Dominion Supplemental Projects

Transmission Expansion Advisory Committee
January 06, 2026

Needs

Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2025-0030

Process Stage: Need Meeting 01/06/2026

Project Driver: Customer Service

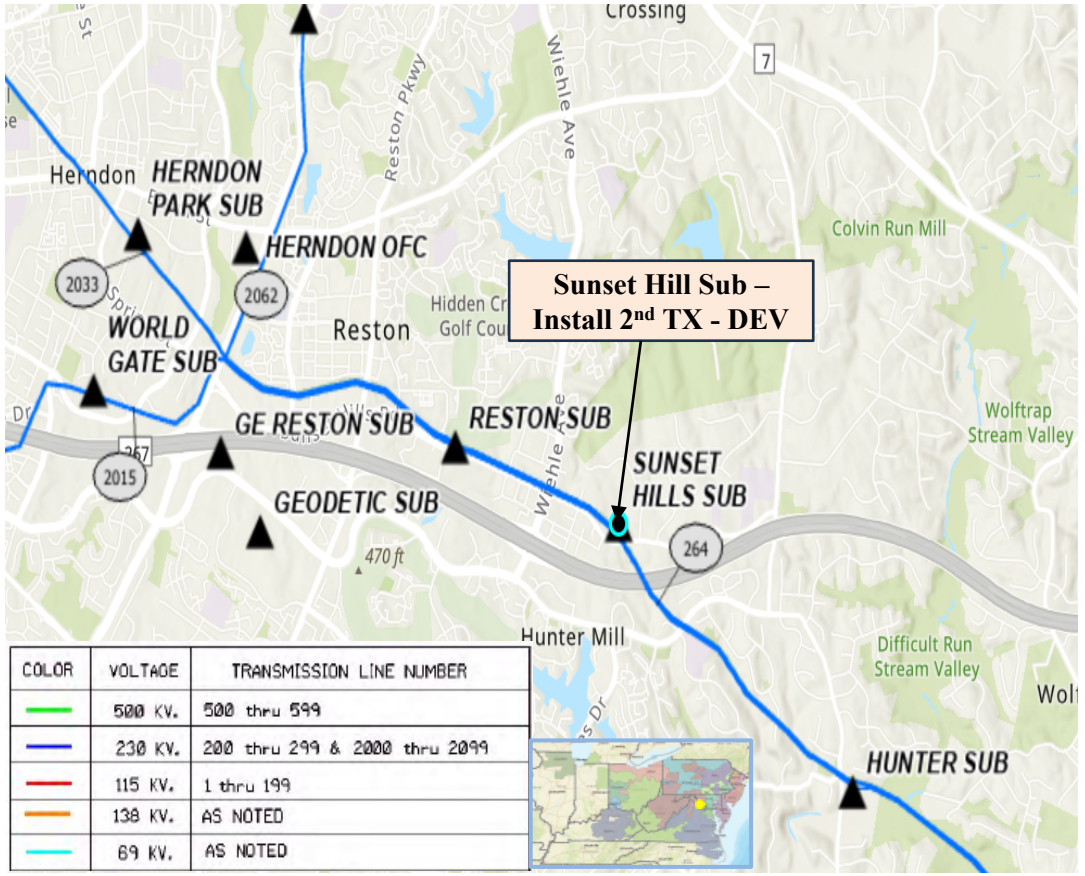
Specific Assumption References:

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 install a second transformer (TX#2) at Sunset Hill Substation in Herndon, VA. This upgrade is required to address non–data center load growth that is expected to exceed the capacity of the existing transformer. The substation has a total expected load of 100 MW.

Expected in-service date is December 31, 2028.



Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2025-0031

Process Stage: Need Meeting 01/06/2026

Project Driver: Customer Service

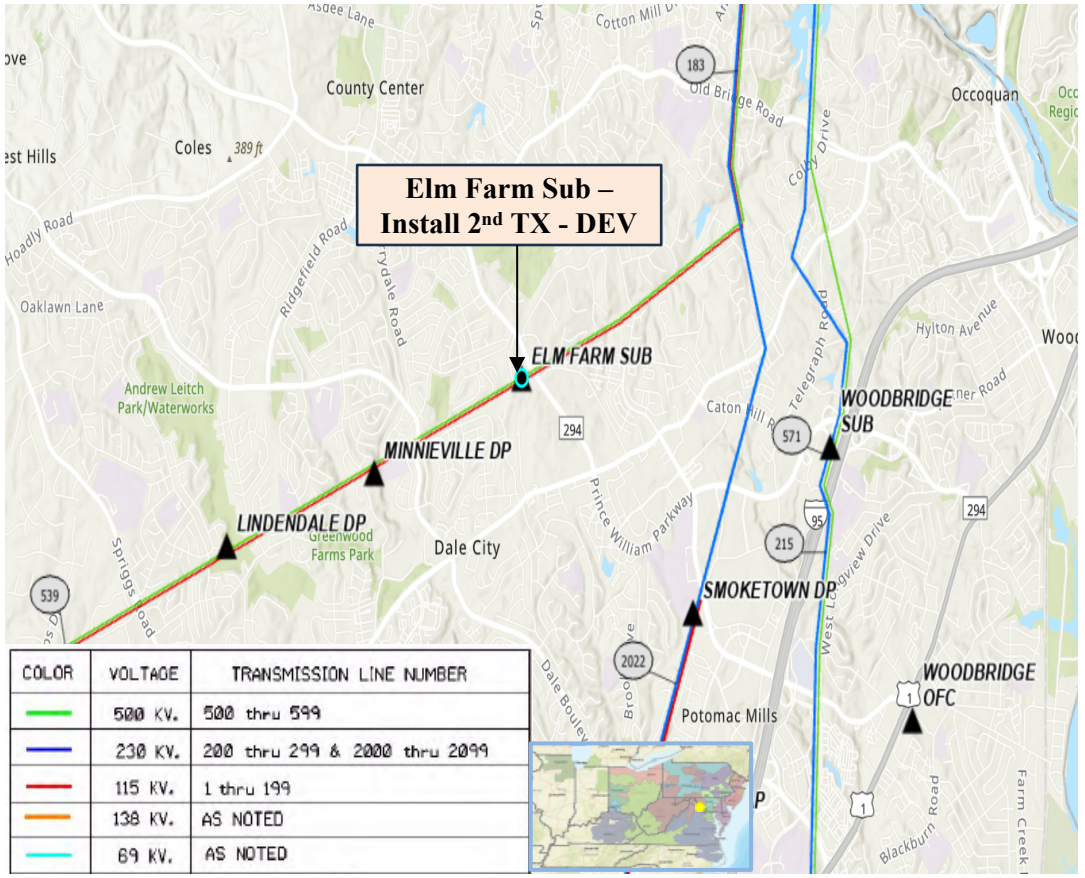
Specific Assumption References:

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 install a second transformer (TX#2) at Elm Farm Substation in Prince William County, VA. This upgrade is required to address non–data center load growth that is expected to exceed the capacity of the existing transformer. The substation has a total expected load of 69 MW.

Expected in-service date is December 31, 2027.



Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2025-0078

Process Stage: Need Meeting 01/06/2026

Project Driver: Customer Service

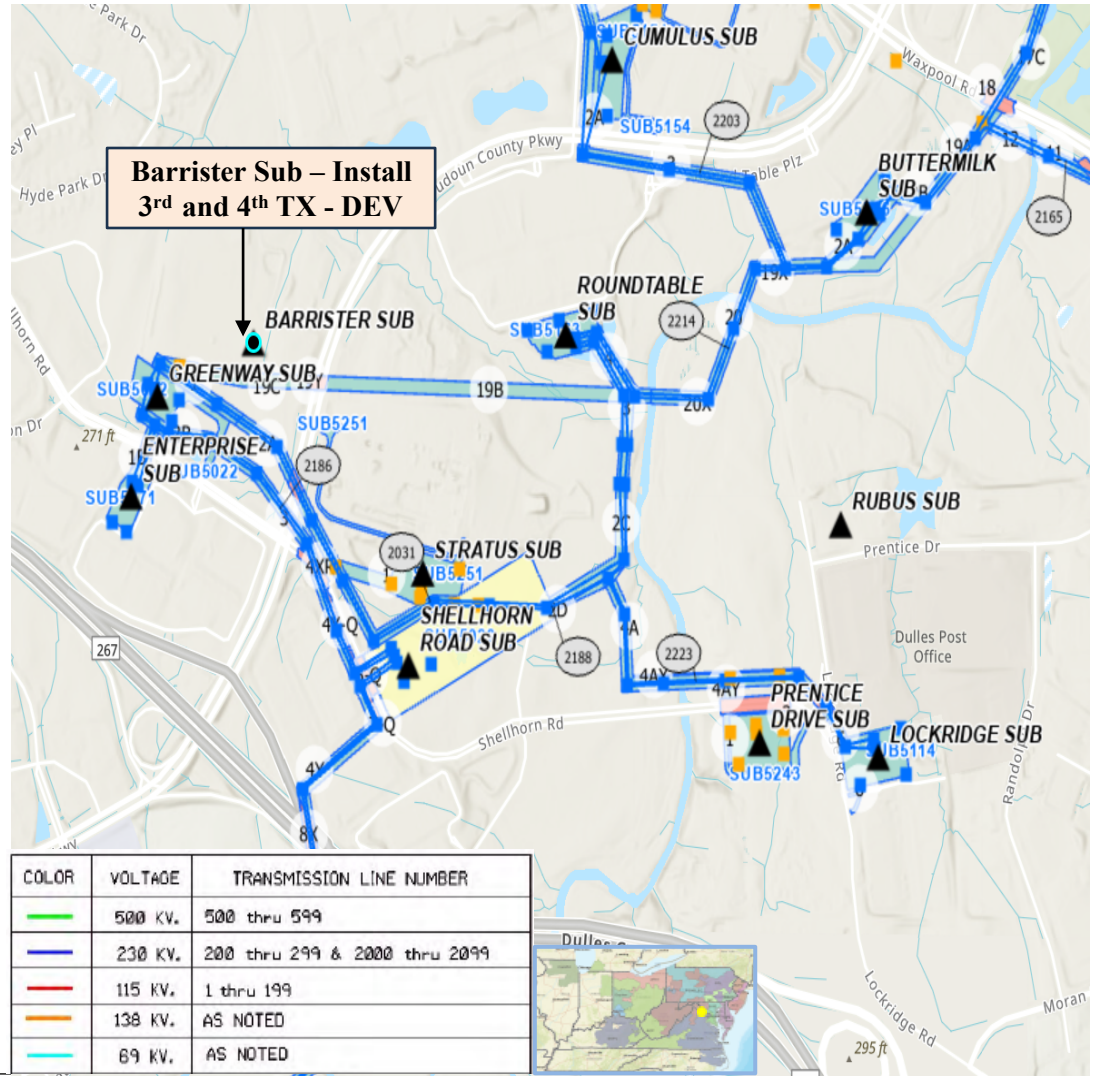
Specific Assumption References:

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 install two additional transformers (TX#1 and TX#4) at Barrister Substation in Loudoun County, VA. This upgrade is required to serve data center load with a total expected load of 290 MW.

Expected in-service date is May 31, 2029.



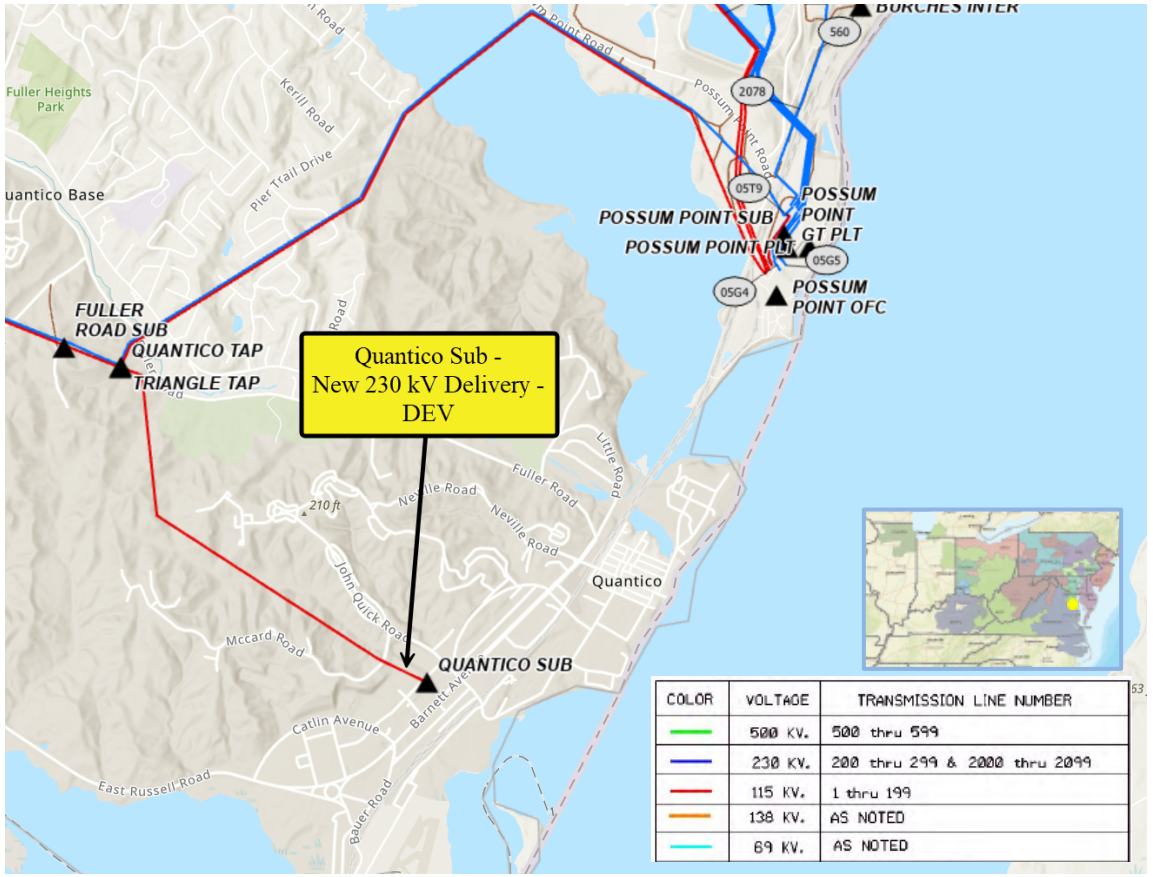
Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2025-0098
Process Stage: Need Meeting 01/06/2026
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:
Existing 115 kV Line #29 is being converted to 230 kV as part of baseline upgrade project b3694. DEV Distribution has submitted a DP Request for a new 230 kV substation (Quantico) to be located on Marine Corps Base Quantico in Prince William County, VA. The total expected load is 30.3 MW.

The requested in-service date is 12/31/2029.



Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2026-0001

Process Stage: Need Meeting 01/06/2026

Project Driver: Customer Service

Specific Assumption References:

