COMMONWEALTH OF VIRGINIA
STATE CORPORATION COMMISSION

APPLICATION OF

VIRGINIA ELECTRIC AND POWER COMPANY **CASE NO. PUR-2023-00110**

For approval and certification of electric transmission facilities: 230 kV Elmont-White Oak Line #2075, 230 kV Chickahominy-White Oak Line #2294, and White Oak Substation Expansion

REPORT OF MICHAEL D. THOMAS, SENIOR HEARING EXAMINER

January 17, 2024

This case involves a request by Virginia Electric and Power Company d/b/a Dominion Energy Virginia ("Dominion" or "Company") to construct two new approximately 4.69-mile overhead 230 kilovolt ("kV") transmission lines on primarily double circuit monopole structures in a new predominantly 100-foot-wide right-of-way and expand the Company's existing White Oak Substation in Henrico County, Virginia. The record in this proceeding supports the Company's request for a certificate of public convenience and necessity ("CPCN") to construct and operate the electric transmission facilities. The Project is needed to comply with mandatory reliability standards and to maintain reliable service to accommodate overall growth in the White Oak Load Area.

HISTORY OF THE CASE

On June 23, 2023, the Company filed an application ("Application") with the State Corporation Commission ("Commission") for approval and certification of electric transmission facilities in Henrico County. The Company 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*. Concurrent with the filing of its Application, the Company also filed a Motion for *Pro Hac Vice* Admission.

In its Application, the Company proposed to construct the following facilities, which are collectively referred to as the "Project:"

- Construct two new approximately 4.69-mile overhead 230 kV transmission lines on primarily double circuit monopole structures in a new predominantly 100-foot-wide right-of-way by cutting the Company's existing 230 kV Chickahominy-Elmont Line #2075 at a location between Structures #2075/150 and #2075/151, resulting in (i) 230 kV Elmont-White Oak Line #2075, and (ii) 230 kV Chickahominy-White Oak Line #2294 ("White Oak Lines"). At the cut-in location within the existing right-of-way, the Company would remove one single circuit lattice tower and install one single circuit H-frame structure on 500 kV Chickahominy-Elmont Line #557 to facilitate construction of the White Oak Lines. From the cut-in location within the existing right-of-way, the White Oak Lines would extend a total of approximately 4.69 miles generally in a southwesterly direction before terminating at the expanded White Oak Substation.

While the proposed cut-in location is in the existing right-of-way, the proposed White Oak Lines would be constructed in new right-of-way supported primarily by double circuit weathering steel monopoles and would utilize three-phase twin-bundled 768.2 ACSS/TW type conductor with a summer transfer capability of 1,573 megavolt-ampere ("MVA");

- Expand the Company's existing White Oak Substation in Henrico County, to accommodate the termination of the new White Oak Lines ("White Oak Substation Expansion"). The White Oak Substation Expansion would require an additional approximately 0.7 acres of land, which the Company would obtain through an easement; and
- Perform line-protection resets at the Company's existing Chickahominy and Elmont Substations.[1]

According to the Application, the Company proposed the Project to relieve identified violations of North American Electric Reliability Corporation ("NERC") Reliability Standards brought on by increases in electrical demand over the past five years as well as expected demand growth projected for the future, and to maintain the structural integrity and reliability of the Company's transmission system.[2]

The Company identified an approximately 4.69-mile overhead route for the Project ("Proposed Route" or "Route 3"), as well as two overhead alternative routes ("Alternative Route 1" and "Alternative Route 2"), all of which the Company proposed for Commission consideration and notice.[3] The Company stated although the Proposed Route is the longest of the routes considered, it was selected because it had the best collocation characteristics, had the least impact on residences and residential neighborhoods, and was the route regarded as most compatible with existing and planned land uses.[4]

The Company stated for the White Oak Substation Expansion, the existing White Oak Substation would be expanded to accommodate the termination of the new White Oak Lines.[5] The Company further stated the White Oak Substation Expansion would include installation of three 230 kV 4000 ampere breakers to create an 8-breaker hybrid breaker-and-a-half arrangement and would require an additional approximately 0.7 acres of land.[6]

The Company stated the target in-service date for the Project is April 30, 2026.[7] The Company represented the estimated conceptual cost of the Project (2023 dollars) utilizing the

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[1] Ex. 2, at 2-3 (Application).
[2] *Id.* at 2.
[3] *Id.* at 4.
[4] *Id.* at 5.
[5] *Id.*
[6] *Id.*
[7] *Id.* The Company requested that the Commission enter a final order by March 1, 2024. *Id.* The Company stated should the Commission issue a final order by March 1, 2024, the Company estimated that construction should begin around January 1, 2025, and be completed by April 30, 2026. *Id.* The Company stated its schedule is contingent on several items, and the Company also stated it is actively monitoring the regulatory changes and requirements associated with the Northern Long-Eared Bat and how it could potentially impact construction timing associated with time of year restrictions. *Id.* at 5-6. The Company further stated it is also monitoring potential regulatory changes associated with the potential up-listing of the Tri-Colored Bat to endangered. *Id.* at 6

Proposed Route is approximately $44.6 million, which included approximately $34.6 million for transmission-related work and approximately $10.0 million for substation-related work.[8]

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).[9] The Staff of the Commission ("Staff") requested the DEQ Office of Wetlands & Stream Protection ("DEQ-OWSP") to provide the Wetland Impacts Consultation for the Project.[10]

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),[11] the Commission receives and considers reports on the proposed facilities from state environmental agencies. Staff requested DEQ to coordinate an environmental review of this Application by the appropriate agencies and to provide a report on the review.[12]

On August 3, 2023, 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 December 6, 2023; scheduled a public evidentiary hearing for December 6, 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.

By Hearing Examiner's Ruling entered on August 4, 2023, the Company's Motion for *Pro Hac Vice* Admission was granted.

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[8] *Id.* at 6.

[9] *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).

[10] Letter from C. Austin Skeens, Esquire, State Corporation Commission, dated June 29, 2023, to David L. Davis, Department of Environmental Quality, filed in Case No. PUR-2023-00110.

[11] *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. Rep. 559, Order Distributing Memorandum of Agreement (Aug. 14, 2002).

[12] Letter from C. Austin Skeens, Esquire, State Corporation Commission, dated June 29, 2023, to Bettina Rayfield, Department of Environmental Quality, filed in Case No. PUR-2023-00110.

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 August 18, 2023. In addition to DEQ, DEQ-OWSP, and DEQ's Division of Land Protection and Revitalization ("DEQ-DLPR"), the following state agencies submitted comments on the Project: Department of Conservation and Recreation ("DCR"), DCR's Division of Natural Heritage ("DCR-DNH"), Department of Historic Resources ("DHR"), Virginia Outdoors Foundation ("VOF"), Department of Transportation ("VDOT"), Department of Aviation ("DOAv"), and Virginia Marine Resources Commission ("VMRC").[13]

On September 7, 2023, The Company filed its Proof of Notice and Certificate of Mailing.[14]

On October 3, 2023, Quality Investment Properties, LLC ("QTS"), filed a Notice of Participation. QTS operates data centers in Henrico County to be served by the facilities for which Dominion seeks approval in its Application. QTS stated it has a direct interest in the outcome of this proceeding because, as described in the Application, the need for the facilities for which Dominion seeks approval is supported, in part, by load growth associated with QTS' data centers. As a result, QTS maintained that it has immediate, pecuniary, and substantial interests in the outcome of this proceeding, which QTS seeks to protect.[15]

On October 5, 2023, Hourigan Development, LLC ("Hourigan"), filed a Notice of Participation. Hourigan represented it is a Virginia limited liability company, property developer, and real estate investor with ownership interests in properties located in and proximate to the White Oak Technology Park ("Technology Park"), including multiple parcels that, (i) once developed, would be served by the Project, should it be approved and built as proposed; and (ii) are traversed by at least one of the routes that Dominion has identified for certain Project-related transmission lines and related facilities. For these and other reasons, Hourigan stated it has a direct and significant interest in this proceeding and its outcome, and would participate in this proceeding to protect its interests.[16]

On October 6, 2023, the Myrtle M. Holland Family Trust filed a Notice of Participation ("Holland Family Trust" or "Trust"). The Holland Family Trust represented it owns the property located at 3464 Meadow Road, Sandston, Virginia, ("Trust Property") which is directly impacted by the Project and would be substantially impacted by the outcome of this proceeding. The Trust filed its Notice of Participation to challenge whether the Proposed Route for the Project is "reasonable and in the public interest" as required by Code § 56-599C. The Trust also stated it intended to demonstrate the irreparable harm and damage to the environment, the unconstitutional taking of the quiet enjoyment of the landowner's rights, as well as the arbitrary nature of the Proposed Route.[17]

The evidentiary hearing was convened, as scheduled, on December 6, 2023. The Company appeared by its counsel Vishwa B. Link, Esquire, Anne Hampton Haynes, Esquire, and

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[13] Ex. 12, at 1 (DEQ Report).
[14] Ex. 1 (Proof of Notice).
[15] QTS Notice of Participation at 1-2.
[16] Hourigan Notice of Participation at 1-2.
[17] Holland Family Trust Notice of Participation at 1-2.

Sarah B. Nielsen, Esquire, with the law firm McGuireWoods, LLP, and David J. DePippo, Esquire, and Annie C. Larson, Esquire, with Dominion Energy Services, Inc. QTS appeared by its counsel Michael J. Quinan, Esquire, with the law firm Thompson McMullan, PC. Hourigan appeared by its counsel Christian F. Tucker, Esquire, with the law firm Christian & Barton, LLP. The Holland Family Trust appeared by its counsel William W. Smith, Esquire, with the law firm Critzer Cardani, PC. Staff appeared by its counsel William H. Harrison, Esquire, and C. Austin Skeens, Esquire.

Although the Holland Family Trust appeared by its counsel, the Trustee, Donald Andrews, did not appear as a witness to sponsor his prefiled direct testimony into the evidentiary record. Since Mr. Andrews was not present to sponsor his testimony or avail himself for cross-examination of that testimony, his direct testimony was not admitted into the evidentiary record. Mr. Andrews failed to file a motion for continuance in advance of the evidentiary hearing, or show good cause why he could not appear at the scheduled hearing.[18]

Post-Hearing Briefs were filed timely on January 3, 2024, by QTS, Hourigan, and Dominion. Staff filed a letter in lieu of a formal Post-Hearing Brief. No Post-Hearing Brief was filed by the Holland Family Trust.

WRITTEN COMMENTS

Lynn P. Wilson, a resident of Sandston, Virginia, is a concerned citizen and an affected landowner. She stated the final route was not presented at the first community meeting. She asked the Commission to consider a route that follows the Norfolk Southern Railroad right-of-way. She further stated after the first community meeting, the route was modified to follow Crib Lane, a paved driveway into family property where Ms. Wilson resides and that she actively manages for its conservation value. She further stated Crib Lane does not appear on some of Dominion's maps that show other neighborhood features. Besides the direct impact to her property, Ms. Wilson expressed her concern that residential ratepayers are being asked to pay for infrastructure that is designed to serve primarily data center customers. She believes the Company's Application "merits the highest level of scrutiny" by the Commission and its Staff.

Ms. Wilson supplemented her written comments. To the extent citizen feedback matters to the Commission and to good government generally, she provided the following additional comments. First, Ms. Wilson stated the Staff Report filed in this case was disappointingly "thin" in its analysis of the Company's Application. She referred to the report as a recitation of the Company's boilerplate. In particular, she maintained the Staff Report's indication that the VAH Data Center Campus fits with Henrico County's Comprehensive Plan belies the fact that future land use is designated for office/commercial development, not industrial development. The economic benefits of the VAH Data Center Campus are taken as given, as opposed to being founded in actual research. Second, Ms. Wilson addressed the Company's public outreach efforts. In initial meetings with Company personnel, the Project was pitched as necessary to maintain reliability for residential customers, not because of grid instability caused by electric demand at the Technology Park. She stated but for the data centers, there would be no concern for the electrical grid in the area, which matters to the citizens and ratepayers that live in the area. Third, Ms. Wilson

[18] Tr. at 41-45, 64, 66.

addressed the speculative nature of the VAH Data Center Campus, which would be located outside the Technology Park and would require rezoning approvals from Henrico County. She believes the VAH Data Center Campus should not factor into the Commission's decision whether a new transmission line should be built and paid for by ratepayers. She stated the only information about the VAH Data Center Campus provided to residents in the area has been gleaned from documents filed with the Commission, not information provided by the developer or Henrico County. Ms. Wilson believes the infrastructure requirements for the VAH Data Center Campus should not obviate others' land uses. Fourth, Ms. Wilson addressed the Proposed Route for the Project. In particular, she addressed collocating the proposed transmission line with a future sewer line and the railroad right-of-way. She stated this is the first she has heard about a new sewer line coming to area because Henrico County has not previously shared this information with local residents but has shared the information with the data center developers. She questioned whether the new sewer line was created to accommodate the Proposed Route for the Project. Ms. Wilson also questioned why the Proposed Route does not follow the existing railroad right-of-way rather than cross the railroad tracks, I-64, and State Route 60. She believes if anyone really looked at a map, they could come up with a less intrusive route for transmission line. Finally, Ms. Wilson advocated for the legislature to study the impact of data centers on Virginia, determine the best practices for data center development, update the laws governing data centers, require data centers to have their own zoning classification, determine who should pay for the infrastructure required of data centers, and pause development while these issues may be addressed at all levels of government.

Kelsey Cappiello, a resident of Sandston, Virginia, stated she is appalled data centers, that are not generally supported by residents of eastern Henrico County, are being allowed to move forward with no expectation that those data centers would pay for the required utility infrastructure to serve their facilities. Instead, she believes those costs are being passed on to taxpayers and residents. She stated residents do not want the noise pollution, elimination of green spaces, or the responsibility for footing the bill for the infrastructure to serve their enormous energy consumption needs. She stated the data centers should be held to their pledges to use green energy and lessen their overall impact. Lastly, she believes Dominion's customers should not be responsible for the bill to connect these data centers to the Company's distribution system.

Robin Thady, a resident of Sandston, Virginia, believes transmission lines built primarily to serve a single user should be paid for by the entity requesting the service. She stated transmission lines are expensive and often require the use of eminent domain to install. She believes the use of eminent domain for economic development and placing the cost of the transmission lines on ratepayers is inappropriate and should be stopped.

Gwen Parker, a resident of Richmond, Virginia, believes transmission lines built primarily to serve a single customers should be paid for by that customer. She stated transmission lines are expensive and often require the use of eminent domain to install. She believes the use of eminent domain for economic development and placing the cost of the transmission lines on ratepayers is inappropriate and should be stopped.

Ivy Main, a resident of McLean, Virginia, stated the only reason the transmission line is "needed" is to serve a data center and the Company's ratepayers should not be expected to pick up the tab. She stated the environment and local communities should not have to suffer as a result of

transmission lines being sited through those areas, especially when eminent domain is used to secure the right-of-way. The transmission line should be routed along existing right-of-way to avoid these harms.

Erin Shibley, a resident of Sandston, Virginia, believes a transmission line to serve a single customer should be paid for by that customer. She stated transmission lines are expensive and often require the use of eminent domain to acquire the right-of-way. She believes the use of eminent domain for economic development and placing the cost of the transmission lines on ratepayers is inappropriate and should be stopped. She believes local residents are paying the cost of this economic development with their landscape, which is rich in both historical Native American and ecological value. Lastly, she believes the loss of habitat would threaten wildlife species that are known to be present in the area, including species that are listed as endangered in Virginia.

Ellen Snyder, a resident of Sandston, Virginia, believes the proposed transmission line will be an eyesore for the residents of the Elko Community and represented this message was conveyed to county officials and Dominion. She believes the transmission line should be placed underground. Ms. Snyder is opposed to the taking of private property to support business interests in the Technology Park.

Mark Davis, a resident of Sandston, Virginia, is opposed to any of the routes for the transmission line to the Technology Park. He questioned why the line was not routed underground along Route 60, and believed the Company's response was it would cost too much. He also believes Dominion did not want to deal with VDOT. He is opposed to the taking of private property to support business interests in the Technology Park, and to ratepayers paying the cost of a transmission line that will only benefit business interests in the Technology Park. Lastly, Mr. Davis believes the proposed transmission line will be an eyesore for the residents of the Elko Community and indicated that message was conveyed to Henrico County officials and Dominion.

Diane Schwartz, a resident of Henrico County, Virginia, urged the Commission not to let Dominion raise its rates.

Irvine Wilson, a resident of Sandston, Virginia, is a retired conservation planner, an affected landowner, and a concerned citizen. He has many concerns and objections, but he limited his comments to two important flaws which he perceived concerning the Company's analysis of the Project. First, he performed his own analysis, using publicly available databases, and determined, of the three routes, the Proposed Route had the highest impact on forested land with a Forest Conservation Value ("FCV") of "very high" when compared to Alternative Routes 1 and 2. Mr. Wilson explained that, although some of the forest along the right-of-way for the Proposed Route has been clearcut, the conservation value of the land would remain unchanged unless the land is converted to another use after the clearcut. If the land is replanted with native trees for another generation of timber production, the conservation value remains the same. Second, contrary to DCR-DNH's recommendation to avoid or minimize impacts to ecological cores, he believes the Proposed Route would sever approximately 80 acres from a core with very high (C2) to outstanding (C1) ecological integrity. Mr. Wilson found no discussion in the Company's Application that addresses ecological cores nor any evidence that the Company consulted with DCR-DNH to minimize impacts to significant ecological cores. Lastly, Mr. Wilson stated, after the first

community meeting, the interconnection point for the Proposed Route shifted farther away from the Norfolk Southern Railroad right-of-way to a forested area. Mr. Wilson finds this route modification upsetting and contrary to the good practice of following existing linear infrastructure. Mr. Wilson urged the Commission to consider the original Proposed Route as a viable routing option for the Project.

Written comments were also submitted by Beth Kreydatus, a resident of Henrico County, Virginia. Ms. Kreydatus' written comments were not filed timely and were not considered in deciding this case.

SUMMARY OF THE RECORD

Public Witnesses

One person signed up to testify as a public witness. Mr. Alton Jordan with DOAv could not be reached by telephone on the morning of the hearing, December 6, 2023, although two attempts were made to contact him.

