SRRTEP Committee Southern
Dominion Supplemental Projects

January 15, 2026

Needs

Dominion Transmission Zone: Supplemental Equipment Material Condition, Performance and Risk

Need Number: DOM-2025-0074

Process Stage: Need Meeting 1/6/2026

Project Driver: Equipment Material Condition, Performance and Risk

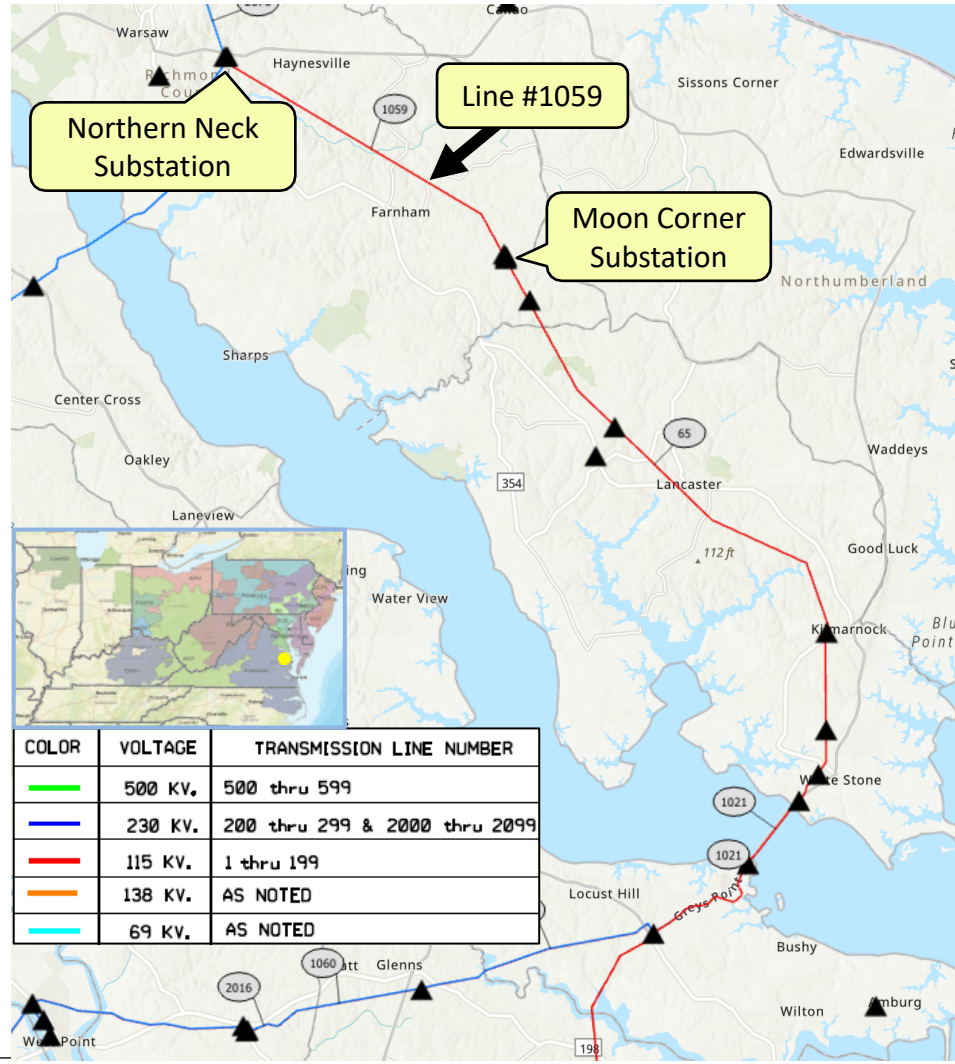
Specific Assumption References:

See details on Equipment Material Condition, Performance and Risk in Dominion's Planning Assumptions presented in December 2025.

Problem Statement:

Dominion Energy has identified a need to replace approximately 10 miles of 115kV Line #1059 (Northern Neck – Moon Corner) to new 115kV standards based on the Company's End of Life criteria.

- Line #1059 was constructed on primarily wood H-frame structures in 1962.
- A field-condition assessment indicated wood pole rotting and decaying in addition to ground line deterioration in numerous locations. Approximately 21% has been replaced due to woodpecker damage, rotting, and other structural deficiencies.
- Industry guidelines indicate equipment life for wood structures is 35-55 years, conductor and connectors 40-60 years, and porcelain insulators 50 years.
- If not rebuilt, Line #65 (Rappahannock – Moon Corner) becomes radial and would have a MW-mile value of 1575, which is above the 700 MW-mile threshold per DOM ET Planning Criteria. Additionally, the results of Generation Deliverability N-1 contingency analysis indicate that thermal violations would occur if Line #1059 is not rebuilt.



