

SRRTEP Committee Southern Dominion Supplemental Projects

November 13, 2025

Needs

Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2025-0076

Process Stage: Need Meeting 11/13/2025

Project Driver: Customer Service

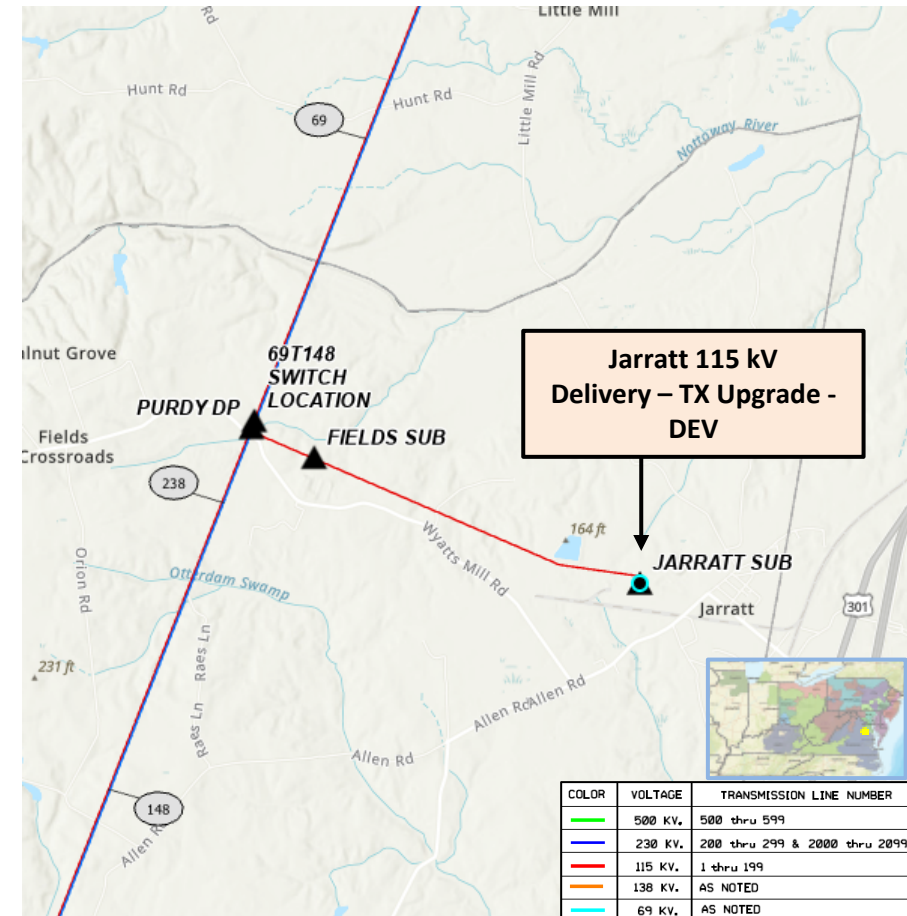
Specific Assumption References:

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

Problem Statement:

DEV Distribution has submitted a DP Request to upgrade TX #4 and retire TX #3 at Jarratt Substation in Greensville County, VA. The reason for this request is deployment of GTP Phase III Substation Technology which will enable real-time monitoring and control, as well as advanced protection, automation, and power quality monitoring. The total expected capacity is 33 MW.

Expected in-service date is 12/31/2026.



Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2025-0077

Process Stage: Need Meeting 11/13/2025

Project Driver: Customer Service

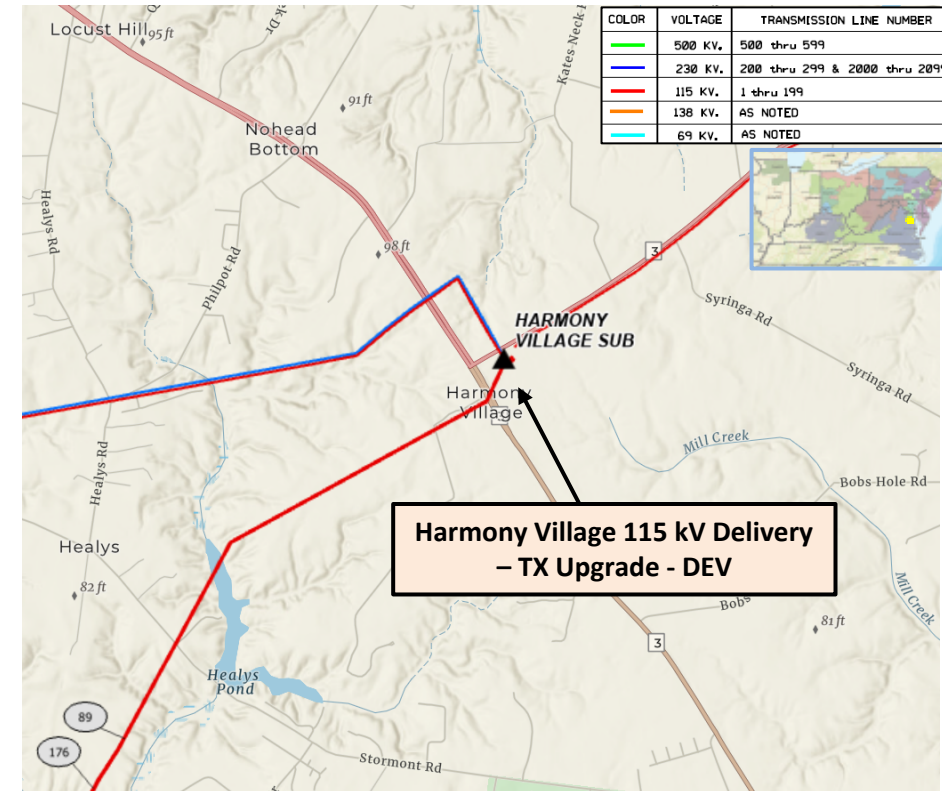
Specific Assumption References:

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

Problem Statement:

DEV Distribution has submitted a DP Request to upgrade a distribution transformer (TX#3) at Harmony Village Substation in Middlesex County, VA. The replacement is being driven by non-data center load growth with a total expected capacity of 159 MW.

