

# Dominion Supplemental Projects

Transmission Expansion Advisory  
Committee  
February 6, 2024

# Needs

Stakeholders must submit any comments within 10 days of this meeting in order to provide time necessary to consider these comments prior to the next phase of the M-3 process

# Dominion Transmission Zone: Supplemental Customer Load Request

**Need Number:** DOM-2024-0001

**Process Stage:** Need Meeting 02/06/2024

**Project Driver:** Customer Service

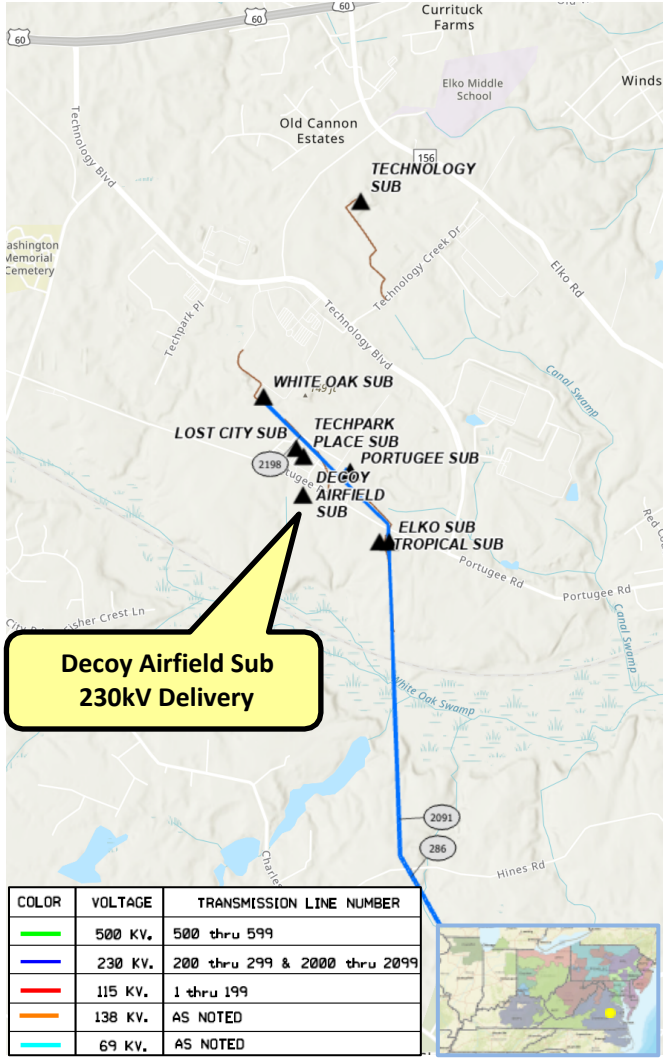
**Specific Assumption References:**

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 a new substation (Decoy Airfield) to serve a data center in Henrico County with a total load in excess of 100 MW. The requested in-service date is 01/01/2026.

Initial In-Service Load	Projected 2028 Load
Summer: 288.0 MW Winter: 288.0 MW	Summer: 288.0 MW Winter: 288.0 MW



# Dominion Transmission Zone: Supplemental Customer Load Request

**Need Number:** DOM-2024-0004

**Process Stage:** Need Meeting 02/06/2024

**Project Driver:** Customer Service

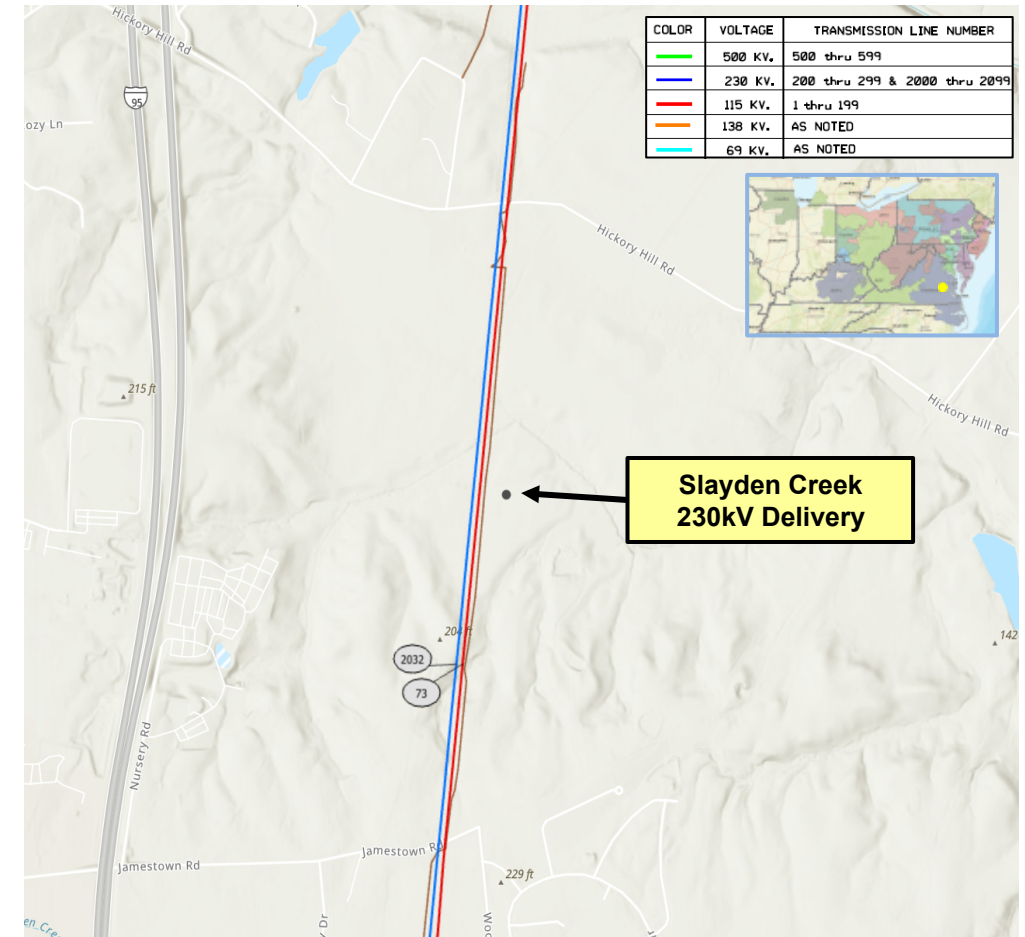
## Specific Assumption References:

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 230 kV delivery point (Slayden Creek) to serve a data center customer in Ashland VA with a total load in excess of 100 MW. Requested in-service date is 1/01/2026.

