Commission issue a CPCN for the Rebuild Project as proposed. Importantly, Staff does not oppose the construction of the Rebuild Project using 230 kV construction standards as proposed because the Company's decision is based on sound engineering principles.²³

The Company does not object to the "Summary of Recommendations" in the DEQ Report except as discussed below. The Company requests that the Commission reject the following recommendations:

- The recommendation by DCR's Division of Natural Heritage ("DCR/DNH") related to the development and implementation of an invasive species management plan ("ISMP");
- The recommendation by DEQ to consider development of an effective Environmental Management System ("EMS"); and

²⁰ Ex. 7, at 1 (Ingram Direct).

²¹ Ex. 7, Staff Report at 22.

²² Ex. 9, at 2-3 (Young Rebuttal).

²³ *Id.* at 3-4.

• The recommendation by DWR to conduct significant tree removal and groundclearing activities outside of the primary songbird nesting season of March 15 through August 15.²⁴

The Company requested that the Commission reject DCR/DNH's ISMP recommendation because it is unnecessarily duplicative, and could lead to significant project cost increases and construction delays. The Company has an Integrated Vegetation Management Plan ("IVMP") in place that utilizes mechanical, chemical, and cultural methods for controlling vegetation, including invasive species. The Company's IVMP is consistent with standards for utility right-of-way management by the American National Standards Institute, as well as NERC Vegetation Management Standards, for all regions in the Company's service territory. The IVMP is administered by the Company's Forestry Section and is staffed with experienced graduate-level foresters and International Society of Arboriculture Certified Arborists. To conduct an invasive species survey as requested by DCR/DNH, Mr. Young estimates, based on the Company's past experience with species surveys and contractors, this type of species survey would cost approximately \$14,000 to \$20,000 per mile. Additionally, due to the likelihood of different plant-specific identification windows within the growing season, the Company believes there could be delays in the construction schedule.²⁵

Pursuant to the Commission's decision in Case No. PUR-2021-00272,²⁶ the Company met with DCR/DNH representatives on August 23, 2022. Based on that discussion, the Company has reviewed its IVMP for application to both woody and herbaceous species, based on the species list available on the DCR website. The Company and DCR/DNH representatives have been in communication and have scheduled a follow-up meeting in February 2023 to discuss the Company's current IVMP. Since the Company is working with DCR/DNH to address the agency's concerns, the Company requested that the Commission reject this recommendation.²⁷

The Company requested that the Commission reject DEQ's recommendation to develop an effective EMS as unnecessarily duplicative. The Company already has a comprehensive EMS Manual in place that ensures it complies with environmental laws and regulations, reduces risk, minimizes environmental impacts, sets environmental goals, and achieves improvements in its environmental performance, consistent with the Company's core values.²⁸

The Company requested that the Commission reject DWR's recommendation regarding time-of-year restrictions for tree clearing. Since the Rebuild Project will be constructed in an existing cleared right-of-way, the Company believes any tree and/or ground-clearing activities will

²⁷ Ex. 9, at 6-7 (Young Rebuttal).

²⁸ Id. at 7-8.

²⁴ Id. at 4.

²⁵ *Id.* at 5-6.

²⁶ 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, Final Order at 10-11 (Aug. 31, 2022) (The Commission agreed with the Chief Hearing Examiner and declined to adopt DCR/DNH's recommendation regarding an ISMP, but directed the Company to meet with DCR/DNH and to report on the status of the meetings in the Company's next transmission CPCN case).

not be significant. To the extent significant tree and/or ground-clearing may be required, the Company will coordinate with DWR to create appropriate construction restrictions.²⁹

Lastly, Mr. Young provided an update on a petroleum release site identified by DEQ near the Rebuild Project right-of-way. The Company engaged Stantec Consulting Services, Inc. ("Stantec"), to perform a file review to determine the impacts from the petroleum release. Stantec evaluated the location, nature, and extent of the petroleum release at the site DEQ identified within 200 feet of the Rebuild Project area. Based on the results and recommendations from Stantec, it is not anticipated that petroleum contaminated soil will be found within the Rebuild Project right-of-way. If petroleum contaminated soil is encountered during construction, the Company has best management practices in place to safely handle and dispose of the contaminated soil.³⁰

DISCUSSION

Code of Virginia

The statutory scheme governing the Company's 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 . . . 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:

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 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.

²⁹ *Id.* at 8.

