

# SRRTEP Committee Southern Dominion Supplemental Projects

June 16, 2020

# 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-2020-0020

**Process Stage:** Need Meeting 06/16/2020

**Project Driver:** Customer Service

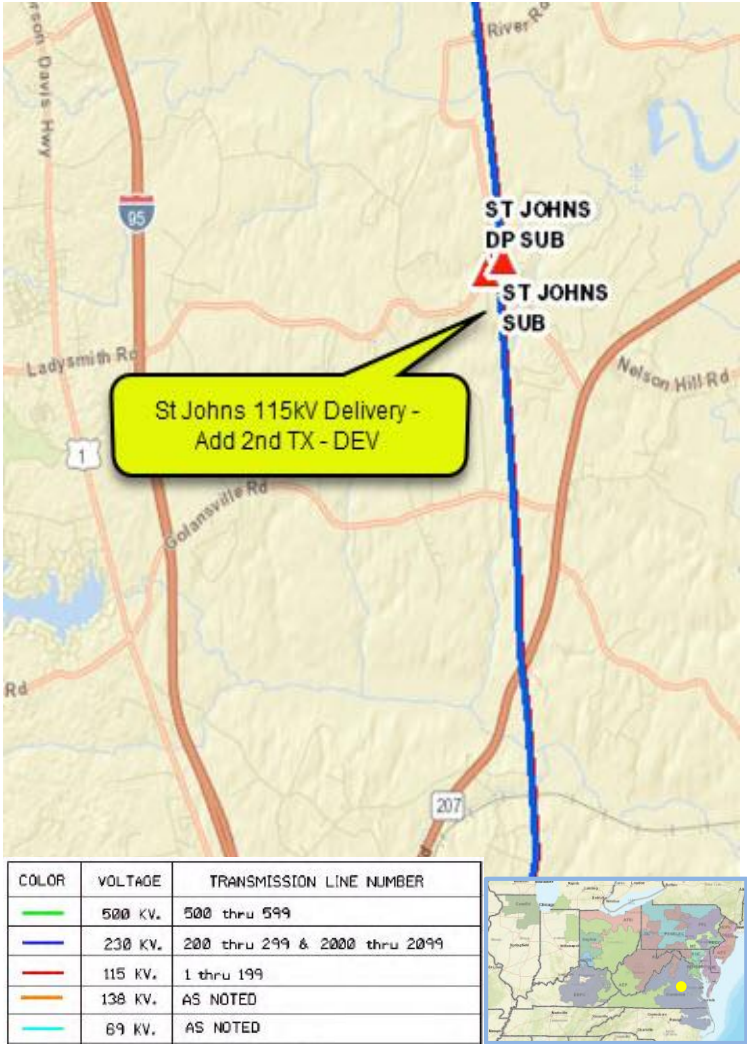
**Specific Assumption References:**

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 2nd, 12.5 MVA distribution transformer at St. Johns Substation in the Caroline County. The new transformer is needed to mitigate load loss for a transformer contingency. Requested in-service date is 11/15/2021.