Initial In-Service Load	Projected 2028 Load
Summer: 0 MW Winter: 5 MW	Summer: 210 MW Winter: 150 MW



# Dominion Transmission Zone: Supplemental Customer Load Request

**Need Number:** DOM-2024-0005

**Process Stage:** Need Meeting 02/06/2024

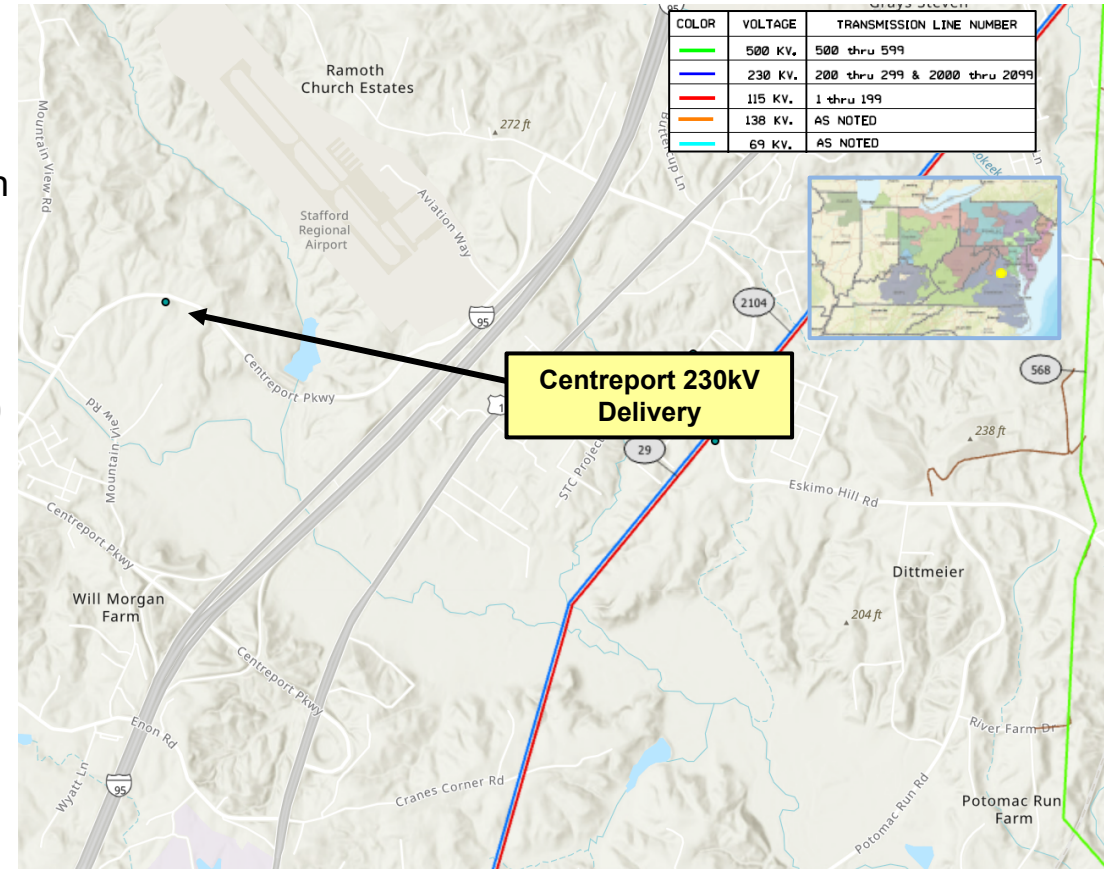
**Project Driver:** Customer Service

## 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 230 kV delivery point (Centreport) to serve a data center customer in Stafford VA with a total load in excess of 100 MW. Requested in-service date is 6/30/2027.



Initial In-Service Load	Projected 2028 Load
Summer: 4 MW Winter: 0 MW	Summer: 48 MW Winter: 48 MW

# Dominion Transmission Zone: Supplemental Customer Load Request

**Need Number:** DOM-2024-0006

**Process Stage:** Need Meeting 02/06/2024

**Project Driver:** Customer Service

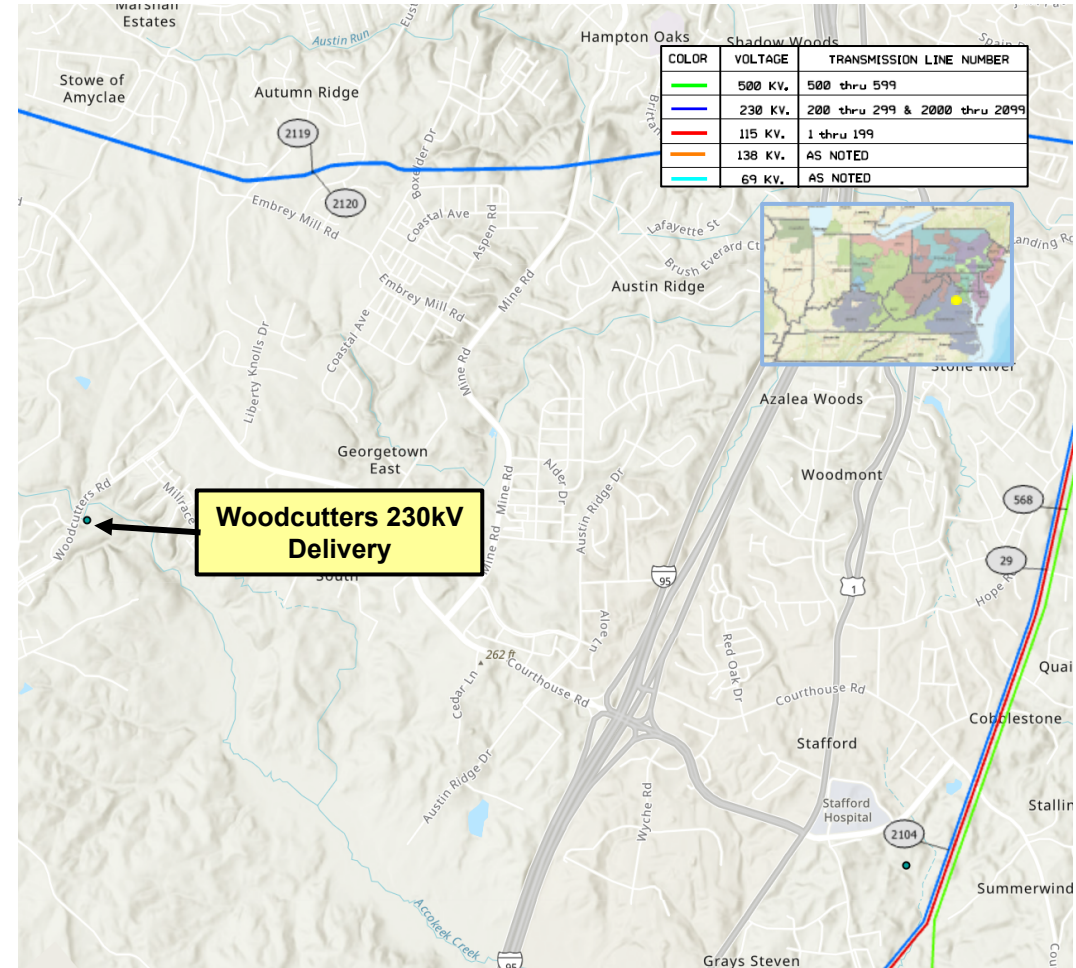
## Specific Assumption References:

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 230 kV delivery point (Woodcutters) to serve a data center customer in Stafford VA with a total load in excess of 100 MW. Requested in-service date is 1/01/2028.

Initial In-Service Load	Projected 2028 Load
Summer: 225 MW Winter: 225 MW	Summer: 225 MW Winter: 225 MW



# Dominion Transmission Zone: Supplemental Customer Load Request

**Need Number:** DOM-2024-0007

**Process Stage:** Need Meeting 02/06/2024

**Project Driver:** Customer Service

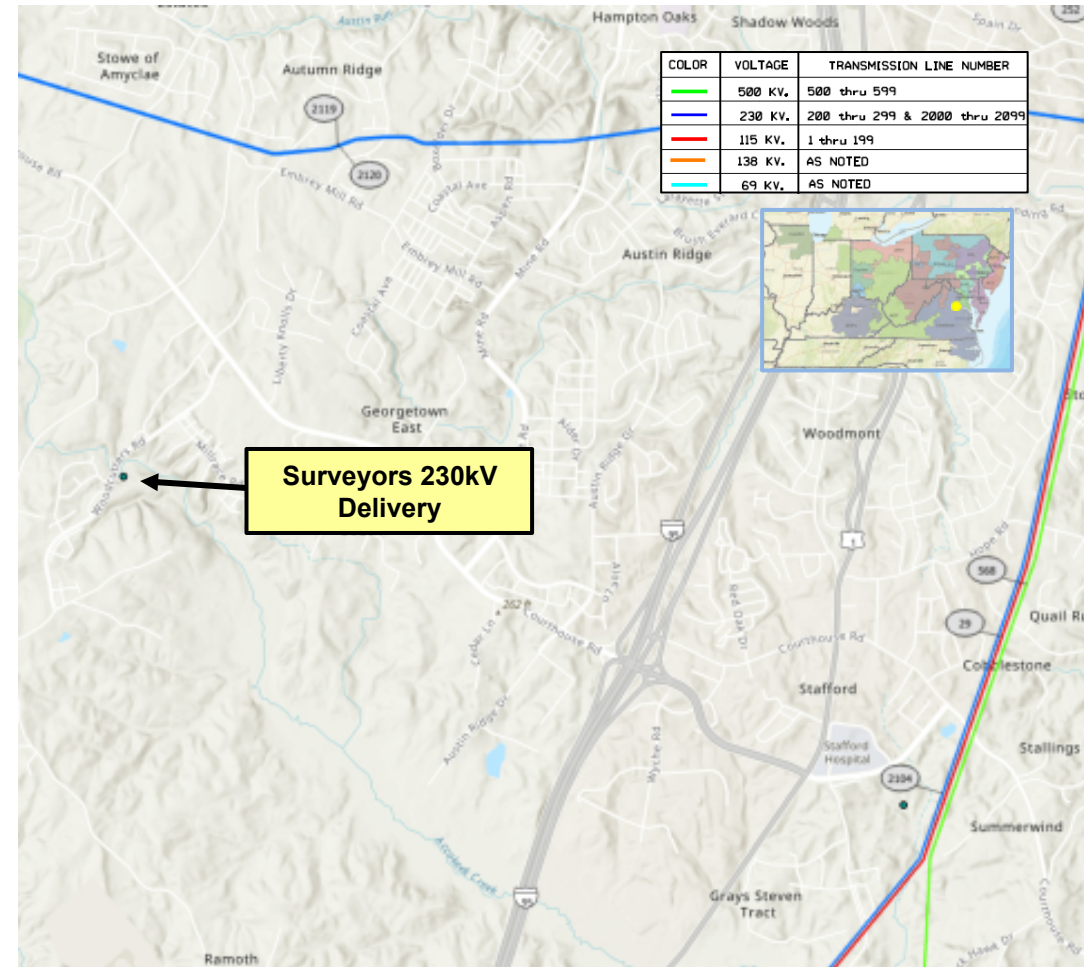
## Specific Assumption References:

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 230 kV delivery point (Surveyors) to serve a data center customer in Stafford VA with a total load in excess of 100 MW. Requested in-service date is 1/01/2028.