³⁰ *Id.* at 8-9.

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: "[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: "[p]rior 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:

It 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:

"Environment" means the natural, cultural, social, economic, and political assets or components of a community.

"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.

Need/Economic Development

The Company addressed the need for the Project in Sections I.A,³¹ I.B,³² I.C,³³ I.D,³⁴ I.E,³⁵ I.F,³⁶ I.H,³⁷ I.I,³⁸ I.J,³⁹ and I.K⁴⁰ of the Appendix. In sum, the Company believes the Rebuild Project is needed to replace aging infrastructure that is at the end of its service life, to comply with the Company's Planning Criteria and mandatory NERC Reliability Standards, and to maintain reliable service for overall growth in the Rebuild Project area.⁴¹

a. Need to Replace Aging Infrastructure

The Company's Planning Criteria contains a proactive plan to rebuild transmission lines that are comprised of wood pole structures that are experiencing maintenance and reliability issues, including cracked and decaying wood, ground line rot, and woodpecker damage, as well as weathering steel COR-TEN[®] towers that are at the end of their service life. The Company defines "end of life" as the point at which infrastructure is at risk of failure, and continued maintenance and/or refurbishment of the infrastructure is no longer a valid option to extend the life of the facilities consistent with Good Utility Practice and the Company's Planning Criteria.⁴²

The Company's Planning Criteria has a two-part test for determining whether facilities have reached reach the end of their service life:

- 1. The facility is nearing, or has already passed, its end of life; and
- 2. The continued operation risks negatively impacting reliability of the transmission system.⁴³

Regarding the first test, the Company explained Line #183 runs approximately 23.6 miles between the Company's existing Bristers and Ox Substations. Along the 15.2-miles segment proposed for the Rebuild Project, Line #183 serves four NOVEC DPs (Sowego, Independent Hill, Lindendale, and Minnieville) and one Dominion DP (Elm Farm). This section of the line is supported predominantly by single circuit 115 kV wood H-frame structures and weathering steel COR-TEN[®] lattice towers.⁴⁴

The Company explained approximately 10.1 miles of Line #183 proposed for rebuild are supported by wood pole structures dating back to 1948. Since these structures are at least 60 years

³¹ Ex. 1, Appendix at 1 (Application).

³² *Id.*, Appendix at 14.

³³ *Id.*, Appendix at 17.

³⁴ *Id.*, Appendix at 19.

³⁵ *Id.*, Appendix at 24.

³⁶ *Id.*, Appendix at 25.

³⁷ *Id.*, Appendix at 29.

³⁸ *Id.*, Appendix at 30.

³⁹ *Id.*, Appendix at 31.

⁴⁰ *Id.*, Appendix at 39.

⁴¹ *Id.*, Appendix at 1.

 $^{^{42}}$ Id., Appendix at 3-4.

 $^{^{43}}$ *Id.*, Appendix at 4.

⁴⁴ *Id.*, Appendix at 4-5.

old, the Company believes it is most cost-effective to completely rebuild this section rather than replace individual structures.⁴⁵

The Company further explained approximately 5.1 miles of Line #183 are supported by COR-TEN[®] lattice towers that were constructed in the mid-1960s. These structures have been identified for replacement because COR-TEN[®] steel is now known to be problematic when used for lattice type structures. The Company determined that it would be most efficient to take all the outages for Line #183 at one time and rebuild the entire 15.2-miles segment, including an approximately 0.11-miles tap circuit, as part of the Rebuild Project.⁴⁶

Regarding the second test, the Company explained its Planning Criteria addressing end of life takes into consideration that Line #183 serves one Dominion DP and four NOVEC DPs in Fauquier and Prince William Counties, totaling a projected 2026 load of over 200 megawatts ("MW"). These DPs serve approximately 35,533 NOVEC and Dominion customers. The Company explained, unless Line #183 is rebuilt, it will be unable to provide reliable transmission serve to these customers.⁴⁷

The Company further explained as part of the PJM 2021 RTEP, PJM identified several thermal overloads under N-1 conditions, as well as generation deliverability violations. In addition, PJM's 2026 Summer planning model identified several scenarios that violate the Company's Planning Criteria. Specifically, under the P1 or P4 N-1 scenarios in which the 230-115 kV transformer at Ox Substation is lost, the segment of Line #183 between NOVEC's Sowego and Independent Hill DPs, as well as the 230-115 kV transformer at Bristers Substation, increase their loading beyond the allowable limit of NERC Reliability Standards. The same transmission line segment was also found to be overloaded and in violation of PJM's generation deliverability requirements.⁴⁸

