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**APPLICATION OF**

**VIRGINIA ELECTRIC AND POWER COMPANY**

**CASE NO. PUR-2019-00040**

**For approval and certification of electric  
facilities: Potomac Yards Undergrounding  
and Glebe GIS Conversion**

**REPORT OF MICHAEL D. THOMAS, SENIOR HEARING EXAMINER<sup>1</sup>**

**August 13, 2019**

**HISTORY OF THE CASE**

On March 7, 2019, Virginia Electric and Power Company (“Dominion” or “Company”) filed an application and supporting documents, pursuant to § 56-46.1 of the Code of Virginia (“Code”) and the Utility Facilities Act, § 56-265.1 *et seq.* of the Code, for approval and certification of electric facilities (“Application”) with the State Corporation Commission (“Commission”).

Dominion requested approval to convert the overhead portion of 230 kilovolt (“kV”) Glebe-Ox Line #248 and 230 kV Glebe-North Alexandria Line #2023 between Glebe Substation (located in Arlington, Virginia), and Potomac Yards North Terminal Station (“Potomac Yards Station”) (located in the City of Alexandria, Virginia) to underground lines and to tie the converted lines into Glebe Substation (“Potomac Yards Undergrounding”).<sup>2</sup> This conversion would include the removal and replacement of related underground lines comprising a total installation of approximately 2,100 feet of new underground cable from existing manhole #110 to new manhole #111 to Glebe Substation. Of the 2,100 feet of underground line, 1,100 feet would be installed using microtunneling and 1,000 feet would be installed using existing underground right-of-way. Dominion also proposed to remove 550 feet of underground cable and pipe from Potomac Yards Station to new manhole #111 and to remove 1,000 feet of cable only from new manhole #111 to existing manhole #110. Dominion also requested to convert and rebuild the Company’s existing Glebe Substation to a Gas Insulated Substation (“Glebe GIS Conversion”) (collectively, the work described above comprises the “Project”).<sup>3</sup>

Dominion asserted the proposed Project is necessary to comply with the expiration of an existing Special Use Permit (“SUP”) issued by the City of Alexandria (“City”). The SUP is expected to expire January 1, 2021.<sup>4</sup> According to Dominion, the proposed Project is necessary to permit the Company’s remaining transmission facilities in the area to provide adequate service to the Company’s existing customers located in the City and Arlington County (“County”), consistent

<sup>1</sup> The Office of Hearing Examiners’ summer law clerk, Olivia Akl, assisted in the preparation of this Report.

<sup>2</sup> Ex.2, Application at 2, Appendix at 3-5.

<sup>3</sup> *Id.*, Application at 2, Appendix at 3-6.

<sup>4</sup> *Id.*, Application at 2, Appendix at 3-4.

with North American Electric Reliability Corporation Reliability Criteria (“NERC”).<sup>5</sup> Dominion further asserted the proposed Project would improve operational performance, maintain critical energy infrastructure needed to provide continued reliable electric service to facilities depended upon to provide critical services, and to maximize available land use to accommodate necessary transmission terminations.<sup>6</sup>

The proposed Project would require new right-of-way across Four Mile Run, a local stream. Dominion explained no feasible alternatives have been submitted to PJM Interconnection, L.L.C. (“PJM”), specifically limited to this Project, which includes the Potomac Yards Undergrounding and Glebe GIS Conversion, because a key driver for the Project is the undergrounding requirement of the City of Alexandria’s SUP.<sup>7</sup>

Dominion anticipates an in-service date of May 2022 for the proposed Project, subject to Commission approval and outage scheduling. Dominion estimates the conceptual cost of the proposed Project to be \$122.8 million, including approximately \$59.3 million for transmission-related work and approximately \$63.5 million for substation-related work (2019 Dollars).<sup>8</sup>

As provided by § 62.1-44.15:21 D 2 of the Code, the Commission and the State Water Control Board must consult on wetland impacts prior to the siting of electric utility facilities that require a certificate of public convenience and necessity. As required by Section 3 of the Department of Environmental Quality – State Corporation Commission Memorandum of Agreement Regarding Wetland Impacts Consultation, the Staff of the Commission (“Staff”) advised the Department of Environmental Quality (“DEQ”), acting on behalf of the State Water Control Board, that the Company filed its Application and that consultation might be required.<sup>9</sup>

In addition to consultation on wetlands, § 56-46.1 G of the Code directs the Commission and DEQ to coordinate the environmental review of proposed electric facilities. Moreover, § 56-46.1 A of the Code provides for the Commission to receive and to consider reports on the proposed facilities from state environmental agencies. Accordingly, Staff requested DEQ to coordinate an environmental review of the Project by appropriate agencies and to provide a report on the review.<sup>10</sup>

On March 25, 2019, the Commission entered an Order for Notice and Hearing, which among other things, docketed the Application; established a procedural schedule; required public notice of the Application; scheduled an evidentiary hearing for July 23, 2019; and appointed a Hearing Examiner to conduct all further proceedings in this matter on behalf of the Commission and to file a final report.

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<sup>5</sup> *Id.*, Application at 2-3.

<sup>6</sup> *Id.*, Application at 3.

<sup>7</sup> *Id.*, Application at 3, Appendix 3-6.

<sup>8</sup> *Id.*, Application at 3.

<sup>9</sup> Letter from Alisson P. Klaiber, Esquire, State Corporation Commission, dated March 11, 2019, to David L. Davis, CPWD, PWS, Director, Office of Wetlands & Stream Protection, Department of Environmental Quality, filed in Case No. PUR-2019-00040.

<sup>10</sup> Letter from Alisson P. Klaiber, Esquire, State Corporation Commission, dated March 11, 2019, to Bettina Rayfield, Department of Environmental Quality, filed in Case No. PUR-2019-00040.

On April 24, 2019, the City, by counsel, filed its Notice of Participation. The City is a municipal corporation in the Commonwealth of Virginia, is the governing body of a city whose real property would be impacted by the Potomac Yards Undergrounding and Glebe GIS Conversion proposed by Dominion, and is vitally interested in the outcome of this proceeding. The City intends to participate in the proceeding to protect its interests and the interests of its residents.<sup>11</sup>

The public hearing was convened in a Commission courtroom on July 23, 2019. The Company appeared by its counsel, Jennifer D. Valaika, Esquire, and Lauren E. Wood, Esquire, with the law firm of McGuire Woods, LLP, and David J. DePippo, Esquire, with Dominion Energy Services, Inc. The City appeared by its counsel, Cliona Mary Robb, Esquire, with the law firm of Christian & Barton. Staff appeared by its counsel, Arlen Bolstad, Esquire, and William Chambliss, Esquire.