Initial In-Service Load	Projected 2028 Load
Summer: 225 MW Winter: 225 MW	Summer: 225 MW Winter: 225 MW



# Dominion Transmission Zone: Supplemental Customer Load Request

**Need Number:** DOM-2024-0008

**Process Stage:** Need Meeting 02/06/2024

**Project Driver:** Customer Service

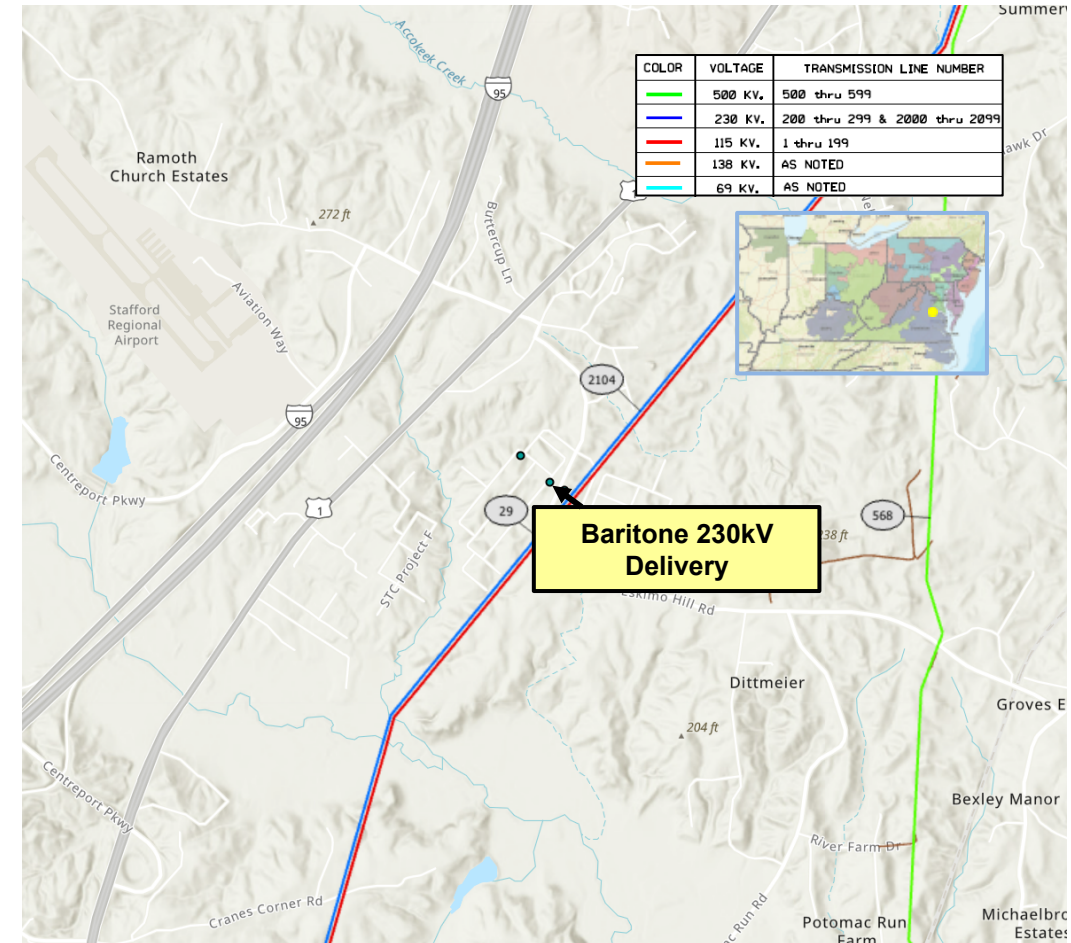
## Specific Assumption References:

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 230 kV delivery point (Baritone) to serve a data center customer in Stafford VA with a total load in excess of 100 MW. Requested in-service date is 10/01/2028.

Initial In-Service Load	Projected 2028 Load
Summer: 0 MW Winter: 32 MW	Summer: 32 MW Winter: 32 MW





# Dominion Transmission Zone: Supplemental Customer Load Request

**Need Number:** DOM-2024-0009

**Process Stage:** Need Meeting 02/06/2024

**Project Driver:** Customer Service

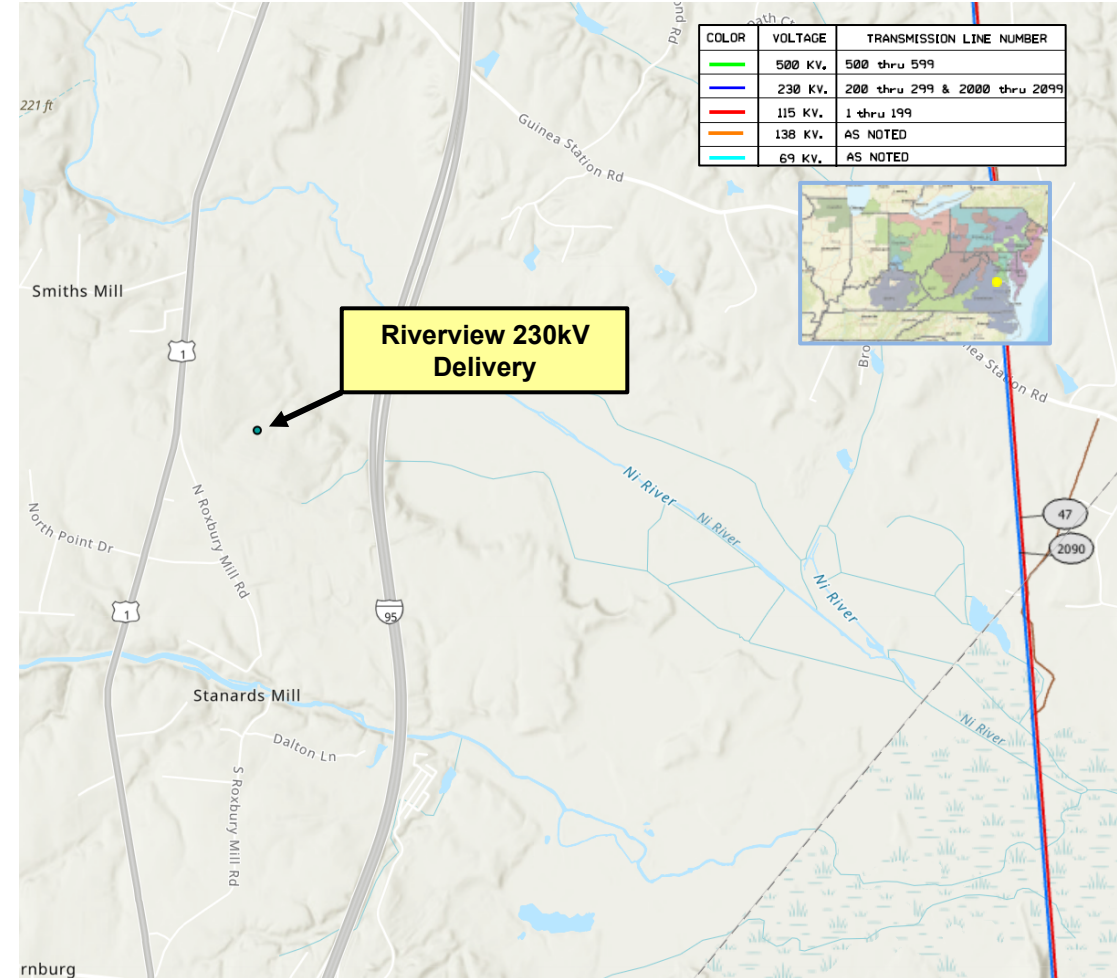
## Specific Assumption References:

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 DP request for a new 230 kV delivery point (Riverview) to serve a data center customer in Spotsylvania VA with a total load in excess of 100 MW. Requested in-service date is 5/31/2025.