Virginia Electric and Power Company Testimony

The Company presented the direct testimony of six witnesses: **Mark R. Gill**, Consulting Engineer in the Electric Transmission Planning Department for the Company; **Emmanuel J. Dobson**, Engineer III in the Distribution Planning Group for the Company; **Sherrill A. Crenshaw**, Principal Engineer in the Electric Transmission Line Engineering Department for the Company; **Antoaneta M. Yanev**, Engineering Technical Specialist III for the Company; **Stefan R. Brooks**, Electric Transmission Siting and Permitting Contractor for the Company; and **Jacob M. Rosenberg**, Principal Consultant with Environmental Resources Management ("ERM").

In his direct testimony, **Mr. Gill** sponsored the following sections of the Appendix, which describe the Company's electric transmission system and the need for, and benefits of, the Project:

- Section I.G: This section provides a system map of the affected area.
- Section I.J: If approved by PJM Interconnection LLC ("PJM"), this section provides information about the Project.
- Section I.K: This section, when applicable, provides outage history and maintenance history for existing transmission lines if the proposed project is a rebuild and is due in part to reliability issues.
- Section I.M: This section, when applicable, contains information for transmission lines interconnecting a non-utility generator.
- Section II.A.3: This section provides color maps of existing or proposed rights-of-way in the vicinity of the Project.
- Section II.A.10: This section provides details of the construction plans for the Project, including requested line outage schedules.[19]

[19] Ex. 3, at 2 (Gill Direct).

Additionally, Company Witness Gill co-sponsored the Executive Summary and the following sections of the Appendix:

- Section I.A (co-sponsored with Company Witnesses Dobson, Crenshaw, Yanev, Brooks, and Rosenberg): This section details the primary justifications for the Project.
- Section I.B (co-sponsored with Company Witness Dobson): This section details the engineering justifications for the Project.
- Section I.C (co-sponsored with Company Witness Dobson): This section describes the present system and details how the Project would effectively satisfy present and projected future load demand requirements.
- Section I.D (co-sponsored with Company Witness Dobson): Although not applicable to the Project, this section describes critical contingencies and associated violations due to the inadequacy of the existing system.
- Section I.E (co-sponsored with Company Witness Dobson): This section explains feasible alternatives to the Project.
- Section I.H (co-sponsored with Company Witness Dobson): This section provides the desired in-service date of the Project and the estimated construction time.
- Section I.L (co-sponsored with Company Witness Crenshaw): This section, when applicable, provides details on the deterioration of structures and associated equipment.
- Section I.N (co-sponsored with Company Witness Dobson): 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 Project.[20]

In his direct testimony, **Mr. Dobson** co-sponsored the Executive Summary and the following sections of the Appendix, which describe the Company's electric distribution system and the need for, and benefits of, the Project:

- Section I.A (co-sponsored with Company Witnesses Gill, Crenshaw, Yanev, Brooks, and Rosenberg): This section details the primary justifications for the Project.
- Section I.B (co-sponsored with Company Witness Gill): This section details the engineering justifications for the Project.
- Section I.C (co-sponsored with Company Witness Gill): This section describes the present system and details how the Project would effectively satisfy present and projected future load demand requirements.
- Section I.D (co-sponsored with Company Witness Gill): Although not applicable to the Project, this section describes critical contingencies and associated violations due to the inadequacy of the existing system.
- Section I.E (co-sponsored with Company Witness Gill): This section explains feasible alternatives to the Project.
- Section I.H (co-sponsored with Company Witness Gill): This section provides the desired in-service date of the Project and the estimated construction time.

[20] *Id.* at 2-3.

- Section I.N (co-sponsored with Company Witness Gill): 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 Project.[21]

At the hearing, Mr. Dobson explained the process of working with a customer such as QTS to meet the customer's expectations regarding the ramp schedule for a data center and the ultimate energy needs for a data center when it becomes fully operational. The customer supplies Dominion with a load letter that provides the ramp schedule and the contractual value of each of the buildings in a data center campus. This establishes the contractual relationship between Dominion and the customer and starts the planning process to meet the customer's electric needs.[22]

In his direct testimony, **Mr. Crenshaw** sponsored the following sections of the Appendix, which provide an overview of the design characteristics of the transmission facilities for the Project, and discussed electric and magnetic field levels:

- Section I.F: This section describes any lines or facilities that would be removed, replaced, or taken out of service upon completion of the Project.
- Section II.A.5: This section provides drawings of the right-of-way cross section showing typical transmission lines structure placements.
- Section II.B.1 to II.B.2: These sections provide the line design and operational features of the Project, as applicable.
- Section IV: This section provides analysis on the health aspects of electric and magnetic field levels.[23]

Additionally, Mr. Crenshaw co-sponsored the Executive Summary and the following sections of the Appendix:

- Section I.A (co-sponsored with Company Witnesses Gill, Dobson, Yanev, Brooks, and Rosenberg): This section details the primary justifications for the Project.
- Section I.I (co-sponsored with Company Witness Yanev): This section provides the estimated total cost of the Project.
- Section I.L (co-sponsored with Company Witness Gill): This section, when applicable, provides details on the deterioration of structures and associated equipment.
- Sections II.B.3 to II.B.5 (co-sponsored with Company Witness Brooks): These sections, when applicable, provide supporting structure details along the proposed and alternative routes.
- Section II.B.6 (co-sponsored with Company Witnesses Brooks and Rosenberg): This section provides photographs of existing facilities, representations of proposed facilities, and visual simulations.

[21] Ex. 4, at 2-3 (Dobson Direct).
[22] Tr. at 54-57.
[23] Ex. 5, at 2 (Crenshaw Direct).

- Section V.A (co-sponsored with Company Witnesses Brooks and Rosenberg): This section provides the Proposed Route description and structure heights for notice purposes.[24]

In her direct testimony, **Ms. Yanev** co-sponsored the Executive Summary and the following sections of the Appendix, which describe the substation work to be performed for the Project:

- Section I.A (co-sponsored with Company Witnesses Gill, Dobson, Crenshaw, Brooks, and Rosenberg): This section details the primary justifications for the Project.
- Section I.I (co-sponsored with Company Witness Crenshaw): This section provides the estimated total cost of the Project.
- Section II.C: This section describes and furnishes a one-line diagram of the substation associated with the Project.[25]

In his direct testimony, **Mr. Brooks** sponsored those sections of the Appendix, which provide an overview of the design of the route for the Project, and related permitting:

- Section II.A.12: This section identifies the counties and localities through which the Project would pass and provides General Highway Maps for these localities.
- Sections V.B to V.D: These sections provide information related to public notice of the Project.[26]

Additionally, Mr. Brooks co-sponsored the Executive Summary and the following sections of the Appendix:

- Section I.A (co-sponsored with Company Witnesses Gill, Dobson, Crenshaw, Yanev, and Rosenberg): This section details the primary justifications for Project.
- Section II.A.1 (co-sponsored with Company Witness Rosenberg): This section provides the length of the proposed corridor and viable alternatives to the Project.
- Section II.A.2 (co-sponsored with Company Witness Rosenberg): This section provides a map showing the route in relation to notable points close to the Project.
- Section II.A.4 (co-sponsored with Company Witness Rosenberg): This section explains why the existing right-of-way is not adequate to serve the need for the Project.
- Sections II.A.6 to II.A.8 (co-sponsored with Company Witness Rosenberg): These sections provide detail regarding the right-of-way for the Project.
- Section II.A.9 (co-sponsored with Company Witness Rosenberg): This section describes the Proposed Route selection procedures and details alternative routes considered for the Project.
- Section II.A.11 (co-sponsored with Company Witness Rosenberg): This section details how the construction of the Project follows the provisions discussed in Attachment 1 of the Transmission Appendix Guidelines.

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[24] *Id.* at 2-3.
[25] Ex. 6, at 2-3 (Yanev Direct).
[26] Ex. 7, at 3 (Brooks Direct).

- Sections II.B.3 to II.B.5 (co-sponsored with Company Witness Crenshaw): These sections, when applicable, provide supporting structure details along the proposed and alternative routes for the Project.
- Section II.B.6 (co-sponsored with Company Witnesses Crenshaw and Rosenberg): This section provides photographs of existing facilities, representations of proposed facilities, and visual simulations.
- Section III (co-sponsored with Company Witness Rosenberg): This section details the impact of the Project on scenic, environmental, and historic features.
- Section V.A (co-sponsored with Company Witnesses Crenshaw and Rosenberg): This section provides the Proposed Route description and structure heights for notice purposes.[27]

Mr. Brooks co-sponsored the DEQ Supplement filed with the Application with Company Witness Jacob M. Rosenberg.[28]

Finally, Mr. Brooks confirmed the Company complied with Code § 15.2-2202 E by delivering a letter dated May 18, 2023, to the County Manager of Henrico County outlining the Project.[29]

In his direct testimony, **Mr. Rosenberg** sponsored the Environmental Routing Study provided as part of the Company's Application.[30]

Additionally, Mr. Rosenberg co-sponsored the Executive Summary and the following sections of the Appendix:

- Section I.A (co-sponsored with Company Witnesses Gill, Dobson, Crenshaw, Yanev, and Brooks): This section details the primary justifications for the Project.
- Section II.A.1 (co-sponsored with Company Witness Brooks): This section provides the length of the proposed corridor and viable alternatives to the Project.
- Section II.A.2 (co-sponsored with Company Witness Brooks): This section provides a map showing the route in relation to notable points close to the Project.
- Section II.A.4 (co-sponsored with Company Witness Brooks): This section explains why the existing right-of-way is not adequate to serve the need for the Project.
- Sections II.A.6 to II.A.8 (co-sponsored with Company Witness Brooks): These sections provide detail regarding the right-of-way for the Project.
- Section II.A.9 (co-sponsored with Company Witness Brooks): This section describes the Proposed Route selection procedures and details alternative routes considered for the Project.
- Section II.A.11 (co-sponsored with Company Witness Brooks): This section details how the construction of the Project follows the provisions discussed in Attachment 1 of the Transmission Appendix Guidelines.

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[27] *Id.*
[28] *Id*
[29] *Id.*
[30] Ex. 8, at 5 (Rosenberg Direct).

- Section II.B.6 (co-sponsored with Company Witnesses Crenshaw and Brooks): This section provides photographs of existing facilities, representations of proposed facilities, and visual simulations.
- Section III (co-sponsored with Company Witness Brooks): This section details the impact of the Project on scenic, environmental, and historic features.
- Section V.A (co-sponsored with Company Witnesses Crenshaw and Brooks): This section provides the Proposed Route description and structure heights for notice purposes.[31]

Finally, Mr. Rosenberg co-sponsored the DEQ Supplement filed with the Application with Company witness Brooks.[32]

QTS Testimony

QTS prefiled the direct testimony of Mark D. Egan, Vice President of Development. Mr. Egan was unable to attend the hearing and his testimony was adopted by **Travis Wright**, Vice President of Energy and Sustainability for QTS.[33] QTS operates the data centers in Henrico County that would be served by the facilities proposed in the Application. Mr. Wright provided QTS' perspective on the Application and supported the construction of the White Oak Lines and the expansion of the White Oak Substation.[34]

Mr. Wright stated Dominion provided two justifications for the Project: (1) to address potential violations of NERC Reliability Standards; and (2) to maintain and improve reliable electric service to customers in the load area surrounding the White Oak Substation.[35]

Mr. Wright expressed QTS' concern with the reliability of electric service that it receives. QTS customers require that power be available continuously, with no possibility of interruption. For this reason, QTS installs on-site backup generation behind the meter at all of its data centers. He also indicated QTS would prefer to operate those diesel generators only in emergency situations. QTS is concerned with the potential violations of NERC Reliability Standards. QTS would prefer that the NERC violations be addressed and that grid supporting the White Oak Load Area be as robust as possible.[36]

Mr. Wright observed that strengthening the transmission grid in the White Oak Load Area benefits all the customers served by the White Oak Substation.[37]

QTS took no position on the route proposed by Dominion, except to note that all three routes would relieve the potential violations of NERC Reliability Standards and would support projected load growth in the area.[38]

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[31] *Id.*
[32] *Id.*
[33] Tr. at 30-32.
[34] Ex. 9, at 3-4 (Wright Direct).
[35] *Id.* at 4.
[36] *Id.* at 4-5.
[37] *Id.* at 5.
[38] *Id.* at 5-6.

At the hearing, Mr. Wright explained the QTS Data Center Campus in the Technology Park has seen solid growth, and QTS has received interest from several large technology companies to locate their operations at the campus. As a result, QTS is constructing additional buildings to accommodate that growth. Mr. Wright believes Dominion has a duty to serve so that QTS can meet the ramp schedules for its facilities. He confirmed that QTS would be investing several billions of dollars on its data center facilities and its customers would be investing multiples of that multiple times. Mr. Wright confirmed that the investment in a single data center campus would approach approximately $1 billion.[39]

Mr. Wright addressed the economic impact of the QTS Data Center Campus. He explained that QTS facilities generate tax revenues on the value of the property that is developed and the energy that the facility consumes. He mentioned job creation, which would include employees hired by QTS and employees hired by the technology companies using QTS' facilities. At the QTS Data Center Campus, QTS has approximately 100 employees. QTS has found that for every job it creates, four jobs are created by the data center's ancillary services such as security, equipment maintenance, and cleaning services.[40]

Hourigan Development, LLC Testimony

Hourigan presented the direct testimony of **Brian Jenkins**, Senior Managing Director of Development. Hourigan is an integrated construction and development firm headquartered in the City of Richmond.[41]

Mr. Jenkins explained the principal reasons why Hourigan supports Commission approval of the Project as proposed in the Application, and confirmed the accuracy of the Project-related statements and actions the Application attributes to Hourigan. He described the necessity for the Project and the likely impacts to certain properties on or near where Dominion proposes to site certain Project-related transmission lines and other facilities. Mr. Jenkins also described Hourigan's plans and understanding with regard to how its and others of these properties would be developed and used.[42]

Mr. Jenkins supported Dominion's statements in the Application regarding immediate and anticipated need for the Project, including those which relate to Hourigan's planned development identified in the Application as the "VAH Data Center Campus." Hourigan has contracted to purchase approximately 320 acres of land near the Technology Park in Henrico County. Hourigan intends to develop the land for data center operations, advanced manufacturing, and/or other comparable industrial uses.[43]

Mr. Jenkins described the service demands at the VAH Data Center Campus that the Project would serve, provided the Commission approves the Proposed Route, included in the Application. He described the stakeholder process that precipitated and informed the design and development of

[39] Tr. at 33-35, 37.
[40] Tr. at 35-37.
[41] Ex. 10, at 1 (Jenkins Direct).
[42] *Id.* at 2.
[43] *Id.* at 3-4.

the Proposed Route. Mr. Jenkins described the Proposed Route's various advantages, including those that would accrue to the community due to Hourigan's and other local landowners' agreement to accommodate long segments of the Project's transmission lines on their property.[44]

Mr. Jenkins confirmed, of all the routes considered in the Application, the Proposed Route has the least impact on residences and residential neighborhoods and is the most compatible with existing and planned uses of land near the Project. He also confirmed Hourigan's understanding with regard to the additional infrastructure that would be required to serve the VAH Data Center Campus, if the Commission does not approve the Proposed Route in this case.[45]

Mr. Jenkins described the VAH Data Center Campus and some of the community and other benefits that reasonably could be expected to accrue to Henrico County and the Commonwealth of Virginia, including increased tax revenues, job growth, and economic development, if and when the campus is developed and put to use, as planned. He explained why the site is ideally suited for data center operations and advanced microchip manufacturing. Mr. Jenkins discussed the ways in which Hourigan's and others' plans for the VAH Data Center Campus are consistent with and supportive of Henrico County's Comprehensive Plan, as well as the economic development objectives of both the County and the Commonwealth.[46]

Finally, Mr. Jenkins described how community and other benefits associated with the VAH Data Center Campus and, in turn, the Project itself, could be diminished or postponed if the Proposed Route is not approved in this case.[47]

At the hearing, Mr. Jenkins confirmed that its critical for Hourigan's development efforts to have reliable electric power at the sites that it is developing. He confirmed that Hourigan is actively working with Dominion to ensure that the VAH Data Center Campus has sufficient transmission and distribution infrastructure.[48]

Holland Family Trust Testimony

The Trustee for the Holland Family Trust, Donald Andrews, did not appear as a witness to sponsor his prefiled direct testimony into the evidentiary record. Since Mr. Andrews was not present to sponsor his testimony or avail himself for cross-examination of that testimony, his direct testimony was not admitted into the evidentiary record.[49]

Commission Staff Testimony

Staff presented the direct testimony of **Carlos A. Gil**, Associate Utilities Engineer with the Division of Public Utility Regulation. Mr. Gil sponsored the Staff Report.[50]

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[44] *Id.* at 5-6.
[45] *Id.* at 6-9.
[46] *Id.* at 9-12.
[47] *Id.* at 12-13.
[48] Tr. at 40-41.
[49] *Id.* at 66.
[50] Ex. 11 (Staff Report).

Staff investigated the Application and other information provided by the Company and concluded that the Company reasonably demonstrated the need for constructing the Project to comply with NERC Reliability Standards, as well as to maintain reliable electric service for overall load growth projected for the White Oak Load Area. Staff does not oppose the Proposed Route for the Project. According to Staff, the Proposed Route appears to avoid or reasonably minimize impact on existing residences, scenic assets, historic districts, and the environment. Staff also considers Alternative Route 2 to be a reasonable option for the Project. Additionally, Staff concluded that the Project does not appear to adversely impact any goal established by the VEJA. Accordingly, Staff does not oppose issuance of a CPCN for the construction and operation of the Project.[51]

Virginia Electric and Power Company Rebuttal Testimony

The Company presented the rebuttal testimony of four witnesses: **Mark R. Gill**; **Ann Gordon Mickel**, Communications Consultant, Electric Transmission; **Heather E. Kennedy**, Environmental Services Electric Transmission Environmental Specialist II; and **Jacob M. Rosenberg**.