I find the Rebuild Project is needed to replace aging infrastructure that is at the end of its service life, to comply with the Company's Planning Criteria and mandatory NERC Reliability Standards, and to maintain reliable service for overall growth in the Rebuild Project area.

b. Need for 230 kV Construction but Operated at 115 kV

The Company explained the need to rebuild Line #183 at 230 kV but operate it at 115 kV. The Company's power flow analysis in PJM's 2026 RTEP model showed that low voltage violations were not resolved using the Company's highest capacity 115 kV conductor. In contrast, using the Company's standard 230 kV twin-bundled 768.2 ACSS conductor resulted in the overall reduction of impedance and resolved the low voltage violation identified in PJM's 2026 RTEP model.⁴⁹

⁴⁵ *Id.*, Appendix at 5.

⁴⁶ Id.

⁴⁷ Id.

⁴⁸ *Id.*, Appendix at 5-6.

⁴⁹ *Id.*, Appendix at 6-7.

The Company further explained the need for Line #183 to meet future long-term service requirements and load growth. Based on Dominion's and NOVEC's load forecasts for the five DPs currently served by Line #183, the 230-115 kV transformers at the Bristers and Ox Substations are nearing their load capacity. The loss of one transformer would push the other transformer to its load limit, which is a violation of NERC Reliability Standards. The Company believes, rather than having to replace two 230 kV transformers and potentially reconductor Line #183 again in the near future at a higher voltage, rebuilding Line #183 to operate at 115 kV with the capability of converting to 230 KV in the future will promote reliability and loading capability to meet future load growth. The Company explained the area served by Line #183 (Arlington, Fairfax, Prince William, Loudoun, Fauquier, and Stafford Counties) have the heaviest concentration of load of the entire Dominion service area, accounting for 36% of the Company's total summer load. NOVEC has informed the Company that it anticipates large block load additions in the area served by Line #183 due to data center development in Prince William County.⁵⁰

The Company further explained rebuilding Line #183 at 115 kV would exacerbate the existing 230 kV bottleneck at the Bristers and Ox Substations because portions of Line #183 have already been rebuilt to 230 kV standards. The Company determined the installation of 230 kV capable conductors and associated equipment for the remaining portion of Line #183 was the least impactful and most cost-effective solution to meet its and NOVEC's future load requirements.⁵¹

The Company explained the PJM Generation Queue currently has four active solar and energy storage projects totaling 505 MW in the immediate area of the proposed Rebuild Project. The Company believes continuing to operate Line #183 at 115 kV after these projects are connected to the grid could create a transmission bottleneck for carrying the output from these generators out of the area. For this reason, the Company believes it is prudent to rebuild Line #183 to carry 230 kV.⁵²

I find Line #183 should be rebuilt using 230 kV construction so that the line could be operated at 115 kV in the near-term but with the capability of converting to 230 kV operation when needed to support load growth. This is the least impactful and most cost-effective solution to meet the Company's future load requirements.

c. Need for Double-Circuit 230 kV Construction to Accommodate a Future Line

The Company believes rebuilding Line #183 utilizing 230 kV double circuit construction from Structures #183/24 through #183/133 with a set of three vacant davit arms will allow for the addition of a new 230 kV conductor when the need arises in the future, without requiring new ROW or expansion of the existing transmission ROW Line #183 shares with the 500 kV Bristers-Ox Line #539. The recent addition of the Independent Hill area to the Prince William County Data Center Opportunity Zone Overlay District is designed to attract data center developers to Prince William County from Loudoun County's Data Center Alley. Based on the Company's experience, the typical loading for a new data center can be expected to exceed 100 MW. In the PJM 2026 RTEP model, the loading of the five DPs currently served by Line #183 exceeds 200 MW. The

⁵⁰ *Id.*, Appendix at 7-8.

⁵¹ Id., Appendix at 8.