Initial In-Service Load	Projected 2028 Load
Summer: 7 MW Winter: 0 MW	Summer: 108 MW Winter: 108 MW



# Dominion Transmission Zone: Supplemental Customer Load Request

**Need Number:** DOM-2024-0010

**Process Stage:** Need Meeting 02/06/2024

**Project Driver:** Customer Service

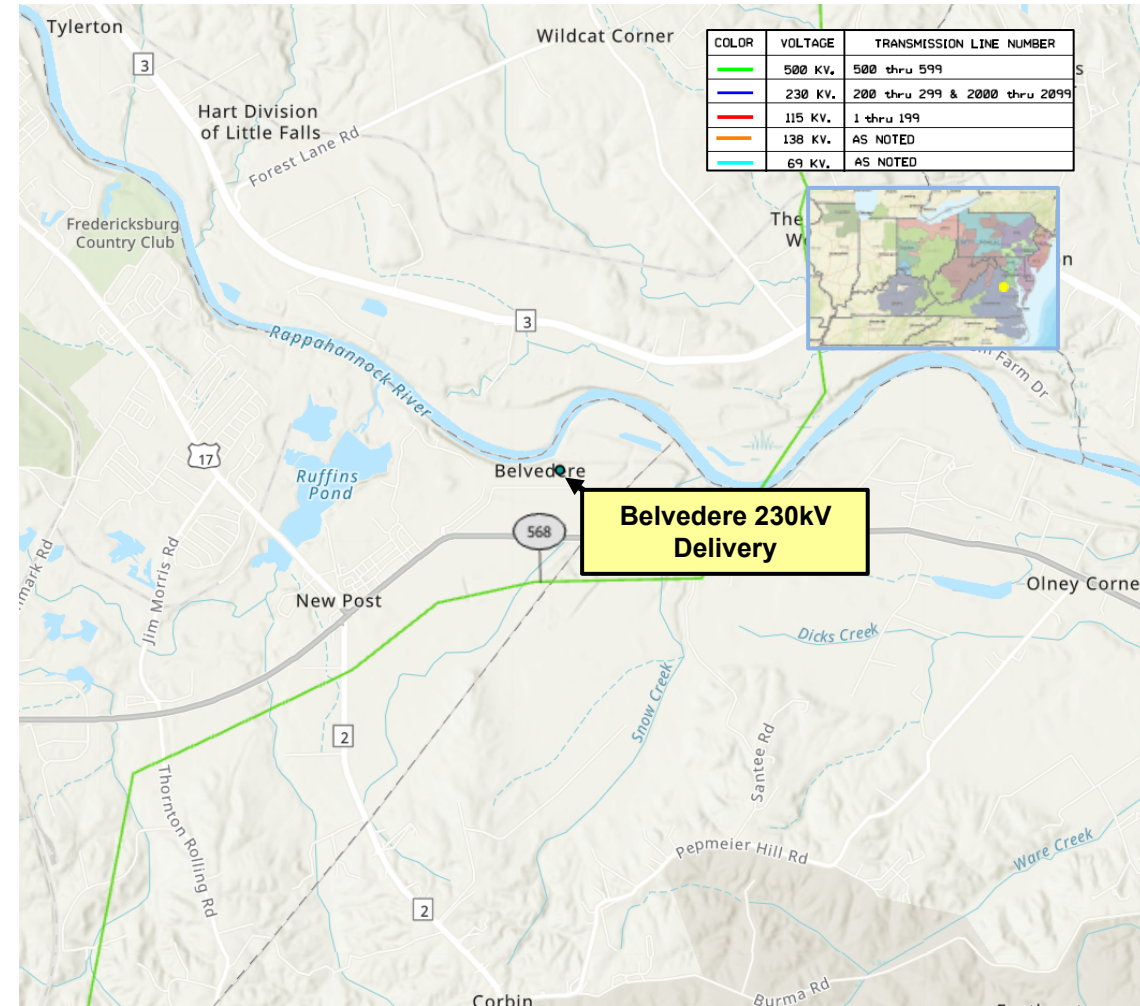
## Specific Assumption References:

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 230 kV delivery point (Belvedere) to serve a data center customer in Fredericksburg VA with a total load in excess of 100 MW. Requested in-service date is 1/01/2026.

Initial In-Service Load	Projected 2028 Load
Summer: 92 MW Winter: 92 MW	Summer: 285 MW Winter: 285 MW