In his rebuttal testimony, **Mr. Gill** offered general comments in support of the conclusions and recommendations in the Staff Report; responded to comments in the testimony of the Holland Family Trust witness Andrews,[52] as they pertain to the need for the Project; addressed the public comments submitted in this case pertaining to the need and who should bear the cost for the Project; and introduced the Company's other rebuttal witnesses.[53]

Mr. Gill confirmed the Company appreciated the findings in the Staff Report that: (i) "the Company has reasonably demonstrated the need [to construct] the Project to comply with NERC Reliability Standards, as well as to maintain reliable electric service for overall load growth projected for the [White Oak Load Area];"[54] (ii) "the Proposed Route appears to avoid or reasonably minimize impact on existing residences, scenic assets, historic districts, and the environment;"[55] and (iii) "the Project does not appear to adversely impact any goal established by the [VEJA]."[56]

Mr. Gill responded to the statement in the Staff Report that load growth "hasn't developed as fast as the Company's projections found in the Application."[57] He provided additional context regarding load growth. The annual peak load for the White Oak Load Area was 189.3 megawatts ("MW") on September 7, 2023, which was 29.2% higher than the previous summer peak of 146.5 MW on August 9, 2022, and 11.8% higher than the previous annual peak of 169.3 MW on August 30, 2022.[58]

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[51] *Id.*, Staff Report at 27.
[52] As explained above, the testimony of Holland Family Trust witness Andrews was ultimately not admitted into evidence in this case.
[53] Ex. 13, at 2-3 (Gill Rebuttal).
[54] Ex. 11, Staff Report at 27.
[55] *Id.*
[56] *Id.*; Ex. 13, at 3 (Gill Rebuttal).
[57] Ex. 11, Staff Report at 6.
[58] Ex. 13, at 3-4 (Gill Rebuttal).

Mr. Gill responded to the testimony of Holland Family Trust witness Andrews that the "choice of the Proposed Route has very little to do with resolving violations of the mandatory [NERC] Reliability Standards and [is] all about future cost savings to the Company." Mr. Gill explained the "choice of the Proposed Route" was based on a variety of factors, including both routing and planning considerations. From a routing perspective, Mr. Gill explained the Proposed Route is preferrable to Alternative Routes 1 and 2 for several reasons, including: (i) the greatest amount of collocation with other rights-of-way; (ii) the least impact on residences and residential neighborhoods; (iii) the route most compatible with existing and planned land uses; and (iv) the least impactful and most efficient route to serve demand in the White Oak Load Area and the Technology Park. From a planning perspective, Mr. Gill explained, without the Project, there are only two transmission lines (Line #2091 and Line #286) that serve the existing and future substations and the existing and projected load growth in the White Oak Load Area, which creates the potential of 300 MW load drop involving the loss of both lines. In addition, he explained the load in the Technology Park does not necessarily peak at the same time as the system peak and continues to grow. Recent load projections for the Elko, Turner, Portugee, and White Oak Substations show the potential for a 300 MW load drop by summer 2023. As a result, he maintained additional 230 kV transmission sources are required in the White Oak Load Area to mitigate the NERC reliability violation.[59]

Mr. Gill stated the Proposed Route also avoids the need to construct Spur Lines to serve the future VAH Data Center Campus because the Proposed Route is collocated with planned future growth, which reduces overall impacts and costs to the benefit of the Company's customers.[60]

Mr. Gill responded to the comments submitted by Lynn Wilson, Ivy Main, Gwen Parker, Robin Thady, Erin Shibley, Ellen Snyder, and Mark Davis as they pertain to the need and who should bear the cost for the Project. Mr. Gill explained in the White Oak Load Area, the Company's Portugee and White Oak Substations serve data center load, while the Company's Elko Substation serves approximately 5,200 residential customers, 434 commercial customers, and other infrastructure such as pumping stations and traffic signals. Those three substations in the White Oak Load Area are served by two transmission lines, Line #2091 and Line #286. While those lines are adequate to serve existing load, the main reason for pursuing the Project is the risk of a 300 MW load drop involving the loss of both transmission lines, which would impact not only the data centers served by the Portugee and White Oak Substations but also the residential and commercial customers served by the Elko Substation. Mr. Gill stated the distribution service provided to the residential properties owned by Ms. Snyder, Ms. Shibley, Ms. Cappiello, Ms. Thady, Ms. Wilson, and Mr. Davis would directly benefit from the increased reliability that the Project would provide to the area's transmission network.[61]

Lastly, Mr. Gill introduced the Company's additional rebuttal witnesses.[62]

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[59] *Id.* at 4-5.
[60] *Id.* at 5-6.
[61] *Id.* at 7-8.
[62] *Id.* at 9.

In her rebuttal testimony, **Ann Gordon Mickel**, Communications Consultant, Electric Transmission, responded to comments in the testimony of Holland Family Trust witness Andrews,[63] as they pertain to communications and outreach with landowners potentially impacted by the Project, as well as with Trust representatives specifically. In addition, she addressed the comments submitted by Lynn Wilson as they relate to communications and outreach.[64]

In response to the testimony of Holland Family Trust witness Andrews that neither the Trust nor the beneficiary of the Trust, Mr. McCoy, received Project notifications from the Company, Ms. Mickel confirmed the Company sent all Project announcement letters and invitations to community meetings to: (i) Myrtle M Holland Life Int c/o Donald Andrews or Current Resident; and (ii) Richard Floyd McCoy III or Current Resident.[65]

Ms. Mickel confirmed, in addition to the letters and post cards, the Company placed newspaper advertisements and used paid digital and social media campaigns to make residents in the area aware of the Project and promote the two community meetings. The outreach program was intended to direct residents to the Project website so that they could monitor the progress of the Project and participate in the planning process.[66]

Ms. Mickel confirmed she called Mr. Andrews in January 2023 to advise him of a route adjustment on the Trust Property and to set up a Microsoft Teams ("Teams") meeting to explain the proposed route adjustment. The Teams meeting was held on January 25, 2023, between Mr. Andrews and Mr. McCoy representing the Holland Family Trust and Company witness Rosenberg, legal counsel, the project manager, and Ms. Mickel. Ms. Mickel rebutted Mr. Andrews' testimony that the Company was advised of the Trust's intentions for the Trust Property. During the January 2023 Teams meeting, the Company was advised that the Trust intended to apply for a permit to operate the private shooting range on the Trust Property as a commercial shooting range, and the possibility of re-applying for an aggregate mining permit. She confirmed that Mr. Andrews did not raise any concerns about wetlands, forests, Boar Swamp, fauna, or other environmental impacts to the Trust Property. In addition, she confirmed that Mr. Andrews did not mention helicopter pads, runways, or expanded training facilities, including aeronautical structures on the Trust Property during the January 2023 Teams meeting or in any subsequent correspondence with the Company. Mr. Andrews indicated during the meeting that he was not inclined to discuss routes on the Trust Property without establishing "ballpark of compensation" for the transmission line easements.[67]

Ms. Mickel confirmed she engaged in email correspondence with Mr. Andrews after the Teams meeting up to and including October 24, 2023, when she advised Mr. Andrews that she had

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[63] As explained above, the testimony of Holland Family Trust witness Andrews was ultimately not admitted into evidence in this case.
[64] Ex. 14, at 3 (Mickel Rebuttal).
[65] *Id.* at 4-5. Since the Trust Property lies along Route 3, the Company sent all Project announcement letters and invitations to community meetings by U.S. Mail to the Trust c/o Trust witness Andrews. Additionally, since Mr. McCoy owns several properties along Route 3, the Company sent the same correspondence by U.S. Mail to his property addresses. *See, Id.* at n.2.
[66] *Id.* at 5.
[67] *Id.* at 5-8.

reviewed his testimony and that the Project team was available to discuss the route alignment on the Trust Property and whether there might be another route that would be more preferable.[68]

Lastly, Ms. Mickel addressed the public comments regarding the Company's community meetings and whether the Company misrepresented the Project at those meetings. Ms. Mickel summarized the outreach efforts the Company undertook for the Project, including sending letters and post cards to adjoining property owners, establishing a Project website, advertising the meetings in the *Richmond Times Dispatch* and the *Richmond Free Press*, and through paid digital and social media campaigns. Ms. Mickel described the first community meeting held on September 15, 2022, which was attended by 84 community members, and the second community meeting held on November 17, 2022, which was attended by 61 community members. The second community meeting described the changes and adjustments made to the Project since the first community meeting, and during the meeting the Project team answered questions from members of the audience. Ms. Mickel disagreed strongly that the Company misrepresented any aspects of the Project. She explained the Company has a strong commitment to its outreach and engagement efforts with the public, property owners, and counties impacted by its projects.[69]

In her rebuttal testimony, **Ms. Kennedy** addressed certain recommendations included in the DEQ Report. The Company does not object to the "Summary of Findings and Recommendations" in the REQ Report, except as addressed in Ms. Kennedy's rebuttal testimony and the rebuttal testimony of Company witness Rosenberg. The Company requested that the Commission reject the following recommendations in the DEQ Report:

- The recommendation by DEQ-DLPR to further evaluate two petroleum release sites identified in the DEQ Report;
- The recommendations by DCR related to a survey of Swamp Pink and an inventory for the resource in the study area;
- The recommendation by DCR-DNH to avoid or minimize impacts to ecological cores;
- The recommendation of DCR-DNH related to the development of an Invasive Species Management Plan ("IVMP"); and
- The recommendations by DCR-DNH regarding enhanced planned right-of-way restoration and maintenance practices, to the extent they require the Company to do more that provided for in the Company's existing IVMP.[70]

Regarding DEQ-DLPR's recommendation, Ms. Kennedy explained the Company already evaluated the petroleum release sites and determined that DEQ closed the pollution cases in 1993 and 2005, respectively. The Company determined that no further evaluation is necessary based on: (i) the documented regulatory status of the sites (*i.e.*, closed pollution complaints); (ii) the time elapsed since closure allowing for natural attenuation to occur at both sites; and (iii) the location of the release sites as identified in various DEQ databases outside the proposed right-of-way for the Project. The Company requested that the Commission reject this recommendation.[71]

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[68] *Id.* at 8.
[69] *Id.* at 8-10.
[70] Ex. 15, at 3 (Kennedy Rebuttal).
[71] *Id.* at 4-7.

Regarding DCR's recommendation for the Swamp Pink, Ms. Kennedy clarified the recommendation has two parts: (1) a survey of Swamp Pink; and (2) an inventory for the resource in the study area. Regarding the first part of the recommendation, Ms. Kennedy explained the survey will be completed as part of the U.S. Army Corps of Engineers ("USACE") Section 404 permitting process, which requires the Company to coordinate with U.S. Fish and Wildlife Service ("USFWS"), conduct surveys required by USFWS, and adhere to the requirements associated with threatened and endangered species. Since the Company will conduct a survey for Swamp Pink along the route selected by the Commission for the Project to the extent deemed necessary by USFWS, the Company believes DCR's recommendation is unnecessarily duplicative. Regarding the second part of the recommendation, the Company stated the study area for the Project encompassed approximately 28.5 square miles, the vast majority of which will not be affected by the Project. The Company believes a survey outside the route selected by the Commission is unwarranted and unnecessary, the significant cost of which should not be incurred by the Company's customers. The Company requested that the Commission reject this recommendation.[72]

Regarding DCR-DNH's recommendation to avoid or minimize impacts to ecological cores, the Company stated based on the route analysis conducted by ERM, impacts to cores are unavoidable along the Proposed Route and Alternative Routes 1 and 2 due to the density of contiguous forested lands and mapped core boundaries in the study area for the Project. As part of its routing efforts, the Company sought to minimize impacts to higher ranked ecological cores by crossing along the edge of a core or along existing clearcuts within cores to minimize fragmentation and avoid the highest quality interior habitat. The Company requested that the Commission reject this recommendation.[73]

Regarding DCR-DNH's recommendation related to the development of an IVMP, the Company requested that the Commission reject the recommendation as unnecessarily duplicative and because it could possibly lead to significant project cost increases and construction delays. The Company stated it already has an IVMP in place that is consistent with the standards for utility right-of-way maintenance developed by the American National Standards Institute, as well as the NERC Vegetation Management Standards, for all regions in the Company's service territory. The Company confirmed that it is working with DCR-DNH regarding an addendum to its IVMP to explain how the Company's operations and maintenance forestry program addresses certain invasive species. Once the addendum is final, the Company will report the results of its coordination with DCR-DNH in future transmission CPCN filings.[74]

Lastly, regarding DCR-DNH's recommendation related to enhanced right-of-way restoration and maintenance practices, the Company requested that the Commission reject the recommendation as duplicative and potentially costly. To the extent DCR-DNH's recommendation seeks to have the Company do more than what its IVMP and standard maintenance practice entails, the Company requested that the Commission reject this recommendation, as it has done in past cases.[75]

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[72] *Id.* at 7-9.
[73] *Id.* at 9-11.
[74] *Id.* at 11-13.
[75] *Id.* at 14.

In his rebuttal testimony, **Mr. Rosenberg**: responded to comments relating to routing in the pre-filed testimony of Holland Family Trust witness Andrews,[76] Hourigan witness Jenkins, and QTS witness Wright; addressed routing comments in the Staff Report as they related to Alternative Route 2; addressed public witness comments submitted in this case as they relate to routing; and addressed certain findings in the DEQ Report relating to routing issues.[77]

Mr. Rosenberg summarized ERM's routing methodology for new transmission line projects and confirmed that the methodology was followed in this case.[78]

Mr. Rosenberg provided a map showing the property locations of those individuals filing public comments and those participating as a Respondent in this proceeding relating to the various routes for the White Oak Lines.[79]

Mr. Rosenberg confirmed he was present during the January 25, 2023, Teams meeting with Holland Family Trust witness Andrews and Mr. McCoy, the trust beneficiary. Mr. Rosenberg confirmed Mr. Andrews raised four concerns at the meeting regarding the Project. First, the Project would conflict with a private shooting range on the Trust Property, which the Trust might permit for commercial use. Second, the Project's right-of-way would limit the ability to mine the Trust Property for aggregate.[80] Third, the Project would limit logging operations on the Trust Property. Lastly, the Project would visually impact a newly constructed home on the Trust Property, if the right-of-way and support structures were sited close to the entrance of the driveway.[81]

Mr. Rosenberg confirmed he first heard of helipads on the Trust Property when he received a copy of Holland Family Trust witness Andrews' direct testimony on October 23, 2023. Mr. Rosenberg stated Virginia requires any airport or landing area within five nautical miles of a licensed public-use airport, which for purposes of the Project and the Trust Property includes the Richmond International Airport ("RIC") as a Class C airport, to obtain a license from DOAv. ERM confirmed that neither the FAA nor DOAv is aware of the existence of any helipads or the proposed fixed-wing airport, much less having issued licenses/registrations for the aviation facilities. He testified that DOAv confirmed the location of the Trust's aviation facilities likely would not be permittable, given the proximity to RIC and the location within Class C controlled airspace. Additionally, the Trust's discovery responses affirmed that neither the helipads nor the fixed-wing airport are registered with either the FAA or DOAv.[82]

Mr. Rosenberg confirmed the Holland Family Trust could not produce any records regarding takeoffs or landings at the helipads. In addition, Mr. Rosenberg confirmed there were no records of the Henrico County Board of Supervisors having issued a special use permit or special exception for any out-of-the-ordinary uses, such as a *Helicopter Landing Facility* (per the Henrico Zoning

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[76] As explained above, the testimony of Holland Family Trust witness Andrews was ultimately not admitted into evidence in this case.
[77] Ex. 16, at 3-4 (Rosenberg Rebuttal).
[78] *Id.* at 4-5.
[79] *Id.* at 5-6; *See*, Rosenberg Rebuttal Schedule 1.
[80] After the meeting, Mr. Rosenberg confirmed the Trust Property was previously used for mineral extraction, but that permit was abandoned in 2005. *Id.* at 8.
[81] *Id.*
[82] *Id.* at 9-10; *See*, Ex. 16, at Rosenberg Rebuttal Schedules 3 and 4.

Ordinance) or fixed-wing airport located on the Trust Property. Mr. Rosenberg confirmed helicopter landing facilities are not an allowed use in an A-1 (Agricultural) zoned district. Based on his review of Henrico County public records, Mr. Rosenberg determined there are no permits or special exceptions for any out-of-the-ordinary uses on the Trust Property. Given the lack of proper registration/licensure with aviation regulatory agencies and proper county zoning and permitting for the Trust's aviation facilities, and based on input from experts from both the FAA and DOAv, Mr. Rosenberg urged the Commission to afford little weight to the alleged future uses on the Trust Property.[83]

Mr. Rosenberg explained the Company sought to address Mr. Andrews' and Mr. McCoy's concerns regarding the right-of-way across the Trust Property. During the January 2023 Teams meeting, the Company proposed to move the right-of-way north to parallel an existing logging road to avoid bisecting a logging area and avoid the driveway. A small portion of the right-of-way would cross the driveway where it exits onto Meadow Road, but it would not interfere with the use of the driveway, or the nearby logging road.[84]

Mr. Rosenberg confirmed during the Teams meeting, the only mention of a change in the use of the Trust Property occurred when Mr. Andrews indicated that the Trust might pursue a permit to allow a commercial shooting range. Mr. Rosenberg testified that after the Teams meeting, Mr. Andrews' focus was on the estimated compensation from the Company for the right-of-way, and for that reason, Mr. Rosenberg thought the route adjustment was satisfactory and became the as-filed route for the Project. After the Teams meeting, Mr. Rosenberg also confirmed the Henrico County Board of Supervisors had not issued a special use permit or special exception for any out-of-the-ordinary uses on the Trust Property.[85]

After the Holland Family Trust prefiled its direct testimony, Mr. Rosenberg contacted the Henrico County Planning Department to determine if any planning/zoning permits, building permits, or pre-application submittals had been submitted for the Trust Property or Mr. McCoy's adjoining properties. The Henrico County Planning Department confirmed the only permit and/or approval granted for the properties was "[a] building permit for a 2-story, 4,558 square foot single-family dwelling (well/septic)" on the Trust Property.[86]

Regarding the home on Mr. McCoy's property that the Holland Family Trust claims is within a few feet of the right-of-way for the Proposed Route, Mr. Rosenberg confirmed the right-of-way is 250 feet west of the house and separated by over 200 feet of forest. Additionally, Mr. Rosenberg confirmed that no permits or approvals were issued by Henrico County to renovate any structures on any of the properties owned by Mr. McCoy. Mr. Rosenberg indicated that the house was not mentioned in any meetings with Mr. Andrews and Mr. McCoy. Because the house is approximately 250 feet from the right-of-way and is separated from the right-of-way by a 200-foot tree buffer, Mr. Rosenberg confirmed the presence of the house would not have changed ERM's impact assessment in its Environmental Routing Study.[87]

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[83] *Id.* at 10-12.
[84] *Id.* at 12-13.
[85] *Id.* at 13-14.
[86] *Id.* at 15-16.
[87] *Id.* at 16-18.