Expected in-service date is 12/15/2026.



Solutions

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

Need Number: DOM-2025-0058

Process Stage: Solution Meeting 11/13/2025

Previously Presented: Need Meeting 10/16/2025

Project Driver: Equipment Material Condition, Performance and Risk

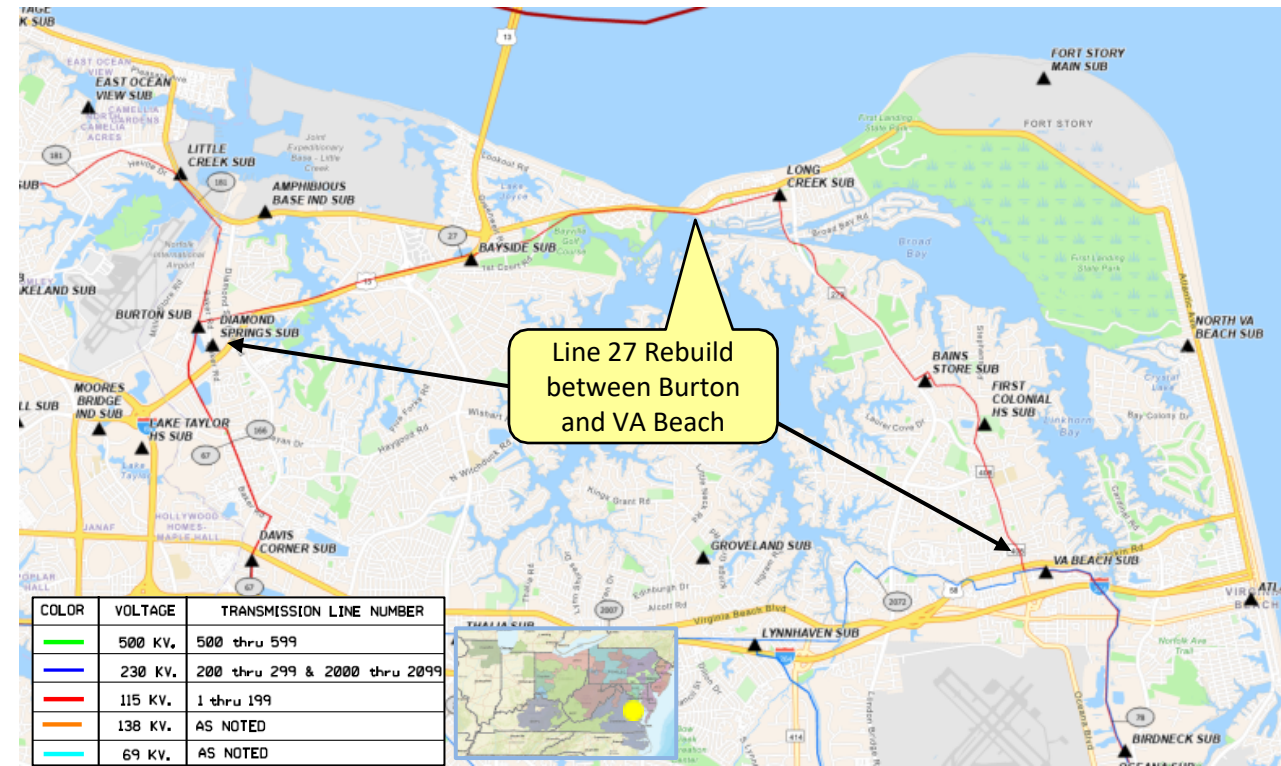
Specific Assumption References:

See details on Equipment Material Condition, Performance and Risk in Dominion's Planning Assumptions presented in December 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 standards 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 115kV Line #27 – EOL Rebuild

Need Number: DOM-2025-0058

Process Stage: Solution Meeting 11/13/2025

Previously Presented: Need Meeting 10/16/2025

Proposed Solution:

- Rebuild approximately 12.7 miles of Line #27 between Burton <> Bayside <> Long Creek <> Bains Store <> VA Beach to current 115kV standards.
- Upgrade substation equipment to support the new conductor rating.
- The Summer normal rating in the four-segment line will be 393 MVA.
- The construction sequence for this project is unusually complex due to the requirements to avoid outages to distribution service costumers.

Estimated Project Cost: \$64M

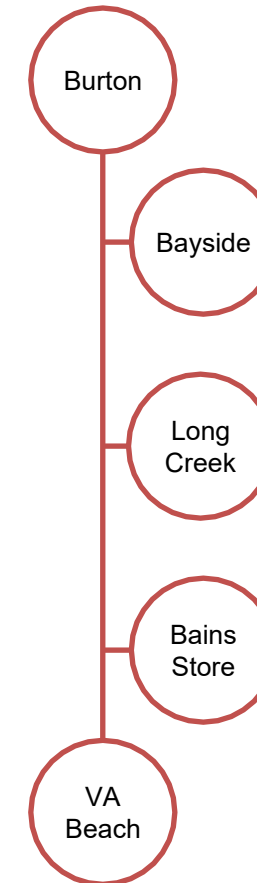
Alternatives Considered:

- No feasible alternatives, End-of-Life
- 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.

Project In-service Date: 12/31/2027

Project Status: Engineering

Model: 2030 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

11/04/2025 – V1 – Original version posted to pjm.com.