

COMMONWEALTH OF VIRGINIA
STATE CORPORATION COMMISSION

160740041

APPLICATION OF

VIRGINIA ELECTRIC AND POWER COMPANY

CASE NO. PUE-2016-00021

For approval and certification of
electric transmission facilities:
Line #65 rebuild across the
Rappahannock River

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HEARING EXAMINER'S RULING

July 22, 2016

On February 29, 2016, Virginia Electric and Power Company ("Dominion Virginia Power" or "Company") filed with the State Corporation Commission ("Commission") an application for a certificate of public convenience and necessity ("Certificate") to construct and operate an electric transmission line in the counties of Lancaster and Middlesex, Virginia, across the Rappahannock River, pursuant to § 56-46.1 of the Code of Virginia ("Code") and the Utility Facilities Act¹ ("Application"). Specifically, the Company proposes to rebuild approximately 2.2 miles of its existing 115 kilovolt ("kV") transmission line, Harmony Village-Northern Neck Line #65, including an approximately 1.9-mile crossing of the Rappahannock River at the Robert O. Norris Bridge ("Norris Bridge").

On March 18, 2016, the Commission entered its Order for Notice and Hearing in which, among other things, the Commission scheduled public hearings to be held at Lancaster Middle School in Kilmarnock, Virginia, on July 6, 2016; scheduled a public hearing in Richmond, Virginia, to begin on September 20, 2016; and appointed a Hearing Examiner to conduct all further proceedings in this matter and to file a final report.

On April 21, 2016, the County of Lancaster, Virginia ("Lancaster County"), filed its Notice of Participation. On May 18, 2016, William C. Barnhardt ("Barnhardt") filed his Notice of Participation. On May 27, 2016, Old Dominion Electric Cooperative ("ODEC") filed its Notice of Participation. On June 3, 2016, the Save the Rappahannock Coalition, Inc. ("Save the Rappahannock"), filed its Notice of Participation.

On June 22, 2016, Barnhardt filed his Motion to Require Applicant to Supplement Application with Additional Alternatives ("Motion"). Specifically, Barnhardt asks that Dominion Virginia Power be directed to supplement its Application to address the following three alternatives: (i) installing a set of insulated transmission lines on the Norris Bridge ("Barnhardt Option 1"); (ii) installing insulated transmission lines in a shallow trench across the river in conjunction with horizontally drilled pathways from the north and south banks traversing shallow depths adjacent to the banks ("Barnhardt Option 2"); and (iii) laying insulated cables on

¹ Section 56-265.1 *et seq.* of the Code.

the river bottom itself, in conjunction with horizontally drilled pathways from the north and south banks traversing shallow depths adjacent to the banks (“Barnhardt Option 3”). A Hearing Examiner’s Ruling directed the parties and Staff to file responses to the Motion on or before July 8, 2016, and Barnhardt was directed to file his reply on or before July 15, 2016.

On July 8, 2016, responses to the Motion were filed by Dominion Virginia Power, Lancaster County, Save the Rappahannock, and Staff.

Dominion Virginia Power maintained that it has considered and rejected Barnhardt Option 1 and that Barnhardt Option 2 and Barnhardt Option 3 would be inconsistent with prudent transmission construction and operational practices. The Company asserted that Barnhardt Option 1 would require installing seven cables on the Norris Bridge in ultraviolet light-resistant fiberglass conduit and require the construction of transition stations at each end of the bridge.² Dominion Virginia Power maintained that it rejected Barnhardt Option 1 because: (i) it would fail to address the compromised reliability and operational issues caused by the line’s attachment to the bridge; (ii) it would be imprudent to make a significant investment in facilities attached to the Norris Bridge, which has an uncertain future; and (iii) the Virginia Department of Transportation (“VDOT”) has advised that it is unlikely to approve additional weight or a reconfiguration of the attachments on the Norris Bridge.³