Regarding the Holland Family Trust's claim that the Proposed Route would damage wetlands on the Trust Property, Mr. Rosenberg confirmed the wetlands were located in an area that was recently clearcut, which converted the wetlands to a scrub-shrub wetland. Mr. Rosenberg further confirmed that the Trust produced no evidence supporting its assertion that the Proposed Route would be detrimental for "wild game and waterfowl" in the wetlands. Lastly, Mr. Rosenberg confirmed the Proposed Route intersects the least amount of predicted suitable habitat for Swamp Pink compared to Alternative Routes 1 and 2.[88]

Regarding the Holland Family Trust's assertion that the Proposed Route would "decimate" timber production on the Trust Property, Mr. Rosenberg stated the Trust provided no evidence to support this assertion. Mr. Rosenberg estimated that the Proposed Route would prevent the replanting of approximately 3 of the 50 acres of recently harvested timber (a 0.2-mile crossing), which in his opinion can hardly be characterized as "decimating recently planted timber." Additionally, Mr. Rosenberg confirmed the right-of-way for the Proposed Route would impact approximately 9.5 acres of a total 126.0 acres used for timber production, or less than 8% of the acreage used for timber production.[89]

Mr. Rosenberg discussed the factors that are considered when determining whether indirect impacts on residential property value are caused by a direct view of high-voltage transmission lines, such as proximity, visibility, size and type of structures, easement landscaping, and surrounding topography. Considering the distances to the nearest residences on the Trust Property, Mr. Rosenberg believes the White Oak Lines will have a minimal impact on the valuation of the homes. Mr. Rosenberg confirmed the right-of-way for the Proposed Route was routed to have a minimal impact on the Trust Property's timber operations and its aggregate mining operations. Mr. Rosenberg confirmed the other speculative uses for the Trust Property are not permissible under the County's Zoning Ordinance.[90]

Mr. Rosenberg provided the rationale for some of the adjustments made in the Proposed Route. The decision was made not to follow a portion of the Norfolk Southern Railroad right-of-way to avoid a residential neighborhood and to route through the VAH Data Center Campus because it had voluntary consent of the landowner.[91]

In response to the Holland Family Trust's assertion that the Alternative Route 2 is clearly the best option for the Project, Mr. Rosenberg countered that the route crosses a future residential land use district designated in the County's Comprehensive Plan and crosses within 160 feet of Elko Middle School. The Proposed Route avoids the future residential district in favor of area planned for industrial and commercial use.[92]

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[88] *Id.* at 18-19.
[89] *Id.* at 19-20.
[90] *Id.* at 20-22.
[91] *Id.* at 22-24.
[92] *Id.* at 25.

Regarding the Holland Family Trust's purported future uses for the Trust Property (commercial shooting ranges, helipads, aircraft runway, and small arms and military training facilities), Mr. Rosenberg was unable to verify any plans or approvals for these facilities.[93]

Mr. Rosenberg acknowledged Hourigan witness Jenkins' testimony that the Proposed Route was the result of "collective efforts by Hourigan and other interested parties, working in close collaboration with Dominion, to devise a feasible alternative to the routes that Dominion presented while conducting stakeholder outreach in 2022." Likewise, Hourigan recognized that the Proposed Route "maximiz[es] collocation with existing linear facilities (such as roadways, railroads, and planned sewer lines)" and "has the least impact on residences and residential neighborhoods and is the most compatible with the existing and planned uses of land local to the Project." Lastly, Hourigan agreed that "[the Proposed Route is] the superior choice from a community benefit standpoint," and is the only route that avoids additional transmission infrastructure, *i.e.*, the additional "Spur Lines." The Proposed Route is 4.69 miles and approximately 1.7 miles or 36% crosses property owned by Hourigan.[94]

Mr. Rosenberg confirmed Hourigan filed a rezoning application with Henrico County for the VAH Data Center Campus on November 16, 2023. The application proposes to rezone approximately 622 acres from A-1 (Agricultural) zone district to M-1 (Light Industrial) zone district to support a data center or advanced manufacturing uses. With the filing of the rezoning application, Dominion believes the future use of the VAH properties have been established and any consideration of Alternative Routes 1 and 2 would have to take into account the need to construct the Spur Lines.[95]

Mr. Rosenberg also confirmed that QTS supports the "construction of the White Oak Lines and the expansion of the White Oak Substation."[96]

In response to public comments, Mr. Rosenberg explained the Company modified the Proposed Route from its initial alignment along the north side of the Norfolk Southern Railroad farther to the north near Crib Lane after consulting with affected landowners, reexamining routes to mitigate negative impacts to nearby residences and sensitive environmental features, and identifying another suitable cut-in location along Line #2075. The Company determined the initial cut-in location would have had a significant impact on the landowner at Nase Lane by placing multiple structures along the south side of the landowner's primary residence, crossing the landowner's agricultural field, and terminating at the cut-in location. The cut-in location would require a complex arrangement of H-frame and monopole structures that would be visible from the landowner's primary residence. The initial cut-in location would have required significant tree removal, multiple new transmission structures within clear view of the residence, temporary and permanent impacts to the landowner's farmland, and removal of the treed buffer between the landowner's residence and the Norfolk Southern Railroad right-of-way.[97]

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[93] *Id.* at 25-28.
[94] *Id.* at 28-30; *See*, Ex. 10, at 5-8 (Jenkins Direct).
[95] *Id.* at 30.
[96] *Id.* at 30-31; *See*, Ex. 9, at 4 (Wright Direct).
[97] *Id.* 32-33.

Mr. Rosenberg explained the new cut-in location had several routing advantages, despite the lack of collocation with the railroad right-of-way. The new cut-in location eliminated the crossing of the Nase Lane property and eliminated significant cumulative impacts to a single landowner. In addition, the new cut-in location allowed the Company to route through an area that was recently timbered and could follow an existing logging road south and parallel to Crib Lane while still leaving a treed buffer between the Trust Property and Lynn Wilson's property to the north. Lastly, the new cut-in location mitigated forest impacts (particularly removal of native hardwoods as opposed to planted pine), eliminated a crossing of Boar Swamp, and increased the distance between the proposed right-of-way and residences in the affected area.[98]

Contrary to what was stated in the public comments, Mr. Rosenberg confirmed the proposed sewer line has been under consideration by Henrico County since 2021 and is related to planned commercial and industrial development north of the Technology Park.[99]

Mr. Rosenberg confirmed that Lynn Wilson's property would not be "significantly affected" by the Proposed Route. The nearest structure would be approximately 580 feet to the southwest of her residence and would not be clearly visible, even during the winter season. The Proposed Route does not cross any portion of Ms. Wilson's property, and it does not negatively impact the conservation value of her property. The Company determined the new route would be more compatible with an active timbering operation, by avoiding further impacts to Boar Swamp, and high-value ecological cores. In sum, the Company believes the shift of the cut-in location north, resulting in the Proposed Route alignment, is a superior routing solution with respect to mitigating impacts to adjacent landowners, affected landowners, and the natural environment.[100]

In response to public comments regarding undergrounding the Project, Mr. Rosenberg confirmed that both an all-underground and a hybrid overhead/underground option were studied and considered, but were ultimately rejected. The all-underground option was rejected because of difficulties with transition station siting and accessibility of the transmission facilities to meet future customer demand. The hybrid overhead/underground option was rejected because of difficulties with transition station siting and the relative short length of the underground portion of the transmission line, considering the improvement in visual impacts would be offset by the introduction of the new transition stations.[101]

In response to public comments regarding ecological cores, Mr. Rosenberg confirmed the alignment of the Proposed Route was routed over an area that had been clearcut to avoid natural forest areas along other possible routes. Mr. Rosenberg argued the Project cannot impact a forest, if the forest has already been cut down, and that a potential future forest on the Trust Property is not ecologically more valuable than an existing forest elsewhere. In response to public comments regarding severing an existing ecological core, Mr. Rosenberg confirmed the recent timbering activities have not only severed, but have completely denuded, the entire area.[102]

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[98] *Id.* at 33-34.
[99] *Id.* at 34-35.
[100] *Id.* at 36.
[101] *Id.* at 37-39.
[102] *Id.* at 40-41.

In response to comments in the DEQ Report, Mr. Rosenberg clarified the Company's preference for the Proposed Route, particularly as to:

- DEQ-OWSP's finding that, in light of the amount of wetlands along each route, Alternative Route 2 should be the preferred route; and
- DHR's finding that Alternative Route 2, if constructed, would result in moderate adverse impact on the Second Cold Harbor Battlefield.[103]

Mr. Rosenberg disagreed with DEQ-OWSP's finding for several reasons. He maintained DEQ-OWSP's finding appears to presuppose that wetland impacts are the only criterion driving the selection of a preferred route. Mr. Rosenberg explained the Proposed Route crosses 11.98 acres of palustrine forested wetlands compared to 10.08 acres for Alternative Route 2, with the Spur Lines. While the Proposed Route has greater impacts, Mr. Rosenberg emphasized that approximately 3.09 acres of the wetlands included in the calculation were recently timbered, which brings the two routes into close parity. In addition, he stated the Proposed Route would parallel an existing sewer line, which would further reduce its impact on wetlands. Lastly, as stated in the Environmental Routing Study, the Spur Lines would convert another 2.99 acres of wetlands to accommodate Alternative Route 2, resulting in similar wetland impacts for both routes.[104]

Mr. Rosenberg confirmed the Company's acceptance of DHR's finding regarding the potential visual impact of Alternative Route 2 on the Second Cold Harbor Battlefield, but noted DHR's finding does not substantively change the analysis of cultural resource impacts provided in the Environmental Routing Study.[105]

Lastly, Mr. Rosenberg summarized all the reasons why the Company considers the Proposed Route preferable to Alternative Route 2.[106]

POST-HEARING BRIEFS

In its letter, Staff summarized the Company's Application and discussed its investigation of the Application. As discussed in the Staff Report, Staff concluded the Company has reasonably demonstrated the need for the Project to comply with NERC Reliability Standards, as well as to maintain reliable electric service for overall load growth projected for the White Oak Load Area.[107] The Staff Report also discussed Staff's analysis of the Company's proposed routing for the Project. For the White Oak Lines, the Company identified a Proposed Route as well as two route alternatives, Alternative Route 1 and Alternative Route 2. Staff does not oppose the Proposed Route for the Project and concluded that the Proposed Route appears to avoid or reasonably minimize the impact on existing residences, scenic assets, historic resources, and the environment. Staff also considers Alternative Route 2 to be a reasonable option for the Project but considers Alternative Route 1 to be inferior to both the Proposed Route and Alternative Route 2.[108] Staff also

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[103] *Id.* at 41.
[104] *Id.* at 42-43.
[105] *Id.* at 44.
[106] *Id.* at 44-45.
[107] Staff Letter at 2.
[108] *Id.* at 2-3.

concluded the Project does not appear to adversely impact any goal established by the Virginia Environmental Justice Act ("VEJA").[109] Based on Staff's investigation of the Application, Staff does not oppose issuance of a CPCN for the construction and operation of the Project.[110]

In its Post-Hearing Brief, QTS noted it operates data centers in Henrico County that will be served by the facilities at issue in this proceeding.[111] In its Application, Dominion offered two justifications for the Project: (1) to relieve violations of NERC Reliability Standards; and (2) to maintain and improve reliable electric service to customers in the load area surrounding the White Oak Substation.[112] QTS confirmed that it currently takes electric service from Dominion's White Oak Substation, and the Project would permit Dominion to provide bridging power to QTS until other interconnection projects are completed.[113] QTS expressed its concern over the reliability of the electric service it receives because its customers require power to be available continuously, with no possibility of interruption. QTS is particularly concerned with the violations of NERC Reliability Standards identified by Dominion. QTS prefers that the electric grid supporting the White Oak Load Area be as robust as possible, and at a minimum to comply with NERC Reliability Standards.[114] QTS participated in this proceeding to underscore the importance of the Project for the White Oak Load Area. QTS believes the need for the Project is beyond question, and the Project is in the public interest.[115]

In its Post-Hearing Brief, Hourigan stated it is a real estate developer with ownership interests in land, adjacent to the Technology Park, that is designated for future development. As provided in its prefiled testimony, Hourigan and its co-owners are cooperating landowners that have voluntarily agreed to the siting of Project-related transmission lines on their property, as contemplated by Dominion's Proposed Route.[116] Hourigan supports approval of the Project and the Proposed Route because, in its assessment, the Proposed Route reasonably minimizes adverse impacts to the environment, scenic assets, and historic resources, while also promoting local and statewide economic development.[117] Hourigan identified four facts established in the record that support approval of the Proposed Route. First, the Proposed Route maximizes collocation with existing linear facilities such as roadways, railroads, and planned sewer lines. Second, the Proposed Route avoids future residential areas, as identified in the Henrico County Comprehensive Plan, and avoids crossing Elko Middle School property. Third, while future development of Hourigan's and others' properties does not drive the imminent need for transmission capacity that the Project will provide, Dominion's planning efforts and the Proposed Route appropriately consider the impacts of future development local to the Technology Park. Critically, the Proposed Route will avoid the need for costly and intrusive Spur Lines that otherwise will have to be built in order to serve these additional loads. Hourigan believes reliable electric service will be "critical" to any future development on its property. Finally, unlike the other routes identified in Dominion's Application, the Proposed Route materially benefits the local community by maximizing the use of land owned

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[109] *Id.* at 3.
[110] *Id.*
[111] QTS Post-Hearing Brief at 1.
[112] *Id.* at 2.
[113] *Id.*
[114] *Id.*
[115] *Id.* at 3.
[116] Hourigan Post-Hearing Brief at 1.
[117] *Id.* at 2.

by cooperating landowners (including Hourigan) that have freely granted the necessary rights-of-way for the Project.[118] Hourigan noted the need for additional transmission capacity to remedy existing reliability concerns at the Technology Park is unopposed in this proceeding, and Dominion's Proposed Route provides a solution to address these needs in a way that addresses local stakeholder concerns while at the same time enabling future economic development.[119]

In its Post-Hearing Brief, Dominion framed the issues addressed in its brief. The Company noted no party in the case disputed the need for the Project. Prior to the evidentiary hearing on December 6, 2023, the only contested issue related to the impacts of the Proposed Route on the Trust Property. Staff did not oppose the Company's Proposed Route, but Staff also noted that Alternative Route 2 was a reasonable option for the Project. While the Trustee for the Holland Family Trust filed a Notice of Participation in this matter asserting that the Trust would challenge the Proposed Route, no testimony or other evidence was submitted into the record supporting the Trust's challenge. The Company summarized the record regarding the uncontested need for the Project and focused the majority of its brief on the routing question and the procedure that resulted in the Proposed Route being uncontested following the hearing.[120]

The Company summarized the background and procedural history of the case.[121] In particular, the Company addressed the failure of the Trustee of the Holland Family Trust to appear at the hearing when it was time for the Trust to present its direct case.[122] The Company explained that following a short recess, counsel for the Trust contacted the Trustee and relayed the Trustee's request for a "continuance regarding his testimony."[123] In response, the Senior Hearing Examiner agreed to take the Trustee's pre-filed testimony out of order, if he appeared before the hearing concluded that day.[124] Staff's prefiled testimony and the DEQ Report were then admitted into the record, thereby concluding the direct portion of the proceeding unless and until the Trustee for the Trust appeared to admit his prefiled testimony and be subject to cross-examination.[125] The Trustee did not appear before the conclusion of the Company's rebuttal case, and counsel for the Trust "renew[ed] his [in-hearing] continuance request to have [the Trustee's] testimony heard at a later date[.]"[126] Due to the Trustee's failure to appear before the close of the Company's rebuttal case, the Senior Hearing Examiner denied admission of the Trustee's prefiled testimony.[127]

The Company addressed three issues in its Post-Hearing Brief. First, the Company reasonably demonstrated the need for the Project, and no party contests the need. The Company

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[118] *Id.*
[119] *Id.* at 3.
[120] Dominion Post-Hearing Brief at iii-iv.
[121] *Id.* at 1-6.
[122] Tr. at 41 ("Your Honor, Don Andrews, who is the trustee of the Myrtle Family Trust, is not present with us. So I don't have a witness to call on his behalf.").
[123] Tr. at 42.
[124] *Id.* at 45. In response to Holland Trust's counsel's in-hearing and first-time request for "reasonable accommodations in order [for Mr. Andrews] to make it up here and appear," the Senior Hearing Examiner noted the Commission "can accommodate any of his accommodations provided he notified us in advance . . . which he failed to do." Tr. at 42-43.
[125] Tr. 46-47. Staff also requested to admit supplemental comments provided to Staff by DCR on December 5, 2023, into the record, and the Senior Hearing Examiner denied the request on the basis that the comments were late and no accompanying motion was submitted by DCR to accept the comments out of time. Tr. at 47.
[126] Tr. at 64.
[127] *Id.*

established the Project is necessary to relieve identified violations of NERC Reliability Standards, maintain reliable electric service to customers served by the White Oak Substation, and meet future load growth in the White Oak Load Area. In addition to the need being uncontested, the Company stated, pursuant to Code § 56-234, it has an obligation to serve all customers, including customers who request service.[128]

Second, the Company addressed the comments in the DEQ Report and which comments it agreed with and which comments should be rejected by the Commission.[129]

Finally, the Company argued the Commission should approve the Proposed Route, finding that the route reasonably minimizes adverse impacts on existing residences, scenic assets, historic districts, and the environment. According to Dominion, the Company and its routing consultant worked with stakeholders and property owners, including representatives of the Trust Property, to assess and compare the environmental impacts; impacts to existing residences, scenic assets, historic districts, and planned developments; and land uses of each route alternative, as discussed more fully in the Environmental Routing Study. Through this process, the Proposed Route was developed.[130] The Company argued the evidence in the record supports a finding that the Proposed Route reasonably minimizes adverse impacts. Additionally, Dominion emphasized that following the December 6 evidentiary hearing, the Proposed Route is uncontested. For these reasons, the Company requested the Commission select the Proposed Route as the approved route for the Project.[131]

The Company further argued the Holland Family Trust's requests for a continuance were properly denied, and the Trustee's prefiled testimony was properly excluded. To the extent the Trust challenges the decisions to deny the Trustee's day-of continuance requests and then exclude the Trustee's prefiled testimony, the Company argued the rulings were based on the Commission's Procedural Order and were supported by applicable law, and therefore, were proper.[132] The Procedural Order established that only the public witness portion of the hearing was to take place telephonically. The Company noted that the Trust's, and its Trustee's, participation in this proceeding was as a respondent, not as a public witness. The Procedural Order makes a distinction between public witnesses and respondents, and that distinction recognizes the difference in the nature of their participation in a Commission proceeding and when that participation was to occur.[133] The decision to deny the continuance requests and exclude the Trustee's prefiled testimony is supported by the Commission's Rules of Practice and Procedure ("Rules of Practice") and case law. The Company noted the Trust did not timely file a motion or submit any "good cause" basis to support its day-of continuance request, although the Trust had the opportunity to do so in advance of the scheduled hearing. At the commencement of the evidentiary hearing, the Trust, through its counsel, indicated that it was prepared to proceed with the hearing. In support of its legal argument, the Company cited *State Highway Transp. Com'r v. Cantrell*, 223 Va. 185, 186-87, 288 S.E.2d 435, 436 (1982) (quoting *Basham v. Terry*, 199 Va. 817, 824, 102 S.E.2d 285, 290

[128] Dominion Post-Hearing Brief at 7-8.
[129] *Id.* at 8-9.
[130] *Id.* at 10-11.
[131] *Id.* at 11-13.
[132] *Id.* at 14-15.
[133] *Id.* at 16-19.