## **SUMMARY OF THE RECORD**

### *Written Comments*

Mr. Mark Schwartz, County Manager, submitted written comments on the Project on behalf of the County. The County supports the Project overall as a needed improvement in the area to enhance electrical service reliability. The County offered the following specific comments:

- Fence Screening Requirement – To mitigate the visual impacts to the Four Mile Run bike path side of the of the substation as it is rebuilt, the County is requesting a visually aesthetically designed wall to screen the station. Dominion’s substation on Wilson Boulevard in Clarendon has a 12-foot wood slat fence that might serve as a model.
- Impacts to Bike Path – It is understood the existing bike path used by both commuters and recreational users might need to be detoured during various construction phases of the Glebe Substation rebuild. There are two detour options for the Four Mile Run Trail: the first option diverts trail traffic across the Route 1 and Arlington Ridge Road bridges to use Alexandria trails, the second routes traffic around the block via Eads Street, and the sidewalks along S. Glebe Road and Route 1. Both detour routes require considerable extra travel and the S. Glebe Road sidewalk is too narrow for combined bike and pedestrian traffic. The County recommends Dominion maintain a minimum of an 8-foot wide path on the existing trail throughout the Project. Complete trail shutdowns should be minimized to only those periods when trail users’ safety could be compromised.
- U.S. Army Corps of Engineers Four Mile Run Flood Control Project – The County and the City of Alexandria are in partnership with the U.S. Army Corps of Engineers (“Corps”) on the operation and maintenance of the Four Mile Run Flood Control Project, which extends from Shirlington to the Potomac River. This project includes regular maintenance (including

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<sup>11</sup> City Notice of Participation at 1-2.

structural repair and replacement as well as dredging) along with more recent naturalization work (addition of tidal wetlands and stream bank plantings) downstream of Mt. Vernon Avenue. The boring underneath Four Mile Run should be coordinated with the County to ensure the boring provides an adequate safety margin below the original elevation of the flood control channel invert of Four Mile Run. The proposed work must also be reviewed and approved by the Corps Baltimore District.

- Community Input on Fence Design – The neighboring wastewater treatment facility currently has a 6-foot black aluminum picket fence with interpretive art attached to the fence. The existing Washington Metropolitan Area Transit Authority (“WMATA”) bus terminal currently has a 6 or 8-foot chain-link fence. Community outreach should be done on the recommended 12-foot fence around the substation.
- Community Outreach – The County recommends community outreach to the four surrounding Civic Associations: Crystal City, Long Branch Creek, Aurora Highlands, and Arlington Ridge. Communications on the project should also be coordinated with communications staff in the County’s Department of Environmental Services; the County would provide contact information at the appropriate time for both staff and the civic associations.
- Project Impacts/Compliance with Resource Protection Area Regulations – The details of where the staging, bore pit locations, and disturbance zones would be located are extremely important given the proximity of Four Mile Run. Adequate erosion and sediment control measures should be deployed along with dewatering protection from the bore pit. All state and local stormwater management ordinance requirements should be complied with, to include Resource Protection Area requirements adjacent to the stream.
- Undergrounding of Overhead Transmission Lines – The removal of the overhead transmission lines in this area is supported by the County and helps fulfill the aesthetic vision of the Four Mile Run Restoration Master Plan approved by both the City of Alexandria and the County in 2006. To maximize the benefits of this opportunity, the County requests the abandoned overhead transmission pole foundations also be removed from Four Mile Run and the stream bank on the county side. Protection measures should be designed and deployed to protect the stream during these operations.
- Compliance with County Zoning Regulations – Dominion should comply with the County’s Zoning regulations for the site which is zoned CM, Limited Industrial District. According to Section 8.1.2 Industrial (M) Districts Principal Use Table in the Zoning Ordinance, a public utility service yard or electrical receiving or transforming station is a permitted use by right in the CM zone. No use permit would be required for use as an electrical substation. The maximum permitted fence height is 7 feet, and that height is only allowable in certain parts of a lot. A 12 or 15-foot fence would require a height variance from the Board of Zoning Appeals. When the final plans are submitted to the County for approval of construction, further evaluation would be conducted.

- Importance of Electrical Reliability Enhancements – This Project is an important electrical service reliability project and the County agrees with the testimony of Carl W. Eger, III, on behalf of the City of Alexandria, (pp. 9-10). The County views the undergrounding of the electric transmission lines under Four Mile Run and the improved capability at the West Glebe Road substation (which includes the ability to provide additional circuits for increased capacity) as important enhancements to the electrical service reliability in this area to support the interests of current and future County residences and businesses, especially at the site for the new Amazon headquarters.

Ms. Liz Birnbaum, former Co-chair, submitted comments on behalf of the Joint Task Force on Four Mile Run (“Task Force”).<sup>12</sup> The Task Force supports the Project. The Task Force has worked with the City and the County on the restoration of the lower reach of Four Mile Run, and was involved in the adoption of the Four Mile Run Master Plan by both local governments in 2006. The Master Plan covers the entire area impacted by the Project. The Master Plan was the result of three years of community meetings and citizen involvement by residents of both localities. A series of federal grants supplied funding for the development of the Master Plan and for several projects to implement the plan once adopted. The Master Plan is a 20- to 30-year guide for the restoration of Four Mile Run and the development of appropriate uses for the stream corridor. Since the Master Plan was adopted, significant environmental projects have been completed including wetland restoration on the Alexandria side and streambank restoration on the Arlington side. Other enhancements have included the removal of an abandoned railroad bridge, new bike trails, dedicated open space, planned additional parks, and the design of a new pedestrian/bicycle bridge. Over the years, the Task Force has maintained active community involvement in the execution of the Master Plan. Recently, the Four Mile Run Conservatory Foundation (“Foundation”), a private non-profit, was created to encourage public engagement along the stream. The Foundation has supplemented the efforts of both localities through community education, documentation of wildlife use, and trash removal along the stream corridor.

Ms. Birnbaum explained the overhead transmission lines have always been an impediment to the full realization of the Master Plan. The overhead lines were the subject of repeated concern during the development of the Master Plan. The transmission towers dominate the visual landscape along the stream and interfere with the use of the stream where they stand in the stream. Although removal of the transmission lines was not included as a requirement in the Master Plan, the Master Plan considered at some point the lines would need to be replaced and at that point undergrounding should be pursued. Ms. Birnbaum noted most of the visual representations in the Master Plan do not include the transmission lines or towers.

