

# Dominion Supplemental Projects

Transmission Expansion Advisory  
Committee  
April 11, 2023

# 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-2023-0027

**Process Stage:** Need Meeting 04/11/2023

**Project Driver:** Customer Service

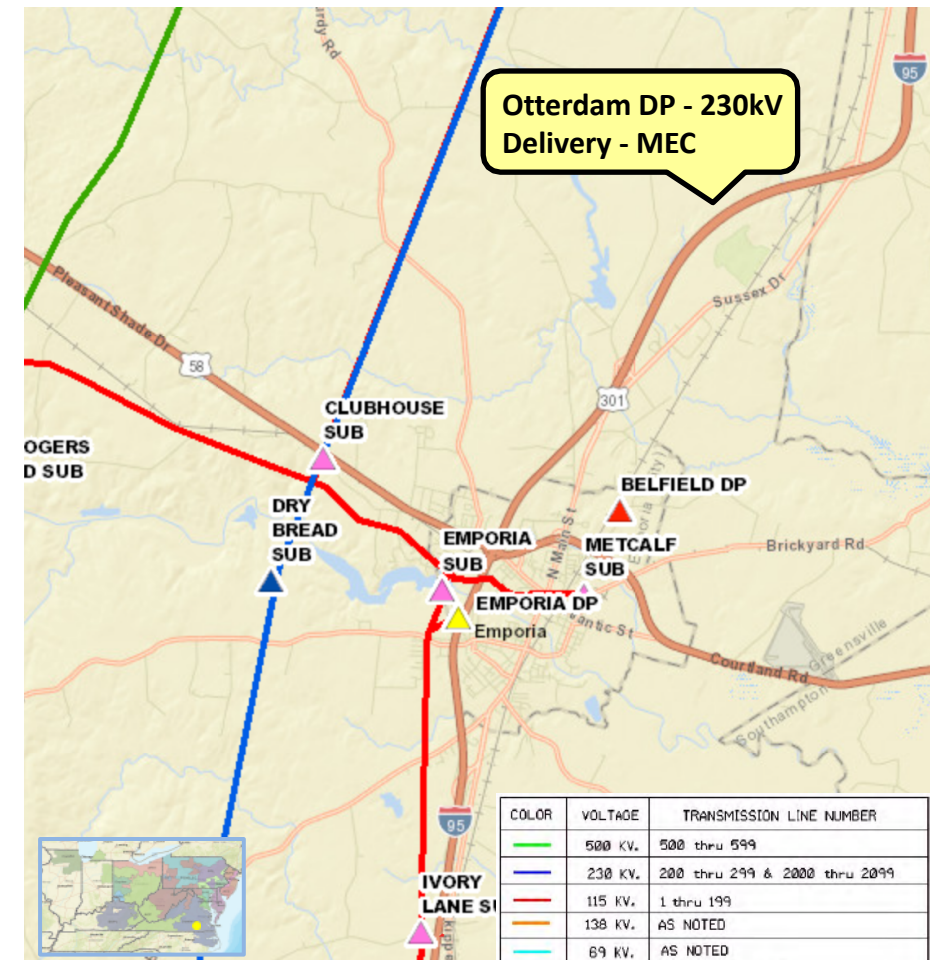
**Specific Assumption References:**

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

**Problem Statement:**

ODEC on behalf of Mecklenburg Electric Cooperative (MEC) has submitted a delivery point request for a new delivery point at the MAMaC site in Greensville County, VA. MEC is requesting to construct a transmission line under the economic development legislative pilot program for business parks. The total load is in excess of 100 MW. The customer requests service by December 31, 2026.