Solutions

Dominion Transmission Zone: Supplemental Operational Flexibility and Efficiency

Need Number: DOM-2022-0061 (Update)

Process Stage: Solution Meeting 01/15/2026

Previously Presented: Submission of Supplemental Project for Inclusion in the Local Plan – 02/21/2024

Project Driver: Operational Flexibility and Efficiency

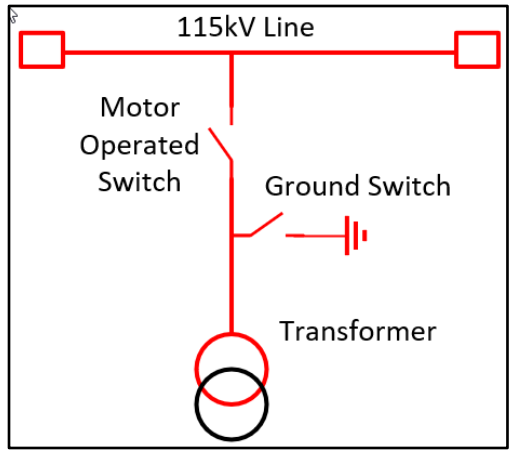
Specific Assumption References:
See details on Operational Flexibility and Efficiency in Dominion's Planning Assumptions presented in December 2021.

Problem Statement:

Dominion has identified ~~5~~ 4 substations that have legacy protection schemes on the 115kV high side of distribution transformers. These protection schemes utilize a ground switch and a motor operated switch on the high side of each transformer. For a fault in the transformer protection zone:

- ❑ The ground switch closes resulting in a bolted fault on the 115kV line
- ❑ This causes the transmission line breakers to open at the substation terminal ends
- ❑ The transformer motor operated high side switch opens isolating the transformer from the 115kV line and the terminal end breakers reclose to re-energize the 115kV line

These schemes are no longer standard protection due to the stress on the transmission equipment from the fault applied by the ground switch and the operation of the 115kV line interrupting service to all customers served by the line.



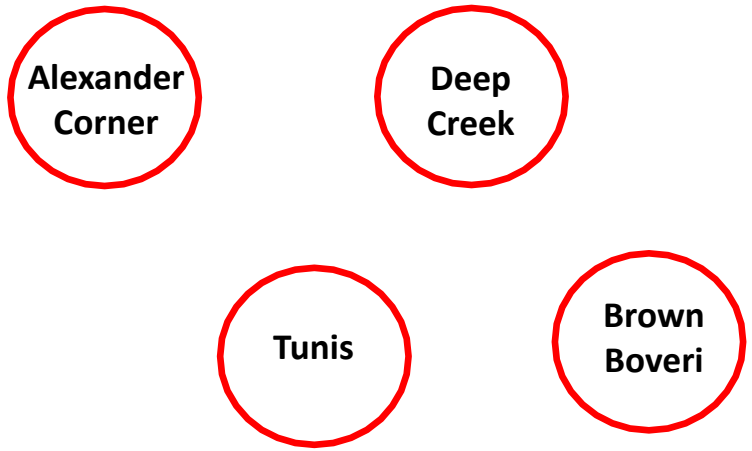
Substation	Tx #
~~Quantico~~	~~1 & 2~~
~~Princess Anne~~	~~1~~
Deep Creek	1 & 2
~~Creswell~~	~~2~~
Alexander Corner	1
Tunis	2
Brown Boveri	1

Dominion Transmission Zone: Supplemental Operational Flexibility and Efficiency

Need Number: DOM-2022-0061 (Update)
Process Stage: Solution Meeting 01/15/2026

Proposed Solution:
Remove the ground switches and install circuit switchers at ~~5~~ 4 substations:

- ~~Quantico Tx# 1 & 2~~
- ❑ Deep Creek Tx# 1 & 2
- ❑ Alexander Corner Tx# 1
- ❑ Tunis Tx# 2
- ❑ Brown Boveri Tx# 1



Estimated Project Costs: ~~$ 2.5M~~ $1.86M

Alternatives Considered: No other alternatives were considered. The protection schemes at these locations are being upgraded to Dominion's current substation standard.

Projected In-Service Date: ~~4/30/2024~~ 12/31/2026
Project Status: Engineering
Model: 2027 RTEP

Questions?

Appendix

High level M-3 Meeting Schedule

Assumptions

Activity	Timing
Posting of TO Assumptions Meeting information	20 days before Assumptions Meeting
Stakeholder comments	10 days after Assumptions Meeting

Needs

Activity	Timing
TOs and Stakeholders Post Needs Meeting slides	10 days before Needs Meeting
Stakeholder comments	10 days after Needs Meeting

Solutions

Activity	Timing
TOs and Stakeholders Post Solutions Meeting slides	10 days before Solutions Meeting
Stakeholder comments	10 days after Solutions Meeting

Submission of Supplemental Projects & Local Plan

Activity	Timing
Do No Harm (DNH) analysis for selected solution	Prior to posting selected solution
Post selected solution(s)	Following completion of DNH analysis
Stakeholder comments	10 days prior to Local Plan Submission for integration into RTEP
Local Plan submitted to PJM for integration into RTEP	Following review and consideration of comments received after posting of selected solutions

Revision History

01/05/2026 – V1 – Original version posted to pjm.com.