Ms. Birnbaum described the impact the Four Mile Run urban greenspace is having on the community, as more people and activities take advantage of what had been an underused resource. She noted Virginia Tech’s Innovation Campus and Amazon HQ2 are locating within two miles of the Project site. These two projects represent a significant investment that would bring jobs and

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<sup>12</sup> Other members of the Task Force supporting the comments on the Project included: Judy Noritake, Co-chair, and Steve Sockwell, Co-chair, Joint Task Force on Four Mile Run; and Kurt Moser, President, Four Mile Run Conservatory Foundation.

new residents to the area. Ms. Birnbaum believes Four Mile Run has a great future as a functioning stream ecosystem, a community resource for recreation and quiet enjoyment, and a driver of economic development. She believes the Project would contribute enormously to that future. The Task Force urged the Commission to approve Dominion's proposed Project.

### Public Witnesses

No public witnesses appeared at the public hearing.

### Virginia Electric and Power Company Direct Testimony

The Company presented the direct testimony of six witnesses: Peter Nedwick, Principal Engineer – Electric Transmission Planning; Michael L. Lamb, Manager – Electric Transmission Operations Engineering; Robert J. Shevenock II, Principal Engineer – Electric Transmission Line Engineering Department; Thomas W. Reitz, Jr., Consulting Engineer – Electric Transmission Line Engineering Department; W. Chase Bland, Supervisor – Substation Engineering Conceptual; and John A. Mulligan, Senior Siting and Permitting Specialist.

In his direct testimony, Mr. Nedwick sponsored the sections in the Appendix describing the Company's transmission system and need for, and benefits of, the Project. This included:

- Section I.B: Details the engineering justifications for the Project.
- Section I.C: Describes the present system and details how the Project would effectively satisfy present and projected future load demand requirements.
- Section I.D: Describes critical contingencies and associated violations due to the inadequacy of the existing system.
- Section I.E: Explains feasible Project alternatives.
- Section I.G: Provides a system map for the affected area.
- Section I.H: Provides the desired in-service date of the Project and the estimated construction time.
- Section I.J: Provides information about the Project if approved by PJM.
- Section II.A.3: Provides color maps of existing or proposed rights-of-way in the vicinity of the Project.
- Section II.A.10: Provides details of the construction plans for the Project, including requested and approved line outage schedules.<sup>13</sup>

Mr. Nedwick co-sponsored the following sections of the Appendix:

- Section I.A: Details the primary justifications for the Project.
- Section I.F: Describes any lines or facilities that would be removed, replaced, or taken out of service upon completion of the Project.
- Section II.B.1: Provides the line design and operational features of the underground portions of the Project, including the transfer capability.<sup>14</sup>

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<sup>13</sup> Ex. 4, at 2.

<sup>14</sup> *Id.*

In his direct testimony, Mr. Lamb sponsored the sections of the Appendix describing the need for the Glebe GIS Conversion based on the condition of the Company's existing Glebe Substation. This included:

- Section I.L: Provides details on the description of infrastructure and associated equipment.<sup>15</sup>

Mr. Lamb co-sponsored the following sections of the Appendix:

- Section I.A: Details the primary justifications for the Project.
- Section II.C: Describes and furnishes a one-line diagram of the substation associated with the Project.<sup>16</sup>

In his direct testimony, Mr. Shevenock co-sponsored the sections of the Appendix providing an overview of the design characteristics of the existing overhead transmission facilities being removed as part of the Project. This included:

- Section I.A: Details the primary justifications for the Project.
- Section I.F: Describes any lines or facilities that would be removed, replaced, or taken out of service upon completion of the Project.
- Section I.I: Provides the estimated total cost of the Project.
- Section II.B.5: Provides the mapping and structure heights for the existing overhead structures.<sup>17</sup>

In his direct testimony, Mr. Reitz sponsored the sections of the Appendix providing an overview of the design characteristics of the existing and proposed underground transmission facilities for the Project and discusses electric and magnetic field levels. This included:

- Section II.A.5: Provides cross section drawings of the proposed underground transmission facilities.
- Sections II.B.3 and II.B.4: Provide the line design and operational features of the underground portions of the Project.
- Section IV: Provides analysis on the health aspects of electric and magnetic field levels.<sup>18</sup>

Mr. Reitz co-sponsored the following sections of the Appendix:

- Section I.A: Details the primary justifications for the Project.
- Section I.I: Provides the estimated total cost of the Project.

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<sup>15</sup> Ex. 5, at 2.

<sup>16</sup> *Id.*

<sup>17</sup> Ex. 6, at 2.

<sup>18</sup> Ex. 7, at 2.

- Section II.B.1: Provides the line design and operational features of the underground portions of the Project, including the transfer capability.
- Section II.B.2: Provides the line design and operational features of the underground portions of the Project, including typical configurations.<sup>19</sup>

In addition, Mr. Reitz compared the calculated peak magnetic field strength for the proposed underground facilities operating at average loading capacity, which is 0.05 milligauss (“mG”) at one meter above ground,<sup>20</sup> to the magnetic fields of a hair dryer (300 mG or more), a copy machine (90 mG or more), and an electric power saw (40 mG or more). The magnetic field strength for the proposed underground electric transmission line is significantly weaker.<sup>21</sup>

In his direct testimony, Mr. Bland co-sponsored the sections of the Appendix describing the work to be performed at the substation for the Project. This included:

- Section I.A: Details the primary justifications for the Project.
- Section I.F: Describes any lines or facilities that would be removed, replaced, or taken out of service upon completion of the Project.
- Section I.I: Provides the estimated total cost of the Project.
- Section II.B.2: Provides the line design and operational features of the underground portions of the Project, including typical configurations.
- Section II.C: Describes and furnishes a one-line diagram of the substation associated with the Project.<sup>22</sup>

In his direct testimony, Mr. Mulligan sponsored the sections of the Appendix providing an overview of the design of the route for the Project and related permitting. This included:

- Section II.A.1: Provides the length of the proposed corridor and viable alternatives to the Project.
- Section II.A.2: Provides a map showing the route of the Project in relation to notable points close to the Project.
- Section II.A.4: Explains why the existing right-of-way is not adequate to serve the need.
- Sections II.A.6, II.A.7, and II.A.8: Provide detail regarding the right-of-way for the Project.
- Section II.A.9: Describes the proposed route selection procedures and details alternative routes considered.
- Section II.A.11: Details how the construction of the Project follows the provisions discussed in Attachment 1 of the Guidelines.
- Section II.A.12: Identifies the counties and localities through which the Project would pass and provides General Highway Maps for these localities.

