

# Dominion Supplemental Projects

Transmission Expansion Advisory  
Committee  
October 17, 2019

# 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-2019-0024**

**Process Stage: Need Meeting 10/17/2019**

**Project Driver: Customer Service**

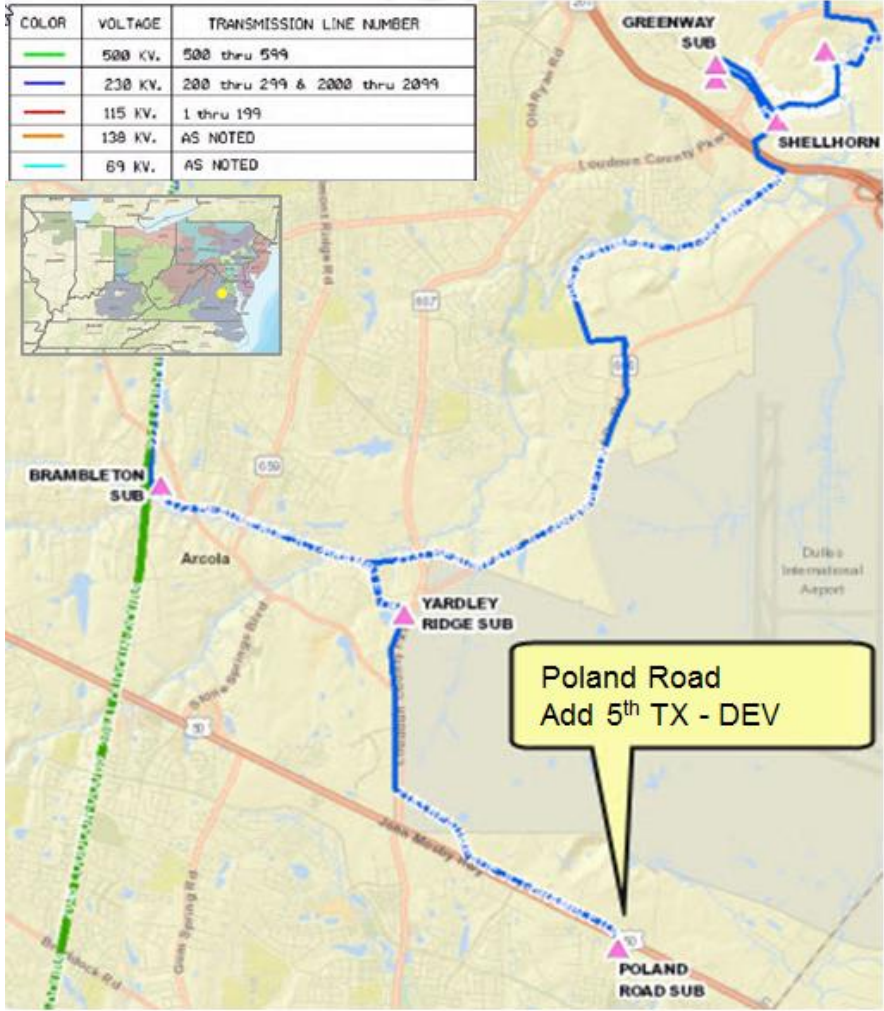
**Specific Assumption References:**

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 a 5th, 84 MVA distribution transformer at Poland Road Substation in Loudoun County. The new transformer is being driven by continued load growth in the area and contingency loading for loss of one of the existing transformers. Requested in-service date is 10/15/2022.

