



Dominion Supplemental Projects

Transmission Expansion Advisory
Committee

October 11, 2018

Needs



Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2018-0017

Meeting Date: 10/11/2018

Process Stage: NEED

Supplemental Project Driver: Customer Service

Problem Statement:

DENC Distribution has submitted a request for a new substation (Kingsboro) to serve two new customers located in Edgecombe County, North Carolina. DENC Distribution does not have distribution facilities in the area to serve this customer load request. The two customers request service, one by 7/1/2019 and the other by 1/15/2020.

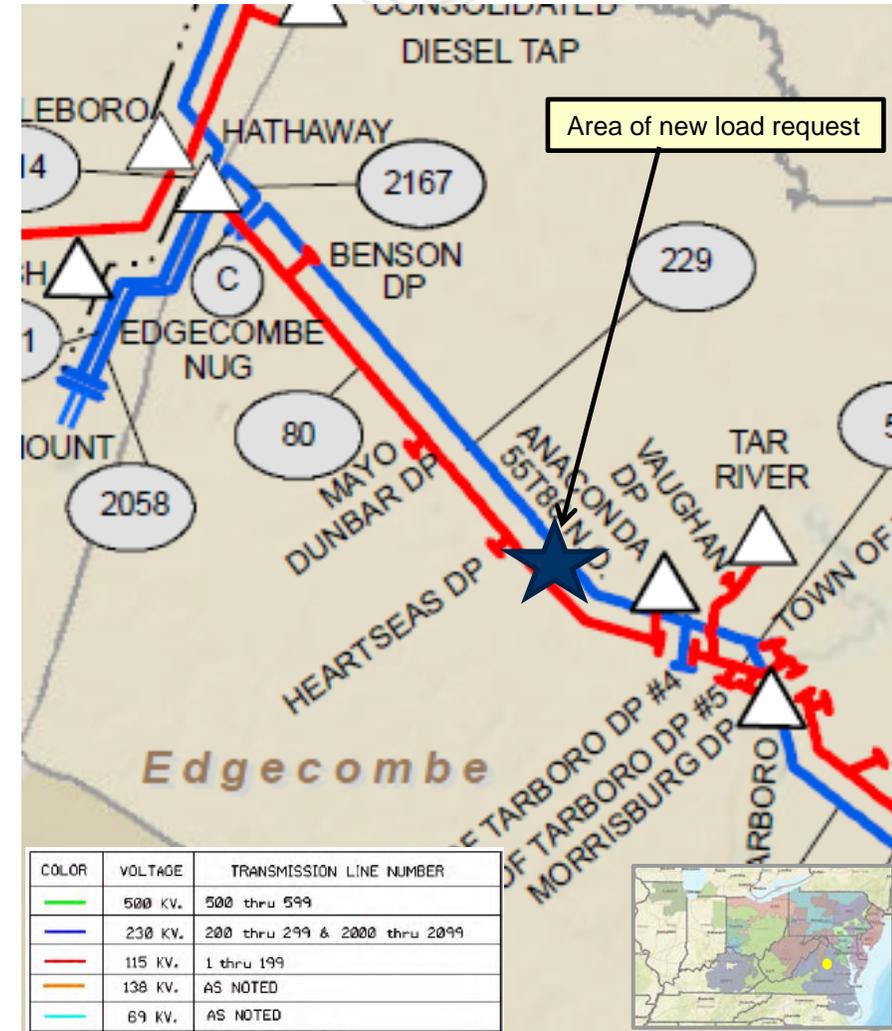
Projected 2023 Load

Summer: 14 MW

Winter: 14 MW

Specific Assumption References:

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





Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2018-0018

Meeting Date: 10/11/2018

Process Stage: NEED

Supplemental Project Driver: Customer Service

Problem Statement:

DEV Distribution has submitted a request for a new substation (Lucky Hill) to accommodate a new datacenter campus in Fauquier County with a total load in excess of 100 MW. Requested in-service date is Sept 15, 2020.