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<sup>19</sup> *Id.*

<sup>20</sup> Ex. 2, Appendix at 228-229.

<sup>21</sup> Ex. 7, at 3.

<sup>22</sup> Ex. 8, at 2.



- Section II.B.6: Provides photographs of existing facilities, representations of proposed facilities, and visual simulations.
- Section III: Details the impact of the Project on scenic, environmental, and historic features.
- Section V: Provides information related to public notice of the Project.<sup>23</sup>

Mr. Mulligan co-sponsored the following section of the Appendix:

- Section II.B.5: Provides the mapping and structure heights for the existing overhead structures.<sup>24</sup>

In addition, Mr. Mulligan sponsored the DEQ Supplement to the Application.<sup>25</sup>

Finally, Mr. Mulligan confirmed the Company complied with the notice requirements in § 15.2-2202 E of the Code by sending letters to Mr. Mark Jinks, City Manager, and Mr. Mark Schwartz, County Manager, advising of the Company's intention to file the Application and inviting the localities to consult with the Company about the project.<sup>26</sup>

City of Alexandria Direct Testimony

The City presented the direct testimony of three witnesses: Heather Diez, Deputy Director of Development and Right of Way for the City's Department of Transportation & Environmental Services; Jeffrey Farner, Deputy Director of Planning and Zoning for the City; and Carl W. Eger, III, Energy Manager for the City.

In her direct testimony, Ms. Diez sponsored the City's letter to DEQ which addressed the environmental mitigation measures set forth in the DEQ Report on the Project.<sup>27</sup>

In addition, Ms. Diez stressed the importance of taking Route 1 traffic flows into account during construction of the Project, emphasizing the volume of traffic for daily commuters in Northern Virginia.<sup>28</sup>

In his direct testimony, Mr. Farner addressed the critical nature of the North Potomac Yard site to the Four Mile Run Restoration Master Plan and Design Guideline ("Four Mile Run Master Plan"), a part of the larger city-wide Master Plan.<sup>29</sup> Mr. Farner also spoke on the City's Coordinated Development District Zoning<sup>30</sup> and required approval for a SUP, which Dominion would need to apply for an extension by January 1, 2021, to complete the Project.<sup>31</sup>

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<sup>23</sup> Ex. 9, at 2.

<sup>24</sup> *Id.*

<sup>25</sup> *Id.*

<sup>26</sup> *Id.* at 3.

<sup>27</sup> Ex. 10, at 3.

<sup>28</sup> *Id.* at 7.

<sup>29</sup> Ex. 11, at 4.

<sup>30</sup> *Id.* at 5.

<sup>31</sup> *Id.* at 10-11.

Additionally, Mr. Farner spoke on the plan to establish the area as an environmentally and economically sustainable community<sup>32</sup> and the importance of the location of the Project in the North Potomac Yard development as the location of the successful bid to attract Amazon's HQ2.<sup>33</sup>

In his direct testimony, Mr. Eger addressed the City's interest in the Project and provided a summary history of the Project from the perspective of the City as well as an overview of benefits the City would see resulting from the Project.<sup>34</sup> These benefits include providing reliable power to the needs of those companies located in the area that support the Virginia economy, including the future Amazon HQ2.<sup>35</sup>

#### Commission Staff Direct Testimony

Staff presented the direct testimony of one witness, Neil Joshipura, Senior Utilities Engineer in the Division of Public Utility Regulation. Mr. Joshipura sponsored the Staff Report on the Company's Application.<sup>36</sup>

The Staff Report began with a general overview of the Project and the Company's existing facilities.<sup>37</sup>

The Staff Report addressed the need for the Project. The Company is required by an easement right-of-way agreement from the 1990s to underground the existing overhead Lines #248 and #2023. Due to the inability of the Glebe Substation to support the new underground terminations of the lines and property adjacent to the substation not being available to allow for expansion, the City issued a SUP to build the Potomac Yards Station as a terminal facility. This SUP was conditioned upon certain recommendations offered by the City Council Staff to address concerns regarding future planning and development in the area, as well as aesthetic concerns. The SUP had a 15-year expiration after which the Potomac Yards Station would need to be removed, but was later extended to January 1, 2021. Should the Potomac Yards Station be removed without upgrading the Glebe Substation, Lines #248 and #2023 would be lost, which would result in numerous projected NERC criteria violations.<sup>38</sup> Staff addressed the aging infrastructure at Glebe Substation in its confidential Report.<sup>39</sup> Based on Staff's review of the Application and an inspection of asset deterioration, Staff concluded the Company reasonably demonstrated the need for the Project to address the expiration of the SUP and the aging infrastructure of the Glebe Substation.

The Staff Report provided a detailed overview of the project including utilizing a high pressure fluid-filled ("HPFF") cable system; removing the entire Potomac Yards Station including a double circuit overhead backbone structure, three double circuit overhead structures, two single

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<sup>32</sup> *Id.* at 5.

<sup>33</sup> *Id.* at 7.

<sup>34</sup> Ex. 12, at 4-10.

<sup>35</sup> *Id.* at 9.

<sup>36</sup> Ex. 13, at 1-2.

<sup>37</sup> Ex. 13, Staff Report at 1-4.

<sup>38</sup> *Id.* Staff Report at 4-6.