Initial In-Service Load	Projected 2028 Load
Summer: 30.0 MW	Summer: 80.0 MW



# 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 Customer Load Request

**Need Number:** DOM-2022-0032

**Process Stage:** Solutions Meeting 04/11/2023

**Previously Presented:** Need Meeting 06/07/2022

**Project Driver:** Customer Service

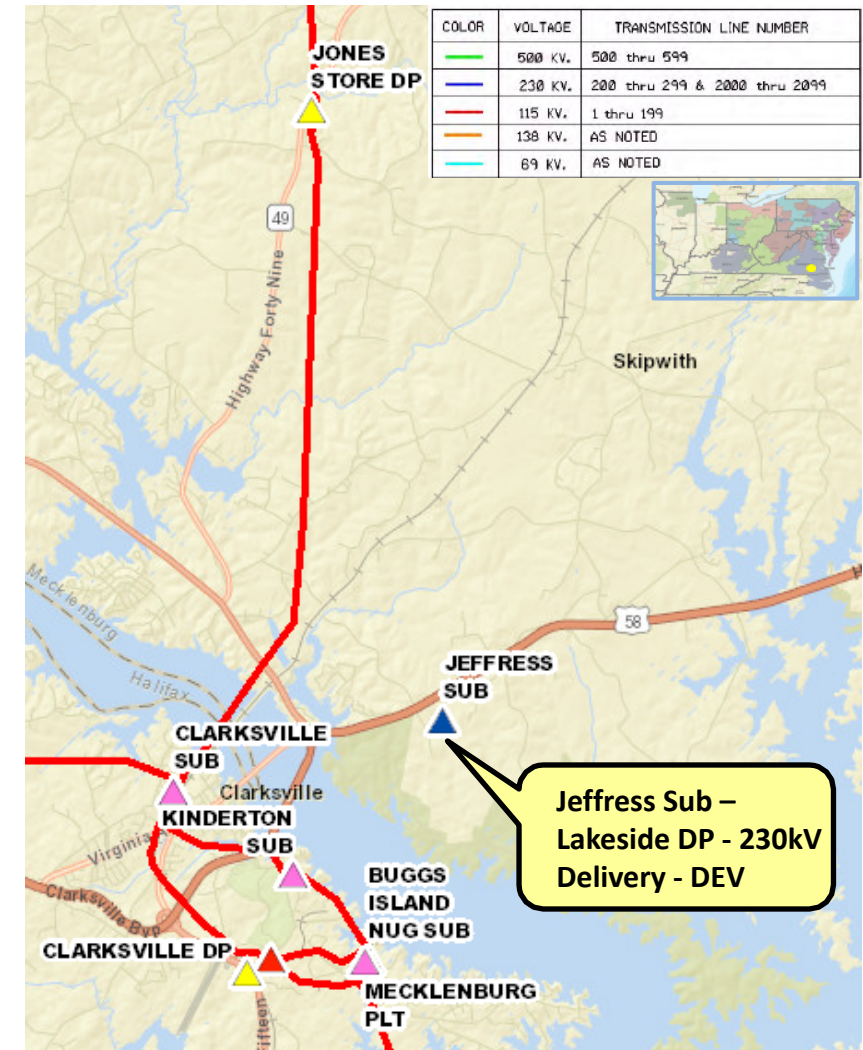
**Specific Assumption References:**

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

**Problem Statement:**

ODEC on behalf of Mecklenburg Electric Coop (MEC) has submitted a delivery point request (Lakeside DP) for a new delivery point to serve a data center customer in Clarksville, VA. The total load is in excess of 100 MW. The customer requests service by Jan 1, 2025.

Initial In-Service Load	Projected 2028 Load
Summer: 12.0 MW	Summer: 103.0 MW



# Dominion Transmission Zone: Supplemental Jeffress 230kV Delivery - MEC

**Need Number:** DOM-2022-0032

**Process Stage:** Solutions Meeting 04/11/2023

## Proposed Solution:

The project will need to be built in 2 stages due to the timeframe associated with obtaining a CPCN and extend 230kV into the area. The 115kV Station will help meet the initial load target date.

**Stage 1:** Interconnect the new substation by cutting and extending Line #36 (Chase City– Buggs Island) to the proposed Jeffress 115kV Substation. The substation and line equipment used to interconnect Jeffress 115 kV with the transmission system will be same as 230kV substation. The projected in-service date for Stage 1 is January 1, 2025.

**Stage 2:** Construct two 230kV single circuits from Finneywood 500/230kV sub to the proposed Jeffress 230kV Substation. Once conversion from 115kV to 230kV substation is complete, remove Jeffress 115kV tap and reconnect Line #36 Chase City– Buggs Island. The projected in-service date for Stage 2 is July 1, 2026.