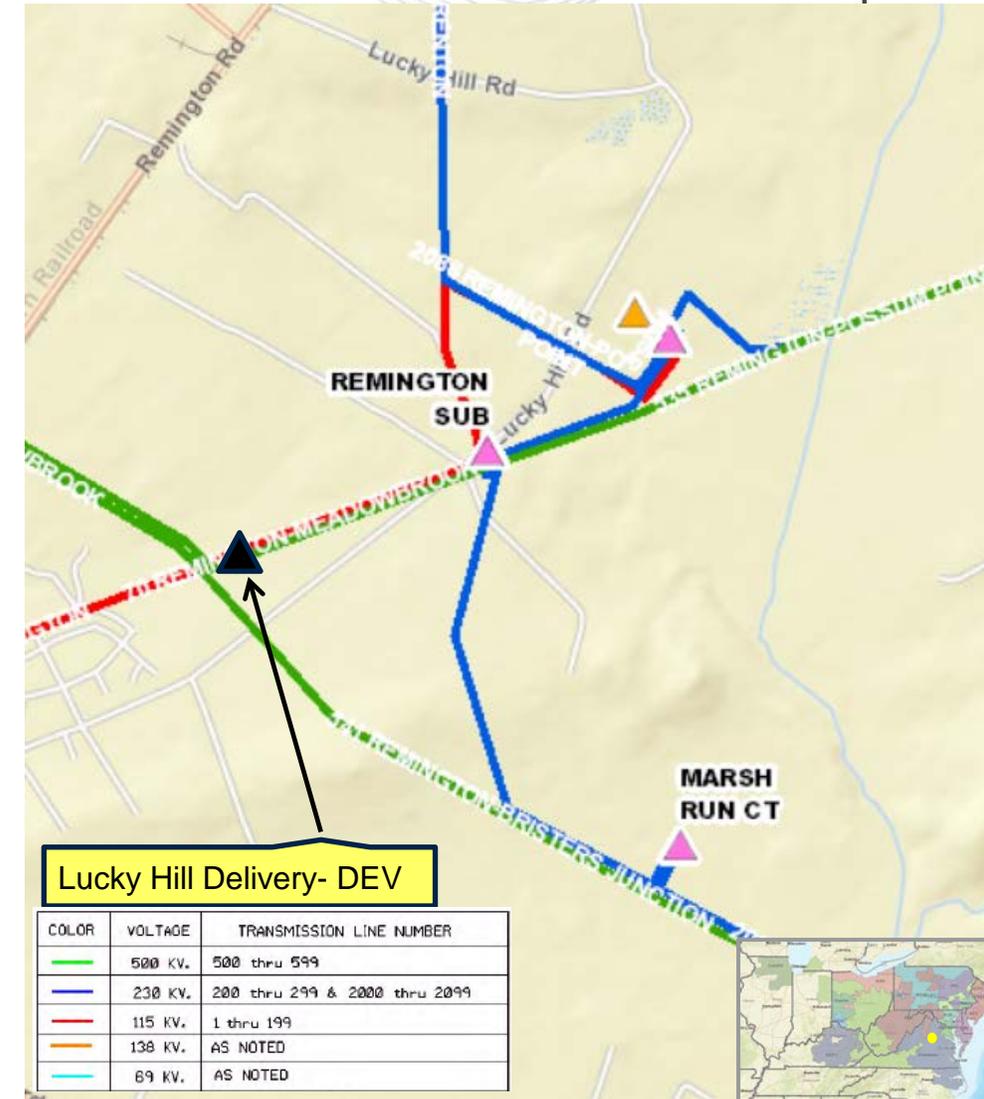
Projected 2023 Load

Summer: 100 MW

Winter: 102 MW

Specific Assumption References:

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





Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2018-0019

Meeting Date: 10/11/2018

Process Stage: NEED

Supplemental Project Driver: Customer Service

Problem Statement:

DEV has submitted a DP Request for a new substation (Sandlot) to accommodate the expansion of a manufacturing plant in the City of Manassas with a total load in excess of 100 MW. Requested in-service date is 10/15/2019.