<sup>39</sup> Ex. 13C, Staff Report at 6.

circuit overhead structures, and conductors; removing 555 feet of underground cable and piping and removing and relocating 1,000 feet of cable only; and installing new HPFF pipe infrastructure for 1,100 of the 2,100 feet of underground line.<sup>40</sup> The Project would take approximately 30 months to complete detailed engineering, materials procurement, permitting, and construction following Commission approval. The expected in-service date for the Project is May 2022. The estimated cost of the Project is \$122.8 million, including \$59.3 million for transmission related work and \$63.5 million for substation-related work.<sup>41</sup>

The Staff Report addressed the possible construction methods for the Potomac Yards Undergrounding part of the Project including open trenching, horizontal directional drilling (“HDD”), and microtunneling. The Company rejected open trenching because the City would not permit the Company to trench across U.S. Route 1 and the cofferdam across Four Mile Run required for open trenching might cause a risk of upstream flooding. Both HDD and microtunneling allow for trenchless construction across the area. HDD would require four drills, a storage area, and a pipe string layout area. HDD would also need to be placed further into the Potomac Yards Shopping Center and would impact 340 of the 844 (approximately 40%) of the parking spaces. Microtunneling would require two drills, jacking and receiving shafts, and a smaller construction area than HDD affecting 75 of the Potomac Yards Shopping Center parking spaces (approximately 9%). The launching shaft would be constructed close to U.S. Route 1. The estimated cost for microtunneling is \$50.5 million, while the estimated cost for HDD is \$34.4 million (a difference of \$16.1 million). Staff believes both HDD and microtunneling are viable options for the Project and do not oppose the Company’s proposal to use microtunneling due to the lesser disruptive impacts of construction upon the Potomac Yards Shopping Center. Staff believes the selection of construction method might require a weighing of the costs of the method against the impacts to the shopping center.<sup>42</sup>

The Project would require a new right-of-way for the launching pit for microtunneling. This right-of-way would be used for approximately 200 of the 1,000 feet of the route between the existing manhole #110 and new manhole #111. Approximately 880 feet of the 1,100 feet of the route between the new manhole #111 and Glebe Substation would also require a new right-of-way.<sup>43</sup>

The Staff Report also addressed the necessity of the Glebe GIS Conversion part of the Project. According to the Company, the adjacent property to the GIS Substation is fully utilized as a bus parking lot owned by WMATA which is not for sale. The Company states the GIS equipment is required to adequately accommodate the new termination of Lines #248 and #2023 within the existing substation footprint. According to the Company, it would take multiple steps to convert the Glebe Substation. The Glebe CIS Conversion would also require work to the existing underground transmission facilities including the installation of new protection equipment, relays, and fiber option control cables, as well as two cross-linked polyethylene cable feeds approximately 335 feet long to connect the existing 230-34.5 kV transformers to the new GIS equipment. Also required

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<sup>40</sup> Ex. 13, Staff Report at 8-9.

<sup>41</sup> *Id.* Staff Report at 17.

<sup>42</sup> *Id.* Staff Report at 9-14.

<sup>43</sup> *Id.* Staff Report at 14.

would be supplemental work including minor relay and drawing work at the Company's Arlington, Carlyle South, and North Alexandria substations.<sup>44</sup>

The Staff Report also discusses environmental, scenic, and historic impacts. The area surrounding the Project being highly developed and commercial, and the construction being underground, the Company represents any impacts to land cover would be minimal. It appears there would be no visual impact on National Historic Landmark-listed architectural resources.<sup>45</sup>

Staff expects the Project to provide economic benefits to the Commonwealth. The Project would allow continued operation of the electric transmission system that provides the backbone for economic activity in the Commonwealth. A significant impact on long-term job creation is not expected after the Project is completed.<sup>46</sup>

Staff confirmed the DEQ wetland impacts consultation and coordinated environmental review were completed.<sup>47</sup>

In its Report, Staff concluded the Company reasonably demonstrated the need to construct the Project. Staff believes the two constructible undergrounding methods considered by the Company for the Potomac Yards Undergrounding (microtunneling and HDD) are both viable options for the Project. Staff does not oppose the Company's selected method of microtunneling, and therefore, does not oppose the Company's request that the Commission issue the CPCN necessary for the Project.

#### Virginia Electric and Power Company Rebuttal Testimony

The Company presented the rebuttal testimony of four witnesses: Peter Nedwick, Michael L. Lamb, Thomas W. Reitz, Jr., and John A. Mulligan.

In his rebuttal testimony, Mr. Nedwick addressed comments in the Staff Report, as well as comments from City witness Eger. Included with Mr. Nedwick's testimony was Rebuttal Schedule 1. Mr. Nedwick noted Staff verified the need for the Project. Mr. Nedwick also communicated the Company's position the Glebe GIS Conversion would be necessary regardless of the existence of the SUP, due to aging infrastructure of the Glebe Substation. In addressing City witness Eger's testimony, Mr. Nedwick reiterated the Company's belief the driver of the Project's undergrounding is the expiring SUP, which requires the transmission facilities be relocated underground, and not electrical reliability. Mr. Nedwick concluded his rebuttal by sharing the Company's continued support for the Project, and noting both Staff and the City support the Project as well.<sup>48</sup>

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<sup>44</sup> *Id.* Staff Report at 15-16.

<sup>45</sup> *Id.* Staff Report at 18.

<sup>46</sup> *Id.*

<sup>47</sup> *Id.* Staff Report at 19.

<sup>48</sup> Ex. 15, at 1-5.

In his rebuttal testimony, Mr. Lamb addressed comments in the Staff Report. Specifically, Mr. Lamb reiterated the Company's position the Glebe GIS conversion would be necessary due to aging infrastructure within the next 2-3 years, even if the SUP did not expire.<sup>49</sup>

In his rebuttal testimony, Mr. Reitz responded to comments in the Staff Report. Included in Mr. Reitz's testimony were Rebuttal Schedules 1-5. Mr. Reitz explained the Company worked with the City in selecting microtunneling as the preferred construction method for the Project. Mr. Reitz emphasized the City's support for the choice of microtunneling. In response to the Staff Report's suggestion that both HDD and microtunneling would be viable options for the undergrounding Project, Mr. Reitz discussed certain challenges associated with HDD that are not present for microtunneling, including impacts to the Potomac Yards Shopping Center. Mr. Reitz also asserted the use of HDD would add a six-month delay to the Project for necessary redesign.<sup>50</sup>

In his rebuttal testimony, Mr. Mulligan confirmed the Company intends to comply with all state and local stormwater management ordinances and requirements. He explained the Company would submit a water quality impact assessment for any disturbance in the Resource Protection Area and would coordinate with the City and state and federal agencies as outlined in the DEQ Report. He also confirmed the Company would continue to share detailed plans regarding impacts to the Four Mile Run streambanks with the City and the County.<sup>51</sup>

Mr. Mulligan also responded to Mr. Farner's testimony regarding structure heights and provided clarification regarding the heights of certain structures.<sup>52</sup>

Finally, Mr. Mulligan addressed the recommendation in the DEQ Report by the Department of Conservation and Recreation's Division of Natural Heritage. The Company recommends changing the language relating to the resubmission of project information from "if the scope of the project changes and/or six months has passed before it is utilized" to "if the scope of the project *materially* changes and/or *twelve* months has passed before it is utilized."<sup>53</sup>

At the July 23, 2019, hearing, the Company filed a letter in response to comments submitted by the County by letter dated June 25, 2019. The Company's responses to the recommendations made in the County's letter are as follows:

- Fence Screening Requirement: The Company would work with the County in designing the proposed 15-foot high security fence to mitigate visual impacts to the Four Mile Run trail.
- Impacts to Bike Path: The Company would make a concerted effort to minimize complete trail shutdowns to those periods when trail users' safety could be compromised.
- Compliance with U.S. Army Four Mile Run Flood Control Project: The Company would coordinate with the County to ensure there is an adequate safety margin below

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<sup>49</sup> Ex. 16, at 2-3.