(1958)) (emphasis added). In that case, the Virginia Supreme Court held that the "latitude permissible in cross-examination of witnesses is largely within the sound discretion of the trial court," but the right to "cross-examin[e] on a matter relevant to the litigation and put in issue by an adversary's witness during a judicial investigation is not a privilege but *an absolute right*." The Supreme Court reiterated this rule in an opinion stemming from an appeal of a Commission decision.[134]

The Company further argued even if the Commission were to find that the Holland Family Trust's prefiled testimony should have been admitted in the record, the Commission should still select the Proposed Route. As explained in the testimony of the Company's rebuttal witnesses, the Proposed Route reasonably minimizes adverse impacts.[135] If the Commission considers the Trust's prefiled testimony, it should not consider any of the alleged impacts to property not owned by the Trust, which would include the property at 3484 Meadow Road owned individually by Richard McCoy. The Company noted that Mr. McCoy did not file a notice of participation in this case, and the Trust does not have standing to represents his individual interests.[136] The Company argued its rebuttal testimony and Company witness Mickel's responses to cross-examination by counsel for the Trust support the Company's position that the Proposed Route reasonably minimizes adverse impacts and should be the route selected for the Project. The Company noted while it did not have an opportunity to cross-examine the Trustee for the Trust, the Trust had the opportunity to cross-examine all of the Company's rebuttal witnesses, but chose to only cross-examine Ms. Mickel on her post-Application filing outreach to the Trustee and Mr. McCoy about the realignment of the Proposed Route to minimize the route's impact on all substantiated uses of the Trust Property.[137]

Lastly, the Company argued the evidence in the record establishes the VAH Data Center Campus has progressed to the point that Alternative Route 2, while viable, should not be selected as the route for the Project. The Company noted that if Alternative Route 2 were selected, the Spur Lines would be necessary to connect the VAH Data Center Campus to the White Oak Lines. The Company stated there are four good reasons why the Proposed Route is superior to Alternative Route 2. First, Alternative Route 2 has more dwellings located within 500 feet of the proposed centerline as compared to the Proposed Route. Second, and relatedly, Alternative Route 2 crosses through more land designated for suburban residential development by Henrico County's Comprehensive Plan. In contrast, the Proposed Route crosses through land designated for commercial and industrial uses. Third, Staff recognized the construction of the Spur Lines associated with Alternative Route 2 would lead to additional environmental impacts not addressed in the Application. Fourth, the Spur Lines would increase the cost of connecting the VAH Data Center Campus to the White Oak Lines.[138]

In conclusion, the Company respectfully requested that the Commission enter a final order by March 1, 2024, that: (i) upholds the ruling to exclude the Holland Family Trust's prefiled testimony of its Trustee; (ii) approves pursuant to Code § 56-46.1 the construction of the Project, as proposed in the Application; (iii) grants a CPCN for the facilities under the Utility Facilities Act,

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[134] *Id.* at 19-26; *See, Commonwealth v. Nat'l Council on Comp. Ins.*, 238 Va. 513, 519, 385 S.E.2d 568, 571-72 (1989).
[135] *Id.* at 26-27.
[136] *Id.* at 27-29.
[137] *Id.* at 29-32.
[138] *Id.* at 33-35.

Code § 56-265.1 *et seq.*; (iv) finds that the Proposed Route reasonably minimizes adverse impacts; (v) rejects the DEQ Report recommendations as addressed in the Company's rebuttal testimony; and (vi) grants the Company such further relief as may be necessary or appropriate.[139]

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.
>
> Code § 56-46.1 B further provides:
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> 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

[139] *Id.* at 35-36.

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 right-of-way 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 VEJA 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 VEJA:
>
> "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,[140] I.B,[141] I.C,[142] I.E,[143] I.F,[144] I.G,[145] I.H,[146] I.I,[147] I.J,[148] and I.N[149] of the Appendix. In sum, the Company believes the Project would relieve identified violations of NERC Reliability Standards beginning in the summer

[140] Ex. 2, Appendix at 1 (Application).
[141] *Id.*, Appendix at 36.
[142] *Id.*, Appendix at 38.
[143] *Id.*, Appendix at 44.
[144] *Id.*, Appendix at 48.
[145] *Id.*, Appendix at 49.
[146] *Id.*, Appendix at 51.
[147] *Id.*, Appendix at 52.
[148] *Id.*, Appendix at 53.
[149] *Id.*, Appendix at 70.

of 2023 and maintain the structural integrity and reliability of its transmission system in support of overall load growth in the White Oak Load Area.[150]

a. Need for the Project

The Project is classified by PJM, the regional transmission organization, as a supplemental project initiated by Dominion to comply with NERC Reliability Standards identified as part of an analysis to meet future customer load and to maintain reliable electric service for overall load growth in the Project area.[151]

The Company explained the data center market continues to expand in Virginia. The combination of competitive colocation/cloud environment, fiber connectivity, strategic geographic location, low risk of business disruptions, affordable and reliable power, and the business climate in Virginia has created the largest market for data center capacity in the United States. In Henrico County, the Technology Park is a 2,278-acre master-planned, publicly owned business park that is home to some of the most advanced manufacturing and distribution facilities and data centers in the country. The Technology Park is home to two data center companies (QTS and Meta) that have access to 20+ different fiber networks, four subsea cables, more than 3,000 network operators and 500 data centers worldwide, which provides a gateway to the largest interconnection system in North America. The Henrico County Economic Development Authority ("EDA") indicated there are approximately 470 acres of build-ready land remaining at the Technology Park, excluding the approximately 675 acres acquired in 2022 by QTS and Meta.[152]

The Company explained the immediate need for the Project. On September 10, 2021, QTS submitted a Delivery Point ("DP") Request to modify the White Oak Substation by adding two transformers to serve an expansion of its data center in the Technology Park. The DP Request projected a summer peak of 32 MW in 2022, increasing to approximately 111.5 MW in 2032, with a requested in-service date of December 2022. On the same day, QTS submitted another DP Request to construct a new substation (Techpark Place Substation) on land it owned to serve a projected summer peak load of 156 MW in 2024, increasing to approximately 192.9 MW by 2034, with a requested in-service date of January 2024. The addition of two transformers at the White Oak Substation (White Oak Substation Expansion) would provide bridging power for the data center expansion project until such time as the onsite Techpark Place Substation is energized. The Company explained the White Oak Substation Modification and future Techpark Place Substation are needed to interconnect new customer load in the Technology Park (collectively, the "Interconnection Projects"). Subsequently, QTS submitted revised DP Requests to adjust the loading to 20.5 MW in summer 2022 and 168.6 MW in 2032 for the White Oak Substation with a revised in-service date of March 2023, and 110 MW in summer 2024 and 255 MW in 2034 for Techpark Place Substation with a revised in-service date of April 2024.[153]

In addition to the Interconnection Projects, the Company is working with QTS to develop another future substation (Lost City Substation) that would be used to serve future data center loads

[150] *Id.*, Appendix at 1, 10.
[151] *Id.*, Appendix at 3.
[152] *Id.*
[153] *Id.*, Appendix at 4-5.

in the Technology Park. On May 19, 2022, QTS submitted a DP Request for the Lost City Substation, which projected a summer peak of 4 MW in 2024, increasing to approximately 202.8 MW in 2034, with a requested in-service date of August 2024. On November 18, 2022, QTS submitted a revised DP Request that adjusted the loading to 126 MW in summer 2025 and 194.4 MW in 2035, with a revised in-service date of April 2025.[154]

In support of the Project, the Company stated Lines #2091 and #286 are the only transmission sources for the Company's existing Elko, Portugee, and White Oak Substations, and future Techpark Place and Lost City Substations serving the projected growth in the White Oak Load Area. Based on the projected load ramps of the planned and future data center development in the White Oak Load Area, the Company stated a scenario is created beginning in the summer of 2023 where a 300 MW load drop could occur involving the loss of both Lines #2091 and #286, which violates NERC Reliability Standards.[155]

As part of PJM's regional transmission planning process, the Company determined that the Project, including the proposed White Oak Lines and White Oak Substation Expansion, would provide the most comprehensive solution for resolving the projected NERC reliability violations and provide the White Oak Load Area with additional transmission sources to reliably serve its future load growth.[156]

In its Staff Report, Staff confirmed, based on the information provided in the Application, the Company adequately demonstrated that the Project is necessary to support load growth in the White Oak Load Area.[157] Staff reviewed the DP Requests for the White Oak Substation, and the future Techpark Place and Lost City Substations.[158] Staff stated the Company provided the total projected load for the White Oak Load Area up to 2032 in Attachment I.C.2 of the Appendix.[159] Staff further stated, according to the Company's November 17, 2022 load projections, without the Techpark Place and Lost City Substations, the load projections for the existing Elko, Portugee, and White Oak Substations show the potential for loading above 300 MW by summer 2023.[160] Staff confirmed the annual peak load for the White Oak Load Area reached 189.3 MW on September 7, 2023.[161]

Staff stated Lines #2091 and #286 are the only transmission lines serving the White Oak Load Area. Based on the projected load ramps of the planned and future data center campuses

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[154] *Id.*, Appendix at 5.
[155] *Id.*, Appendix at 5-6.
[156] *Id.*, Appendix at 6, 10.
[157] Ex. 11, Staff Report at 3-6.
[158] *Id.*, Staff Report at 4-5.
[159] *Id.*, Staff Report at 5.
[160] *Id.*
[161] *Id.*, Staff Report at n.17.

in the White Oak Load Area, Staff stated a 300 MW load drop could occur for an N-1-1 contingency[162] or an N-2 (Tower) contingency[163] involving the loss of both Lines #2091 and #286, beginning in the summer of 2023.[164]

Staff stated the Project proposes to bring two additional transmission lines into the White Oak Load Area via Lines #2075 and #2294, which according to the Company would resolve the identified violations of NERC Reliability Standards and provide the White Oak Load Area with additional transmission sources to serve future load growth.[165] In addition to the DP Requests received to date from QTS, Staff stated there are six build-ready sites at the Technology Park that have yet to be developed and the Project would support this future load growth when it develops.[166]

In sum, Staff believes that while load has not developed as quickly as the Company's initial projections, the load in the White Oak Load Area will eventually exceed 300 MW leading to potential violations of NERC Reliability Standards. This results in the need for an additional transmission source to serve the White Oak Load Area. Based on the information provided in the Application, Staff believes the Company has adequately demonstrated that the proposed Project is necessary to support load growth in the White Oak Load Area.[167]

On rebuttal, Company witness Gill confirmed the annual peak load for the White Oak Load Area was 189.3 MW on September 7, 2023, which was 29.2% higher than the previous summer peak of 146.5 MW on August 9, 2022, and 11.8% higher than the previous annual peak of 169.3 MW on August 30, 2022.[168] In addition, Mr. Gill explained, from a planning perspective, without the Project, there are only two transmission lines (Line #2091 and Line #286) that serve the existing and future substations and the existing and projected load growth in the White Oak Load Area. The loss of both of those lines creates the potential of 300 MW load drop. Mr. Gill further explained the load in the Technology Park does not necessarily peak at the same time as the system peak and continues to grow. The Company's recent load projections for the Elko, Turner, Portugee, and White Oak Substations show the potential for a 300 MW load drop by summer 2023. As a result, Mr. Gill confirmed additional 230 kV transmission sources are required in the White Oak Load Area to mitigate the NERC reliability violation.[169]

I find the Company established the need for the Project to resolve projected NERC reliability violations beginning in the summer of 2023. The evidence shows the potential for a 300 MW load drop exists if Line #2091 and Line #286, which serve the Elko, Turner, Portugee, and White Oak Substations, are lost.[170] In addition, I find the Company established the need for the Project to

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[162] *Id.*, Staff Report at n.19. An N-1-1 contingency is a sequence of events consisting of the initial loss a single generator or transmission component followed by system adjustments, followed by another loss of a single generator or transmission component.
[163] *Id.*, Staff Report at n.20. An N-2 contingency is the loss of two generator or transmission components simultaneously.
[164] *Id.*, Staff Report at 5.
[165] *Id.*, Staff Report at 5-6.
[166] *Id.*, Staff Report at 6. Meta and QTS purchased two of the remaining building sites comprising 675 acres in 2022, leaving four sites comprising approximately 470 acres yet to be developed. *See*, Ex. 2, Appendix at 3 (Application).
[167] Ex. 2, Appendix at 3 (Application).
[168] Ex. 13, at 3-4 (Gill Rebuttal).
[169] *Id.* at 4-5.
[170] *Id.*

provide the White Oak Load Area with additional transmission sources to reliably serve future load growth. The Company's load projections for the summer of 2023 for the Elko, Turner, Portugee, and White Oak Substations is for an overall load of 351.8 MVA. In the summer of 2030, the overall load is projected to increase to 1064.7 MVA, and requires the construction of three additional substations to serve the White Oak Load Area.[171] The Company's load projections are supported by the economic development occurring in the White Oak Load area by QTS, Hourigan, and potentially others that may locate at the remaining building sites at the Technology Park.[172]

b. Demand Side Management

As part of its need analysis, the Company is required to provide an analysis of demand side management ("DSM") incorporated into the Company's planning studies. DSM includes both energy efficiency ("EE") and demand response ("DR") programs. In this case, the need for the Project is driven by compliance with NERC Reliability Standards, which enables the Company to maintain the overall long-term reliability of its transmission system. When PJM performs an analysis based on its 50/50 load forecast, there is no adjustment in load for DR programs that are considered in PJM's fixed resource requirement plan because PJM only dispatches DR when the system is under stress (*i.e.*, a system emergency). Accordingly, while existing DSM is considered to the extent the load forecast accounts for it, DR that has been bid previously into PJM's reliability pricing model market is not a factor in this Application because of the identified need for the Project. Based on these considerations, the evaluation of the Project demonstrated that despite accounting for DSM consistent with PJM's methods, the Project is still necessary.[173]

The Company further demonstrated that incremental DSM would not impact the need for the Project. The Company estimated that the projected load in the White Oak Load Area would exceed 1 gigawatt ("GW") by 2032. By way of comparison, statewide, the Company achieved demand savings of 264.8 MW (net) / 404.8 MW (gross) from its DSM Programs in 2022.[174]

I find the Company established that DSM will not obviate the need for the Project.

c. In-Service Date

The estimated in-service date for the Project is April 1, 2026. The Company estimated it would take approximately 26 months for detailed engineering, materials procurement, permitting, real estate, and construction after a final order from the Commission. To meet the desired in-service date, the Company requested a final order by March 1, 2024. If the final order is issued timely, the Company estimated that construction would begin around January 1, 2025, and be completed by April 30, 2026. The schedule is contingent upon obtaining the necessary permits and outages. The Company indicated the dates may be adjusted based on permitting delays or design modifications to comply with additional agency requirements identified during the permitting process, as well as the ability to schedule outages, and unpredictable delays due to labor shortages, or materials/supply issues. The schedule is also contingent upon the Company's ability to negotiate

[171] Ex. 2, Appendix at Attachment I.C.2 (Application).
[172] Exs. 9 and 10.
[173] *Id.*, Appendix at 46-47 (Application).
[174] *Id.*, Appendix at 47.

easements with property owners along the approved route without the need for litigation. In addition, the Company is monitoring the regulatory changes and requirements associated with the Northern Long-Eared Bat and how it could impact construction based on time-of-year construction restrictions. The interim guidance from the USFWS for the Northern Long-Eared Bat expires on March 31, 2024. The Company is also monitoring potential regulatory changes associated with the proposed up-listing of the Tri-Colored Bat. On September 14, 2022, the Tri-Colored Bat was proposed to be up-listed to endangered, with an estimated announcement of a final decision within 12 months. The regulatory guidance on the Tri-Colored Bat would be available when listed as endangered. The Company's construction window might require adjustment based upon the regulatory guidance and potential time-of-year construction restrictions associated with the two bat species.[175]

I find the Company's proposed construction schedule and in-service date for the Project appear reasonable.

d. Cost

The estimated conceptual cost of the Project utilizing the Proposed Route is approximately $44.6 million (2023 dollars), which includes approximately $34.6 million for transmission-related work and approximately $10.0 million for substation related work.[176] The cost of the Project is 100% allocated to the DOM Zone.[177]

The substation-related costs associated with Alternative Routes 1 and 2 are the same as the Proposed Route.[178]

Alternative Route 1 would involve constructing two new overhead 230 kV transmission lines on primarily double circuit monopole structures in a new predominantly 100-foot-wide right-of-way by cutting the Company's existing 230 kV Chickahominy-Elmont Line #2075 at a location between Structures #2075/159 and #2075/160 and extending approximately 4.19 miles to the expanded White Oak Substation. The estimated conceptual cost of the transmission lines for Alternative Route 1 is approximately $32.2 million (2023 dollars). The total cost for the Project utilizing Alternative Route 1 is approximately $42.2 million (2023 dollars).[179]

Alternative Route 2 would involve constructing two new overhead 230 kV transmission lines on primarily double circuit monopole structures in a new predominately 100-foot-wide right-

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[175] *Id.*, Appendix at 51.
[176] *Id.*, Appendix at 52.
[177] *Id.*, Appendix at 54.
[178] *Id.*, Appendix at 52.
[179] The Company stated the estimated transmission-related conceptual costs for Alternative Route 1 include costs associated with the installation of one structure on 500 kV Chickahominy-Elmont Line #557, and the relocation of an existing cell tower within the right-of-way. Since the cut-in location on Line #2075 occurs mid-span, no Line #2075 structures require removal. To the extent Alternative Route 1 is selected by the Commission for the Project, the Company asserted that the work associated with the installation of one structure supporting Line #557 is ordinary course not requiring approval pursuant to Code § 56-46.1 B or a CPCN from the Commission. Should the Commission determine that a CPCN is required for the work associated with Line #557 as described, the Company requested that the Commission grant such CPCN as part of its final order in this proceeding. *See* Ex. 2, Appendix at 100 and n.29 (Application).

of-way by cutting the Company's existing 230 kV Chickahominy-Elmont Line #2075 at a location between Structures #2075/157 and #2075/158 and extending approximately 3.24 miles to the expanded White Oak Substation. The estimated conceptual cost of the transmission lines for Alternative Route 2 is approximately $26.9 million (2023 dollars). The total cost for the Project utilizing Alternative Route 2 is approximately $36.9 million (2023 dollars).[180]

As discussed later in this Report, the Company's selection of the Proposed Route was reasonable, when compared to the impacts associated with Alternative Routes 1 and 2. I find the Company's proposed transmission-related and substation-related costs for the Project appear to be reasonable and prudent.