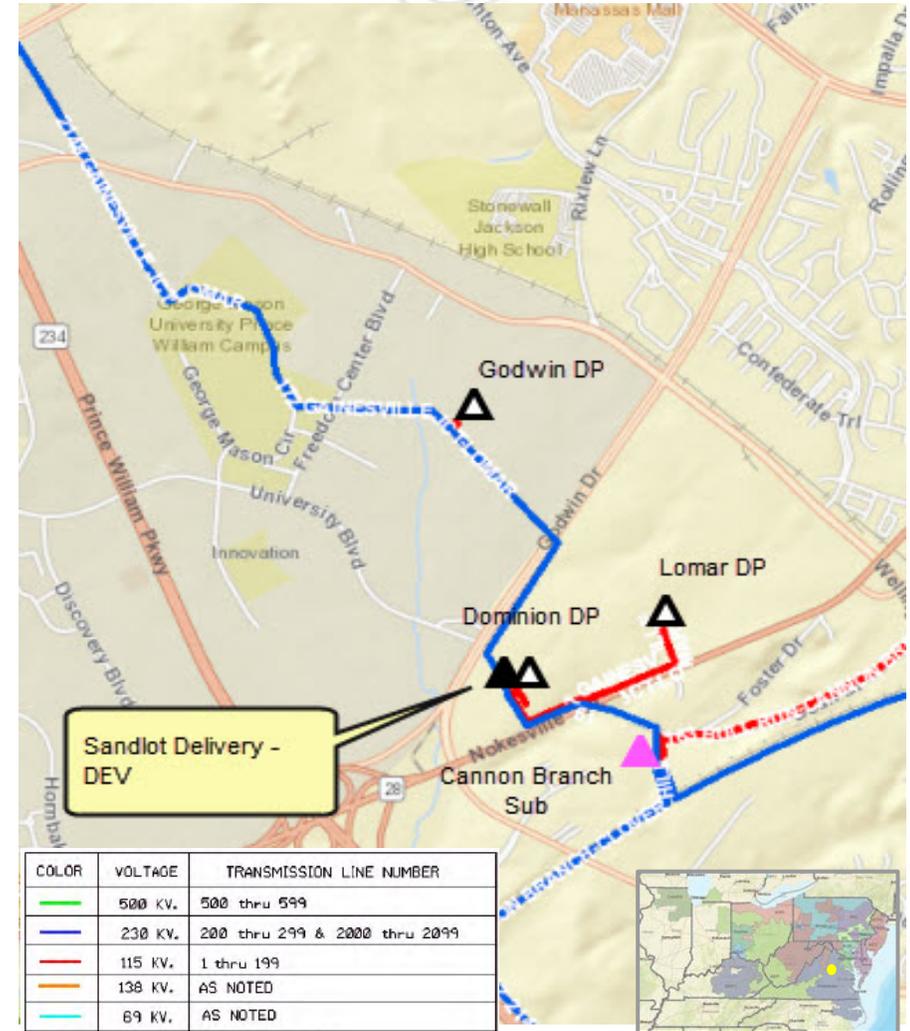
Projected 2023 Load

Summer: 41.9 MW

Winter: 41.9 MW

Specific Assumption References:

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





Solutions



Need Number: DOM-2018-0001

Meeting Date: 10/11/2018

Process Stage: SOLUTIONS

Supplemental Project Driver: Customer Service

Problem Statement:

DEV Distribution has submitted a request to serve a new datacenter campus in Loudoun County with total load in excess of 100MW. Customer requests service by 9/1/2020.