<sup>50</sup> Ex. 17, at 2-10.

<sup>51</sup> Ex. 18, at 2-4.

<sup>52</sup> *Id.* at 4-5.

<sup>53</sup> *Id.* at 5-7.

Four Mile Run. The Company would assist the review process for the Section 408 permit and provide any information needed to determine the Project would not adversely affect the civil works flood control project.

- Community Input on Fence Design: The Company would reach out to the community for input, but the fence must meet the Company's safety and security requirements for a level 3 secured substation facility.
- Community Outreach: The Company would perform outreach to the four Civic Associations mentioned and coordinate with the Department of Environmental Services as requested.
- Four Mile Run Project Impacts and Compliance with RPA Regulations: The Company agreed with and would follow the County's recommendations.
- Undergrounding of Overhead Transmission Lines: The Company agreed with and would follow the County's recommendations.
- Compliance with County Zoning Regulations: The Company would prepare and submit a fence height variance application package for the proposed 15-foot high security fence to the Arlington County Board of Zoning Appeals.
- Importance of Electrical Reliability Enhancements: The Company appreciated and acknowledged the County's statements in this regard.<sup>54</sup>

## **DISCUSSION**

### *Code of Virginia*

The statutory scheme governing the Company's Application is found in several chapters of Title 56 of the Code of Virginia. Va. Code § 56-265.2 A provides that "it shall be unlawful for any public utility to construct . . . 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."

Va. 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

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<sup>54</sup> Ex. 19, at 1-2.

not limited to furtherance of the economic and job creation objectives of the Commonwealth Energy Policy set forth in §§ 67-101 and 67-102, and (b) shall consider any improvements in service reliability that may result from the construction of such facility.

Va. Code § 56-46.1 B further provides:

As a condition to approval the Commission shall determine that the line is needed and that the corridor or route the line is to follow will reasonably minimize adverse impact on the scenic assets, historic districts 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 Va. Code § 56-46.1 D, the term “[e]nvironment” or “environmental” used in Va. 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 of Virginia also requires the Commission to consider existing right-of-way easements when siting transmission lines. Va. 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, Va. 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.”

### Need

The Company addressed the need for the Project in Section I.A of the Appendix.<sup>55</sup> The Project is needed for four reasons: (i) to comply with the expiration of an existing SUP issued by the City, (ii) to improve operational performance, (iii) to maintain critical energy infrastructure, and (iv) to maximize available land use to accommodate necessary transmission terminations.<sup>56</sup>

In 2018, PJM classified the Project as a baseline reliability project based on its operation performance criteria. The Project would allow the Company to comply with Condition #5 of the extension SUP by undergrounding an existing overhead portion of lines #248 and #2023. It would also allow the Company to maintain adequate and reliable service to its customers located in the City and Arlington County by reconfiguring Glebe Substation using GIS equipment, which would allow for lines #248 and #2023 to terminate underground within the existing substation footprint. The Project would allow the Company to maintain critical energy infrastructure needed to provide continued reliable electric service to facilities depended upon to provide crucial service to the public. The Project would also replace aging substation infrastructure that would otherwise require repair or replacement, mitigate existing operational constraints, and make required physical security

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<sup>55</sup> Ex. 2, Appendix at 1-7.

<sup>56</sup> *Id.* Appendix at 1.

upgrades to maintain the overall long-term reliability of the transmission system, in addition to improving the operational reliability of the distribution and transmission systems.<sup>57</sup> Further, the proposed substation arrangement would allow the Company to take breaker outages for planned and unplanned reasons without impacting the reliability of service to the Company's transmission facilities that are located in Glebe Substation.<sup>58</sup> I find the Company established the need for the Project.

### Existing Rights-of-Way

The Company addressed the use of existing right-of-way in Sections II.A.4,<sup>59</sup> II.A.6,<sup>60</sup> II.A.7,<sup>61</sup> and II.A.8 of the Appendix.<sup>62</sup> The majority of the existing overhead right-of-way from Potomac Yards Station to the Glebe Substation cannot adequately serve the needs for the Potomac Yards Undergrounding. For the 1,100 feet of the route between new manhole #111 and the Glebe Substation, 880 feet require a new 40-foot right-of-way. For the 1,000 feet between new manhole #111 and manhole #110, 200 feet will be constructed within new right-of-way used for the launching pit for microtunneling.<sup>63</sup>

For the Potomac Yards Undergrounding, the Company would require new easements for the majority of the route and relocation.<sup>64</sup> Clearing for the Project would be minimal. The majority of the route is under the Four Mile Run stream, or existing roadways, parking lots, sidewalks and paths that have previously been cleared. Upon completion of the Potomac Yards Undergrounding, the Company would restore the right-of-way.<sup>65</sup> I find the Project would make use of existing right-of-way to the maximum extent practicable and would need minimal additional right-of-way.

### Microtunneling v. Horizontal Directional Drilling

Both HDD and microtunneling allow for trenchless construction across the area. HDD would require four drills, a storage area, and a pipe string layout area. HDD would also need to be placed further into the Potomac Yards Shopping Center and would impact 353<sup>66</sup> of the 844 (approximately 42%) of the parking spaces. Microtunneling would require two drills, jacking and receiving shafts, and a smaller construction area than HDD affecting 75 of the Potomac Yards Shopping Center parking spaces (approximately 9%). The launching shaft would be constructed close to U.S. Route 1. The estimated cost for microtunneling is \$50.5 million, while the estimated cost for HDD is \$34.4 million (a difference of \$16.1 million).<sup>67</sup> The Company asserts the use of

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<sup>57</sup> *Id.* Appendix at 6.