⁵² Id., Appendix at 8.

addition of one data center to the line would violate NERC Reliability Standards because of the possibility of an outage exceeding 300 MW. The Company believes it needs to construct its electric transmission grid to accommodate future data center development. The Company noted that as of March 2022, a rezoning request was submitted to Prince William County to rezone approximately 52 acres for the Potomac Technology Park, a proposed data center. The site is located approximately 2.2 miles east of the Independent Hill DP. If approved, the site would be directly served by the adjacent Line #183 transmission corridor. The Company believes to adequately serve potential data center customers in the area a double-circuit 230 kV line will ultimately be needed. For this reason, the Company believes it is reasonable, prudent, and consistent with long-term transmission planning to utilize 230 kV construction, allowing for the future installation of a second 230 kV circuit, rather than simply rebuild Line #183 to meet current needs.⁵³

I find a portion of Line #183 should be rebuilt to accommodate a second 230 kV circuit on the line's steel monopoles to support data center load growth expected to occur in the Rebuild Project area. The Company has established that it is more likely than not that data center development will continue in the area served by Line #183 and that it must have the capacity to reliably serve that data center load growth.

d. Demand Side Management

As part of the need analysis in its Application, the Company is required to provide an analysis of DSM incorporated into the Company's planning studies. DSM includes both energy efficiency and demand response programs. The Company's analysis indicated that despite accounting for DSM consistent with PJM's methods, the Project is still necessary. Additionally, the Company's analysis indicated incremental DSM will not obviate the need for the Rebuild Project.⁵⁴

I find incremental DSM will not obviate the need for the Rebuild Project.

Route/Existing Right-of-Way

The route and the ROW required for the proposed Rebuild Project are discussed in Section II.A.1 through II.A.12 of the Appendix.⁵⁵

The total length of the proposed Rebuild Project transmission corridor is approximately 15.2 miles. The route crosses through Fauquier County, Marine Corps Base Quantico, and Prince William County. No additional ROW easements will be required for the Rebuild Project. All 15.2 miles of the Rebuild Project are located in NOVEC's service territory. The Company has confirmed that NOVEC does not object to the Rebuild Project.⁵⁶

Since the existing ROW is adequate to construct the proposed Rebuild Project, no new ROW is necessary. Given the availability of existing ROW and the statutory preference given to the use of existing ROW, and because additional costs and environmental impacts would be

⁵³ *Id.*, Appendix at 9-10.

⁵⁴ Id., Appendix at 24.

⁵⁵ *Id.*, Appendix at 69-98.

⁵⁶ *Id.*, Appendix at 69, 89, 96.

associated with the acquisition and construction on new ROW, the Company did not consider any alternative routes requiring new ROW for the Rebuild Project.⁵⁷

I find the Company reasonably considered existing ROW for the Rebuild Project and will construct the project entirely within existing Company ROW.

Scenic, Environmental, or Historic Resources

The impact of the Rebuild Project on scenic, environmental, or historic resources is discussed in Sections III.A through III.L of the Appendix.⁵⁸

The Rebuild Project ROW travels for 15.2 miles through Fauquier and Prince William Counties. From Structure #183/12 to Dumfries Road, Line #183 passes through rural land and open space associated with Marine Corps Base Quantico and Prince William Forest Park. From Dumfries Road to Minnieville DP, the land use around the existing ROW transitions to suburban. The Company acquired the transmission ROW in the late 1940s and early 1970s.⁵⁹

The Rebuild Project does not cross any scenic Virginia byways.⁶⁰

The existing ROW crosses approximately 116.47 acres of prime farmland. Only the section of the ROW between Structures #183/19 and #183/23 is currently in agricultural use. Fauquier and Prince William Counties do not have designated farmlands of local importance. For the Rebuild Project, the Company will need to access the ROW with construction equipment. This may involve the construction of temporary access roads and structure pads. The Company indicated that it would work with existing landowners regarding final structure placement to minimize the impact on existing farming operations.⁶¹

The Company regularly maintains the Rebuild Project ROW to keep vegetation at the emergent and scrub/shrub stage for the safe operation of the existing transmission facilities. Since no forested areas exist within the existing ROW, the Company expects no impact to forestland.⁶²

The Company reviewed the U.S. Geological Survey topographical quadrangles (Sommerville, Nokesville, Independent Hill, Joplin, and Occoquan) as part of its wetlands evaluation. The Rebuild Project ROW crosses Town Run, Dorrells Run, Goose Run, Johns Branch, Lucky Run, Quantico Creek, Powells Creek, Neabsco Creek, and several perennial and intermittent streams. The Company indicated it would obtain the necessary permits from the U.S. Army Corps of Engineers to construct the Rebuild Project over these waterways.⁶³

The Company conducted a historic resources Stage I Pre-Application Analysis. The analysis indicated there were no National Historic Landmark ("NHL") resources located within a

⁵⁷ *Id.*, Appendix at 93.