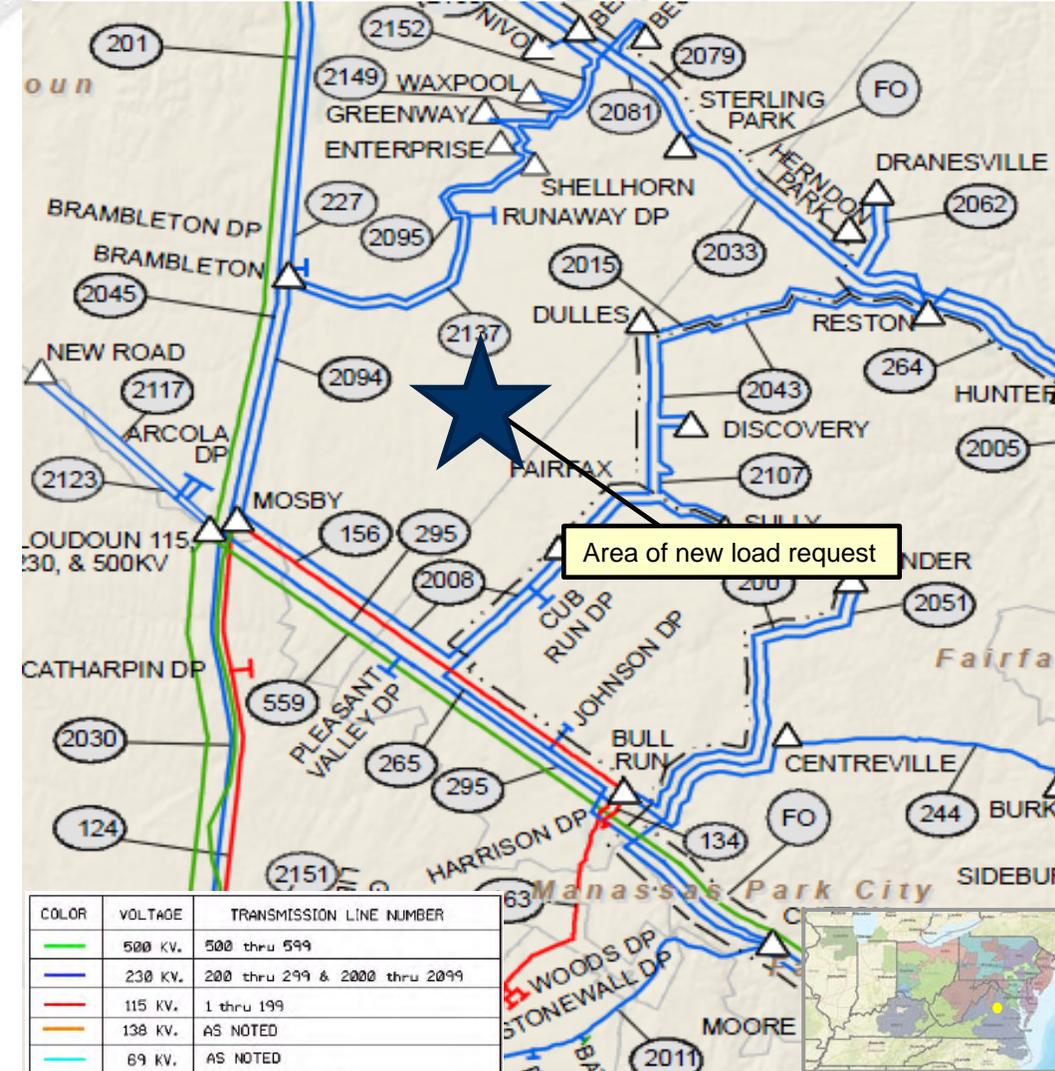
Projected 2023 load
Summer: 150 MW
Winter: 150 MW

DEV Distribution does not have adequate distribution facilities to serve this customer load request.

Specific Assumption References:

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

Dominion Transmission Zone: Supplemental Evergreen Mills 230kV Delivery





Dominion Transmission Zone: Supplemental Evergreen Mills 230kV Delivery

Need Number: DOM-2018-0001

Proposed Solution:

With total projected load of 150 MW, we are proposing to construct a new Evergreen Mills Switching Station. It will require four transmission lines to terminate at the station in order to avoid a violation of mandatory NERC reliability criteria. Cut and extend both Line #2183 (Brambleton-Poland Road) and Line #2172 (Brambleton-Yardley Ridge) into and out of the proposed station. At Evergreen Mills Station, six (6) 230 kV breakers in a ring bus arrangement would be installed to meet the Transmission Planning criteria.

The customer has requested four (4) additional 230kV breakers to be installed for additional redundancy and will be responsible for excess facilities charges.

TO Alternatives Considered :

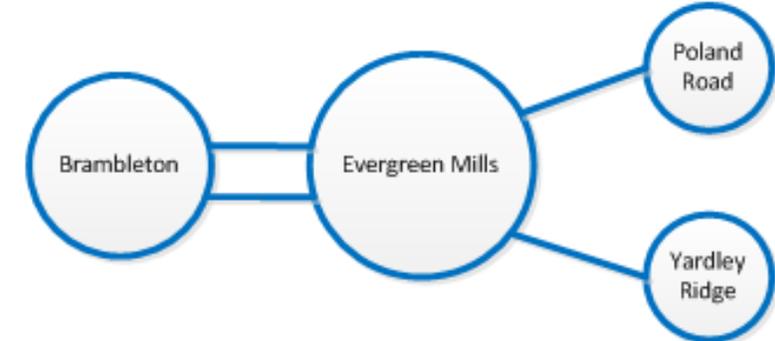
No feasible alternatives

Estimated cost: \$ 27.8 M
Normal Service cost: \$ 22.8 M
Excess Facilities cost: \$ 5.0 M