## Estimated Project Cost: \$120.0 M (Total)

Transmission Line	\$90M
115kV Substation	\$15M
230kV Substation	\$15M

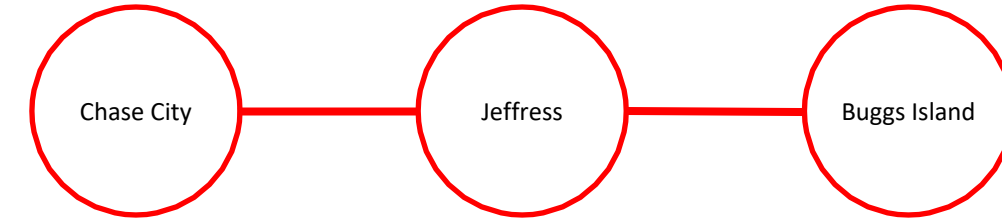
## Alternatives Considered:

No feasible alternatives – 115kV system not adequate to support area data center growth.

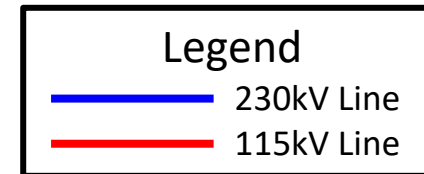
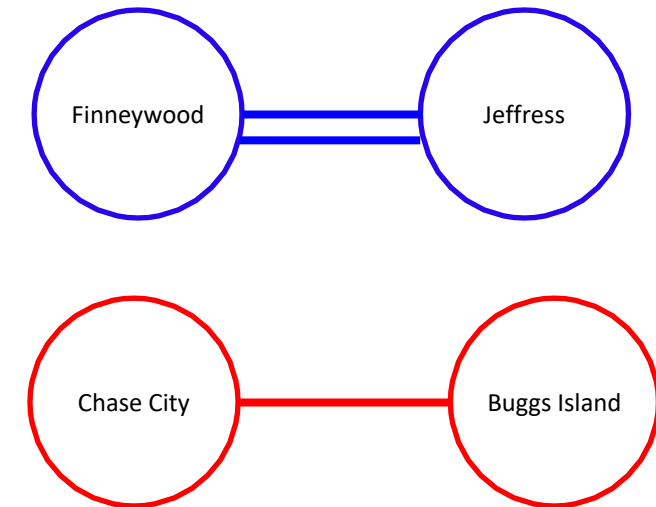
**Projected In-service Date:** 07/01/2026 (Stage 2)