⁵⁸ *Id.*, Appendix at 159-208.

⁵⁹ *Id.*, Appendix at 159, 192.

⁶⁰ *Id.*, Appendix at 199.

⁶¹ *Id.*, Appendix at 159-160.

⁶² Id., Appendix at 159.

⁶³ *Id.*, Appendix at 160-61.

1.5-miles radius of the Rebuild Project centerline. Four National Register of Historic Places ("NRHP") resources are located within 1 mile and one eligible resource was identified within 0.5 miles of the Rebuild Project centerline. The Company believes, based on the proposed changes to structure heights, the similar heights of 500 kV Line #539 in the same ROW, and the position of the Rebuild Project within the landscape, the rebuild Project will have no impact on historic properties with no view of the project, and a minimal impact on those historic properties that will view the project. The Elk Run Historic District, which is NRHP-eligible, will view the Rebuild Project and the impacts of the line will be minimal to moderate. The Company indicated that it would continue to coordinate with DHR regarding the findings of the Stage I Pre-Application Analysis. The Company expects that further evaluation will be required to determine whether impacts to the Elk Run Historic District are minimal or moderate.⁶⁴

The Company conducted a rare and endangered species search of the public databases of the U.S. Fish and Wildlife Service, DCR/DNH, and DWR. The search identified several federal and state listed species that have the potential to occur within the Rebuild Project area. The Company indicated that it would reasonably minimize any impact on these resources and coordinate with DWR as appropriate.⁶⁵

Based on its review of available data in Fauquier and Prince William Counties, the Company confirmed there are 547 dwellings located within 500 feet of the centerline of the Rebuild Project, 169 dwellings located with 250 feet of the centerline, 34 dwellings located within 100 feet of the centerline, and no dwellings located within the ROW. The Company will review the entire Rebuild Project corridor prior to construction and plans to address unauthorized encroachments and easement violations, as appropriate.⁶⁶

I find the Rebuild Project will have no material adverse impact on scenic, environmental, or historic resources.

DEQ Report

Pursuant to Va. Code § 56-46.1 A and B, the Commission shall consider the Rebuild Project's impact on the environment and establish such conditions as may be desirable or necessary to minimize the adverse environmental impact. The statute further provides the Commission shall receive and consider all reports that relate to the Rebuild Project by state agencies concerned with environmental protection.

Pursuant to a request by Staff, DEQ conducted a coordinated agency review based on information filed in the DEQ Supplement to the Application, and filed its DEQ Report, including its comments and recommendations, with the Commission on October 19, 2022.⁶⁷

The coordinated agency review focused on the requirement to obtain certain environmental permits to construct the Rebuild Project, the potential environmental impacts of construction and

⁶⁴ *Id.*, Appendix at 161-62.

⁶⁵ *Id.*, Appendix at 162-64.

⁶⁶ *Id.*, Appendix at 164, 191.

⁶⁷ Ex. 8, at 1 (DEQ Report).

operating the project, and the recommendations for minimizing the project's environmental impact. The DEQ Report indicated there are no adverse environmental impacts that would prevent the construction of the Rebuild Project.⁶⁸

Based on the information and analysis submitted by reviewing agencies, DEQ made several recommendations for the Commission's consideration of the Company's Application. These recommendations are *in addition to* requirements of federal, state, or local law or regulations. The recommendations included:

- 1. Follow DEQ's recommendations for construction activities to avoid and minimize impacts to wetlands to the maximum extent possible.
- 2. Follow VMRC's recommendation to initiate a new review with the agency, should the proposed project change.
- 3. Follow DEQ's recommendations regarding erosion and sediment control and stormwater management, as applicable.
- 4. Reduce solid waste at the source, reuse it and recycle it to the maximum extent practicable.
- 5. Coordinate with DCR/DNH to obtain an update on natural heritage information, and regarding its recommendations related to aquatic natural communities and invasive species management.
- 6. Coordinate with DHR regarding the recommendation to perform additional archaeological and architectural surveying.
- 7. Coordinate with VDH regarding its recommendations to protect public drinking water sources.
- 8. Follow the principles and practices of pollution prevention to the maximum extent practicable.
- 9. Limit the use of pesticides and herbicides to the extent practicable.
- 10. Coordinate with DWR regarding its recommendations to minimize adverse impacts from linear utility projects.