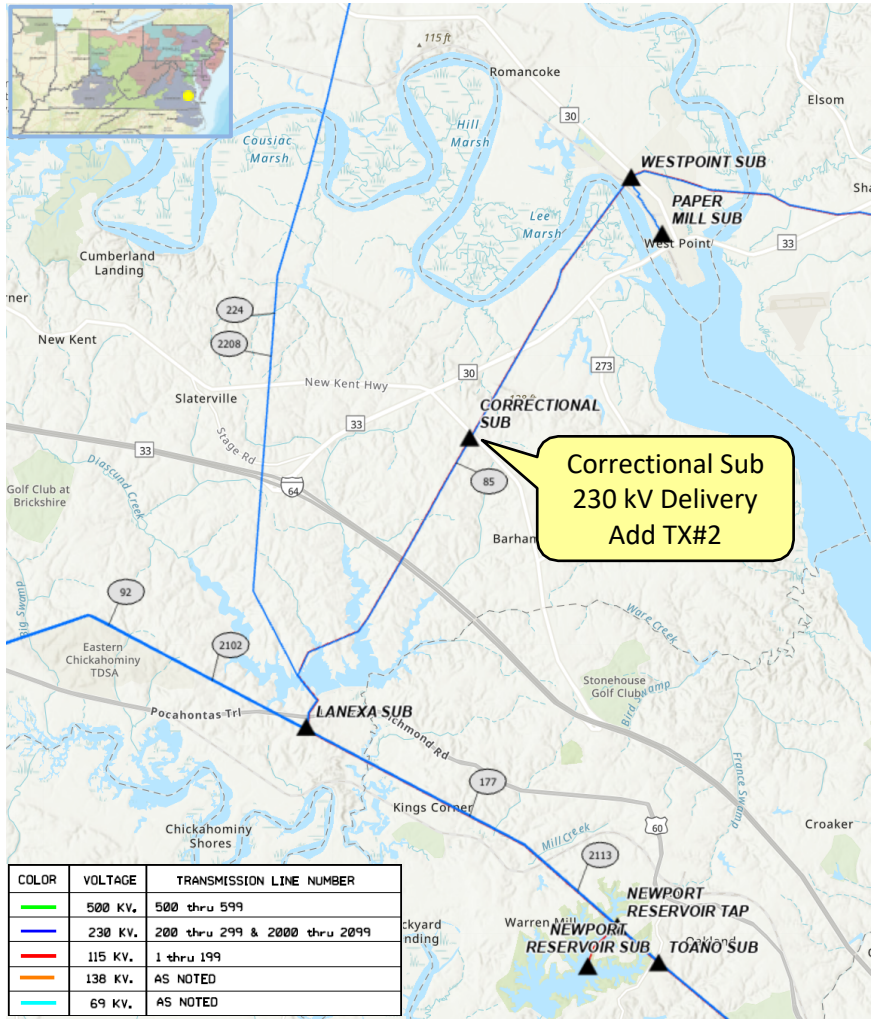
Customer load request will be evaluated per Dominion's Facility Interconnection Requirements Document and Dominion's Transmission Planning Criteria.

Problem Statement:

DEV Distribution has submitted a DP Request for Correctional Substation for the installation of a 2nd 230-34.5 kV LTC transformer (TX#2) with 56 MVA rating. Correctional Sub TX#1 (with 33.6 MVA rating) is expected to be overloaded by 2026, making the substation's contingency plan mobile dependent and requiring cascading load transfers. Demand in the area is expected to grow steadily and is projected to reach approximately 41.5 MVA by 2035.

The requested in-service date is 12/31/2028.

Initial In-Service Load (TX#1+TX#2)	10-year Projected Load
Summer: 24.1 MW Winter: 34.8 MW	Summer: 28.5 MW Winter: 41.3 MW



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

Need Number: DOM-2025-0073

Process Stage: Need Meeting 1/6/2026

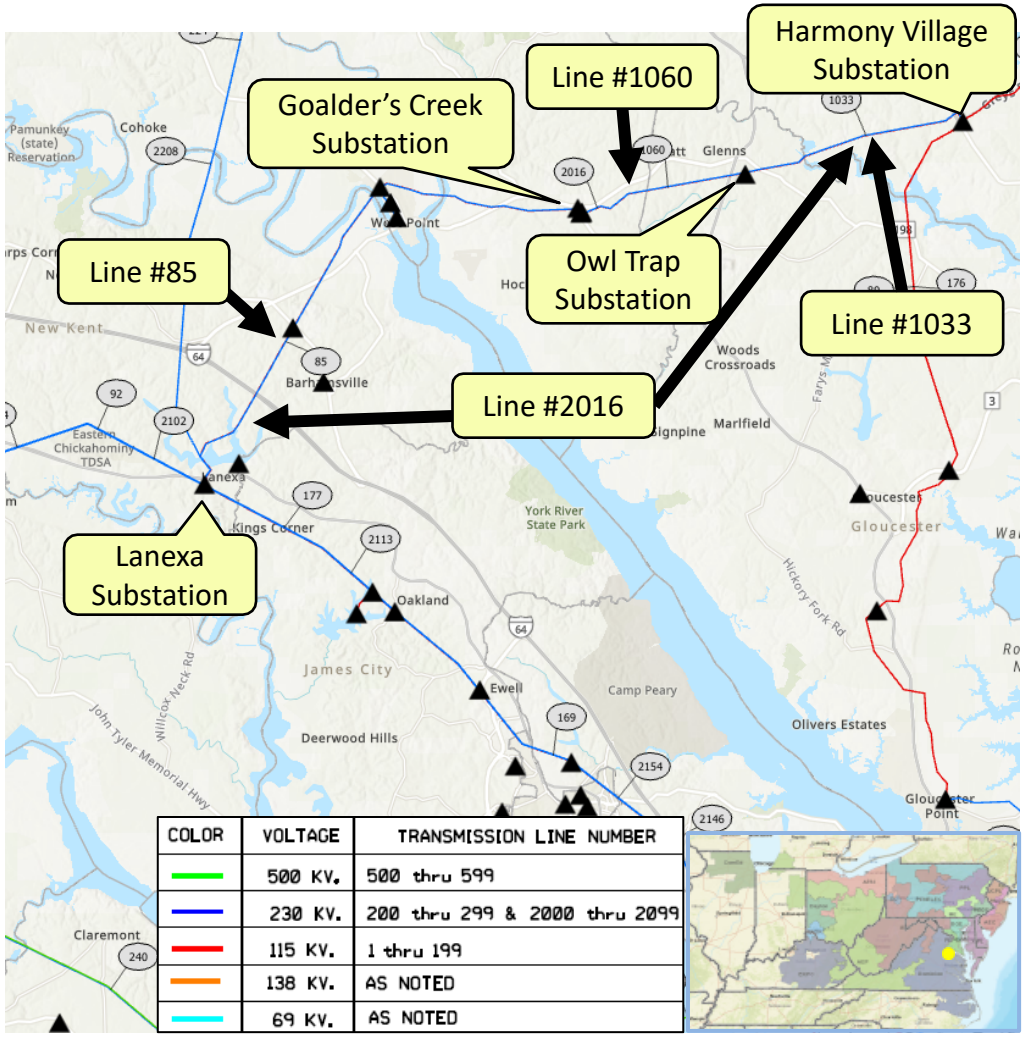
Project Driver: Equipment Material Condition, Performance and Risk

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 229 weathering steel and concrete structures of 230 kV Line #2016 (Lanexa – Harmony Village), 115 kV Lines #85 (Lanexa – Goalder's Creek), #1060 (Goalder's Creek – Owl Trap), and #1033 (Owl Trap – Harmony Village) based on the Company's End of Life criteria. Line #2016 shares double-circuit structures with 115 kV Lines #85, #1033, and #1060.

- These 30.2 miles of line were originally constructed on weathering steel towers and tubular steel H-frame structures in 1979. These structures have developed significant structural concerns as they age.
- The weathering steel poles are a non-conventional shape which is no longer in production in the industry and need extensive repairs to mitigate packout and section loss issues at the ground line and where pole sections connect together.
- The supporting X-bracing and crossarms are deteriorating and need extensive repairs or replacement to maintain structural integrity. Insulators and other supporting hardware are also deteriorating and in need of replacement.
- Lines #85, 1060, and 1033 provide service to West Point, Shackleford, Goalder's Creek, and Owl Trap substations. Line #2016 provides service to Correctional and Paper Mill substations. These lines service a combined load of 54 MW and connect 50 MW of solar generation capacity.