Initial In-Service Load	Projected 2024 Load
Summer: 268.0 MW	Summer: 293.0 MW



# Dominion Transmission Zone: Supplemental Contamination

**Need Number: DOM-2019-0028**

**Process Stage: Need Meeting 10/17/2019**

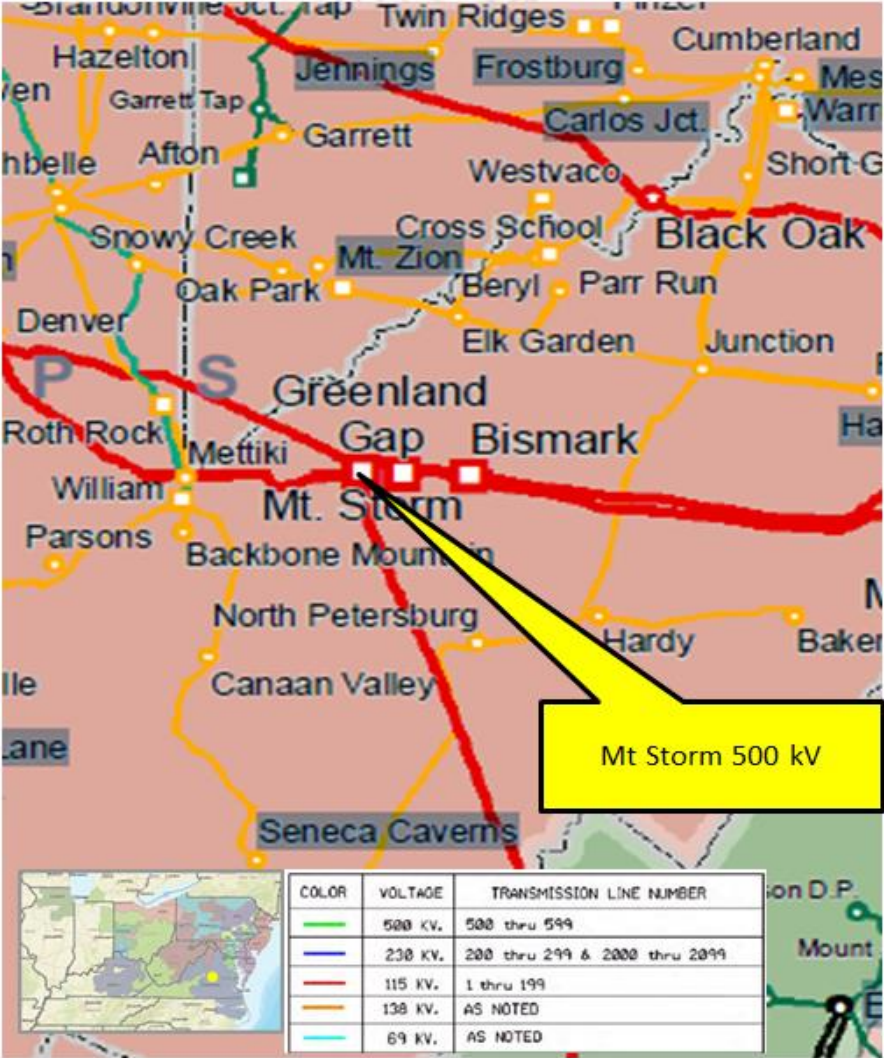
**Project Driver: Contamination & Operational Flexibility**

**Specific Assumption References:**

Dominion Energy Supplemental Project Drivers presented at the December 5, 2018 Southern Sub-Regional Meeting: II. Equipment Material Condition, Performance and Risk & III. Operational Flexibility and Efficiency

**Problem Statement:**

Ice and weather continue to be an issue at Mt Storm Substation that affects the operation and maintenance of the remaining outdoor equipment located in the substation. In 2014 half the existing 500 kV substation equipment was converted to GIS.