# Dominion Transmission Zone: Supplemental Customer Load Request

**Need Number:** DOM-2024-0011

**Process Stage:** Need Meeting 02/06/2024

**Project Driver:** Customer Service

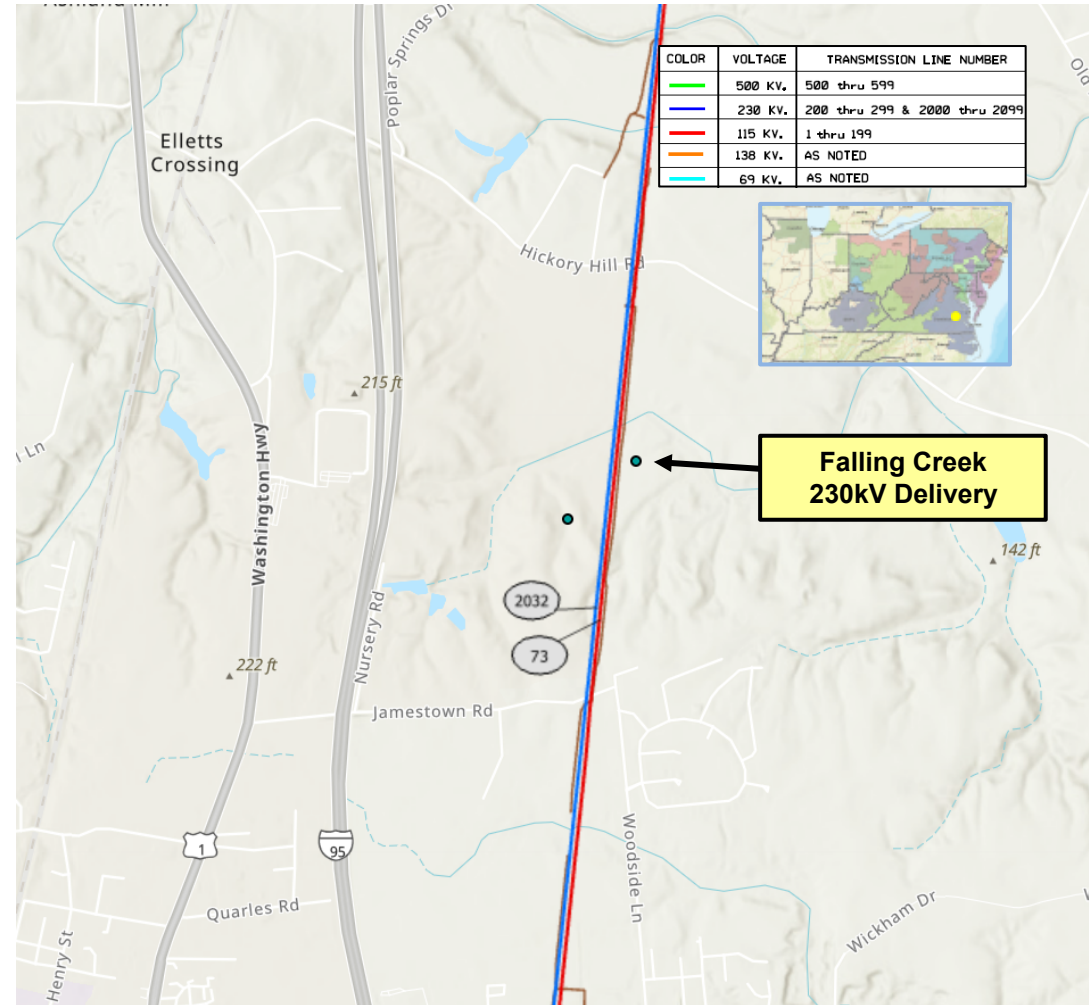
## Specific Assumption References:

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 230 kV delivery point (Falling Creek) to serve a data center customer in Ashland VA with a total load in excess of 100 MW. Requested in-service date is 1/01/2028.

Initial In-Service Load	Projected 2028 Load
Summer: 0 MW Winter: 5 MW	Summer: 5 MW Winter: 5 MW



# Dominion Transmission Zone: Supplemental Customer Load Request

**Need Number:** DOM-2024-0012

**Process Stage:** Need Meeting 02/06/2024

**Project Driver:** Customer Service

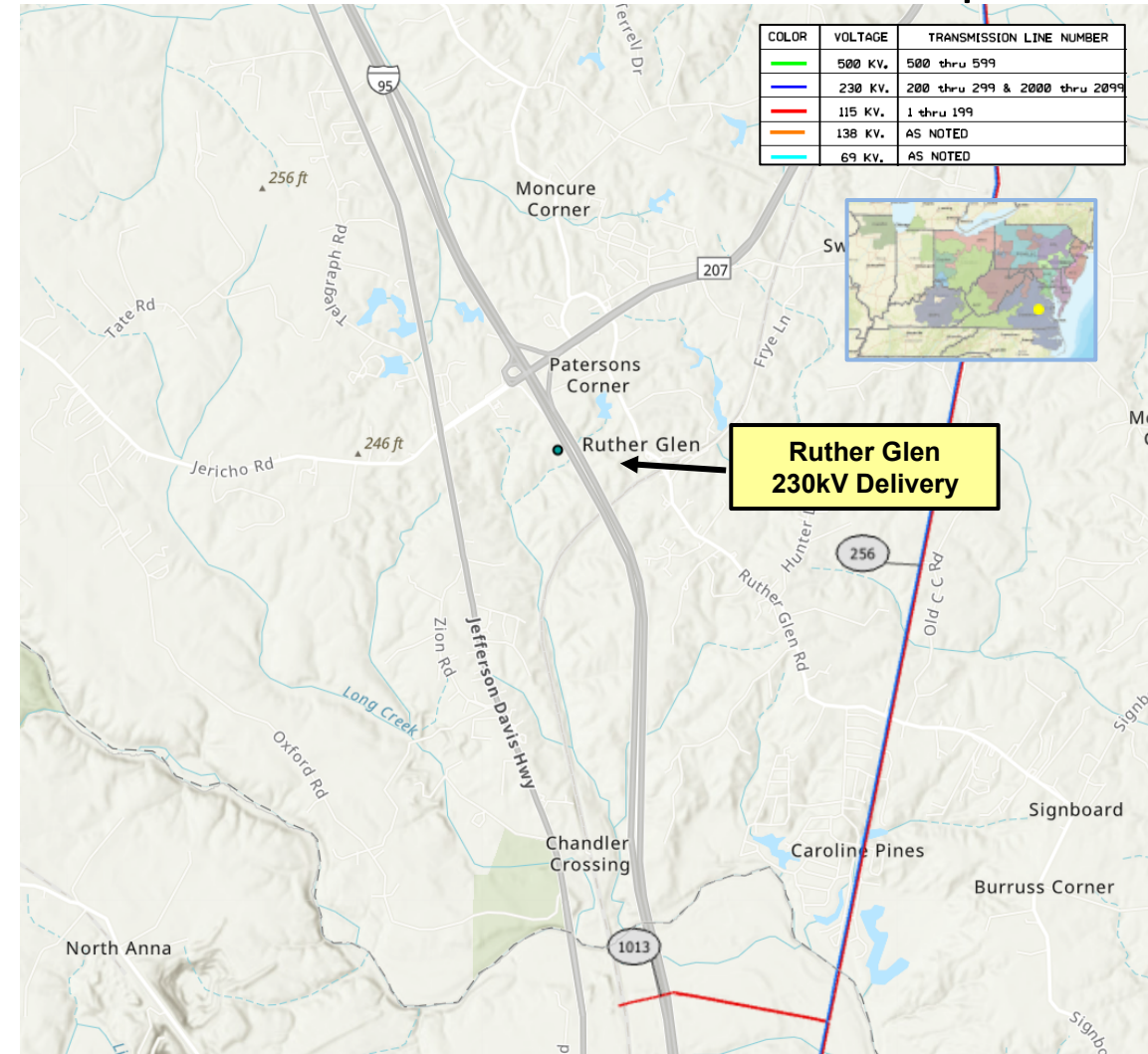
## Specific Assumption References:

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 DP request for a new 230 kV delivery point (Ruther Glen) to serve a data center customer in Caroline County VA with a total load in excess of 100 MW. Requested in-service date is 3/02/2026.