Initial In-Service Load	Projected 2025 Load
Winter: 11.1 MW	Summer: 11.9 MW



# Dominion Transmission Zone: Supplemental Customer Load Request

**Need Number:** DOM-2020-0025

**Process Stage:** Need Meeting 06/16/2020

**Project Driver:** Customer Service

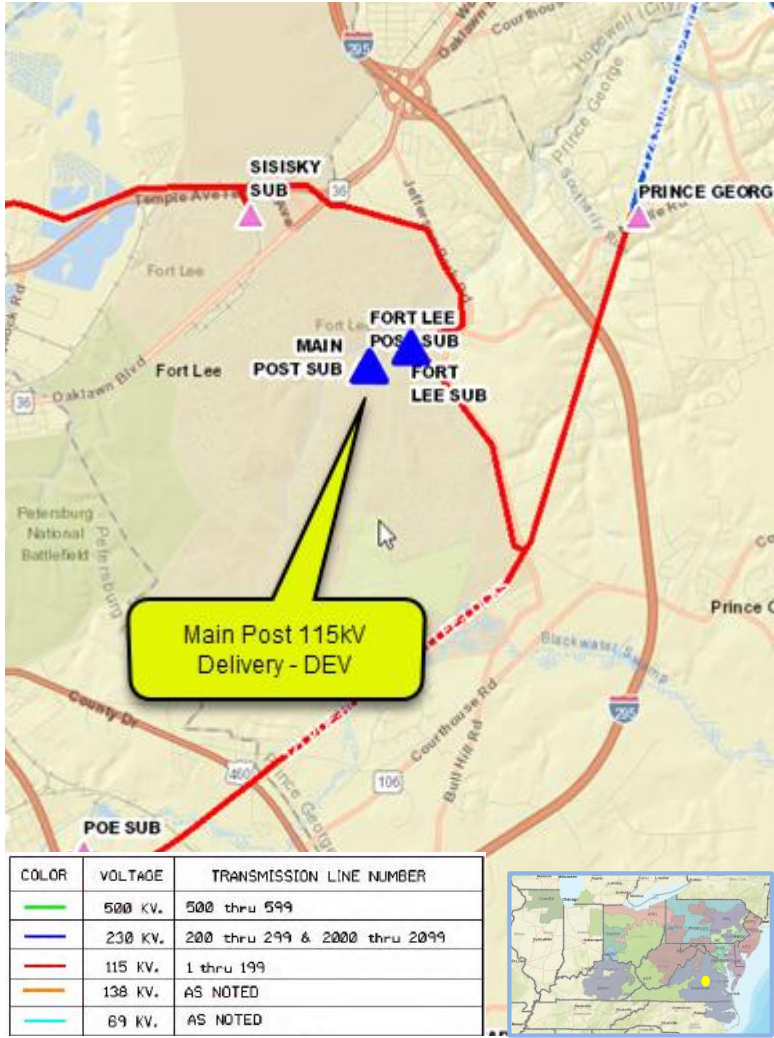
**Specific Assumption References:**

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 (Main Post) to serve existing load (<100 MW) at Fort Lee Army Post in Prince George County. The Army has requested the new substation (on their property) to isolate their load from the regulated 13.2 kV circuits fed by Fort Lee Substation and will bear the full cost of the project. Requested in-service date is 03/15/2021.

Initial In-Service Load	Projected 2025 Load
Summer: 30.0 MW	Summer: 30.0 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 Equipment Material Condition, Performance, and Risk

**Need Number:** DOM-2020-0015

**Process Stage:** Solution Meeting 06/16/2020

**Previously Presented:** Need Meeting 05/21/2020

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

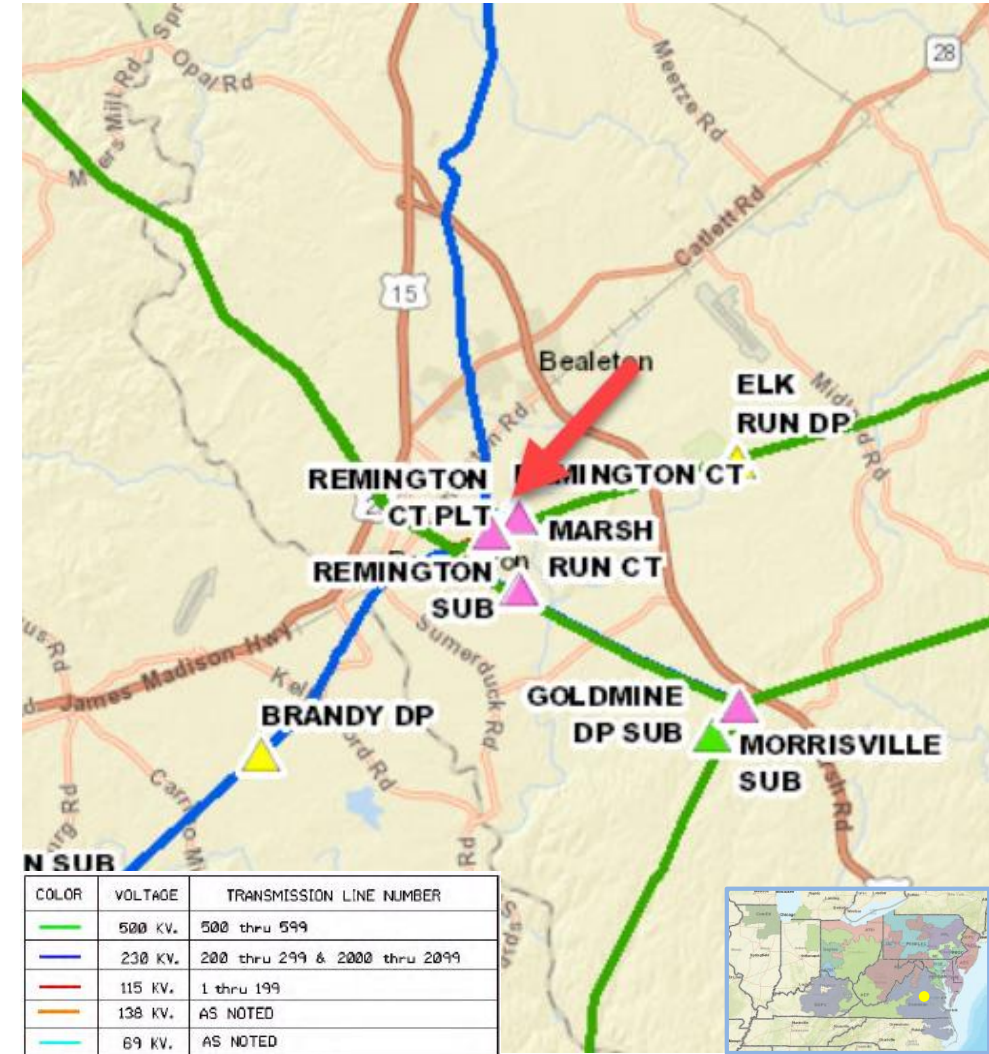
## Specific Assumption References:

See details on Equipment Material Condition, Performance and Risk in Dominion's Planning Assumptions presented in December 2019

## Problem Statement:

Remington CT Tx#9 is a 224MVA, 230/115kV transformer originally manufactured in 1971 as a 200 MVA unit and remanufactured in 1996 as a 224 MVA unit. This transformer is being replaced on the results of our ongoing transformer health assessment (THA) process. Detailed drivers are:

- Oil DGA levels are trending upwards. Unit was exhibiting upward trending combustible gasses from 2001 to 2013 when oil was reprocessed, however gasses are continuing to trend upward even after oil processing.
- Reduced BIL ratings



# Dominion Transmission Zone: Supplemental Transformer Replacement at Remington CT

**Need Number:** DOM-2020-0015

**Process Stage:** Solutions Meeting 06/16/2020

**Proposed Solution:**

Replace the identified 224MVA 230/115kV transformer with a 224MVA 230/115kV transformer. Perform any associated transmission work.

**Estimated Project Cost:** \$3.6 M

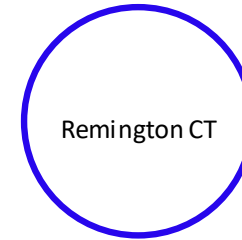
**Alternatives Considered:**

No feasible alternatives

**Projected In-service Date:** 09/16/2020

**Project Status:** Engineering

**Model:** N/A



# Dominion Transmission Zone: Supplemental Customer Load Request

**Need Number:** DOM-2020-0016

**Process Stage:** Solutions Meeting 06/16/2020

**Previously Presented:** Need Meeting 05/21/2020

**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, 56 MVA distribution transformer at Taussig Substation in the City of Norfolk. The new transformer is being driven by new load from the Hampton Road Bridge Tunnel (HRBT) expansion. Requested in-service date is 05/31/2021.

COLOR	VOLTAGE	TRANSMISSION LINE NUMBER
Green	500 KV.	500 thru 599
Blue	230 KV.	200 thru 299 & 2000 thru 2099
Red	115 KV.	1 thru 199
Orange	138 KV.	AS NOTED
Cyan	69 KV.	AS NOTED



Initial In-Service Load	Projected 2025 Load
Summer: 73.7 MW	Summer: 74.2 MW



# Dominion Transmission Zone: Supplemental Taussig 115kV Delivery- Add 3<sup>rd</sup> TX - DEV

**Need Number:** DOM-2020-0016

**Process Stage:** Solutions Meeting 06/16/2020

**Proposed Solution:**

Install a 1200 Amp, 25kAIC circuit switcher and associated equipment (bus, switches, relaying, etc.) to feed the new transformer at Taussig.