Solutions

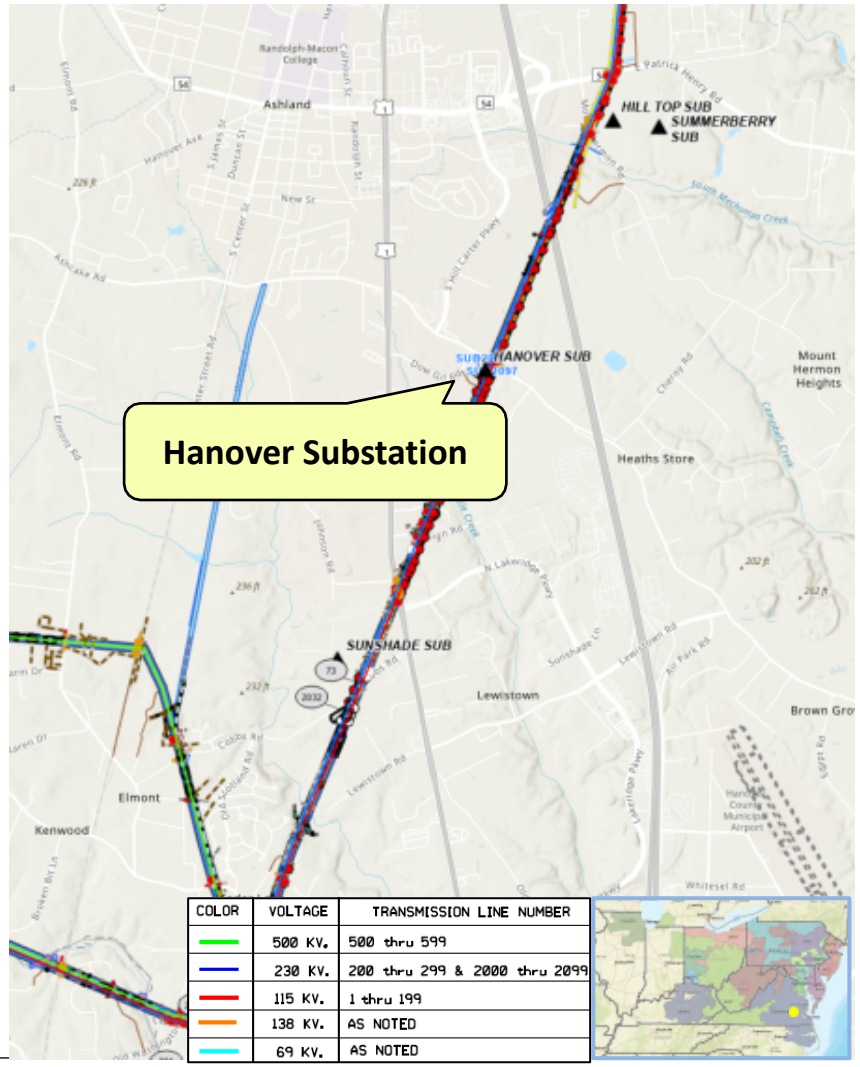
Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2025-0017
Process Stage: Solution Meeting 1/6/2026
Previously Presented: Need Meeting 11/4/2025
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:
Due to load growth in Ashland, VA, the single 230/36.5 kV transformer rated at 50 MVA in Hanover Substation is projected to be overloaded by Summer 2027.

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



Dominion Transmission Zone: Supplemental Hanover 230 kV Delivery – TX Upgrade - DEV

Need Number: DOM-2025-0017
Process Stage: Solution Meeting 1/6/2026
Previously Presented: Need Meeting 11/4/2025
Project Driver: Customer Service

Proposed Solution: Install high side equipment to facilitate installation of a new 84 MVA, 230-34.5 kV transformer.

Estimated Project Cost: $1.5M

Alternatives Considered: No feasible alternatives.

Projected In-Service Date: 12/31/2026

Project Status: Engineering

Model: 2030 RTEP

Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2025-0054
Process Stage: Solution Meeting 01/06/2026
Previously Presented: Need Meeting 10/08/2025
Project Driver: Customer Service

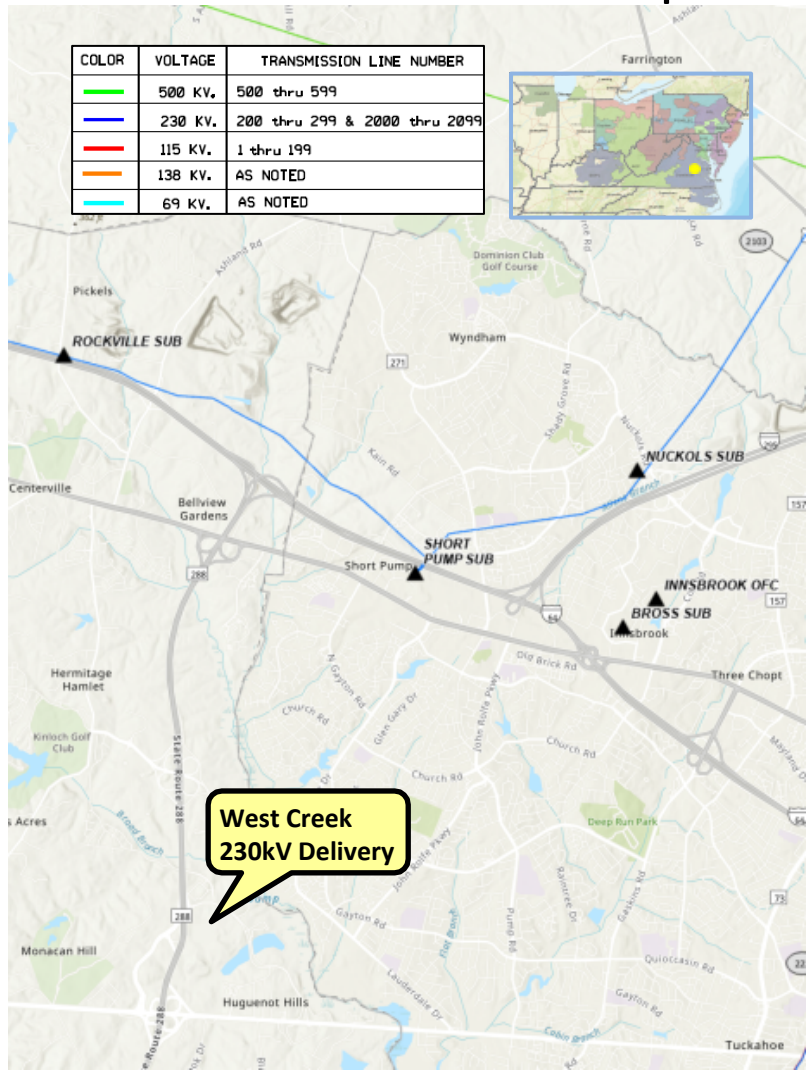
Specific Assumption References:

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

Problem Statement:

DEV has submitted a DP Request for a new substation (West Creek) to serve an industrial load in Goochland County with a total expected load of 100 MW.

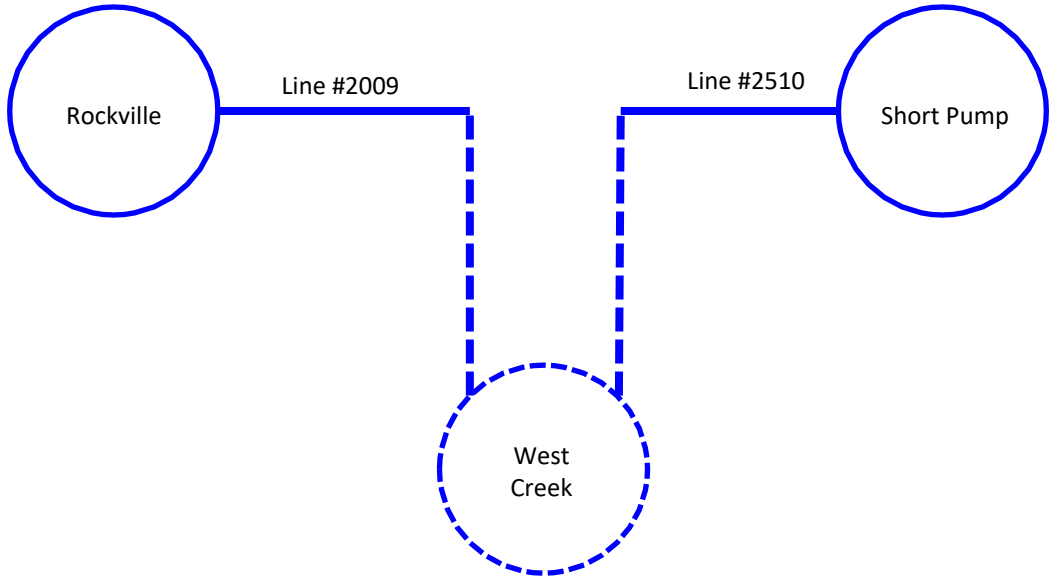
The requested in-service date is 01/02/2029.