Company witness Young confirmed the Company does not object the "Summary of Recommendations" in the DEQ Report except as discussed below. The Company requested that the Commission reject the following recommendations:

- The recommendation by DCR/DNH related to the development and implementation of an ISMP;
- The recommendation by DEQ to consider development of an effective EMS; and
- The recommendation by DWR to conduct significant tree removal and ground-clearing activities outside of the primary songbird nesting season of March 15 through August 15.⁶⁹

The Company requested that the Commission reject DCR/DNH's ISMP recommendation because it is unnecessarily duplicative, and could lead to significant project cost increases and construction delays. The Company has an IVMP that utilizes mechanical, chemical, and cultural

⁶⁸ *Id.* at 2-5.

⁶⁹ Ex. 9, at 4 (Young Rebuttal).

methods for controlling vegetation, including invasive species. The Company's IVMP is consistent with standards for utility right-of-way management by the American National Standards Institute, as well as NERC Vegetation Management Standards, for all regions in the Company's service territory. The IVMP is administered by the Company's Forestry Section and is staffed with experienced graduate-level foresters and International Society of Arboriculture Certified Arborists. To conduct an invasive species survey as requested by DCR/DNH, Company witness Young estimates, based on the Company's past experience with species surveys and contractors, this type of species survey would cost approximately \$14,000 to \$20,000 per mile. For the 15.2-miles ROW in this case, this would add approximately \$212,800 to \$304,000 to the total project cost. Additionally, due to the likelihood of different plant-specific identification windows within the growing season, the Company believes there could be delays in the construction schedule.⁷⁰

Pursuant to the Commission's decision in Case No. PUR-2021-00272,⁷¹ the Company met with DCR/DNH representatives on August 23, 2022. Based on that discussion, the Company has reviewed its IVMP for application to both woody and herbaceous species, based on the species list available on the DCR website. The Company and DCR/DNH representatives have been in communication and have scheduled a follow-up meeting in February 2023 to discuss the Company's current IVMP. The Company and DCR/DNH are continuing to work cooperatively to address the agency's concerns. Accordingly, the Company requested that the Commission reject this recommendation.⁷²

The Company requested that the Commission reject DEQ's recommendation to develop an effective EMS as unnecessarily duplicative. The Company already has a comprehensive EMS Manual in place that ensures it complies with environmental laws and regulations, reduces risk, minimizes environmental impacts, setting environmental goals, and achieving improvements in its environmental performance, consistent with the Company's core values.⁷³

The Company requested that the Commission reject DWR's recommendation regarding time-of-year restrictions for tree clearing. Since the Rebuild Project will be constructed in an existing cleared right-of-way, the Company believes any tree and/or ground-clearing activities will not be significant. To the extent significant tree and/or ground-clearing may be required, the Company will coordinate with DWR to create appropriate construction restrictions.⁷⁴

I agree with the Company and find that the three recommendations discussed above are unnecessarily duplicative, and could lead to significant project cost increases and/or project delays. The Company continues to work with DCR/DNH to address the agency's concerns regarding invasive plant species that may or may not be present in its transmission line ROWs and the most cost-effective method for controlling those plant species in an IVMP or ISMP. The Company stated

⁷⁰ Id. at 5-6.

⁷¹ 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, Final Order at 10-11 (Aug. 31, 2022) (The Commission agreed with the Chief Hearing Examiner and declined to adopt DCR/DNH's recommendation regarding an ISMP, but directed the Company to meet with DCR/DNH and to report on the status of the meetings in the Company's next transmission CPCN case).

⁷² Ex. 9, at 6-7 (Young Rebuttal).

⁷³ *Id.* at 7-8.

⁷⁴ Id. at 8.

the results of these discussions will be presented in the Company's next CPCN case.⁷⁵ The Company already has an EMS Manual in place that ensures it complies with environmental laws and regulations, reduces risk, minimizes environmental impacts, and sets environmental goals consistent with the Company's core values. In its comments, DEQ has not identified how the Company's EMS is deficient in any respect.⁷⁶ Lastly, since the Rebuild Project ROW is already cleared, the Company does not expect any significant tree and/or ground clearing will be required. To the extent it may be required, the Company has agreed to coordinate with DWR to create appropriate construction restrictions. Accordingly, I recommend the Commission decline to adopt these three recommendations in the DEQ Report. I find the other recommendations the DEQ Report Summary of Recommendations are "desirable or necessary to minimize adverse environmental impact" associated with the Rebuild Project.