# 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-2019-0020**

**Process Stage: Solutions Meeting 10/17/2019**

**Previously Presented: Need Meeting 05/16/2019**

**Project Driver: Customer Service**

**Specific Assumption References:**

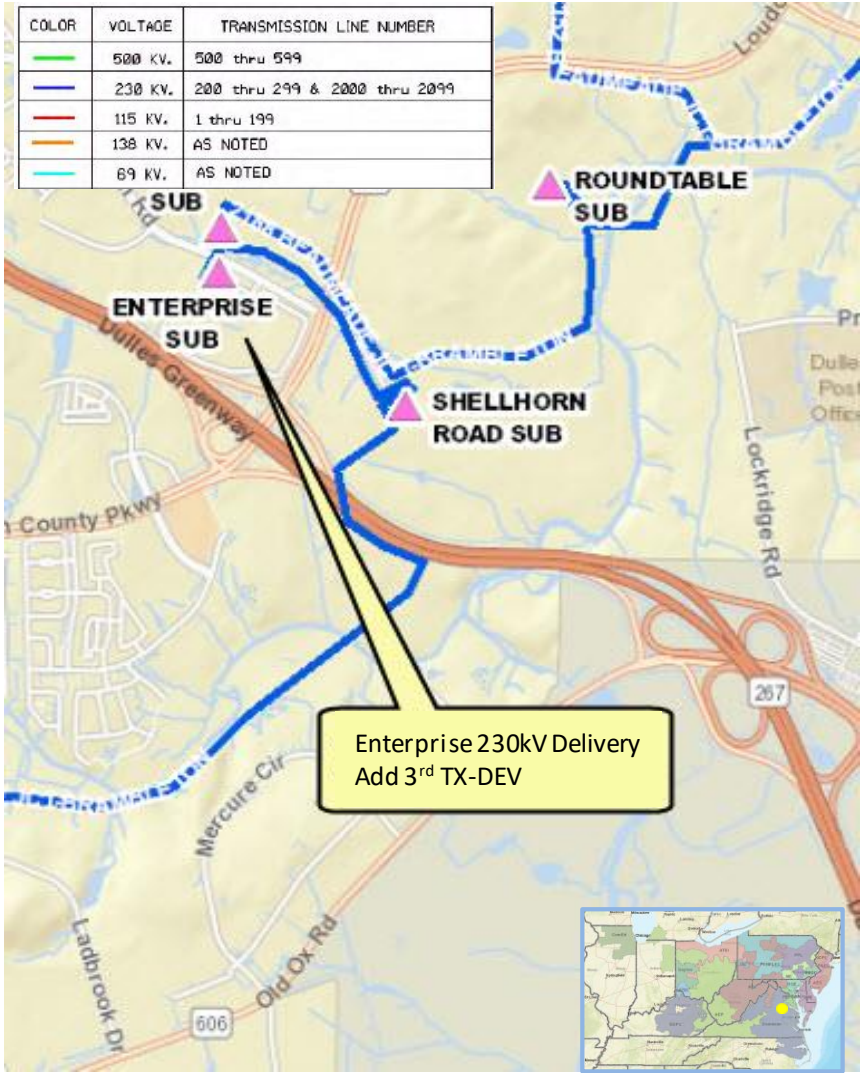
Customer load request will be evaluated per Dominion’s Facility Interconnection Requirements Document and Dominion’s Transmission Planning Criteria.

**Problem Statement:**

DEV Distribution has submitted a DP Request to add a 3rd, 84 MVA distribution transformer at Enterprise Substation in Loudoun County. The new transformer is being driven by continued datacenter load growth and alternate feed contract reservations. Requested in-service date is 07/15/2020.

Initial In-Service Load	Projected 2024 Load
Summer: 82.4 MW	Summer: 96.5 MW

Note: Distribution’s Customer is also requesting 145MVA of alternate capacity



# Dominion Transmission Zone: Supplemental Enterprise 230kV Delivery- Add 3<sup>rd</sup> TX - DEV

**Need Number:** DOM-2019-0020

**Process Stage:** Solutions Meeting 10/17/2019

**Proposed Solution:**

Install a 1200 Amp, 50kAIC circuit switcher and associated equipment (bus, switches, relaying, etc.) to feed the new transformer at Enterprise.