Dominion Transmission Zone: Supplemental West Creek 230kV Delivery - DEV

Need Number: DOM-2025-0054
Process Stage: Solution Meeting 01/06/2026
Previously Presented: Need Meeting 10/08/2025
Project Driver: Customer Service

Proposed Solution:
Cut existing 230kV Line 2009 between Short Pump and Rockville and extend a new 230kV double circuit loop, approximately 6.5 miles, in and out of West Creek Substation. West Creek Substation will be constructed with a 230 kV ring-bus, configured for an ultimate arrangement of six breakers, with four breakers installed initially.



Estimated Project Cost: $35M (Total)
Transmission Line – $20M
230kV Substation – $15M

Alternatives Considered:
Cut existing 230kV Line 2009 between North Pole and Midlothian.
Cut existing 230kV Line 222.

Projected In-service Date: 07/26/2028
Project Status: Planning
Model: 2029 RTEP

Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2025-0070
Process Stage: Solution Meeting 01/06/2026
Previously Presented: Need Meeting 10/08/2025
Project Driver: Customer Service

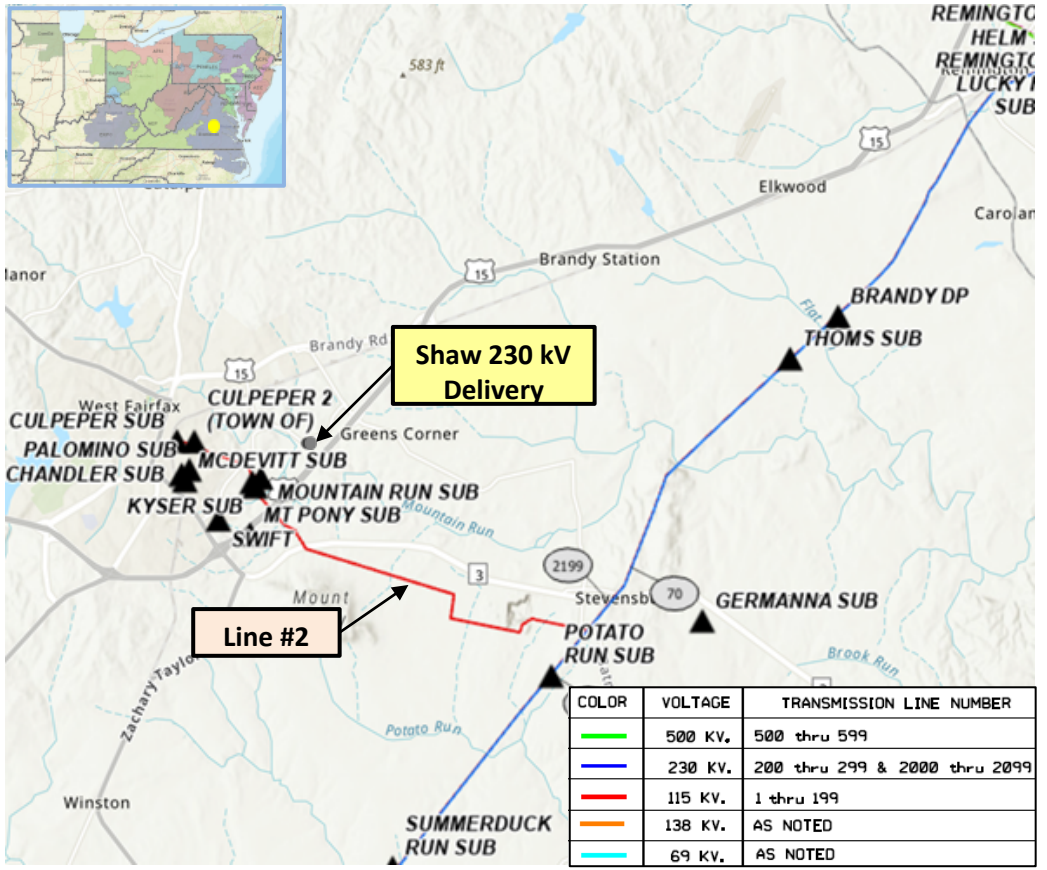
Specific Assumption References:

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

Problem Statement:

REC has submitted a DP request for a new 230 kV delivery point (Shaw) to serve a data center customer in Culpeper County, VA with a total expected load of 300 MW.

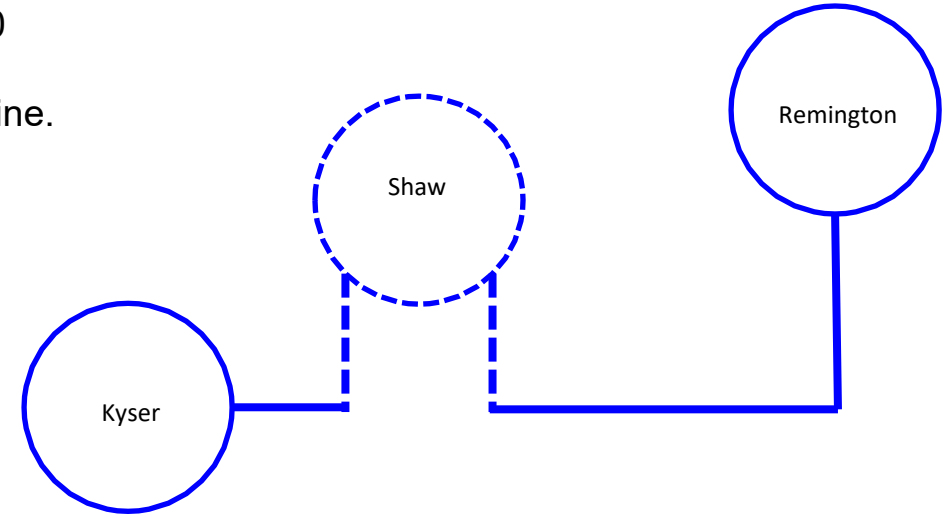
Expected target date is 05/01/2028.



Dominion Transmission Zone: Supplemental Shaw 230kV Delivery - REC

Need Number: DOM-2025-0070
Process Stage: Solution Meeting 01/06/2026
Previously Presented: Need Meeting 10/08/2025
Project Driver: Customer Service

Proposed Solution:
Cut and extend Line #2276 (Kyser-Remington) line approximately 0.6 miles on double-circuit 230 kV structures to the new Shaw substation. The lines will terminate in a 230 kV ring bus configured for an ultimate arrangement of six breakers, with four breakers installed initially. This will create creating a Remington-Shaw line and a Kyser-Shaw line.



Estimated Project Cost: $32M (Total)
Transmission Line – $9M
230kV Substation – $23M

Alternatives Considered:
No feasible alternatives

Projected In-service Date: 5/1/2028
Project Status: Planning
Model: 2030 RTEP

Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2025-0071
Process Stage: Solution Meeting 01/06/2026
Previously Presented: Need Meeting 10/08/2025
Project Driver: Customer Service