**Project Status:** Engineering

## Stage 1: Jeffress 115kV Sub



## Stage 2: Jeffress 230kV Sub



# Dominion Transmission Zone: Supplemental Customer Load Request

**Need Number:** DOM-2023-0007

**Process Stage:** Solutions Meeting 04/11/2023

**Previously Presented:** Need Meeting 03/07/2023

**Project Driver:** Customer Service

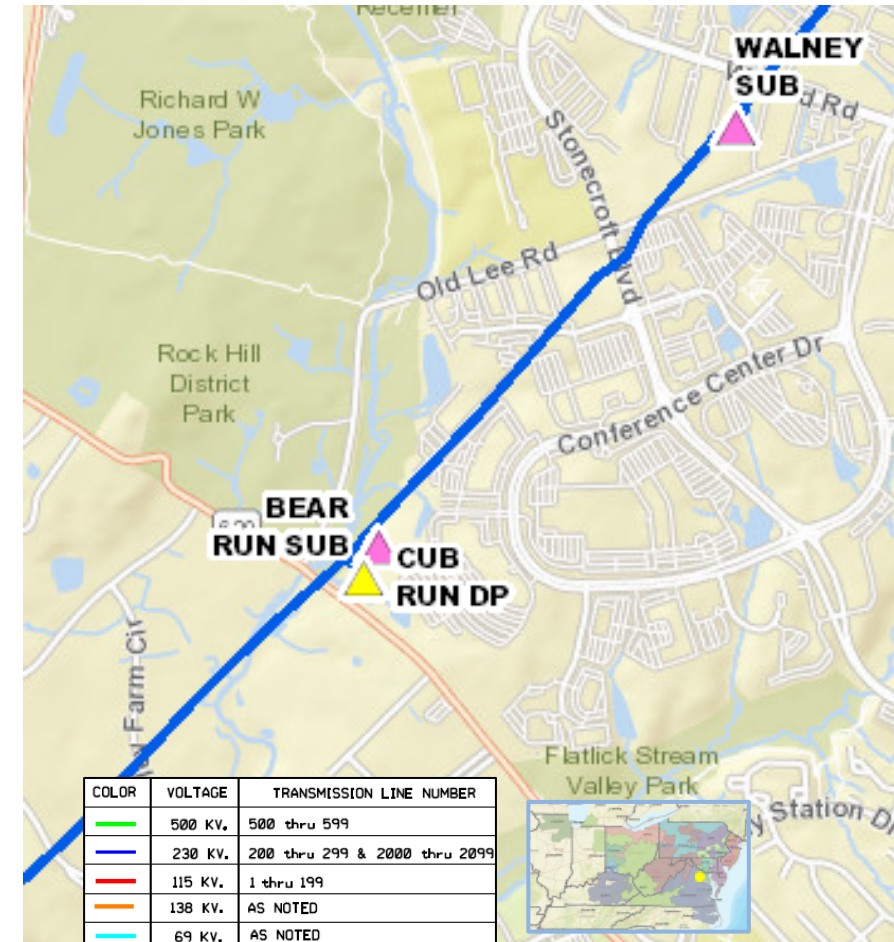
**Specific Assumption References:**

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

**Problem Statement:**

NOVEC has submitted a Delivery Point (DP) Request stating that it is expanding Cub Run Substation in Fairfax County and the total load will exceed 100MW. Requested in-service date is 3/15/2024.

Initial In-Service Load	Projected 2028 Load
Summer: 45.0 MW	Summer: 90.0 MW



# Dominion Transmission Zone: Supplemental Bear Run 230kV Delivery - DEV

**Need Number:** DOM-2023-0007

**Process Stage:** Solutions Meeting 04/11/2023

**Proposed Solution:**

Interconnect the new substation by cutting and extending Line #265 (Bull Run - Sully) to the proposed Bear Run Substation. Lines to terminate in a 230kV four-breaker ring arrangement with an ultimate arrangement of a six-breaker ring.

**Estimated Project Cost:** \$24.5 M

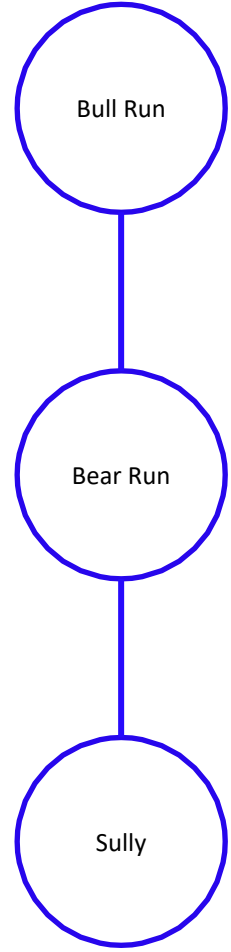
**Alternatives Considered:**

None – adjacent to existing transmission line.