In regard to Barnhardt Option 2, Dominion Virginia Power acknowledged that it would be technically feasible, albeit complex.⁴ Nonetheless, the Company contended that “laying cables on the river bottom or in shallow trenches would be inconsistent with prudent transmission construction and operational practices, as there are instances in the industry of anchor drags that have been known to damage submarine cables and pipelines installed in that manner.”⁵ In addition, the Company asserted that the construction associated with Barnhardt Option 2 would have significant environmental impacts, including greater negative impacts on residences on both sides of the river, fish, and aquatic life. For example, Dominion Virginia Power advised that Barnhardt Option 2 would require eight separate drills on each side of the river as opposed to three drills on each side of the river for the Company’s proposed Underground Option.⁶

The Company’s assessment of Barnhardt Option 3 is similar to its assessment of Barnhardt Option 2. Barnhardt Option 3 is possible, albeit complex, but would involve the laying of cables on the river bottom or in shallow trenches. Dominion Virginia Power maintained that Barnhardt Option 3 “would be inconsistent with prudent transmission construction practices, as it would not provide adequate physical protection for the cables.”⁷

² Company Response at 6-7.

³ *Id.* at 8-9.

⁴ *Id.* at 12.

⁵ *Id.*

⁶ *Id.* at 14.

⁷ *Id.*

Lancaster County supported the Motion and argued that Barnhardt Option 1, using insulated lines and housed in conduits or trays may be acceptable to VDOT and “would almost certainly be less expensive than [Dominion Virginia Power’s] Proposed Route.”⁸ Lancaster County maintained that “if provided with sufficient engineering data, VDOT is prepared to undertake its own evaluation of this alternative and may issue a report on its findings and conclusions for the Commission’s consideration.”⁹ Lancaster County supported this statement with the Affidavit of Michael A. Matthews, P.E., which includes the minutes of his recent meeting with VDOT.¹⁰

As for the trenching of cables or Barnhardt Option 2, Lancaster County pointed out that such methods have been used for other projects inside and outside of the Commonwealth, such as for a crossing of the Elizabeth River in Hampton Roads.¹¹ Lancaster County also contended that this alternative is likely less expensive than the alternative preferred by the Company.¹²

In regard to laying cables on the river bottom or Barnhardt Option 3, Lancaster County disagreed with the problems outlined by Dominion Virginia Power in its discovery responses.¹³ Lancaster County provided the Affidavit of W. Bruce Sanders and asserted that the likelihood of damage from vessel anchorage is remote and that there is no river current in the vicinity of the Norris Bridge.¹⁴ Lancaster County also supported this alternative because it was less expensive than the Company’s Proposed Route.

Save the Rappahannock supported the Motion and advised that it “supports any feasible alternative crossing that does not place towers or fenders in the Rappahannock River.”¹⁵ Save the Rappahannock contended that granting the Motion is in the public interest. Finally, Save the Rappahannock asked that Dominion Virginia Power include a discussion of comparative security risks to infrastructure for each alternative crossing method.¹⁶

Staff took no position on the Motion, but maintained that the Commission has the authority to consider reasonable alternatives.¹⁷ Staff also advised that it is available to provide assistance with any request for further review from the Department of Environmental Quality (“DEQ”) or other government agencies.¹⁸

⁸ Lancaster County Response at 5.

⁹ *Id.*

¹⁰ *Id.* at Attached Exhibit A.

¹¹ *Id.* at 6. Lancaster County reversed the order of Barnhardt’s proposed alternatives and referred to the trenching of cables as the third alternative instead of Barnhardt Option 2.

¹² *Id.*

¹³ *Id.* at 5. Lancaster County reversed the order of Barnhardt’s proposed alternatives and referred to the laying of cables on the river bottom as the second alternative instead of Barnhardt Option 3.

¹⁴ *Id.* at Attached Exhibit B.

¹⁵ Save the Rappahannock Response at 1.

¹⁶ *Id.* at 2.

¹⁷ Staff Response at 2.