**Estimated Project Cost:** \$0.25 M

**Alternatives Considered:**

No feasible alternatives

**Projected In-service Date:** 07/15/2020

**Project Status:** Engineering

**Model:** 2023 RTEP



# Dominion Transmission Zone: Supplemental Customer Load Request

**Need Number: DOM-2019-0022**

**Process Stage:** Solutions Meeting 10/17/2019

**Previously Presented:** Need Meeting 05/16/2019

**Project Driver:** Customer Service

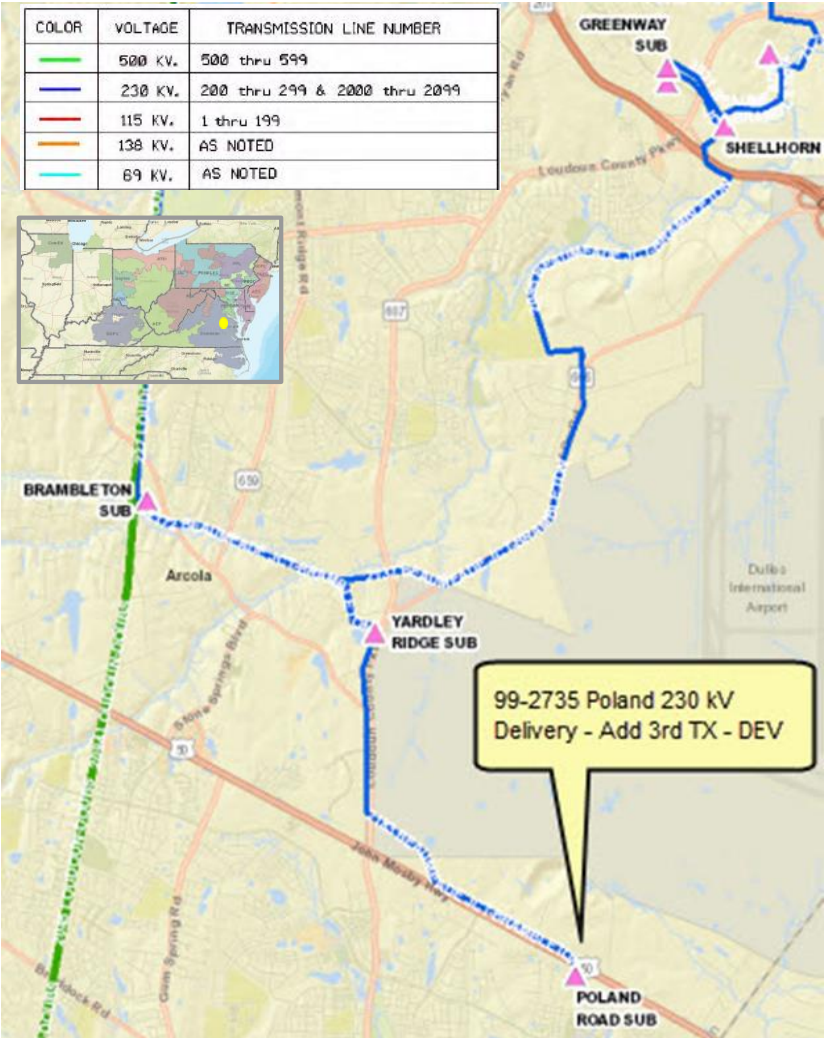
**Specific Assumption References:**

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 a 4th, 84 MVA distribution transformer at Poland Road Substation in Loudoun County. The new transformer is being driven by continued datacenter load growth and alternate feed contract reservations. Requested in-service date is 12/31/2021.

Initial In-Service Load	Projected 2024 Load
Summer: 225.0 MW	Summer: 293.0 MW





# Dominion Transmission Zone: Supplemental Poland Road 230kV Delivery- Add 4th TX - DEV

**Need Number:** DOM-2019-0022

**Process Stage:** Solutions Meeting 10/17/2019

**Proposed Solution:**

Install a 1200 Amp, 50kAIC circuit switcher and associated equipment (bus, switches, relaying, etc.) to feed the new transformer at Poland Road.