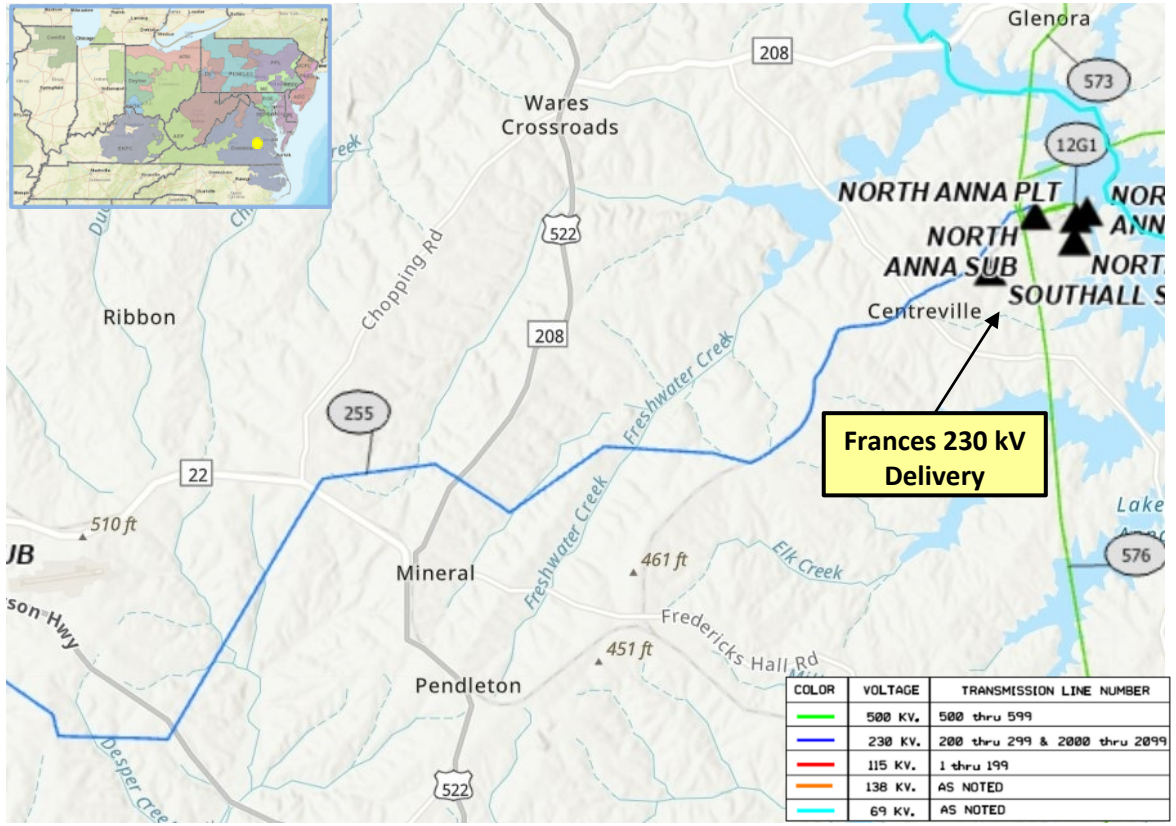
Specific Assumption References:

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

Problem Statement:

REC has submitted a DP request for a new 230 kV delivery point (Frances) to serve a data center customer in Louisa County, VA with a total expected load of 176 MW.

Expected target date is 08/01/2027.



Dominion Transmission Zone: Supplemental Frances 230kV Delivery - REC

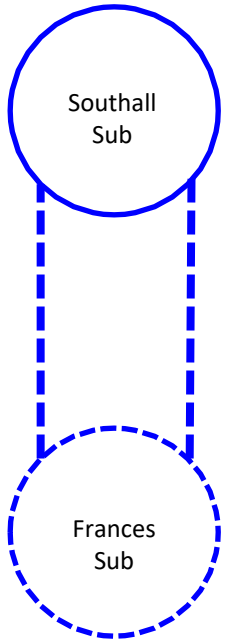
Need Number: DOM-2025-0071
Process Stage: Solution Meeting 01/06/2026
Previously Presented: Need Meeting 10/08/2025
Project Driver: Customer Service

Proposed Solution:
Connect a new Frances substation by extending a new double circuit 230kV feed from Southall substation. Lines will terminate in a 230kV six-breaker ring arrangement.

Estimated Project Cost: $21M (Total)
Transmission Line – $1M
230kV Substation – $20M

Alternatives Considered:
No feasible alternatives; Frances Sub is adjacent to Southall Sub

Projected In-service Date: 8/01/2027
Project Status: Planning
Model: 2030 RTEP



Dominion Transmission Zone: Supplemental Do No Harm Analysis

Need Number: DOM-2025-0071-DNH

Process Stage: Solution Meeting 01/06/2026

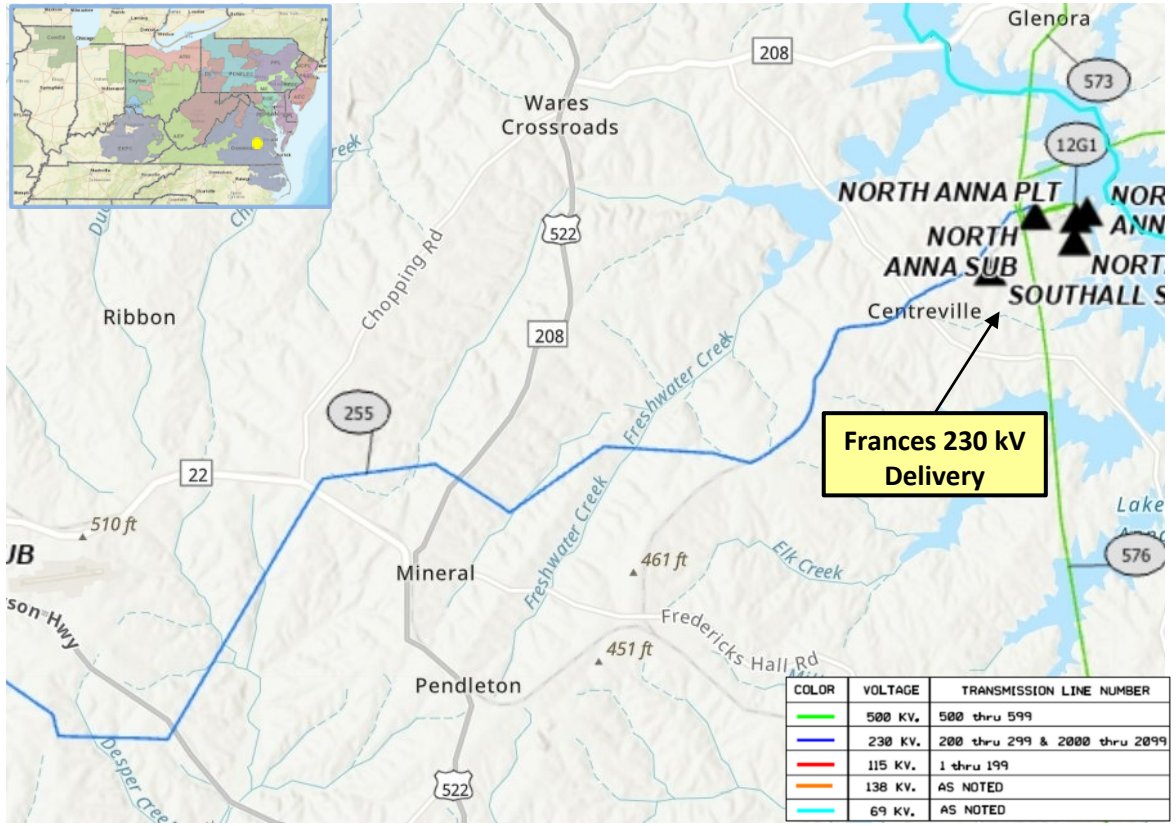
Project Driver: Do No Harm Analysis

Specific Assumption References:

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

Problem Statement:

A new Frances delivery point has been requested in the Louisa Area near Southall substation. This new load introduces a 300MW load drop violation as identified in the RTEP 2029 DNH case for the N-1-1 loss of Lines #2304 (Foxbrook Lane-Southall) and #255 (Southall-N Anna). This is a violation of DE Planning Criteria.



Dominion Transmission Zone: Supplemental Do No Harm Analysis

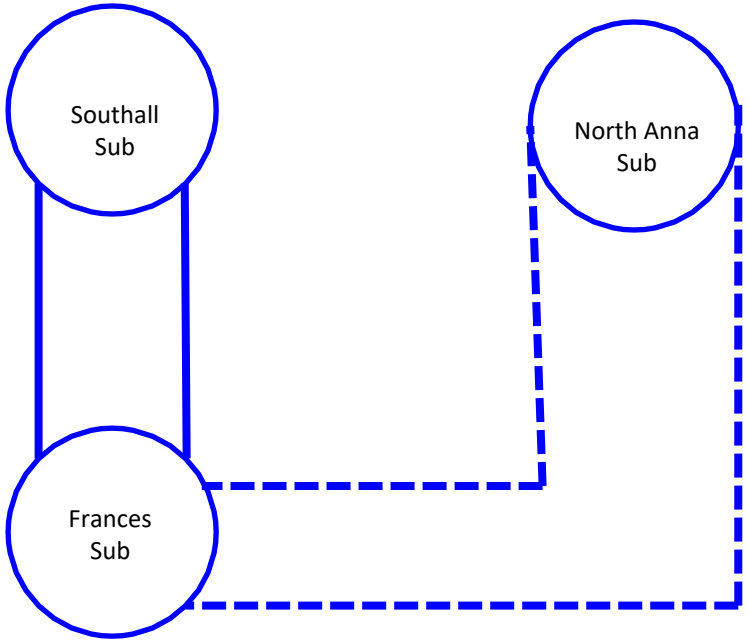
Need Number: DOM-2025-0071-DNH

Process Stage: Solution Meeting 01/06/2026

Project Driver: Do No Harm Analysis

Proposed Solution:

- Rebuild single-circuit 230 kV Line #255 (Southall-North Anna) approximately 1.1 miles as 230 kV double-circuit lines back to North Anna.
- Expand North Anna substation to terminate the new 230 kV line from Frances by adding a new 230kV string of breakers in a breaker-and-a-half arrangement.
- Install associated 230 kV terminal equipment at Frances and North Anna to terminate both lines (existing Line #255 and new 230 kV line), creating two Frances to North Anna lines.