<sup>58</sup> *Id.* at 6-7.

<sup>59</sup> *Id.* Appendix at 168.

<sup>60</sup> *Id.* Appendix at 174.

<sup>61</sup> *Id.* Appendix at 176.

<sup>62</sup> *Id.* Appendix at 177.

<sup>63</sup> *Id.* Appendix at 168.

<sup>64</sup> *Id.* Appendix at 174.

<sup>65</sup> *Id.* Appendix at 176.

<sup>66</sup> Ex. 17, at 8 (while the Company originally estimated only 340 spaces (approximately 40%) would be impacted in Company's Response to Staff Interrogatory No. 1-10, the Company later revised this estimate to 353 spaces in its rebuttal testimony).

<sup>67</sup> Ex. 13, Staff Report at 9-14.



HDD would add a six-month delay to the Project for necessary redesign.<sup>68</sup> I find the Company's proposal to construct the Project using microtunneling was reasonable. Microtunneling would impact the fewest number of parking spaces at the Potomac Yards Shopping Center. The additional parking spaces lost from HDD would have a significant impact on the stores located on the outparcels along Route 1, as they would be almost surrounded by construction activity. Finally, there is a greater likelihood of success using microtunneling and the construction time could be shortened by six months.

### Economic Development

Staff believes the Project would provide economic benefits to the Commonwealth by allowing continued operation of the electric transmission system that provides the backbone for economic activity in the Commonwealth. Staff further believes the Project would not have a significant impact on long-term job creation after the Project is completed.<sup>69</sup> The recent announcement of the location of the Virginia Tech Innovation Campus and Amazon HQ2 in the area served by the Project is evidence of the impact on job creation. I find the Project would have a positive impact on economic development.

### Scenic Assets and Historic Districts

The Company addressed the impact of the Project on scenic assets and historic districts in Sections III.A through III.L of the Appendix.<sup>70</sup> The area surrounding the Project being highly developed and commercial, and the construction being underground, the Company represents any impacts to land cover would be minimal. It appears there would be no visual impact on National Historic Landmark-listed architectural resources.<sup>71</sup> I find the Project would have no material adverse impact on scenic assets and historic districts.

### Environmental Impact

Pursuant to Va. 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 the Commission 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 May 1, 2019.<sup>72</sup> The following agencies participated in the review: DEQ, Department of Conservation and Recreation ("DCR"), Department of Game and Inland Fisheries ("DGIF"), Virginia Department of

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<sup>68</sup> Ex. 17, at 2-10.

<sup>69</sup> Ex. 13, Staff Report at 18.

<sup>70</sup> Ex. 2, Appendix at 205-227.

<sup>71</sup> Ex. 13, Staff Report at 18.

<sup>72</sup> Ex. 14.

Health (“VDH”), Department of Historic Resources (“DHR”), Virginia Marine Resources Commission (“VMRC”), Virginia Department of Aviation (“DOAV”), Virginia Department of Transportation (“VDOT”), Virginia Outdoors Foundation (“VOF”), the City, and the County.<sup>73</sup>

The coordinated agency review focused on the requirement to obtain certain environmental permits to construct the Project, the potential environmental impacts of constructing and operating the Project, and recommendations for minimizing the Project’s environmental impact. The DEQ Report indicated there are no adverse environmental impacts that would prevent construction of the Project along the proposed route. However, the DEQ Report offered 12 general recommendations for Commission consideration, which are in addition to any requirements of federal, state, or local law.<sup>74</sup>

Those recommendations included: (i) ensure the on-site wetland delineation is verified by the Corps and follow DEQ’s recommendations to avoid and minimize impacts to wetlands and streams; (ii) follow VMRC’s recommendation to coordinate instream activities with DGIF and adhere to any time-of-year restriction; (iii) follow DEQ’s recommendations regarding erosion and sediment control and stormwater management; (iv) follow DEQ’s recommendations regarding air quality protections; (v) reduce solid waste at the source, reuse it and recycle it to the maximum extent practicable; (vi) coordinate with DCR’s Division of Natural Heritage (“DNH”) for updates to the Biotics Data System database if six months have passed before the project is implemented or if the scope of work changes, and coordinate with DCR DNH regarding its recommendation to minimize adverse impacts to the aquatic environment; (vii) coordinate with DGIF regarding its recommendations to protect terrestrial and aquatic wildlife; (viii) coordinate with DHR regarding the recommended archaeological and architectural surveys and submit results of any surveys to DHR; (ix) coordinate with the VDOT Northern Virginia District Office to obtain the as-built bridge plans for the Route 1 bridge; (x) coordinate with VOF if the project area changes or the project does not start for 24 months; (xi) follow the principles and practices of pollution prevention to the maximum extent practicable; and (xii) limit use of pesticides and herbicides to the extent practicable.<sup>75</sup>

The Company agreed to the recommendations in the DEQ Report, except as noted below. The Company requested the language of the DCR recommendation be modified. DCR recommended that the Company “[c]ontact the DCR DNH to re-submit project information and a map for an update on this natural heritage information if the scope of the project changes and/or six months has passed before it is utilized.”<sup>76</sup> The Company proposed the following language as a substitute: “[c]ontact the DCR DNH to re-submit project information and a map for an update on this natural heritage information if the scope of the project *materially* changes and/or *twelve* months has passed before it is utilized.”<sup>77</sup> The Company believes the insertion of “material” appropriately gives effect to DEQ’s intent to capture significant changes in the scope of the Project, consistent

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<sup>73</sup> *Id.* at 1.

<sup>74</sup> *Id.* at 6-7.

<sup>75</sup> *Id.*

<sup>76</sup> *Id.* at 18.