Route/Existing Right-of-Way

The route and the right-of-way required for the Project are discussed in Section II.A.1 through II.A.12 of the Appendix.[181]

A map showing the overhead Proposed Route and the two overhead Alternative Routes for the proposed White Oak Lines and the location of the White Oak Substation Expansion is provided in the Appendix at Attachment V.A., which was included in the public notice for the Project as well as a description of the Proposed Route and Alternative Routes 1 and 2 as follows:[182]

a. Proposed Route

The Proposed Route is approximately 4.69 miles in length. The route begins at the cut-in location between Structures #2075/150 and #2075/151 and travels southwest toward the intersection of the Norfolk Southern Railroad and Meadow Road. The route then continues west, paralleling the south side of the railroad before turning south and crossing Interstate 64 ("I-64"). The route continues south crossing Old Williamsburg Road then East Williamsburg Road before turning southeast and paralleling Technology Boulevard past the intersection with Techpark Place. The route then turns south, crossing Technology Boulevard, then southeast, terminating on the west side of the expanded White Oak Substation.[183]

The Proposed Route would be primarily supported by double circuit monopole structures. For the Proposed Route, the minimum structure height is 55 feet, the maximum structure height is 130 feet, and the average structure height is 111 feet (excluding significantly shorter structures at

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[180] The Company stated the estimated transmission-related conceptual costs for Alternative Route 2 include costs associated with removing existing Structure #2075/157 at the cut-in location for Alternative Route 2, the removal and installation of one structure on 500 kV Chickahominy-Elmont Line #557, and the relocation of an existing cell tower within the right-of-way. To the extent Alternative Route 2 is selected by the Commission for the Project, the Company asserted that the work associated with the installation of one structure supporting Line #557 is ordinary course not requiring approval pursuant to Code § 56-46.1 B or a CPCN from the Commission. Should the Commission determine that a CPCN is required for the work associated with Line #557 as described, the Company requested that the Commission grant such CPCN as part of its final order in this proceeding. *See* Ex. 2, Appendix at 102-03 and n.30 (Application).

[181] *Id.*, Appendix at 64-84.

[182] *Id.*, Appendix at 288-90.

[183] *Id.* at 288.

the cut-in location to avoid a downward bias as to the overall average structure height), based on preliminary conceptual design, not including foundation reveal and subject to change based on final engineering design.[184]

b. Alternative Route 1

Alternative Route 1 is approximately 4.19 miles in length. The route begins at the cut-in location between Structures #2075/159 and #2075/160 and travels southwest toward White Oak Road. The route turns west, crosses White Oak Road, then turns to the southwest. The route crosses Elko Road then turns northwest to parallel Elko Road before turning west and crossing Engineered Wood Way and Canal Swamp. The route turns northwest to parallel Technology Boulevard crosses Technology Creek Drive, then turns west to cross Technology Boulevard. The route turns to the southwest along the west side of an existing data center then southeast, terminating on the west side of the expanded White Oak Substation.[185]

Alternative Route 1 would be primarily supported by double circuit monopole structures. For Alternative Route 1, the minimum structure height is 50 feet, the maximum structure height is 125 feet, and the average structure height is 105 feet (excluding significantly shorter structures at the cut-in location to avoid a downward bias as to the overall average structure height), based on preliminary conceptual design, not including foundation reveal and subject to change based on final engineering design.[186]

c. Alternative Route 2

Alternative Route 2 is approximately 3.24 miles in length. The route begins at the cut-in location between Structures #2075/157 and #2075/158 and travels southwest crossing Old Williamsburg Road and continues southwest through wooded, residential areas north of Monaco Drive. The route passes the south side of Elko Middle School before crossing Elko Road and continues southwest across undeveloped parcels in the Technology Park. The route turns south, crosses Technology Boulevard, and then southwest continuing along the west side of an existing data center. The route then turns to the southeast, terminating on the west side of the expanded White Oak Substation.[187]

Alternative Route 2 would be primarily supported by double circuit monopole structures. For Alternative Route 2, the minimum structure height is 55 feet, the maximum structure height is 125 feet, and the average structure height is 109 feet (excluding significantly shorter structures at the cut-in location to avoid a downward bias as to the overall average structure height), based on preliminary conceptual design, not including foundation reveal and subject to change based on final engineering design.[188]

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[184] *Id.*
[185] *Id.*
[186] *Id.*, Appendix at 288-89.
[187] *Id.*, Appendix at 289.
[188] *Id.*

d. Company's Route Selection Analysis

The Company's route selection process for a new transmission line begins with identification of the project "origin" and "termination" points provided by the Company's Transmission Planning Department. This is followed by the development of a study area for the project. The study area represents a defined geographic area from which potential routes suitable for a transmission line may be identified.[189]

The study area for the Project included the following geographic boundaries:

- The Company's existing Chickahominy-Elmont Lines #2075 and #557 at the Henrico County and Charles City County borders to the north and east;
- The Company's existing Darbytown-White Oak Line #286, Chesterfield-Chickahominy Line #287, Chickahominy-Portugee Line #2091, and Allied-Chickahominy Line #2050 to the south; and
- Interstate 295 ("I-295") to the northwest and west.[190]

For the Project, the Company retained the services of ERM to collect information on the study area, identify potential routes, perform a routing analysis comparing the route alternatives, and document the routing efforts in an Environmental Routing Study.[191] After review of the new construction options, the Company identified the Proposed Route over Alternative Routes 1 and 2, for the Project. The Proposed Route is located entirely in Henrico County.[192]

As part of its route selection analysis, the Company considered the facilities required to construct and operate the new infrastructure, the length of new right-of-way that would be required for the Project, the amount of existing development in the area, the potential for environmental impacts and impacts on communities, and cost.[193]

Three viable overhead route alternatives were identified between the existing White Oak Substation and potential cut-in locations along the Company's existing 230 kV Chickahominy-Elmont Line #2075. The Company selected the Proposed Route, and Alternative Routes 1 and 2 were considered viable alternatives. The Company considered one additional overhead route for the Project ("Route 4"), but ultimately it was rejected. Route 4 was developed in response to public comments received at the White Oak Community Meeting held on September 15, 2022, as a potential route alternative that would avoid residences near the Proposed Route and Alternative Routes 1 and 2. Route 4 cut into the 230 kV Chickahominy-Elmont Line #2075 at a location approximately 3.7 miles east of White Oak Substation between the CSX Railroad and White Oak Swamp. The route generally followed the south side of the CSX Railroad right-of-way before turning north, crossing portions of the Technology Park, and terminating at the expanded White Oak Substation. Although Route 4 largely avoided residential areas, the Company believes the route had several significant drawbacks, including: it was the longest of all routes considered; it

[189] *Id.*, Appendix at 96.
[190] *Id.*
[191] *Id.*
[192] *Id.*
[193] *Id.*, Appendix at 96-97.

affected the most wetlands, forested lands, waterbodies, and areas of ecological significance; and it crossed the most privately-owned land. Due to the route length, environmental impacts, and high permitting risk in comparison to the other routes, the Company rejected Route 4.[194]

The Proposed Route crosses 22 privately-owned parcels affecting 57.69 acres of right-of-way. The land use along the right-of-way consists of 43.20 acres of forested land, 1.85 acres of agricultural land, 5.86 acres of open space, 3.10 acres of open water, and 3.68 acres of developed area.[195]

The right-of-way for the Proposed Route includes approximately 15.63 acres of land with a medium or higher probability of containing wetlands and waterbodies, which includes approximately 11.98 acres of forested wetlands. The Proposed Route has a total of eight waterbody crossings, including seven intermittent streams and one swamp/marsh. The Proposed Route requires the clearing of approximately 43.20 acres of forested land, including approximately 5.6 acres of managed timber. While the Proposed Route requires the greatest amount of clearing of any route, the Proposed Route has the least impact on forested lands with FCV classification of "very high" when compared to Alternative Routes 1 and 2.[196]

Although it is the longest route at 4.69 miles, the Proposed Route provides opportunities to parallel existing facilities, including: approximately 0.50-miles along the north side of Technology Boulevard; approximately 0.66-miles along the south side of the Norfolk Southern Railroad; and approximately 0.59-miles of planned sewer lines along the west side of Boar Swamp.[197] In addition, the Proposed Route crosses approximately 2.0 miles of the VAH Data Center Campus, which represents approximately 43% of the entire route. The Proposed Route crosses forested land ranked "average" and "moderate" in the FCV ranking regarding ecological integrity in an area that will be cleared for the data center campus. The Proposed Route avoids the residential neighborhood west of Elko Road. The Proposed Route has the least impacts on residences compared to Alternative Routes 1 and 2 with one residence within 250 feet and 15 residences within 500 feet of the proposed centerline. The Proposed Route avoids crossing future suburban residential areas designated in Henrico County's Comprehensive Plan and avoids crossing the Elko Middle School property, as compared to Alternative Route 2. The Proposed Route is compatible with existing and proposed industrial zoning as well as future land uses envisioned in Henrico County's Comprehensive Plan and the Technology Park Master Plan. The Proposed Route eliminates the need to build Spur Lines to connect the VAH Data Center Campus north of the Technology Park. The Spur Lines would add a minimum of 0.94 miles of transmission line and increase the overall environmental impacts of Alternative Routes 1 and 2. In sum, the Company believes the Proposed Route has the best collocation opportunities, results in the least impact on residences and residential neighborhoods, is the most compatible with existing and planned land uses relative to the Alternative Routes, and avoids the construction of the Spur Lines to serve future data center development.[198]

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[194] *Id.*, Appendix at 97-98.
[195] *Id.*, Appendix at 99.
[196] *Id.*
[197] *Id.*, Appendix at 73.
[198] *Id.*, Appendix at 99-100.

Alternative Route 1 crosses 16 parcels affecting 51.72 acres of right-of-way. Fifteen of the parcels are privately-owned, and one parcel is owned by Henrico County. Land use along the right-of-way consists of 35.85 acres of forested land, 7.89 acres of agricultural land, 1.87 acres of open space, 3.02 acres of open water, and 3.09 acres of developed area. Alternative Route 1 would cross within 250 feet of 5 dwellings, and within 500 feet of 25 dwellings and 45 non-residential buildings, where the route crosses within a residential neighborhood near the cut-in location.[199]

The right-of-way for Alternative Route 1 would encompass approximately 15.99 acres of land with a medium or higher probability of containing wetlands and waterbodies, which includes approximately 12.43 acres of forested wetlands. Alternative Route 1 has a total of six waterbody crossings, including two perennial stream crossings, three intermittent stream crossings, and one swamp/marsh crossing. Alternative Route 1 requires the clearing of approximately 35.85 acres of forested land. Compared to the Proposed Route, Alternative Route 1 would affect more residences within 250 and 500 feet of the centerline, more conservation districts, more wetlands including forested wetlands, and more "very high" and "outstanding" FCV lands. Alternative Route 1 would also have less total collocation with existing infrastructure.[200]

Alternative Route 1 requires the construction of two new Spur Lines approximately 0.94-miles on 160-foot-wide right-of-way to serve the VAH Data Center Campus north of the Technology Park, resulting in greater cumulative impacts when compared to the Proposed Route. If Alternative Route 1 and the Spur Lines are considered one project, the right-of-way is 0.41 miles longer that the Proposed Route and would have a construction footprint approximately 11.9 acres larger than the Proposed Route. The Company believes Alternative Route 1 would impose greater impacts to residences than the Proposed Route because it crosses residential neighborhoods rather than land planned for industrial use or currently used for timber production. In addition, the Company believes Alternative Route 1 is incompatible with the residential neighborhood in the vicinity of White Oak Road and Henrico County's future land use policies for the area east of the Technology Park.[201]

Alternative Route 2 crosses 22 parcels affecting 40.02 acres of right-of-way. Nineteen parcels are privately-owned and three parcels are owned by Henrico County. Land use along the right-of-way consists of 32.32 acres of forested land, 1.31 acres of open space, 3.55 acres of open water, 2.84 acres of developed area, and no agricultural land.[202]

The right-of-way for Alternative Route 2 would cross approximately 11.71 acres of land with a medium or higher probability of containing wetlands and waterbodies, including approximately 7.09 acres of forested wetlands. Alternative Route 2 has a total of seven waterbody crossings, including five intermittent streams, one lake/pond, and one swamp/marsh crossing. Alternative Roue 2 would require the clearing of 32.32 acres of forested land, which is the least amount of land clearing of the three routes. Compared to the Proposed Route, Alternative Route 2 would affect four residences within 250 feet and 20 residences within 500 feet of the centerline,

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[199] *Id.*, Appendix at 101-02.
[200] *Id.*, Appendix at 102.
[201] *Id.*
[202] *Id.*, Appendix at 104.

cross Elko Middle School property, affect more predicted suitable environmental habitat, and utilize less collocation with existing infrastructure.[203]

Alternative Route 2 requires the construction of two new Spur Lines approximately 0.94-miles on 160-foot-wide right-of-way to serve the VAH Data Center Campus north of the Technology Park, resulting in greater cumulative impacts when compared to the Proposed Route. Alternative Route 2 and the Spur Lines would cumulatively affect more forested land and more landowners, and would have a slightly larger total construction footprint than the Proposed Route. Alternative Route 2 would cross within 160 feet of the Elko Middle School and is generally incompatible with the existing residential neighborhood east of Elko Middle School and the Technology Park. The Henrico County Comprehensive Plan designated this area as suburban residential land use, the policy objective of which is to avoid the encroachment of nonresidential uses and reduce impacts of such uses in residential areas. While shortest in length, the Company believes Alternative Route 2 would impose electric infrastructure on an area intended to be buffered from the impacts of the Technology Park development.[204]

No municipal lands or school district lands are crossed by the Proposed Route. Lands owned by the Henrico County School Board are crossed by Alternative Route 2. Land owned by the Henrico County EDA are crossed by Alternative Routes 1 and 2. Alternative Route 1 crosses one Henrico County EDA-owned parcel. Alternative Route 2 crosses three parcels owned by Henrico County, including the Henrico County School Board and the Henrico County EDA.[205]

I find the Company's selection of the Proposed Route for the Project right-of-way was reasonable and is supported by the evidence in the record. In response to citizen input, the Company modified the route from its initial alignment along the north side of the Norfolk Southern Railroad right-of-way farther north near Crib Lane for the cut-in location to avoid a landowner on Nase Lane that would have been significantly impacted by the original alignment, and to reduce the transmission line's impact on the residential neighborhood along the south side of the railroad right-of-way.[206] The Company further modified the route to follow an existing logging road on the Holland Family Trust Property to avoid bisecting the property's managed timber operation.[207] The Company established the Proposed Route is preferable to Alternative Routes 1 and 2 for several reasons, including: (i) the greatest amount of collocation with other rights-of-way and voluntary transmission line easements; (ii) the least impact on residences and residential neighborhoods; (iii) the route most compatible with existing and planned land uses; and (iv) the least impactful and most efficient route to serve demand in the White Oak Load Area and the Technology Park, while avoiding the additional cost and environmental impacts of the Spur Lines required for Alternative Routes 1 and 2.[208]

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[203] *Id.*
[204] *Id.*; Ex. 16, at 25 (Rosenberg Rebuttal).
[205] *Id.*, Appendix at 253-54.
[206] Ex. 16, at 32-34 (Rosenberg Rebuttal).
[207] *Id.* at 12-13.
[208] Ex. 13, at 4-6 (Gill Rebuttal).