Estimated Project Cost: $12M (Total)

Transmission Line - $10M

230 kV Substation - $2M

Alternatives Considered:

Bring a new 230 kV source approximately 30 miles from Gordonsville

Projected In-service Date: 12/30/2028

Project Status: Planning

Model: 2030 RTEP

Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2025-0072
Process Stage: Solution Meeting 01/06/2026
Previously Presented: Need Meeting 10/08/2025
Project Driver: Customer Service

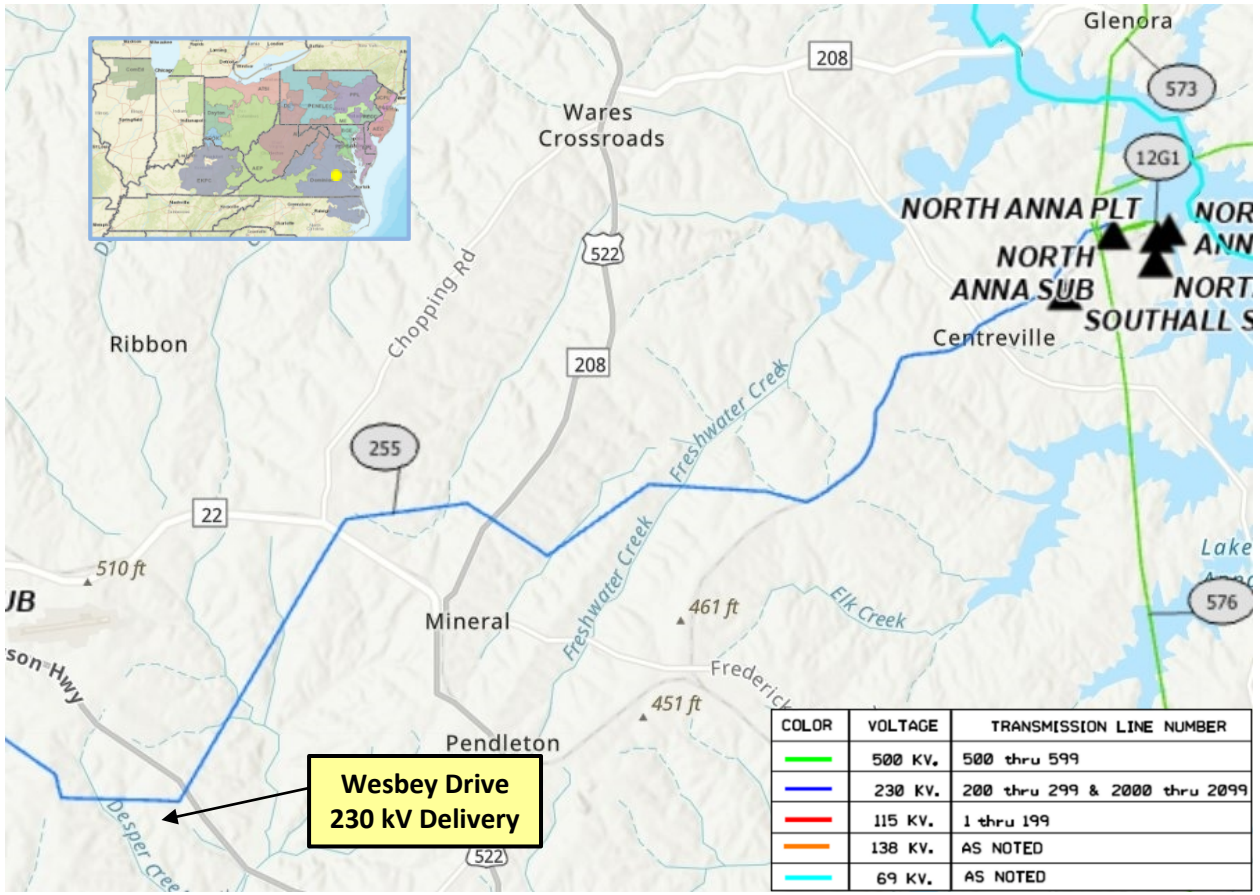
Specific Assumption References:

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

Problem Statement:

REC has submitted a DP request for a new 230 kV delivery point (Wesbey Drive) to serve a data center customer in Louisa County, VA with a total expected load of ~~270~~ 292 MW.

Expected target date is 03/01/2029.



Dominion Transmission Zone: Supplemental Wesbey Drive 230kV Delivery - REC

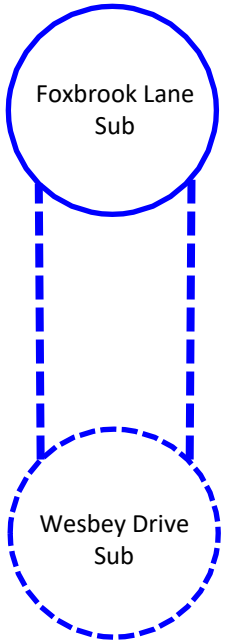
Need Number: DOM-2025-0072
Process Stage: Solution Meeting 01/06/2026
Previously Presented: Need Meeting 10/08/2025
Project Driver: Customer Service

Proposed Solution:
Connect a new Wesbey Drive substation by extending a new double circuit 230kV feed from Foxbrook Lane substation. Lines to terminate in a 230kV six-breaker ring arrangement.

Estimated Project Cost: $21M (Total)
Transmission Line – $1M
230kV Substation – $20M

Alternatives Considered:
No feasible alternatives; Wesbey Drive Sub is adjacent to Foxbrook Lane Sub

Projected In-service Date: 3/01/2029
Project Status: Planning
Model: 2030 RTEP



Dominion Transmission Zone: Supplemental Do No Harm Analysis

Need Number: DOM-2019-0021, DOM-2024-0022, DOM-2024-0023, DOM-2024-0024 - DNH

Process Stage: Solution Meeting 12/03/2024; Update 1/6/2026

Previously Presented:

Solution Meeting 6/30/2024: DOM-2019-0021 & DOM-2024-0022

Solution Meeting 12/03/2024: DOM-2024-0023 & DOM-2024-0024

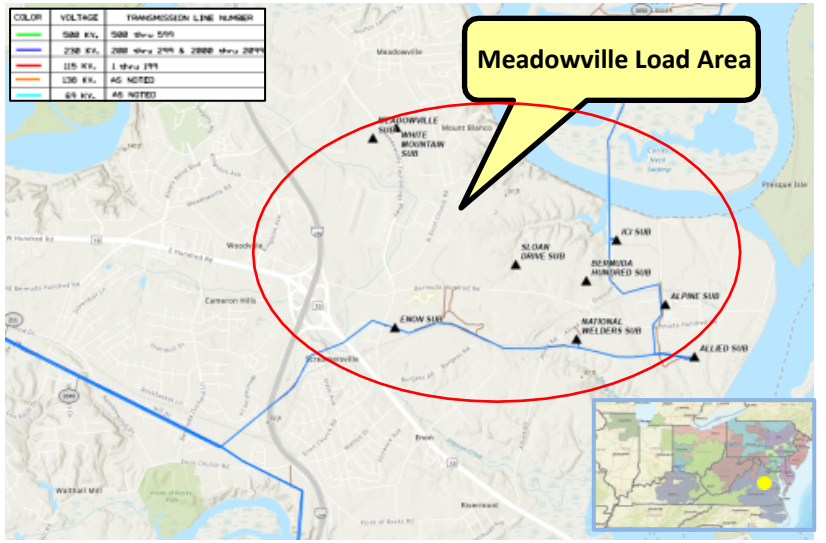
Project Driver: Do No Harm Analysis – Meadowville Load Area