**Projected In-service Date:** 03/15/2024

**Project Status:** Engineering

**Model:** 2027 RTEP





# Dominion Transmission Zone: Supplemental Customer Load Request

**Need Number:** DOM-2023-0015

**Process Stage:** Solutions Meeting 04/11/2023

**Previously Presented:** Need Meeting 03/07/2023

**Project Driver:** Customer Service

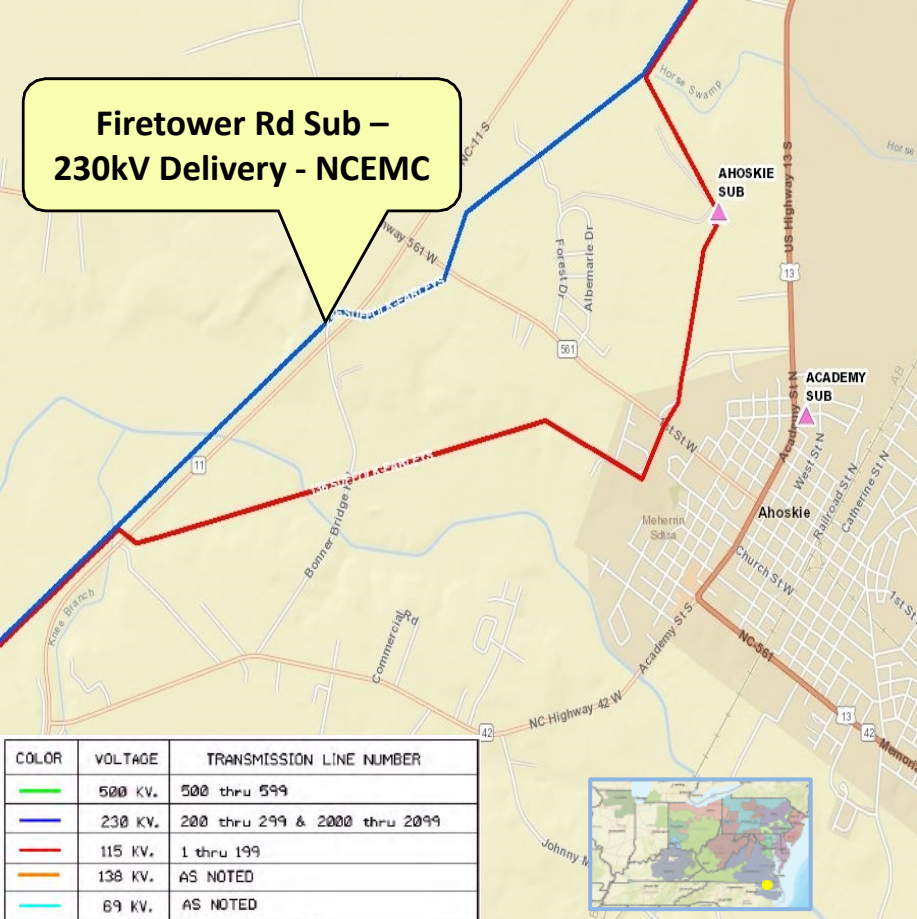
**Specific Assumption References:**

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

**Problem Statement:**

NCEMC has submitted a delivery point request for a new substation (Firetower Rd) to serve a gas compression facility in Ahoskie, NC. The total load is less than 100 MW. The customer requests service by December 31, 2023.

Initial In-Service Load	Projected 2028 Load
Winter: 8.1 MW	Summer: 8.1 MW



# Dominion Transmission Zone: Supplemental Firetower Rd 230kV Delivery - DEV

**Need Number:** DOM-2023-0015

**Process Stage:** Solutions Meeting 04/11/2023

**Proposed Solution:**

Tap Line #246 (Earleys – Suffolk) near structure 246/290 and extend a single circuit 230kV line to Firetower Road sub.

**Estimated Project Cost:** \$5.0 M (Total)

Transmission Line \$4M

230kV Substation \$1M

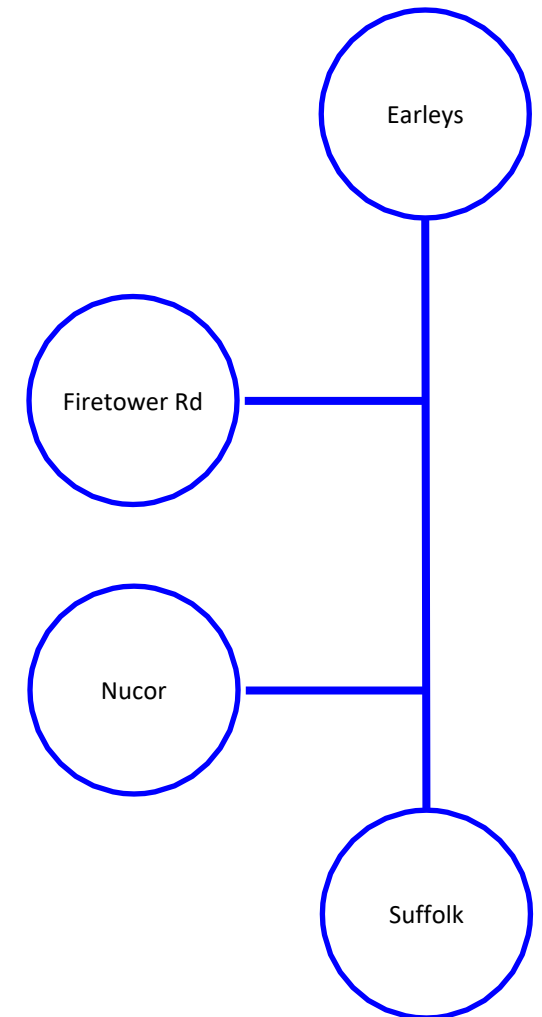
**Alternatives Considered:**

None – adjacent to existing transmission line.

**Projected In-service Date:** 12/31/2023

**Project Status:** Engineering

**Model:** 2027 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

03/31/2023 – V1 – Original version posted to pjm.com