Other Alternatives

The Company addressed feasible project alternatives, if any, in Section I.E of the Appendix.⁷⁷ There were no feasible project alternatives submitted to PJM. As stated in Section I.A of the Appendix, unless this 15.2-miles segment of Line #183 is rebuilt to the Company's standard for 230 kV construction, the transmission line would continue to be in non-compliance with NERC Reliability Standards and the Company's Planning Criteria.⁷⁸

I find there are no feasible alternatives to the Rebuild Project.

Public Health and Safety

The Company's studies on the health effects of electromagnetic fields ("EMF") are found in Sections IV.A,⁷⁹ IV.B,⁸⁰ and IV.C⁸¹ of the Appendix. Based on those studies and the levels of EMF associated with the Rebuild Project, the Company determined that no adverse health effects are anticipated to result from the operation of the Rebuild Project.⁸²

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

Other Resources

The Company identified four Federal Aviation Administration ("FAA") restricted airports located within 10 miles of the Rebuild Project:

- Warrenton/Fauquier Airport, approximately 5.5 miles west of Line #183;
- Manassas Regional Airport, approximately 5.0 miles north of Line #183;

⁷⁸ Id.

⁷⁵ Tr. at 15.

⁷⁶ Ex. 8, at 20.

⁷⁷ *Id.*, Appendix at 24.

⁷⁹ *Id.*, Appendix at 209.

⁸⁰ *Id.*, Appendix at 213.

⁸¹ *Id.*, Appendix at 216.

⁸² *Id.*, Appendix at 214.

- Quantico Marine Corps Airfield (Turner Field), approximately 9.1 miles southeast of Line #183; and
- Davison Army Airfield (Fort Belvoir), approximately 8.8 miles northeast of Structure #183/134.⁸³

In addition, there are several private airfields in the vicinity of the Rebuild Project including Maples Field (approximately 2.5 miles north of Structure #183/12) and the Flying Circus Airshow (approximately 8.1 miles west of Structure #183/12).⁸⁴

Based on its review, the Company believes there will be no permanent impacts to air navigation; however, FAA filings are required for the construction cranes. The Company filed for obstruction evaluation determinations for the proposed rebuild transmission structures. No structures exceed obstruction standards, but all require submission of FAA Form 7460-2 within five days of construction reaching its greatest height. The DOAv advised the Company in an email dated June 23, 2022, that the proposed Rebuild Project is beyond 20,000 linear feet of a public use or military airport. The DOAv further advised the Company of the requirement to submit FAA Form 7460-2 if the proposed transmission structures or the construction cranes will reach a height of 200 feet above ground level, which the Company has done.⁸⁵

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

Virginia Environmental Justice Act

The Company addressed environmental justice in Section III.B of the Appendix.⁸⁶ In preparing its Application, the Company researched the demographics of the surrounding communities using the U.S. Environmental Protection Agency ("EPA") environmental justice mapping and screening tool EJSCREEN and determined there are 36 Census Block Groups ("CBGs") within the Rebuild Project area that fall within 1.0-mile of the existing transmission line. Of these, 12 CBGs are intersected by the Rebuild Project. The Company reviewed minority, income, and education census data and identified populations within the study area that meet the EPA's defined threshold for Environmental Justice protections and the thresholds for "community of color" and "low income" set forth in Code § 2.2-234 ("EJ Communities"). The Company identified communities of color in 32 out of 36 CBGs within the study area. Sixteen out of 36 CBGs within the study area appear to be low income. Of the 12 CBGs intersected by the Rebuild Project, 10 meet the definition for a community of color and five meet the definition of low income.⁸⁷

The Company described its outreach efforts which included the launch of an internet website in June 2022 dedicated to the Rebuild Project; direct mail to approximately 2,010 property owners and residents within 1,000 feet of the Rebuild Project providing information on the Rebuild Project

⁸³ Id. at 198.

⁸⁴ Id.

⁸⁵ Id.; See Ex. 1, DEQ Supplement at Attachment 2.O.3 (Application).

⁸⁶ *Id.*, Appendix at 169.