Projected In-service Date: 9/1/2020



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





Need Number: DOM-2018-0002

Meeting Date: 10/11/2018

Process Stage: Solutions

Need Presented: 9/13/2018

Supplemental Project Driver: Customer Service

Problem Statement:

ODEC has submitted a delivery point request south of Fredericksburg to serve projected residential, commercial and industrial growth totals in year 2023 shown below.

Summer: 35 MW

Winter: 41 MW

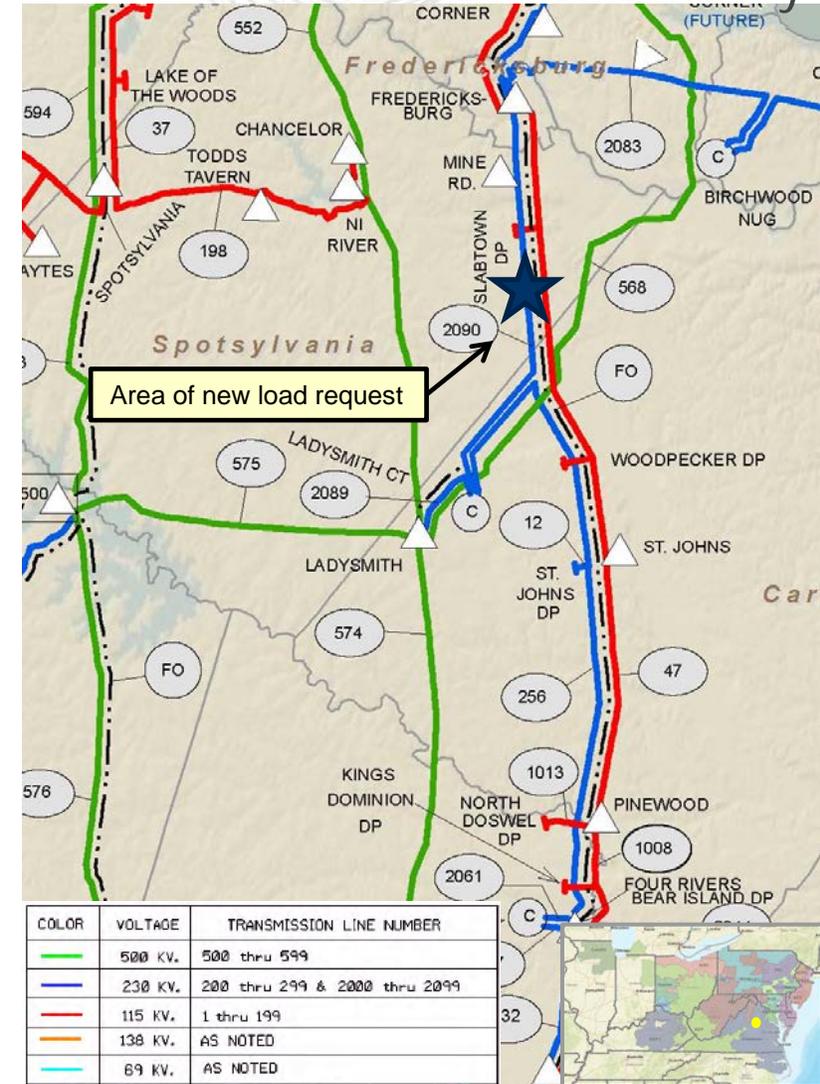
Customer requests service by 8/1/2019.

ODEC does not have adequate distribution facilities to serve this customer load request.