<sup>77</sup> Ex. 18, at 5.

with DEQ's current review of the impacts of the project. The Company requested this change in other recent cases, and the change was approved by the Commission.<sup>78</sup>

There are two open issues between City and the Company. First, the City stated it would require the Company to submit a water quality impact assessment for any disturbance in the Resource Protection Area ("RPA").<sup>79</sup> The Company clarified that it falls under DEQ regulations with respect to RPA lands, not local regulations.<sup>80</sup> Nevertheless, the Company stated it would coordinate with the City to develop a reasonable assessment that would address the City's concerns and ensure compliance with the Chesapeake Bay Act.<sup>81</sup> Second, the City stated it would require the Company to coordinate with the City regarding any permitting needed from VRMC or the Corps on City property.<sup>82</sup> The Company plans to submit a Joint Permit Application to VMRC to obtain authorization from the VRMC and Corps for the Project, and would coordinate with the City through the permit process.<sup>83</sup>

Based on the DEQ Report, I find there are no adverse environmental impacts that would prevent the construction of the Project. I further find the Company's proposed modifications to the language of the DCR recommendation are reasonable. I find the Company's responses to the concerns raised by the City regarding environmental impacts are reasonable. I further find the recommendations in the DEQ Report, including the DCR recommendation that is proposed to be modified, are "desirable or necessary to minimize adverse environmental impact" associated with the Project.<sup>84</sup>

### Public Health and Safety

There is no evidence in the record that the Project represents a hazard to public health or safety. The Company's studies of the health aspects of EMF levels are found in Sections IV.A,<sup>85</sup> IV.B,<sup>86</sup> and IV.C<sup>87</sup> of the Appendix. Based on those studies, the Company believes that no significant health effects will result from the construction and operation of the Project. I find the Project does not represent a hazard to public health or safety.

### Other Alternatives

No feasible alternatives were submitted to PJM specifically limited to the Project, including the Potomac Yards Undergrounding and Glebe GIS Conversion, because a key driver for the Project is the undergrounding requirement of the City's SUP.<sup>88</sup>

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<sup>78</sup> *Id.* at 6.

<sup>79</sup> Ex. 14, at 26.

<sup>80</sup> Ex. 18, at 2-3.

<sup>81</sup> *Id.* at 3.

<sup>82</sup> Ex. 14, at 26.

<sup>83</sup> Ex. 18, at 3.

<sup>84</sup> Va. Code § 56-46.1 A.

<sup>85</sup> Ex. 2, Appendix at 228.

<sup>86</sup> *Id.* Appendix at 230.

<sup>87</sup> *Id.* Appendix at 232.

<sup>88</sup> *Id.* Appendix at 152.

Since the SUP was issued by the City in 1996, the Company has intended to remove the Potomac Yards Station and underground the related overhead portions of Lines #248 and #2023. Thus, the Glebe GIS Conversion and Potomac Yards Conversion were components of an earlier Company project proposal (not filed with the Commission), which included a new 230 kV underground line between the Glebe Substation and Pepco's Potomac River Substation ("Glebe-Potomac River Project"). The Glebe-Potomac River Project was initially reviewed as a potential solution to identified violations of NERC Reliability Standards and was approved by the PJM Board of Directors at its February 2014 meeting. Since then, changes in the PJM load forecasts eliminated the NERC violations driving the need for the Glebe-Potomac River Project.<sup>89</sup> While the PJM load forecast does not directly incorporate demand response, it incorporates variables derived from Itron that reflect energy efficiency by modeling the stock of end-use equipment and its usages. Further, because PJM's load forecast considers the historical non-coincident peak ("NCP") for each load serving entity ("LSE") within PJM, it reflects the actual load reductions achieved by DSM programs to the extent an LSE has used DSM to reduce its NCPs.<sup>90</sup> Nevertheless, the Company is required by the SUP to remove the Potomac Yards Station and underground portions of Lines #248 and #2023.<sup>91</sup>

PJM and the Company have identified a need for the Project based on the undergrounding of Lines #248 and #2023 as required by the SUP, and the need to convert Glebe Substation to GIS to maintain critical energy infrastructure, to provide continued reliable electric service to facilities depended upon to provide critical services to the public, and to terminate the new underground lines.<sup>92</sup> I find there are no feasible alternatives to the Project.

### Staff Report

Staff does not dispute the Project is needed to address the expiration of a SUP, and believes the Project achieves that objective. Staff also confirms the need to address the aging infrastructure at Glebe Substation.<sup>93</sup> The Company and Staff are in agreement that the Project addresses these issues.<sup>94</sup>

Additionally, Staff believes the two constructible undergrounding methods considered by the Company for the Potomac Yards Undergrounding – microtunneling and HDD – are both viable options for the project. Staff does not oppose the Company's selection of microtunneling as the method of construction, but believes the Commission's selection of the specific construction method may require weighing the costs of the method against the disruptive impacts of construction on the Potomac Yards Shopping Center.<sup>95</sup> The Company opposed the description of HDD as a viable method and emphasized challenges present for HDD that are not present for microtunneling, including impacts to the Potomac Yards Shopping Center and an added six-month delay to the Project for necessary redesign should HDD be selected.<sup>96</sup>

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<sup>89</sup> *Id.* Appendix at 152, n.3.

<sup>90</sup> *Id.* Appendix at 152, n.4.

<sup>91</sup> *Id.* Appendix at 152, n.3.

<sup>92</sup> *Id.*

<sup>93</sup> Ex. 13, Staff Report at 7.

<sup>94</sup> Ex. 2, Application at 2.

<sup>95</sup> Ex. 13, Staff Report 13-14.

<sup>96</sup> Ex. 17, at 7-9.

## 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;
- (2) The Project would make use of existing right-of-way to the maximum extent practicable and would need minimal additional right-of-way;
- (3) The Company's proposal to construct the Project using microtunneling is reasonable;
- (4) The Project would have a positive impact on economic development;
- (5) The Project would have no material adverse impact on scenic assets and historic districts;
- (6) There are no adverse environmental impacts that would prevent the construction of the Project;
- (7) The Company's proposed modification to the language of the DCR recommendation is reasonable;
- (8) The Company's responses to the concerns raised by the City regarding environmental impacts are reasonable;
- (9) The recommendations in the DEQ Report, including the DCR recommendation that is proposed to be modified, are "desirable or necessary to minimize adverse environmental impact" associated with the Project;
- (10) The Project does not represent a hazard to public health or safety; and
- (11) There are no feasible alternatives to the Project.


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

- (1) **ADOPTS** the findings and recommendations contained in this Report;
- (2) **ISSUES** a certificate of public convenience and necessity to the Company to construct and operate the Project; and
- (3) **PASSES** the papers herein to the file for ended causes.

**COMMENTS**

The parties are advised that, pursuant to Rule 5 VAC 5-20-120 C of the Commission's Rules of Practice and Procedure and § 12.1-31 of the Code, any comments to this Report must be filed within seven (7) calendar days from the date hereof. 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 mailed or delivered to all counsel of record and any such party not represented by counsel.

Respectfully submitted,

  
Michael D. Thomas  
Michael D. Thomas  
Senior Hearing Examiner

The Clerk of the Commission is requested to mail 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.