Scenic, Environmental, or Historic Resources

The impact of the Project on scenic, environmental, or historic resources is discussed in Sections III.A through III.L of the Appendix[209] and the DEQ Supplement.[210]

a. Rivers, Streams, and Wetlands

The Proposed Route and Alternative Routes 1 and 2 cross perennial and intermittent waterbodies, including perennial and intermittent sections of Canal Swamp (Alternative Route 1), an intermittent section of Boar Swamp (Proposed Route), and open waterbodies. The distance between transmission line structures proposed by the Company would be adequate to span the waterbodies identified along the Proposed Route and Alternative Routes 1 and 2. Tree clearing would be required within forested riparian areas at these crossing locations. All routes would have an effect on surface waters along these routes due to the removal of forested riparian areas adjacent to streams. The Company intends to limit impacts to riparian areas by utilizing the minimal right-of-way crossing feasible for each crossing, thereby minimizing impacts to surface waters and adjacent riparian habitat.[211]

During construction, the Company would maintain waterbodies for proper drainage using culverts or other crossing devices, as needed, according to its standard policies. Where clearing of trees and/or woody shrubs is required, clearing within 100 feet of a stream would be conducted by hand. Vegetation would be at or slightly above ground level, and stumps would not be grubbed. The Company would use sedimentation barriers along waterways and steep slopes to protect waterways from soil erosion and sedimentation during construction. If a section of line cannot be accessed from existing roads, the Company might need to install a culvert or a temporary bridge to cross small streams. In such cases, the Company would remove any temporary structure or material when construction is completed.[212]

No designated scenic rivers are crossed or adjacent to the Proposed Route or Alternative Routes 1 and 2.[213]

The Company identified no tidal wetlands within the Project area. However, the Company identified non-tidal wetlands crossed by the Proposed Route and Alternative Routes 1 and 2 as summarized below:

- Proposed Route – approximately 15.63 acres of wetlands would be cleared and/or disturbed. Of these, approximately 11.98 acres consist of palustrine forested wetland areas, 0.57 acres consist of palustrine scrub-shrub wetlands, 0.70 acres consist of palustrine emergent wetlands, 2.18 acres consist of palustrine unconsolidated bottom wetlands, and 0.18 acres consist of riverine/stream wetland areas.

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[209] Ex. 2, Appendix at 180-266 (Application).
[210] Ex. 2, DEQ Supplement at 4-37 (Application).
[211] *Id.*, DEQ Supplement at 5.
[212] *Id.*, DEQ Supplement at 6.
[213] *Id.*, Appendix at 253.

- Alternative Route 1 – approximately 15.99 acres of wetlands would be cleared and/or disturbed. Of these, approximately 12.44 acres consist of palustrine forested wetland areas, 0.57 acres consist of palustrine scrub-shrub wetlands, 0.30 acres consist of palustrine emergent wetlands, 2.43 acres consist of palustrine unconsolidated bottom wetlands, and 0.25 acres consist of riverine/stream wetland areas.
- Alternative Route 2 – approximately 11.71 acres of wetlands would be cleared and/or disturbed. Of these, approximately 7.09 acres consist of palustrine forested wetland areas, 0.57 acres consist of palustrine scrub-shrub wetlands, 0.72 acres consist of palustrine emergent wetlands, 3.18 acres consist of palustrine unconsolidated bottom wetlands, and 0.15 acres consist of riverine/stream wetland areas.
- White Oak Substation Expansion – no wetlands were identified within the footprint of the substation expansion.[214]

Henrico County is subject to the Chesapeake Bay Preservation Act, which regulates development of lands that could impact water quality in the Chesapeake Bay and its tributaries. Henrico County developed the Chesapeake Bay Preservation Program to meet the legislative requirements, designating Chesapeake Bay Preservation Areas that help maintain water quality. These areas are broken into Resource Protection Areas, including tidal wetlands, tidal waterbodies, perennially flowing streams, wetlands associated with perennially flowing streams, and a 100-foot buffer around perennially flowing streams and wetlands; and Resource Management Areas, land that could degrade water quality or the value of Resource Protection Areas. The Company stated the construction, installation, operation, and maintenance of electric transmission lines are conditionally exempt from the Chesapeake Bay Preservation Act; however, the Company indicated it would meet the conditions for the exemption. In addition, the Company confirmed it would use Best Management Practices to limit impacts to Resource Protection Areas, to the extent practicable.[215]

The Company confirmed it would obtain any necessary permits to impact jurisdictional resources. The Company sited structures to avoid wetlands and streams, to the extent practicable. When working in wetlands, the Company would require matting to be installed to support construction vehicles, equipment, and materials. The Company indicated that forested wetlands would be cleared, resulting in conversion to scrub-shrub or emergent type wetlands. The Company confirmed temporary impacts would be restored to pre-existing conditions, and permanent impacts would be compensated for in accordance with all applicable state regulations and laws. Vegetation would be allowed to return to maintained right-of-way heights after construction is completed.[216]

b. Natural Heritage, Threatened and Endangered Species

The Company conducted online database searches for threatened and endangered plant and animal species in the vicinity of the Project. The database queries identified 16 federally and/or state listed plant or animal species that have the potential to occur within 5.0 miles of the Project area. Virginia Department of Wildlife Resources ("DWR") confirmed no documented occurrence of any of the species within the Project area. According to its review, DCR-DNH concluded that

[214] *Id.*, DEQ Supplement at 8-9.
[215] *Id.*, DEQ Supplement at 28.
[216] *Id.*, DEQ Supplement at 7, 9.

two federally and/or state listed plant species (New Jersey Rush and Swamp Pink) have been documented by DCR or DWR as having potential habitat in areas immediately adjacent to or crossed by the Proposed Route and Alternative Routes 1 and 2. DCR also found that the Proposed Route and Alternative Routes 1 and 2 intersect multiple ecological cores ranging in rank from C1 (outstanding integrity) to C5 (general ecological integrity). DCR identified no State Natural Areas along the routes.[217]

To minimize the impacts on ecological cores, the Company located the Proposed Route and Alternative Routes 1 and 2 in areas where the least impacts to the ecological quality of the core(s) would occur. To the maximum extent practicable, the Company proposed routes on the edges of cores to reduce fragmentation, in areas of lower habitat quality, or in areas of existing or currently planned development by others.[218]

The Proposed Route and Alternative Routes 1 and 2 do not cross any secondary buffers of currently identified bald eagle nests. The Company indicated construction and maintenance of the new transmission line could have some minor effects on wildlife; however, impacts on most species would be short-term in nature and limited to the period of construction.[219]

The Company indicated that it would re-submit project information and a map for a Biotics database update from DCR if the scope of the Project changes and/or six months have passed before the information is utilized for construction.[220]

c. Wildlife Resources

The Company identified several federal and state listed wildlife species with the potential of occurring in the Project area. The Company indicated it would coordinate with the USFWS, DWR, and DCR as appropriate to determine whether additional surveys are necessary and to minimize impacts on wildlife resources. The Company stated the Project area includes a combination of undeveloped forested land, open space, and developed land consisting of public roads, industrial, and commercial use. The Company indicated that, after right-of-way clearing, native grasses could be used during revegetation to maintain plant species diversity to support wildlife.[221]

Based on recommendations by DWR, the Company indicated that it would try to adhere to the time of year restrictions for cutting trees and vegetation favorable to winged animals from March 15 – November 15, to the extent practicable. This includes avoiding trees favorable for bat maternity roosting and nesting bird habitat, to the extent practicable.[222]

The impact of the Project on the Northern Long-Eared Bat and the Tri-Colored Bat, and the possibility of time of year construction restrictions, was discussed previously.[223]

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[217] *Id.*, DEQ Supplement at 13, 16.
[218] *Id.*, DEQ Supplement at 16.
[219] *Id.*, DEQ Supplement at 16-17.
[220] *Id.*, DEQ Supplement at 17-18.
[221] *Id.*, DEQ Supplement at 28-29.
[222] *Id.*, DEQ Supplement at 29.
[223] *Id.*

The Proposed Route and the Alternative Routes 1 and 2 do not cross any federal or state game or wildlife management areas.[224]

d. Scenic, Historic, Cultural, Archaeological, or Architectural Resources

The Proposed and Alternative Routes 1 and 2 cross several Civil War battlefields, as shown below:[225]

Battlefields	Unit	Proposed Route	Alternate Route 1	Alternate Route 2	White Oak Substation Expansion
Second Cold Harbor Battlefield	miles	0.00	0.11	0.48	0.00
Glendale Battlefield	miles	0.00	0.60	0.31	0.00
Savage Station Battlefield	miles	3.69	1.60	1.48	0.00
Seven Pines Battlefield	miles	0.28	0.00	0.23	0.00

The Company conducted a Stage 1 Pre-Application Analysis ("Stage 1 Analysis") of potential impacts on cultural resources for the Proposed Route and Alternative Routes 1 and 2 in accordance with DHR's *Guidelines for Assessing Impacts of Proposed Electric Transmission Lines and Associated Facilities on Historic Resources in the Commonwealth of Virginia* (DHR 2008). The analysis was completed in February 2023 and submitted to DHR on June 16, 2023. For each route, the analysis identified and considered previously recorded resources within the following study tiers as specified in DHR's Guidelines:

- National Historic Landmark ("NHL") properties located within 1.5-mile radius of each route centerline.
- National Register of Historic Places ("NRHP")-listed properties, NHLs, battlefields, and historic landscapes within a 1.0-mile radius of each route centerline.
- NRHP-eligible and -listed properties, NHLs, battlefields, and historic landscapes within a 0.5-mile radius of each route centerline.
- Qualifying architectural resources and archaeological sites located within the right-of-way for each route.
- Information on cultural resources within each of the above study tiers was obtained from the Virginia Cultural Resource Information System.
- The Company also collected information from Henrico County Historical Society (2023) and the Charles City County Richard M. Bowman Center for Local History (2023) to find locally significant resources within a 1.0-mile radius of each centerline. No additional resources were identified through these sources. The Company also collected information on battlefields surveyed and assessed by the National Park Service's ("NPS") American Battlefield Protection Program ("ABPP") (NPS 2023). No additional ABPP study areas, core areas, or potential NRHP boundaries for battlefields were

[224] *Id.*, Appendix at 254.
[225] *Id.*

identified within the relevant study tiers for the various route options through this source.[226]

The Company's Stage 1 Analysis documented the following impacts to historic resources.

Proposed Route – Seven historic resources were identified within the DHR study tiers. The Company believes construction and operation of the transmission line along this route would have no impact on the Second Cold Harbor Battlefield, Second Deep Bottom Battlefield, Glendale Battlefield, and Savage Station Farm and Cemetery; minimal impact on the Seven Pines Battlefield; and moderate impact on the Savage Station Battlefield and Cedar Knoll.[227] Regarding the Seven Pines Battlefield, the Company indicated views from the resource to the north and south are completely blocked by dense tree cover and pockets of residential dwellings. The view of the Proposed Route to the east and west along Old Williamsburg Road would represent a change to the setting, the vantage points for this change would be limited in relation to the resource overall. Existing transmission lines run through the battlefield to the east, which have diminished the historic viewshed of the battlefield in that area. For these reasons, the Company believes the Proposed Route would have a minimal impact on the Seven Pines Battlefield. Regarding the Savage Station Battlefield, the Proposed Route crosses approximately 3.69 miles of the battlefield's ABPP Potential National Register Area and is collocated with the associated historic Richmond and York River Railroad (current Norfolk Southern Railroad) for 0.66 miles. The proposed White Oak Substation expansion is also located in the resource. The Proposed Route would create a new corridor through the resource within which vegetation would be removed for the installation of new transmission structures and conductors. The Savage Station Battlefield would also be crossed by six planned industrial developments in and around the Technology Park. The Company indicated an advantage of the Proposed Route is that it aligns with the data center development planned to occur in the Technology Park. Since the proposed transmission line would be visible within the battlefield and from public rights-of-way in several areas, including four road crossings and the crossing of the Norfolk Southern Railroad, which was significant to the Savage Station Battlefield, the Company believes the impact on the Savage Station Battlefield would be moderate. Regarding Cedar Knoll, there is an existing overhead electric distribution line in the southeast viewshed. Furthermore, construction along the Proposed Route would add larger, more obtrusive infrastructure, and would change the current viewshed to the southeast and east. In addition, data center development at the Technology Park would impact the viewshed to the south. For these reasons, the Company believes the impact of the proposed transmission line would be cumulative of the data center development and the overall impact on the resource would be moderate.[228]

The Proposed Route crosses one archaeological site, which has not been evaluated for listing in the NRHP. The site is a historic house dating to the twentieth century. Aerial photography of the area shows the house still standing in 1968 but demolished by 1984. Subsequent aerial photographs show no change to the site conditions through 2018.[229]

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[226] *Id.*, DEQ Supplement at 18-19.
[227] *Id.*, DEQ Supplement at 20.
[228] *Id.*, DEQ Supplement at 20-21.
[229] *Id.*, DEQ Supplement at 23.

Alternative Route 1 – Five historic resources were identified within the DHR study tiers. The Company believes construction and operation of the transmission line along this route would have no impact on the Seven Pines Battlefield and Second Deep Bottom Battlefield; and minimal impact on the Savage Station Battlefield, Second Cold Harbor Battlefield, and Glendale Battlefield.[230] Regarding the Savage Station Battlefield, Alternative Route 1 would add additional utility facilities, including the expansion of the existing White Oak Substation, in an already compromised setting, which includes existing data centers and the Company's Portugee Substation and Lines #286 and #2198. Vegetated portions of the route would not be visible from other parts of the battlefield due to the existing tree canopy. The only portions of the route that would be visible are at the intersection of public roads and the route. For these reasons, the Company believes Alternative Route 1 would result in minimal impact on the Savage Station Battlefield.[231] Regarding the Second Cold Harbor Battlefield, the Company stated most potential views of the transmission line from the resource would be obscured by dense vegetation. Since there are existing transmission lines in the viewshed of the battlefield, and because a very small portion of the overall battlefield would be impacted, the addition of a new line along Alternative Route 1 would have little additional impact. The structures and conductors would only be visible from a limited vantage point along White Oak Road. For these reasons, the Company believes Alternative Route 1 would result in minimal impact on the Second Cold Harbor Battlefield.[232] Regarding the Glendale Battlefield, Alternative Route 1 would be visible to drivers and pedestrians along Elko Road when looking to the northeast in the open field where the route crosses Elko Road and would be visible to the southwest during off-leaf season. Alternative Route 1 would introduce modern elements where no modern infrastructure currently exists. To the north and west of Alternative Route 1, and adjacent to the resource, there is considerable modern development including data centers, the Company's White Oak and Portugee Substations, and Lines #286 and #2091. For these reasons, the Company believes Alternative Route 1 would result in a minimal impact on the Glendale battlefield.[233]

Alternative Route 1 crosses two archeological sites, neither of which are eligible for listing in the NRHP.[234]

Alternative Route 2 – Five historic resources were identified within the DHR study tiers. The Company believes construction and operation of the transmission line along this route would have no impact on the Second Deep Bottom Battlefield and minimal impact on the Savage Station Battlefield, Glendale Battlefield, and Seven Pines Battlefield.[235] Regarding the Second Cold Harbor Battlefield, the Company accepted DHR's finding regarding the potential visual impact (moderate) of Alternative Route 2.[236] Regarding the Savage Station Battlefield, Alternative Route 2 would only be visible from the nearest public right-of-way during off-leaf season; otherwise, foliage would obscure views of the transmission line. The transmission line would be visible from areas inside the resource boundary where the area is highly developed and include the Company's existing White Oak and Portugee Substations and Lines #286 and #2198. There would be few vantage points

[230] *Id.*, DEQ Supplement at 23-24.
[231] *Id.*, DEQ Supplement at 24.
[232] *Id.*
[233] *Id.*, DEQ Supplement at 24-25.
[234] *Id.*, DEQ Supplement at 25-26.
[235] *Id.*, DEQ Supplement at 26.
[236] Ex. 16, at 44 (Rosenberg Rebuttal).

within and adjacent to the battlefield from which Alternative Route 2 would be visible. For these reasons, the Company believes Alternative Route 2 would have minimal impact on the Savage Station Battlefield.[237] Regarding the Glendale Battlefield, the tree clearing for Alternative Route 2 would be small in relation to the overall size of the battlefield and would only affect a peripheral portion of the battlefield. Alternative Route 2 is outside the core areas of the battlefield. For these reasons, the Company believes Alternative Route 2 would have a minimal impact on the Glendale Battlefield.[238] Regarding the Seven Pines Battlefield, the majority of the battlefield would be unaffected by the new transmission line, with views of the line limited to within the right-of-way. In addition, two existing transmission lines are present in the vicinity of the Alternative Route 2, and modern infrastructure has already been introduced along the eastern section of the battlefield. For these reasons, the Company believes Alternative Route 2 would have minimal impact on the Seven Pines Battlefield.[239]

Alternative Route 2 has no documented archaeological sites.[240]

e. Recreation, Agricultural and Forest Resources

The Project is expected to have minimal impacts on recreational, agricultural, and forest resources.[241]

The Proposed Route and Alternative Routes 1 and 2 would cross U.S. Bicycle Route 76. To minimize the impact, the transmission line would cross perpendicular to the bicycle trail, to the extent practicable.[242]

The Virginia Scenic Rivers Act identifies, designates, and protects rivers and streams that possess outstanding scenic, recreational, historic, and natural characteristics of statewide significance for future generations. The Project would not cross any state scenic rivers or streams.[243]

The Virginia Agricultural and Forestal District Act provides for the development and improvement of a locality's agricultural and forested lands. The Project does not affect any Agricultural or Forestal Districts, nor does it affect any federal or state forest.[244]

Under the Virginia Open-Space Land Act, any public body can acquire title or rights to real property to provide means of preservation of open space land. No conservation easements or open space easements are crossed or adjacent to the Proposed Route or the Alternative Routes 1 and 2.[245]

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[237] Ex. 2, DEQ Supplement at 26-27 (Application).
[238] *Id.*, DEQ Supplement at 27.
[239] *Id.*
[240] *Id.*, DEQ Supplement at 28.
[241] *Id.*, DEQ Supplement at 30.
[242] *Id.*, Appendix at 254.
[243] *Id.*, DEQ Supplement at 30.
[244] *Id.*, Appendix at 254, DEQ Supplement at 30.
[245] *Id.*, Appendix at 253, DEQ Supplement at 30.

Considering the foregoing and the agency comments in the DEQ Report, I find the Project along the Proposed Route would avoid or reasonably minimize adverse impacts to the greatest extent reasonably practicable on scenic, environmental, or historic resources.