Initial In-Service Load	Projected 2028 Load
Summer: 170 MW Winter: 170 MW	Summer: 300 MW Winter: 300 MW



# Dominion Transmission Zone: Supplemental Customer Load Request

**Need Number:** DOM-2024-0002

**Process Stage:** Need Meeting 02/06/2024

**Project Driver:** Customer Service

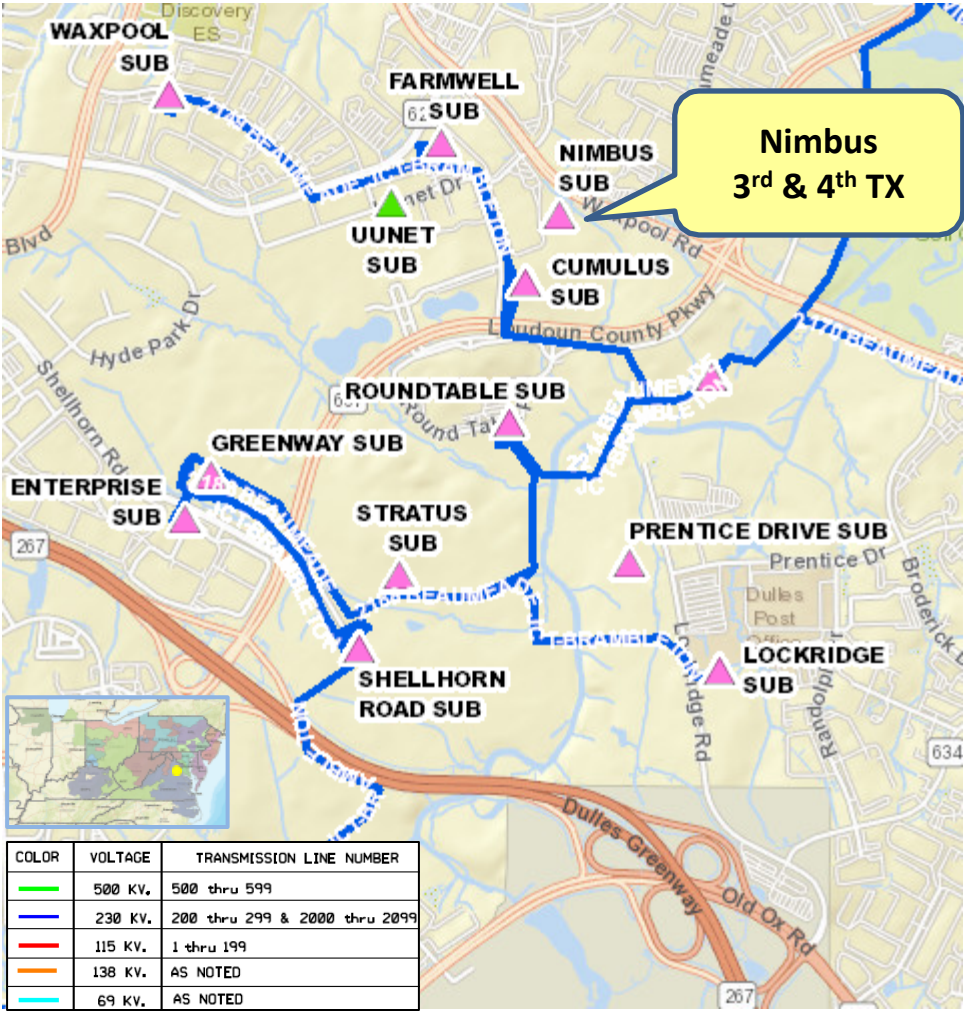
**Specific Assumption References:**

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 add the 3<sup>rd</sup> and 4<sup>th</sup> distribution transformers at Nimbus Substation in Loudoun County. The new transformers are being driven by continued load growth in the area. Requested in-service date is 1/1/2026.

Initial In-Service Load	Projected 2029 Load
Summer: 188.0 MW Winter: 188.0 MW	Summer: 280.5 MW Winter: 280.5 MW