**Estimated Project Cost:** \$0.5 M

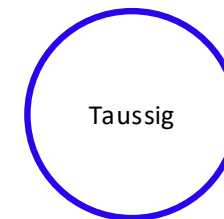
**Alternatives Considered:**

No feasible alternatives

**Projected In-service Date:** 05/31/2021

**Project Status:** Engineering

**Model:** N/A



# Dominion Transmission Zone: Supplemental Customer Load Request

**Need Number:** DOM-2020-0017

**Process Stage:** Solutions Meeting 06/16/2020

**Previously Presented:** Need Meeting 05/21/2020

**Project Driver:** Customer Service

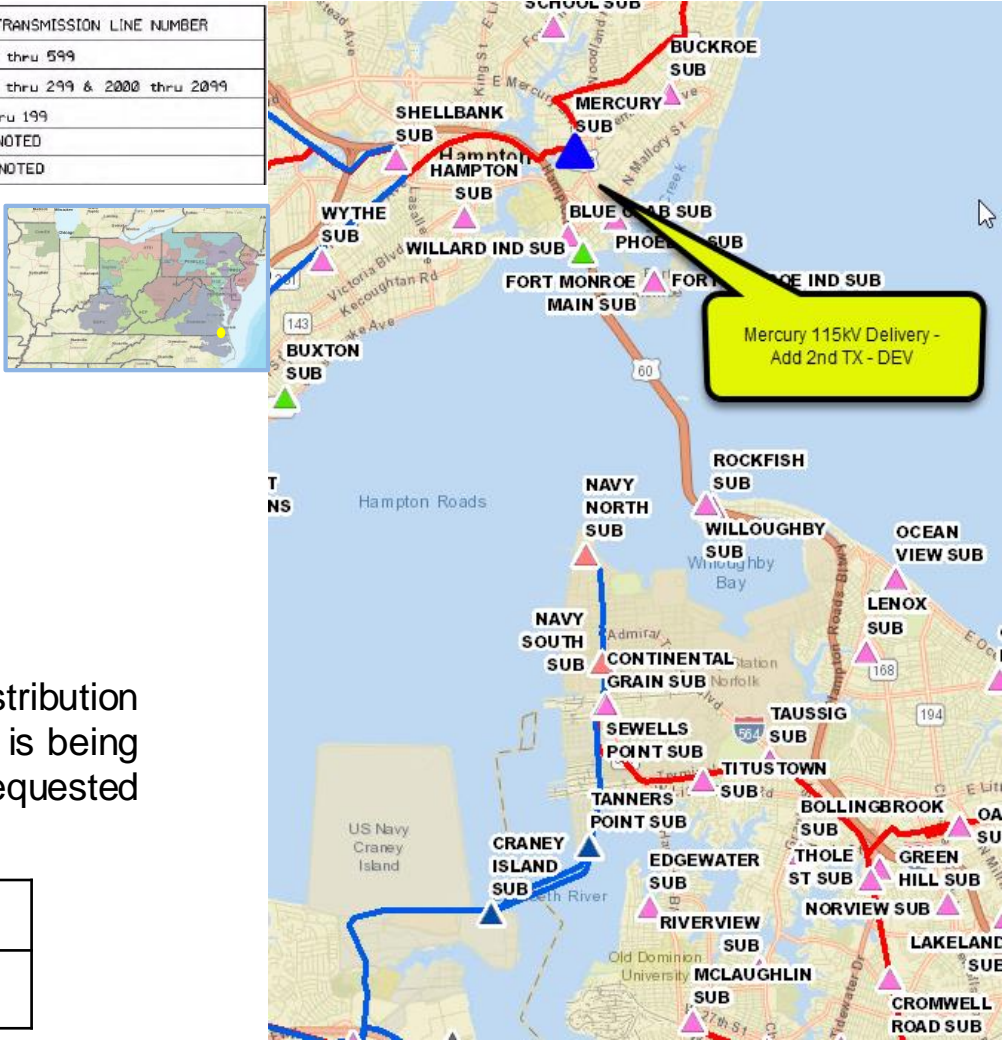
**Specific Assumption References:**

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 2nd, 33.6 MVA distribution transformer at Mercury Substation in the City of Hampton. The new transformer is being driven by new load from the Hampton Road Bridge Tunnel (HRBT) expansion. Requested in-service date is 09/01/2023.

COLOR	VOLTAGE	TRANSMISSION LINE NUMBER
Green	500 KV.	500 thru 599
Blue	230 KV.	200 thru 299 & 2000 thru 2099
Red	115 KV.	1 thru 199
Orange	138 KV.	AS NOTED
Cyan	69 KV.	AS NOTED



Initial In-Service Load	Projected 2025 Load
Summer: 37.2 MW	Summer: 37.2 MW

# Dominion Transmission Zone: Supplemental Mercury 115kV Delivery- Add 2<sup>nd</sup> TX - DEV

**Need Number:** DOM-2020-0017

**Process Stage:** Solutions Meeting 06/16/2020

**Proposed Solution:**

Install a 1200 Amp, 25kAIC circuit switcher and associated equipment (bus, switches, relaying, etc.) to feed the new transformer at Mercury.

**Estimated Project Cost:** \$0.5 M

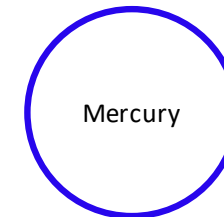
**Alternatives Considered:**

No feasible alternatives

**Projected In-service Date:** 09/01/2023

**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

6/5/2020 – V1 – Original version posted to pjm.com