⁸⁷ *Id.*, Appendix at 170.

and instructions on accessing additional information on the Rebuild Project from the project's website; newspaper print advertisements, in both English and Spanish, in several local newspapers regarding the Rebuild Project and an invitation to the virtual Open House; and a virtual Open House on June 29, 2022, which provided details about construction, project timing, project need, structure types and height differences, information on the interactive mapping tool, photo simulations from key areas along the Rebuild Project, and the Commission approval process.⁸⁸

The Company believes, pursuant to Code §§ 56-46.1 C and 56-259 C, there is a strong preference for the use of existing ROW whenever feasible. The Rebuild Project is within existing ROW, including shared ROW with an existing 500 kV transmission line (Line #539) in the vicinity of EJ Communities. Although the Rebuild Project will be replacing the existing 115 kV structures to uprated 230 kV structures that will have an average increase in structure height of 40 feet, these structures will be collocated with the 500 kV line which will have approximately similar heights as the proposed Rebuild Project. The Company believes, based on the use of existing ROW and height of the existing 500 kV transmission line, there will be minimal impacts to surrounding communities. Based on the design of the Rebuild Project, the Company believes the project will not have a disproportionately high or adverse impacts to the surrounding community and the EJ Communities located within the study area.⁸⁹

The Company confirmed that it has and will continue to engage EJ Communities and others affected by the Rebuild Project in a manner that allows them to meaningfully participate in the project development and approval process so that it can take their views and input into consideration.⁹⁰ The Company provided a copy of its environmental justice policy as Attachment III.B.5.⁹¹

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

Staff Report

After investigating the Application, Staff concluded that the Company reasonably demonstrated the need to construct the Rebuild Project to replace aging infrastructure. The Rebuild Project utilizes existing ROW and appears to reasonably minimize impacts on existing residences, scenic assets, historic districts, and the environment and does not appear to adversely impact any goal established by the Virginia Environmental Justice Act. Staff therefore does not oppose the Company's request that the Commission issue the CPCN necessary for the construction and operation of the Rebuild Project. The Company has indicated that it will seek an amendment to any CPCN issued in this proceeding prior to converting the rebuilt line to 230 kV operation.⁹²

⁹⁰ Id.

⁸⁸ Id., Appendix at 169.

⁸⁹ *Id.*, Appendix at 170.

⁹¹ *Id.*, Appendix at 190.

⁹² Ex. 7, Staff Report at 22.

FINDINGS AND RECOMMENDATIONS

Based on the evidence received in this case, and for the reasons set forth above, I find that:

- The Rebuild Project is needed to replace aging infrastructure that is at the end of its service life, to comply with the Company's Planning Criteria and mandatory NERC Reliability Standards, and to maintain reliable service for overall growth in the Rebuild Project area;
- (2) Line #183 should be rebuilt using 230 kV construction so that the line could be operated at 115 kV in the near-term but with the capability of converting to 230 kV operation when needed to support load growth;
- (3) A portion of Line #183 should be rebuilt to accommodate a second 230 kV circuit on the line's steel monopoles to support data center load growth expected to occur in the Rebuild Project area;
- (4) Incremental DSM will not obviate the need for the Rebuild Project;
- (5) The Company reasonably considered existing ROW for the Rebuild Project and will construct the project entirely within existing Company ROW;
- (6) The Rebuild Project will have no material adverse impact on scenic, environmental, or historic resources;
- (7) The comments in the DEQ Report by DCR/DNH regarding the development of an ISMP, DEQ regarding the development of an EMS, and DWR regarding time-of-year construction restrictions are unnecessarily duplicative, and could lead to significant project cost increases and/or project delays;
- (8) The Commission should decline to adopt the foregoing recommendations in the DEQ Report;
- (9) The other recommendations the DEQ Report Summary of Recommendations are "desirable or necessary to minimize adverse environmental impact" associated with the Rebuild Project;
- (10) There are no feasible alternatives to the Rebuild Project;
- (11) The Rebuild Project does not represent a hazard to public health or safety;
- (12) The Company reasonably addressed the impact of the Rebuild Project on aviation resources; and
- (13) The Company reasonably considered the requirements of the Virginia Environmental Justice Act in its Application.

I therefore *RECOMMEND* the Commission enter an order that:

- (1) ADOPTS the findings and recommendations contained in this Report;
- (2) *ISSUES* a certificate of public convenience and necessity to the Company to construct and operate the Rebuild Project; and
- (3) **DISMISSES** 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 March 10, 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,

michael J. Thomas

Michael D. Thomas Senior 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, VA 23219.