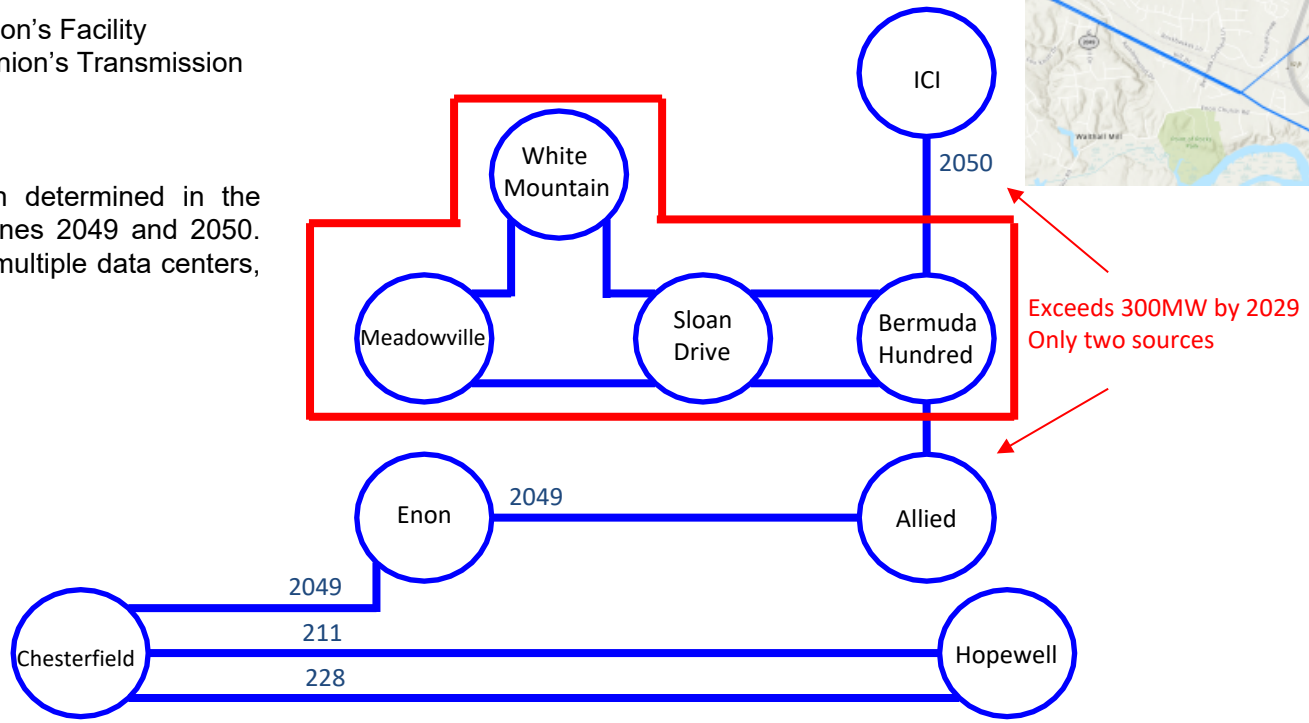
Specific Assumption References:

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

Problem Statement:

A 300MW N-1-1 contingency violation has been determined in the Meadowville general load area with the loss of Lines 2049 and 2050. This violation affects multiple customers including multiple data centers, industrial, and residential load.





Dominion Transmission Zone: Supplemental Do No Harm Analysis

Need Number: DOM-2019-0021, DOM-2024-0022, DOM-2024-0023, DOM-2024-0024 - DNH
Process Stage: Solution Meeting 12/03/2024; Update 1/6/2026
Project Driver: Do No Harm – Meadowville Load Area

Proposed Solution:

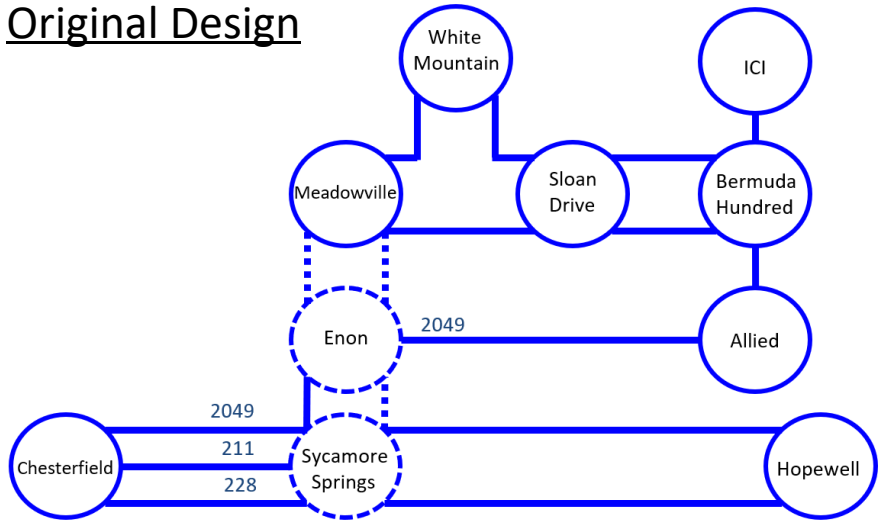
- Connect future Meadowville substation to ~~existing Enon substation~~ a new switching station (Shand Creek) by constructing approximately two miles of double circuit 230kV lines.
- Enon substation was not able to be expanded, so Shand Creek substation will be built 0.5 miles down the ROW on county owned EDA land. ~~Enon substation will need to be expanded to include a new 230kV ring bus.~~
- Construct new Sycamore Springs switching station in existing transmission corridor. Loop existing 230kV Lines 211, 228, and 2049 in and out of Sycamore Springs.
- Wreck and rebuild approximately two miles of existing 230kV Line 2049 between Sycamore Springs and ~~Enon~~ Shand Creek substation with double circuit structures. Install second 230kV conductor on new structures to create a third source to the Meadowville area.

Estimated Project Cost: ~~$92.7M~~ $95.1M
Substation: ~~$37.6M~~ $40.0M
Transmission Lines: $55.1M

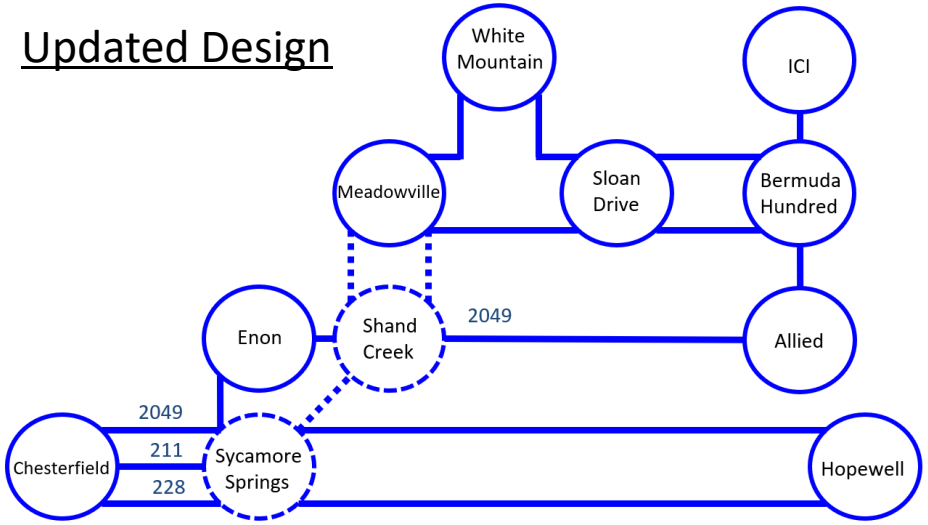
Alternatives Considered:
Wreck and rebuild existing Line 2050 from future Bermuda Hundred substation to existing Chickahominy substation (approximately 14 miles). This option would be more expensive as it is ~12 miles longer. As well, the environmental impact would be greater due to the additional mileage and right-of-way needed to expand from a single circuit to double circuit. This option also crosses the James River.

Projected In-service Date: Q4 2028
Project Status: Engineering
Model: 2029 RTEP

Original Design



Updated Design



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

12/22/2025 – V1 – Original version posted to pjm.com