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

**Need Number:** DOM-2024-0003

**Process Stage:** Need Meeting 02/06/2024

**Project Driver:** Equipment Material Condition, Performance and Risk

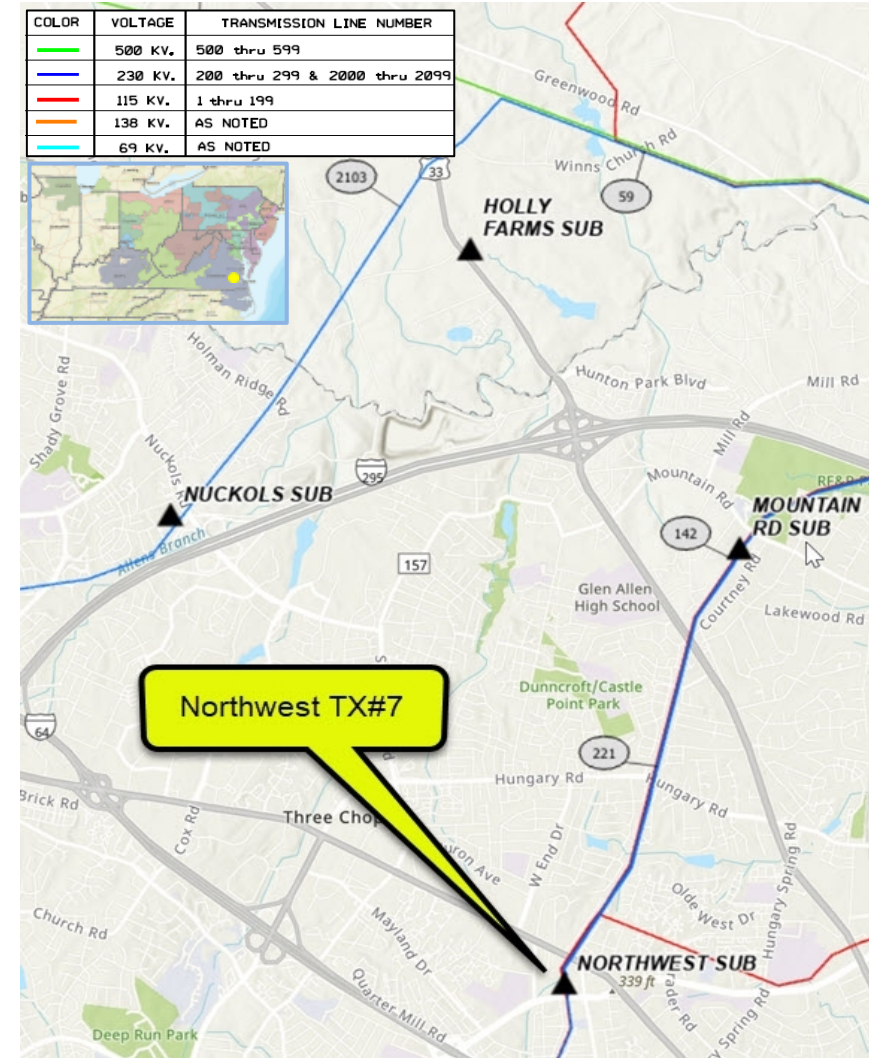
## Specific Assumption References:

See details on Equipment Material Condition, Performance and Risk in Dominion's Planning Assumptions presented in December 2023.

## Problem Statement:

Northwest TX#7 is a 168 MVA, 230/115/13.2 kV three-phase transformer that was manufactured in 1977. This transformer bank has been identified for replacement based on the results of Dominion's transformer health assessment (THA) process. Detailed drivers include:

- Age (>40 years old).
- Reduced BIL ratings (3 levels below standard).
- Degraded porcelain type bushings.
- LTC (Load Tap Changer) has not been manufactured for 30 years; parts for maintenance and refurbishment becoming difficult to procure
- THA score less than 80.



# Solutions

Stakeholders must submit any comments within 10 days of this meeting in order to provide time necessary to consider these comments prior to the next phase of the M-3 process

# Dominion Transmission Zone: Supplemental Do No Harm Analysis

**Need Number:** DOM-2021-0016-DNH **Update**

**Process Stage:** Solutions Meeting 02/06/2024

**Previously Presented:** Solutions Meeting 06/06/2023

## Proposed Solution (Part 1 of 4):

### Pleasant View 500-230kV Transformer

- Install (1) 840 MVA 500-230 kV transformer at Goose Creek Substation. (TD 12/15/2023)
  - Extend the existing 500kV ring bus at Goose Creek Substation to be set up for a future six-breaker ring arrangement. One breaker to be installed initially creating a five-breaker ring bus.
  - Install a new 230kV ring bus at Goose Creek Substation to be set up for a future four-breaker ring arrangement. Three 230kV breakers to be installed initially.
- Cut and extend line #227 (Belmont to Beaumeade) into Goose Creek Substation. (TD 12/15/2023)
- Upgrade 230 kV Pleasant View breakers L3T203 and L3T2180 from 50 kA to ~~63 kA~~ 80 kA

**Estimated Project Cost:** \$41.0 M

Transmission Line Cost: \$5.0 M

Substation Cost: \$36 M

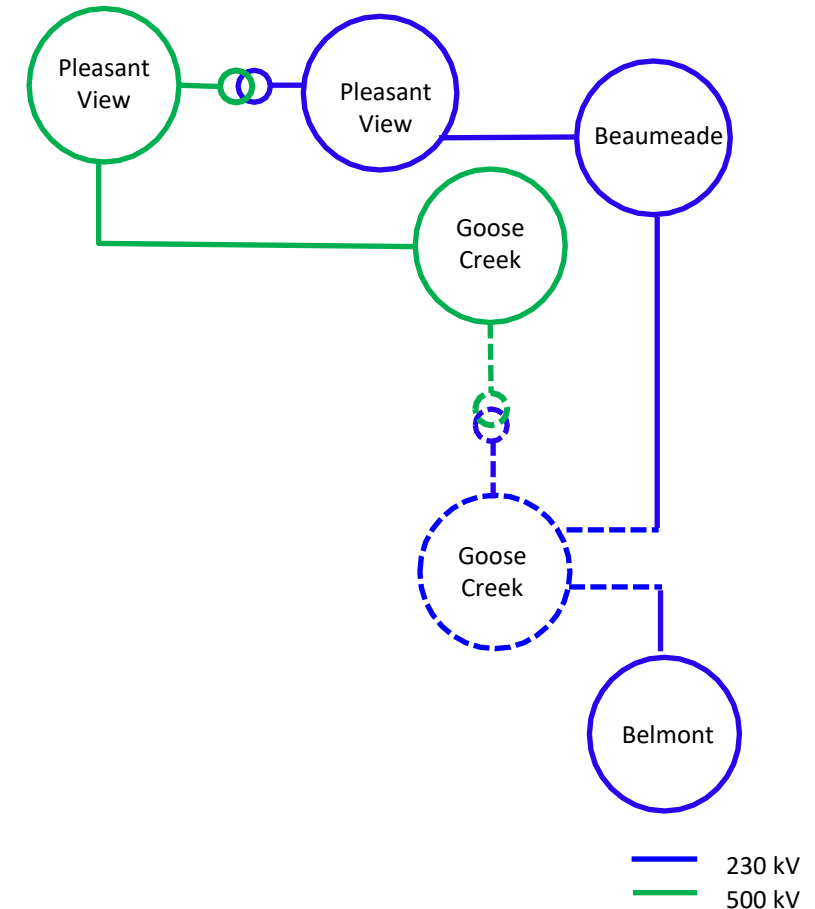
### Alternatives Considered:

No feasible alternatives

**Projected In-service Date:** 12/15/2027

**Project Status:** Engineering

**Model:** 2025 RTEP





# 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

01/26/2024– V1 – Original version posted to pjm.com