**Estimated Project Cost:** \$2.0 M

**Alternatives Considered:**

No feasible alternatives

**Projected In-service Date:** 12/31/2021

**Project Status:** Engineering

**Model:** 2023 RTEP



# Dominion Transmission Zone: Supplemental Customer Load Request

**Need Number: DOM-2019-0023**

**Process Stage:** Solutions Meeting 10/17/2019

**Previously Presented:** Need Meeting 05/16/2019

**Project Driver:** Customer Service

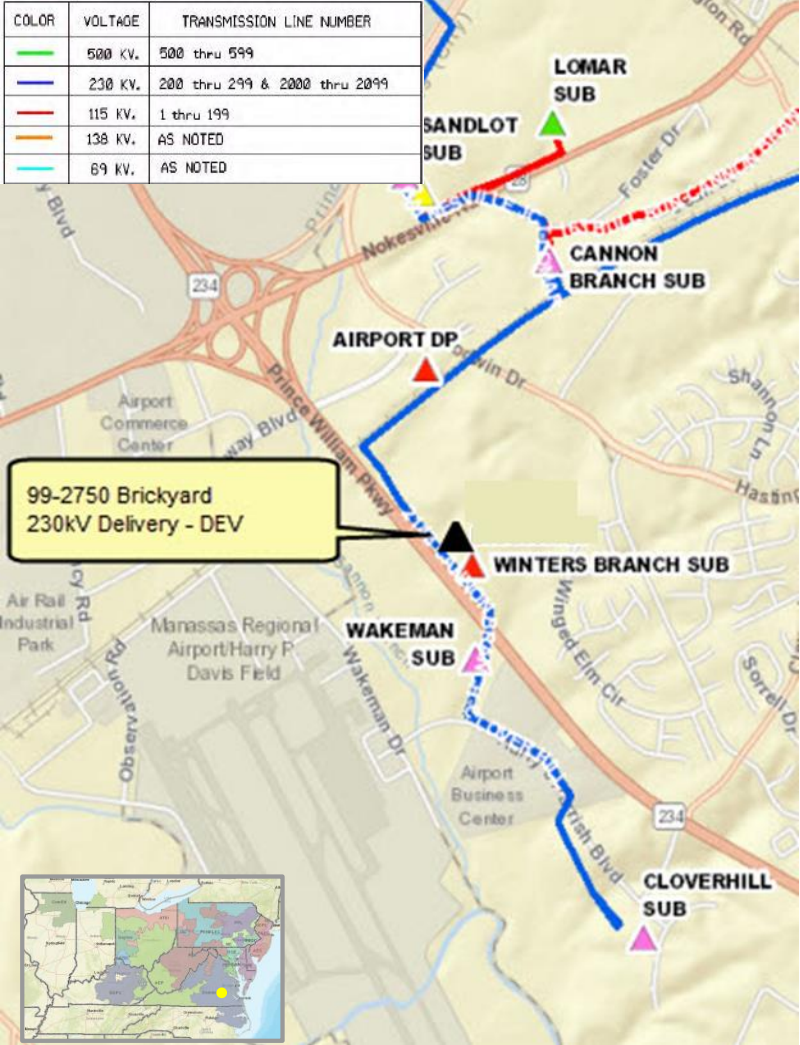
**Specific Assumption References:**

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 (Brickyard) to support a new datacenter campus in Prince William County with a total load in excess of 100 MW. Requested in-service date is 12/15/2021.

Initial In-Service Load	Projected 2024 Load
Summer: 8.0 MW	Summer: 52.0 MW



# Dominion Transmission Zone: Supplemental Brickyard 230kV Delivery - DEV

**Need Number:** DOM-2019-0023

**Process Stage:** Solutions Meeting 10/17/2019

**Proposed Solution:**

Cut an existing 230kV line between Cannon Branch and Winters Branch Substations. At Brickyard, install four 230kV breakers to terminate the two lines. Install two 230kV circuit switchers and any necessary high side switches and bus work for two initial transformers.

**Estimated Project Cost:** \$2.0 M

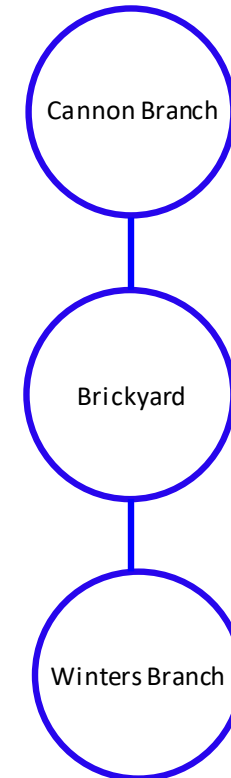
**Alternatives Considered:**

No feasible alternatives

**Projected In-service Date:** 05/15/2023

**Project Status:** Engineering

**Model:**



# 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

10/07/2019 – V1 – Original version posted to pjm.com

10/18/2019 – V2 – Updated the title to slide 4 and 11 and also updated the bubble diagram on slide 11 to reflect the correct substations.