Specific Assumption References :

Customer load request will be evaluated per Dominion's Facility Interconnections Requirements Document & Dominion's Transmission Planning Criteria

Dominion Transmission Zone: Supplemental Summit 230kV Delivery





Need Number: DOM-2018-0002

Proposed Solution :

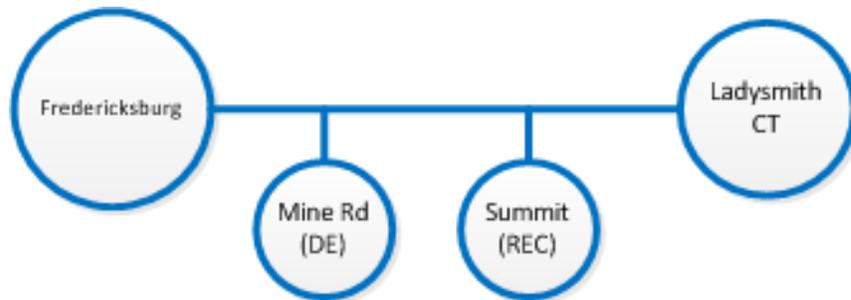
Install necessary 230kV facilities including three 230kV switches on Line #2090 and associated metering to connect the proposed new Summit Delivery Point.

TO Alternatives Considered :

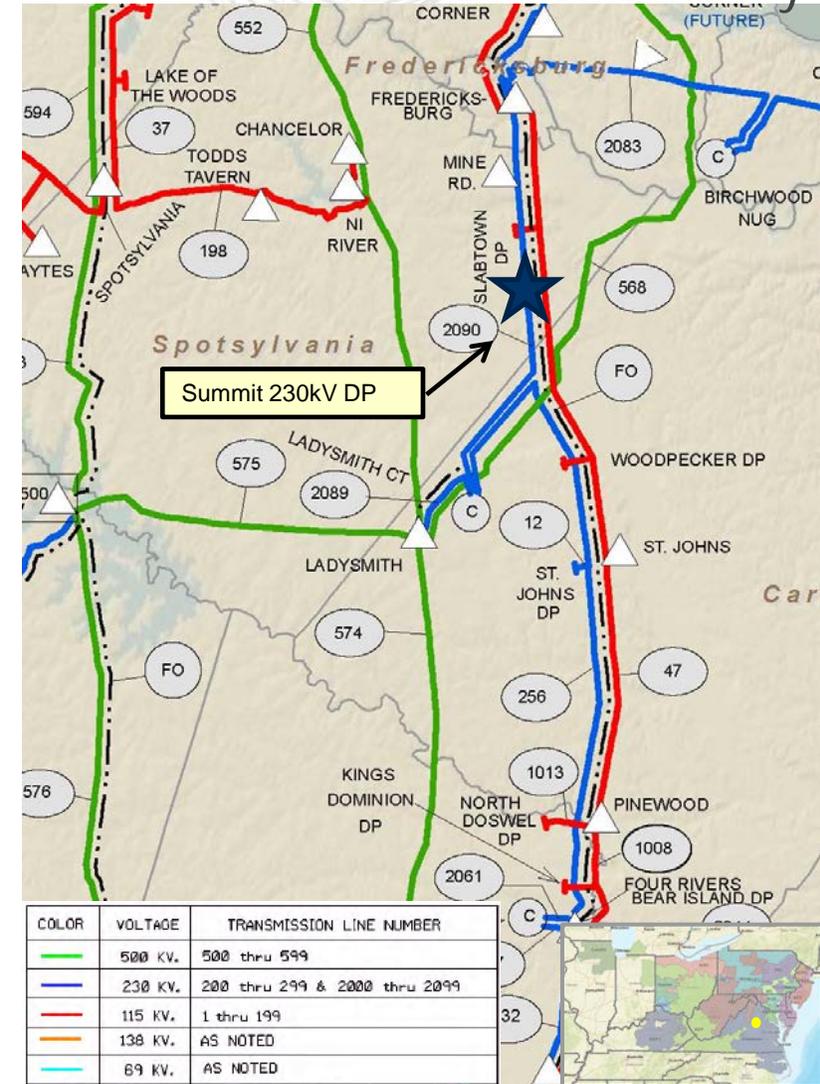
No feasible alternatives

Estimated cost: \$ 1.4 M

Projected In-service Date: 8/1/2019



Dominion Transmission Zone: Supplemental Summit 230kV Delivery



- V1 – 10/1/2018 – Original Slides Posted
- V2 – 10/4/2018 – Updated slide 3 to reflect that Dominion Energy Distribution received a 2nd customer request which increased the MW load.