DEQ Report

Pursuant to Code § 56-46.1 A and B, the Commission shall consider the 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 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 August 18, 2023.[246]

The coordinated agency review focused on the requirement to obtain certain environmental permits to construct the Project, the potential environmental impacts of construction and 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 or operation of the Project along the Proposed Route or Alternative Routes 1 and 2.[247]

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:

- Follow DEQ's recommendations for construction activities to avoid and minimize impacts to wetlands to the maximum extent practicable;
- Follow DEQ's recommendations regarding air quality protection, as applicable;
- Reduce solid waste at the source, reuse it and recycle it to the maximum extent practicable, as applicable;
- Coordinate with DCR-DNH regarding its recommendations related to a species survey for Swamp Pink, the protection of forested wetlands, avoidance of and an Impact Analysis for ecological cores, development of an Invasive Species Plan, and to obtain an update on natural heritage information as needed;
- Coordinate with DHR regarding the recommendation to complete and submit comprehensive cultural resources surveys, along with the recommendation to evaluate identified resources, assess the potential of direct/indirect impacts to eligible and listed resources and avoid/minimize/mitigate moderate to severe impacts;
- Coordinate with VOF if the Project area changes or the Project does not start within 24 months;

[246] Ex. 12 (DEQ Report).
[247] *Id.* at 2-6.

- Follow the principles and practices of pollution prevention to the maximum extent practicable; and
- Limit the use of pesticides and herbicides to the extent practicable.[248]

The Company did not object to the "Summary of Findings and Recommendations" in the REQ Report, except as addressed in Company witness Kennedy's rebuttal testimony and the rebuttal testimony of Company witness Rosenberg.[249]

The Company requested that the Commission reject the following recommendations in the DEQ Report:

- The recommendation by DEQ-DLPR to further evaluate two petroleum release sites identified in the DEQ Report;
- The recommendations by DCR related to a survey of Swamp Pink and an inventory for the resource in the study area;
- The recommendation by DCR-DNH to avoid or minimize impacts to ecological cores;
- The recommendation of DCR-DNH related to the development of an IVMP; and
- The recommendations by DCR-DNH regarding enhanced planned right-of-way restoration and maintenance practices, to the extent they require the Company to do more that provided for in the Company's existing IVMP.[250]

Regarding DEQ-DLPR's recommendation regarding petroleum release sites, the Company confirmed that it already evaluated the petroleum release sites and determined that DEQ closed the two pollution cases in 1993 and 2005, respectively. The Company determined that no further evaluation is necessary based on: (i) the documented regulatory status of the sites (*i.e.*, closed pollution complaints); (ii) the time elapsed since closure allowing for natural attenuation to occur at both sites; and (iii) the location of the release sites outside the proposed right-of-way for the Project.[251] I find this recommendation is moot and should be rejected by the Commission because the Company has already evaluated the petroleum release sites.

Regarding DCR's recommendation regarding the Swamp Pink, the Company clarified the recommendation involves a survey of Swamp Pink and an inventory of the resource in the study area. The Company confirmed it would conduct a survey for Swamp Pink as part of the USACE Section 404 permitting process, which requires the Company to coordinate with USFWS and conduct surveys for threatened and endangered species as required by USFWS. To the extent the Company would be conducting a survey for Swamp Pink for USFWS, the Company believes DCR's recommendation is unnecessarily duplicative. Regarding the inventory for Swamp Pink in the study area, the Company stated the study area for the Project encompassed approximately 28.5 square miles, the vast majority of which would not be affected by the right-of-way for the Project. The Company believes a survey outside the route selected by the Commission is unwarranted and would be unnecessarily costly.[252] I find this recommendation is unnecessarily duplicative and

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[248] *Id.* at 6.
[249] Ex. 15, at 3 (Kennedy Rebuttal).
[250] *Id.*
[251] *Id.* at 4-7.
[252] *Id.* at 7-9.

costly and should be rejected by the Commission because the Company is required to conduct a survey for Swamp Pink within the right-of-way for the Proposed Route as part of the USACE Section 404 permitting process.

Regarding DCR-DNH's recommendation regarding ecological cores, the Company stated based on the route analysis conducted by ERM, impacts to cores are unavoidable along the Proposed Route and Alternative Routes 1 and 2 due to the density of contiguous forested lands and mapped core boundaries in the study area for the Project. As part of its routing efforts, the Company sought to minimize impacts to higher ranked ecological cores by crossing along the edge of a core or along existing clearcuts within cores to minimize fragmentation and avoid the highest quality interior habitat.[253] I find this recommendation is moot and should be rejected by the Commission because the Company has already minimized the Proposed Route's impact on ecological cores.

Regarding DCR-DNH's recommendation related to its IVMP, the Company confirmed that it is still working with DCR-DNH regarding an addendum to its IVMP to explain how the Company's operations and maintenance forestry program addresses certain invasive species. Once the addendum is final, the Company will report the results of its coordination with DCR-DNH in future transmission CPCN filings.[254] For purposes of this case, I find this recommendation is unnecessarily duplicative and should be rejected by the Commission because the Company and DCR-DNH continue to work on an addendum to the Company's IVMP.

Regarding DCR-DNH's recommendation related to enhanced right-of-way restoration and maintenance practices, the Company responded that the recommendation seeks to have the Company do more than its IVMP and standard maintenance practice require.[255] I find this recommendation is unduly burdensome and should be rejected by the Commission because the recommendation exceeds the requirements in the Company's IVMP.

In addition, the Company clarified its preference for the Proposed Route, notwithstanding certain findings in the DEQ Report, particularly as to:

- DEQ-OWSP's finding that, in light of the amount of wetlands along each route, Alternative Route 2 should be the preferred route; and
- DHR's finding that Alternative Route 2, if constructed, would result in moderate adverse impact on the Second Cold Harbor Battlefield.[256]

Regarding DEQ-OWSP's finding that Alternative Route 2 should be the preferred route, the Company responded that when you take into consideration that a portion of the Proposed Route has been clearcut, a portion of the route crosses the VAH Data Center Campus that will be developed, and a portion of the route parallels a proposed sewer line that will impact wetlands, the total impact to wetlands for the Proposed Route and Alternative Route 2 are comparable. In addition, Alternative Route 2 requires the construction of two Spur Lines that would further impact

[253] *Id.* at 9-11.
[254] *Id.* at 11-13.
[255] *Id.* at 14.
[256] Ex. 16, at 41 (Rosenberg Rebuttal).

wetlands.[257] As discussed previously, I find the Company's selection of the Proposed Route for the Project right-of-way was reasonable and is supported by the evidence in the record. I recommend the Commission reject DEQ-OWSP's finding that, in light of the amount of wetlands along each route, Alternative Route 2 should be the preferred route.

The Company accepted DHR's finding regarding the potential visual impact of Alternative Route 2 on the Second Cold Harbor Battlefield, but noted DHR's finding does not substantively change the analysis of cultural resource impacts provided in the Environmental Routing Study.[258] I find DHR's finding is moot because the Proposed Route has been recommended for the right-of-way for the Project.

Other Alternatives

The Company addressed feasible project alternatives in Section I.E of the Appendix.[259] The Company identified one transmission alternative to the Project. The Company did not consider any distribution alternatives due to the violation of NERC Reliability Standards resulting from the identified 300 MW load drop.[260]

The Company identified and analyzed one transmission alternative but it was ultimately rejected. This alternative was referred to as the "Southern Alternative," which involved cutting the Company's existing 230 kV Chesterfield-Chickahominy Line #287 or 230 kV Allied-Chickahominy Line #2050 approximately 3.1 miles south of the White Oak Substation and routing two new transmission lines to the substation. The Company rejected the Southern Alternative in favor of the Project from the north for reasons related to transmission planning, land use compatibility, and avoidance of environmental and cultural resources.[261]

The Company explained the Southern Alternative placed the two new 230 kV transmission lines farther from the future data center and industrial development in the Technology Park and would require new transmission right-of-way through largely rural residential and agricultural areas to the south. Since existing and future development is driving the increased load demand, the Company believes the Project from the north has the advantage of routing two new 230 kV transmission lines through planned customer delivery points.[262]

The Company further explained the Project takes into consideration current zoning and land use patterns. The Project avoids routing the White Oak Lines where a new transmission corridor would be less compatible with existing and future land uses. The northern route would cross industrial, office/commercial, and other mixed-use zoning districts within and adjacent to the Technology Park. In contrast, the Southern Alternative would require two new 230 kV transmission lines crossing land in Henrico County's agricultural zoning district to connect to the expanded White Oak Substation. In addition, Henrico County's Comprehensive Plan supports the

[257] *Id.* at 42-43.
[258] *Id.* at 44.
[259] Ex. 2, Appendix at 44 (Application).
[260] *Id.*
[261] *Id.*
[262] *Id.*

preservation of agricultural, rural residential, and environmentally sensitive land uses in the area south of White Oak Swamp that would be crossed by the Southern Alternative. In contrast, the Comprehensive Plan intends for the area north of White Oak Swamp to support industrial and commercial land uses, as evidenced by the continued development of the Technology Park by the Henrico County EDA.[263]

The Company consulted with NPS staff at the Richmond National Battlefield Park concerning the Park's Proclamation Boundary and other cultural resources located south of White Oak Swamp adjacent to Line #286 and Line #2091 rights-of-way where the Southern Alternative would potentially cut-in to either Line #287 or Line #2050. NPS staff opposed a new transmission right-of-way encroachment within the Richmond National Battlefield Park and its Proclamation Boundary.[264]

Lastly, the Company identified major issues related to construction of the Southern Alternative. First, while the Company identified an opportunity to collocate the Southern Alternative within existing transmission corridors, this routing alternative would require existing transmission lines that serve the White Oak, Portugee, and Elko Substations, and that serve the White Oak Load Area, to be taken out of service at various times during construction. These outages would directly impact existing data center customers and residences in the area. The Company deemed these outages not operationally feasible and rejected collocating the Southern Alternative. Second, the Company identified several residences and other structures located along or near the Company's existing right-of-way for Lines #286 and #2091 between the proposed cut-in location to the south and Hines Road to the north, including two single family homes and one community center within 60 feet of the existing right-of-way. The two single family homes are located within existing subdivisions. Avoiding these homes would require crossing the existing transmission lines at least twice or would require the purchase and demolition of the two residences. The Company indicated it would prefer to avoid the existing residences and the service outages associated with crossing over the existing transmission lines.[265]

I find the Company reasonably considered and rejected the Southern Alternative in favor of the Project along the Proposed Route.

Public Health and Safety

The Company's studies on the health effects of electromagnetic fields ("EMF") are found in Sections IV.A,[266] IV.B,[267] and IV.C[268] of the Appendix. Based on those studies and the levels of EMF associated with the Project, the Company determined that no adverse health effects are anticipated to result from the operation of the Project.[269]

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

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[263] *Id.* at 44-45.
[264] *Id.* at 45.
[265] *Id.* at 45-46.
[266] *Id.*, Appendix at 267.
[267] *Id.*, Appendix at 269.
[268] *Id.*, Appendix at 272.
[269] *Id.*, Appendix at 270.

Other Resources

The Company identified two FAA registered airports located within 10 miles of the Project:

- Richmond International Airport, approximately 2.6 miles west of the Project; and
- New Kent County Airport, approximately 2.9 miles east of the Project.[270]

In addition, there are several heliports in the vicinity of the Project, including the following:

- VCU Health New Kent Emergency Department Heliport, approximately 0.8 miles east of the Project;
- VCU Health System-Main Hospital Heliport, approximately 8.4 miles west of the Project; VCU Children's Medical Center Heliport, approximately 8.5 miles west of the Project;
- VCU Health System-I Lot Heliport, approximately 8.6 miles west of the Project;
- Defense Supply Center Richmond Heliport, approximately 9.8 miles southwest of the Project; and
- McGuire VA Medical Center Pad Heliport, approximately 9.8 miles west of the Project.[271]

Based on its review of FAA Form 7460-1, Notice of Proposed Construction or Alteration, the Company determined the notice must be filed for penetrating a 100 to 1 slope from the Richmond International Airport.[272]

The Company reviewed height limitations associated with FAA-defined civil airport imaginary surfaces for all runways associated with the Richmond International Airport and all other public or private registered airfields to determine whether any of the structure heights associated with each specific structure location would penetrate the imaginary surfaces for any of the runways. The Company determined only the Richmond International Airport is close enough to potentially impact navigable airspace. At its closest point, the Proposed Route would be located within 2.6 miles (14,200 feet) from Runway 16/34 of the Richmond International Airport. The airport surveyed ground elevation is 167.5 feet above mean sea level ("AMSL"). The ground elevation in the study area ranges from approximately 150 feet AMSL on the northern end of the study area to 100 feet AMSL in the southern end of the study area. The transmission line routes are located outside the approach surface of the Richmond International Airport. Based on the ground elevation at the Project area and the distance from the end of the nearest runway, the Company believes there would be no potential for impacts on any of the imaginary surfaces or terminal instrument procedures imaginary surfaces associated with the Richmond International Airport. The Company indicated structure heights for the Proposed Route would range from 55 to 130 feet. The Company does not propose to place any structures below any runway imaginary surface; therefore, the Company does not foresee any impacts to the Richmond International Airport.[273]

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[270] *Id.*, Appendix at 255.
[271] *Id.*
[272] *Id.*
[273] *Id.*, Appendix at 256.

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

Virginia Environmental Justice Act

The Company addressed environmental justice in Section III.B of the Appendix.[274] As part of its outreach efforts, the Company conducted two community meetings. The first meeting was held on September 15, 2022, at Elko Middle School with 84 community members in attendance. The Company gave a presentation about the Project and then answered questions from community members. Once the question and answer session concluded, the meeting transitioned to an open house where community members could speak with Project team members individually. The second meeting was held on November 17, 2022, at Elko Middle School with 61 community members in attendance. The Company provided updates and changes to the Project since the first community meeting. After the updates, the meeting transitioned to an open house where community members could speak with Project team members individually. The Company also provided photo simulations for viewing of key locations for the proposed Project.[275]

The Company considered input from the stakeholder groups regarding community concerns about regional development and land use, vulnerable populations, and environmental and cultural resources during the Project design process.[276]

The Company received feedback in April 2023 that indicated that the Proposed Route is in close proximity to a historic freedmen's community between Meadow Road and the Technology Park along Boar Swamp. A desktop review of historic maps and documents identified an African American settlement (Boar Swamp neighborhood), churches, and one-room schoolhouse east of Boar Swamp and south of East Williamsburg Road and west of Elko Road, dating to the late-nineteenth and early-twentieth centuries. The Proposed Route passes west of Boar Swamp and avoids this area. The Company noted suburban development has evolved when the historic community had been mapped. Additionally, the desktop review did not identify the Boar Swamp area as an Environmental Justice ("EJ") Community because the Census Block Group ("CBG") in which it is located did not meet the EJ criteria.[277]

Based on the feedback it received, the Company researched the demographics of the surrounding communities using the U.S. Environmental Protection Agency's EJ mapping and screening tool and census data from the U.S. Census Bureau 2016-2020 American Community Survey. This information revealed that 11 CBGs are within the Project study area and are within one mile of the routing options. A review of demographic data identified populations within the Project study area that meet the VEJA threshold to be defined as EJ Communities. Three of the 11 CBGs within the study area appear to be communities of color. None of the CBGs within the study area appear to be low-income populations or limited English speaking populations.[278]

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[274] *Id.*, Appendix at 195.
[275] *Id.*, Appendix at 196.
[276] *Id.*, Appendix at 197.
[277] *Id.*
[278] *Id.*, Appendix at 197-98.

Based on its analysis of the Project, the Company does not anticipate disproportionately high or adverse impacts to the surrounding community and the EJ Communities located within the study area.[279]

In addition to evaluating the impacts of the Project, the Company stated that it has and will continue to engage communities affected by the Project, including EJ Communities, in a manner that allows them to meaningfully participate in the project development and approval process so that their views and input can be taken into consideration.[280]

I find the Company reasonably considered the requirements of the VEJA in its Application.

Staff Report

After investigating the Application, Staff concluded that the Company reasonably demonstrated the need to construct the Project to comply with NREC Reliability Standards, as well as to maintain reliable electric service for overall load growth projected for the White Oak Load Area. The Proposed Route appears to avoid or 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 VEJA. Staff therefore does not oppose the Company's request that the Commission issue the CPCN necessary for the construction and operation of the Project.[281]

FINDINGS AND RECOMMENDATIONS

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

(1) The Company established the need for the Project to resolve projected NERC reliability violations beginning in the summer of 2023 and to provide the White Oak Load Area with additional transmission sources to reliably serve future load growth;

(2) The Company established that DSM will not obviate the need for the Project;

(3) The Company's proposed construction schedule and in-service date for the Project appear reasonable;

(4) The Company's proposed transmission related and substation related costs for the Project appear reasonable and prudent;

(5) The Company's selection of the Proposed Route for the Project right-of-way was reasonable and is supported by the evidence in the record;

(6) The Project along the Proposed Route would avoid or reasonably minimize adverse impacts to the greatest extent reasonably practical on scenic, environmental, or historic resources;

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[279] *Id.*, Appendix at 198.
[280] *Id.*
[281] Ex. 11, Staff Report at 27.

(7) The Commission should decline to adopt the following recommendations in the DEQ Report: (i) the recommendation by DEQ-DLPR to further evaluate two petroleum release sites identified in the DEQ Report; (ii) the recommendations by DCR related to a survey of Swamp Pink and an inventory for the resource in the study area; (iii) the recommendation by DCR-DNH to avoid or minimize impacts to ecological cores; (iv) the recommendation of DCR-DNH related to the development of an IVMP; and (v) the recommendations by DCR-DNH regarding enhanced planned right-of-way restoration and maintenance practices, to the extent they require the Company to do more that provided for in the Company's existing IVMP;

(8) The other recommendations in the DEQ Report's "Summary of Findings and Recommendations" are "desirable or necessary to minimize adverse environmental impact" associated with the Project and should be adopted by the Commission;

(9) The Commission should decline to adopt DEQ-OWSP's finding that, in light of the amount of wetlands along each route, Alternative Route 2 should be the preferred route because the Company's selection of the Proposed Route was reasonable and is supported by the evidence in the record;

(10) The Commission should decline to adopt DHR's finding that Alternative Route 2, if constructed, would result in moderate adverse impact on the Second Cold Harbor Battlefield because the finding is moot;

(11) The Company reasonably considered and rejected the Southern Alternative in favor of the Project along the Proposed Route;

(12) The Project does not represent a hazard to public health or safety;

(13) The Company reasonably addressed the impact of the Project on aviation resources; and

(14) The Company reasonably considered the requirements of the VEJA 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 CPCN to the Company to construct and operate the 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 § 12.1-31 of the Code, any comments to this Report must be filed on or before January 26, 2024. 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 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.