¹⁸ *Id.*

On July 15, 2016, Barnhardt filed his reply. Barnhardt stressed that the issue presented by the Motion is not whether any of his proposed alternatives should be adopted, but rather whether the proposed alternatives are feasible and should be studied in detail. Barnhardt maintained that “[r]eplacing the existing cables attached to the [Norris Bridge] with a set of insulated cables installed in cooperation with VDOT is a viable alternative worthy of study.”¹⁹ Barnhardt pointed to the Affidavit of Michael Matthews as demonstrating the willingness of VDOT to “work for a rational, feasible solution that would not be subject to planned outages and would almost certainly be far less costly than Dominion’s towers proposal.”²⁰

In regard to Barnhardt Option 2, Barnhardt pointed to Dominion Virginia Power’s assertion that the trenching alternative failed to provide adequate physical protection for the cables and avowed that the Company employed such a design in a line crossing of the Elizabeth River.²¹ Similarly, Barnhardt argued that the Company failed to support assertions concerning reliability and failed to consider other operating trenching projects.²²

Concerning Barnhardt Option 3, Barnhardt criticized Dominion Virginia Power for not being familiar with submarine cables.²³ Barnhardt emphasized the Affidavit of W. Bruce Sanders concerning remote risk to such cables.²⁴ Barnhardt also advised that “prominent warning signs would alert sailors to the hazard.”²⁵ In addition, Barnhardt stated that “the location of submerged cables would be prominently noted on nautical charts published by the U.S. National Oceanic and Atmospheric Administration.”²⁶

On July 18, 2016, Lancaster County filed its Motion to Revise Procedural Dates (“Motion to Revise Dates”). On July 21, 2016, Save the Rappahannock and Barnhardt filed responses in support of the Motion to Revise Dates.

Based on the pleadings, I find that further study of Barnhardt Option 1 and Barnhardt Option 2 is warranted. I agree with Barnhardt that these alternatives appear to be feasible and that further study will ensure a complete record in this proceeding. Both of these proposed alternatives represent configurations that have been used by Dominion Virginia Power in other situations. On the other hand, Barnhardt Option 3 is not an approach used by the Company. It is somewhat similar to Barnhardt Option 2, does not appear to offer any significant benefits, but would come with prominent warning signs and nautical chart notations. Nonetheless, while based on the pleadings at this point in the case, I do not find that further study of Barnhardt Option 3 by Dominion Virginia Power is required at this time, the respondents are not otherwise prohibited from further developing and presenting this alternative.

¹⁹ Barnhardt Reply at 4.

²⁰ *Id.* at 4-5.

²¹ *Id.* at 6.

²² *Id.* at 6-7.

²³ *Id.* at 7-8.

²⁴ *Id.* at 8.

²⁵ *Id.*

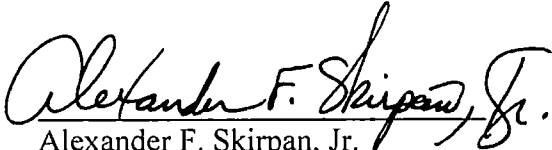
²⁶ *Id.*

In addition, the further study of Barnhardt Option 1 and Barnhardt Option 2 necessitates an adjustment of the procedural schedule in this proceeding. A prehearing conference will be scheduled by a separate ruling to determine a new procedural schedule. Therefore, the current procedural schedule is hereby continued pending further ruling or order. Accordingly,

IT IS DIRECTED THAT:

(1) Dominion Virginia Power shall conduct further study of cost, operational impact, and environmental impacts of: (i) installing a set of insulated transmission lines on the Norris Bridge; and (ii) installing insulated transmission lines in a shallow trench across the river in conjunction with horizontally drilled pathways from the north and south banks traversing shallow depths adjacent to the banks; and

(2) The current procedural schedule is hereby continued pending further ruling or order.


Alexander F. Skirpan, Jr.
Senior Hearing Examiner

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