

SRRTEP Committee Southern Dominion Supplemental Projects

October 16, 2025

Needs

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

Need Number: DOM-2025-0058

Process Stage: Need Meeting 10/16/2025

Project Driver: Equipment Material Condition, Performance Risk

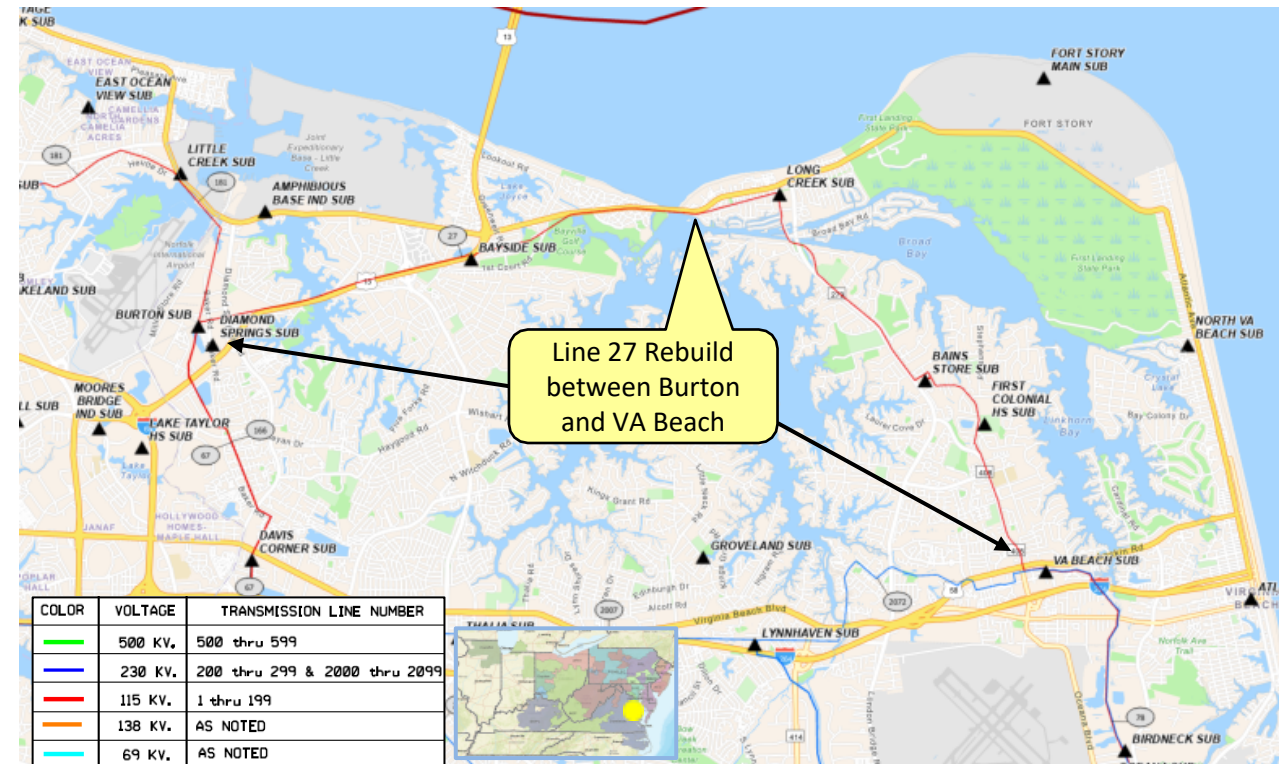
Specific Assumption References:

See details on Equipment Material Condition, Performance and Risk in Dominion's Planning Assumptions presented in December 2024.

Problem Statement:

Dominion Energy has identified a need to replace approximately 12.7 miles of 115kV Line #27 (Burton to VA Beach) to new 115kV standard based on the Company's End of Life criteria.

- Line #27 provides the only transmission supply to Bayside, Long Creek and Bains Store substations.
- Permanent MW load loss for removal of this line is estimated to be 116.0 MW in the 2025 RTEP (for 2030) Summer.
- Line #27 is primarily single-circuit 740.8 AAAC conductor with davit arms and porcelain insulators. It was constructed on a combination of wood, concrete and steel structures dating back to 1972, with many in need of replacement due to significant deterioration.
- Industry guidelines indicate equipment life for steel structures is 40-60 years, wood structures is 35-55 years, conductor and connectors are 40-60 years, and porcelain insulators are 50 years. Furthermore, this area is subjected to salt contamination which can accelerate degradation of transmission equipment.



Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2025-0075

Process Stage: Need Meeting 10/16/2025

Project Driver: Customer Service

Specific Assumption References:

Customer load request will be evaluated per Dominion's Facility Interconnection Requirements Document and Dominion's Transmission Planning Criteria.

Problem Statement:

NAVFAC is upgrading their facility at Norfolk Naval Shipyard in Portsmouth County, VA. The total load is estimated to increase to 150 MVA.

DEV Distribution has submitted a delivery point request to upgrade currently installed TX#1 and TX#2 (75 MVA rating each) and add TX#3 at Gosport Ind. Substation to the 84MVA current standard. The two existing TXs are not sufficient to provide the required redundancy to serve the entire load.

Requested in-service date is 07/31/2029.

| Initial In-Service Load (TX#1+TX#2) | 10-year Projected Load |
|-------------------------------------|------------------------|
| Summer: 35.4 MW | Summer: 144.5 MW |
| Winter: 32.6 MW | Winter: 138.5 MW |



Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2025-0080
Process Stage: Need Meeting 10/16/2025
Project Driver: Customer Service

Specific Assumption References:
Customer load request will be evaluated per Dominion’s Facility Interconnection Requirements Document and Dominion’s Transmission Planning Criteria.

Problem Statement:
LS GreenLink USA is building a \$618M subsea cable manufacturing facility at the Deep Water Terminal Site in Chesapeake, VA, and requests 12 MW of load to be delivered in Q3 2027 with an ultimate buildout requiring 18 MW in 2033.

DEV Distribution has submitted a delivery point request to upgrade currently installed TX#2 (with 33.6 MVA rating) at Cradock Substation to 56 MVA. The two existing TXs are not sufficient to serve the entire load.

Requested in-service date is 04/30/2027.

| Initial In-Service Load (TX#1+TX#2) | 10-year Projected Load |
|-------------------------------------|------------------------|
| Summer: 50.6 MW | Summer: 71.4 MW |
| Winter: 50.5 MW | Winter: 65.8 MW |



Dominion Transmission Zone: Supplemental Operational Flexibility and Efficiency

Need Number: DOM-2025-0081

Process Stage: Need Meeting 10/16/2025

Project Driver: Operational Flexibility and Efficiency

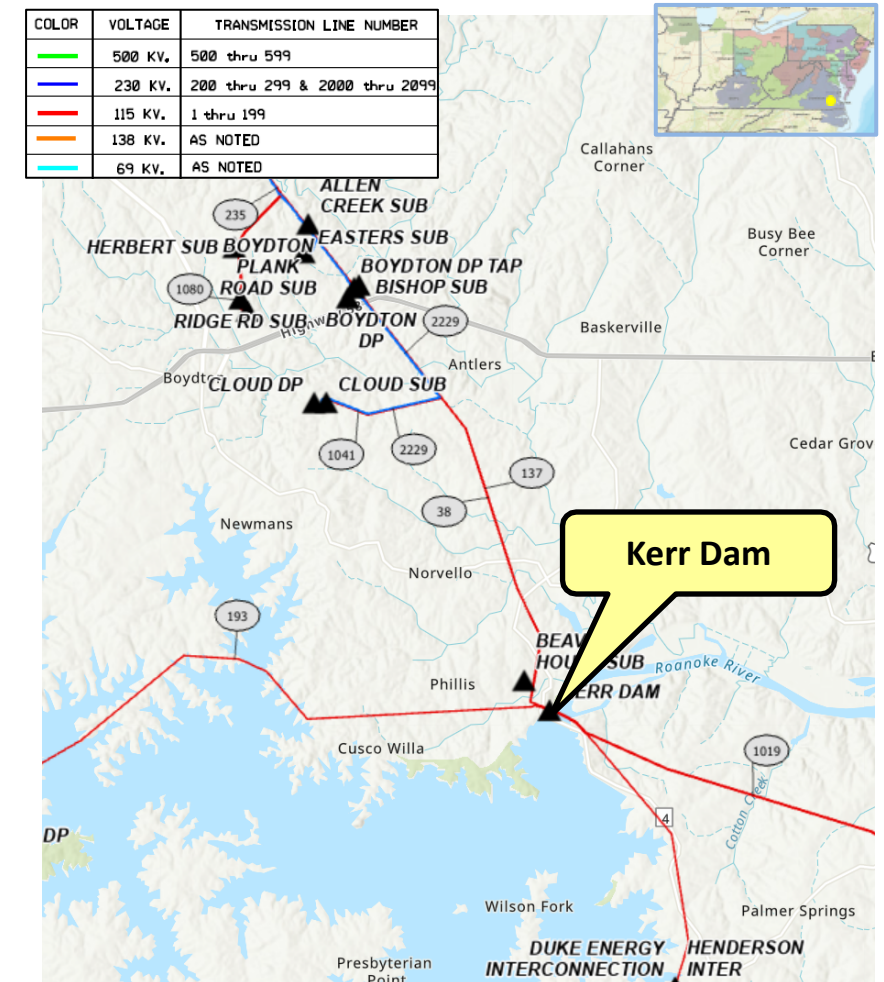
Specific Assumption References:

See details on Operational Flexibility and Efficiency in Dominion's Transmission Planning Assumptions presented in December 2024.

Problem Statement:

The Kerr Dam 115kV switching station is owned and operated by the United States Army Corps of Engineers (Corps). Currently, Dominion Energy (DE) owns six (6) 115kV network transmission lines that terminate in Corps' Kerr Dam switching station. Project Execution and System Protection has encountered numerous issues getting access and performing work on Transmission assets. Also, Kerr Dam is the only non-DE owned switching station with network power flowing through the station. Therefore, Kerr Dam is a part of the Bulk Electric System and DE is dependent on the Corps to provide transmission line terminal ratings.

- There is a lack of a formal interconnection agreement between Dominion and Corps, violating Section 4.10 of PJM's TOA
- In the past, the Corps has performed switching operations without notifying Dominion's SOC. There is a lack of communication protocols and operational coordination.
- Dominion risks non-compliance with NERC and FERC reliability standards
- Dominion's ability to coordinate maintenance, switching and emergency response is hindered by the lack of a formal agreement. This affects system reliability and safety.



Solutions

Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2025-0034

Process Stage: Solution Meeting 10/16/2025

Previously presented: Need Meeting 09/18/2025

Project Driver: Customer Service

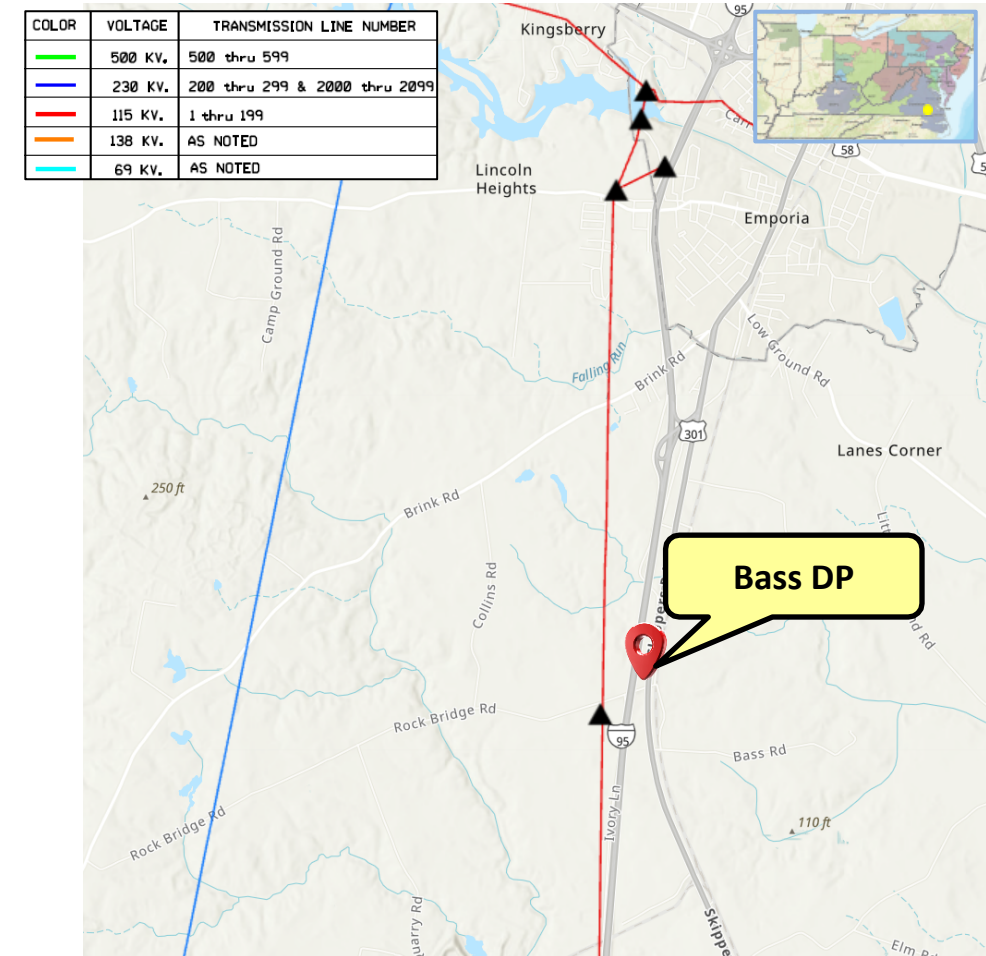
Specific Assumption References:

Customer load request will be evaluated per Dominion's Facility Interconnection Requirements Document and Dominion's Transmission Planning Criteria.

Problem Statement:

ODEC has submitted a delivery point request on behalf of Mecklenburg Electric Cooperative (MEC) for a new delivery point Bass to serve a motor load customer in Skippers, VA. The site is located in Greensville County at the intersection of Rockbridge Road and Hwy 301 South. The driver for the new delivery is a pipeline station with a 6.5 MVA electric motor. Requested in-service date is 10/01/2025.

| Initial In-Service Load | Projected 2030 Load |
|--------------------------------|----------------------------------|
| Summer: 0 MW Winter: 6.5 MW | Summer: 6.5 MW Winter: 6.5 MW |



Dominion Transmission Zone: Supplemental Bass 115kV Delivery - MEC

Need Number: DOM-2025-0034

Process Stage: Solution Meeting 10/16/2025

Proposed Solution:

Tap Line #1037 (Skippers – Ivory Lane) near Ivory Lane Sub and structure 1037/67 and extend a 115kV line to Bass DP using 1-636 ACSR (24/7) “ROOK” conductor. The distance from Line #1037 to the proposed delivery point is approximately 0.34 miles.

Estimated Project Cost: \$4M

- Transmission Lines: \$4M

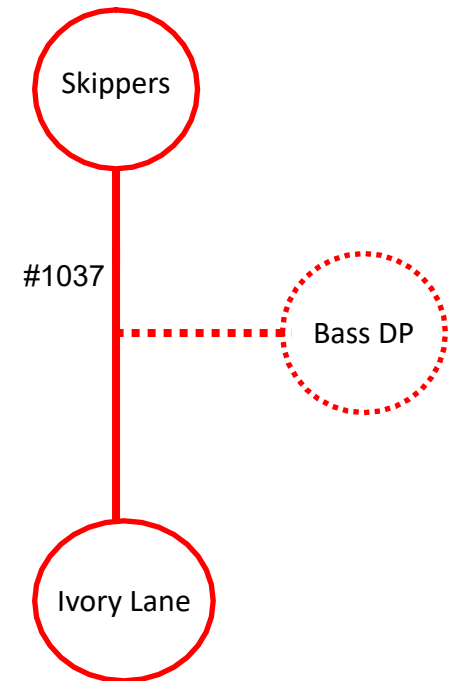
Alternatives Considered:

No feasible alternatives. Nearest source is Line #1037

Projected In-service Date: Q1 2026

Project Status: Construction

Model: 2029 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

10/06/2025 – V1 – Original version posted to pjm.com.