

Reliability Analysis Update

Transmission Expansion Advisory Committee July 7, 2020

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Dominion Cost/Scope Change



Dominion Transmission Zone: Baseline
Windsor Switching Station

Windsor Switching Station

Existing b2900 Cost Increase and Scope Modification

Date Project Last Presented: PJM SRRTEP – South – 08/29/2017

Problem: (End of Life Criteria)

- 115kV Line #139 Everetts to Windsor has 336 ACSR conductor constructed on wood H-frames in the 1951 timeframe. Line #139 serves one delivery point Windsor DP (Roanoke EC). This line needs to be rebuilt to current standards or provide another source for Windsor DP based on Dominion's "End of Life" criteria.
- Permanent MW load loss for removal of this line is 10 MW.

Original Solution:

Build a new 230-115kV switching station connecting to 230kV network Line #2014 (Earleys –
Everetts). Purchase land and install three single phase 30 MVA 230-115kV transformers (and a
spare) with a high and low side breaker. Provide a 115kV source from the new station to serve
Windsor DP. Remove Line #139 19.5 miles (15.5 miles Everetts – Windsor, 1.1 mile Windsor to
idle line, 2.9 miles idle line). (b2900)

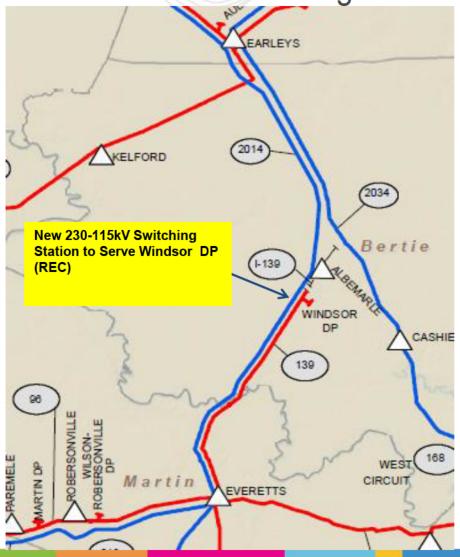
Revised Solution: New

Build a new 230-115kV switching station connecting to 230kV network Line #2014 (Earleys –
Everetts). Purchase land and install (2) three phase 84 MVA 230 -115kV transformers (one serve
as a spare) with a high and low side breaker. Provide a 115kV source from the new station to
serve Windsor DP. Remove Line #139 19.5 miles (15.5 miles Everetts – Windsor, 1.1 mile
Windsor to idle line, 2.9 miles idle line).

Original Estimated Project Cost: \$11.5 M

Revised Estimated Project Cost: \$17.4 M New

Projected IS Date: 12/30/2022 Project Status: Engineering





Penelec B2767 Scope Change



B2767 Scope change:

Problem Statement:

The Homer City 345/230 kV transformer "S" is overloaded for a line fault stuck breaker contingency loss of the Homer City – Armstrong 345 kV circuit and Homer City 345/230 kV transformer #N.

Violation identified as part of the 2016 2nd window.

Old scope:

Construct a new 345kV breaker string with three (3) 345kV breakers at Homer City and move the North autotransformer connection to this new breaker string. (2016_2-8G)

Old Estimated Project Cost: \$ 7.0 M

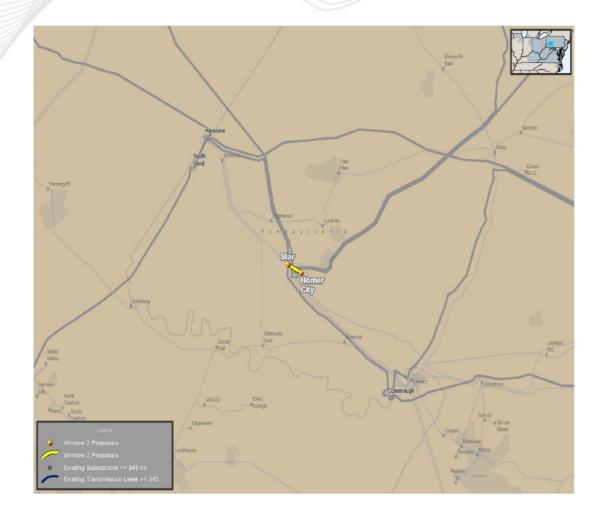
New scope:

Install one new 345 kV breaker and relocate the Homer City - Mainesburg 345 kV line terminal and Homer City 345/230 kV North transformer terminal

New Estimated Project Cost: \$ 7.0 M

Required IS Date: 6/1/2021

Penelec Transmission Zone: Baseline Homer City 345/230 kV transformer





2020 RTEP Analysis Update

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- Post Summer peak case in March
- Post preliminary violations
- Notices sent for 2 windows opening on July 1, 2020
 - Open 60 day proposal window for normal RTEP studies (Window #1)
 - Target July 1
 - Open 30 day proposal window for an immediate need violation (Window #2)
 - Target July 1



Competitive Planner Contact Information

- If you have any questions related to Competitive Planning Process and Competitive Planner Tool, please contact <u>ProposalWindow-Admin@pjm.com</u>
- If you need an assistance with registration to Competitive Planner Tool, please contact <u>AccountManager@pjm.com</u>
- PJM Competitive Planning Process Webpage
 https://www.pjm.com/planning/competitive-planning-process.aspx
- Access Competitive Planner tool through PJM Planning Center Webpage
 https://www.pjm.com/markets-and-operations/etools/planning-center.aspx
- Competitive Planner Tool Updates at Tech Change Forum
 https://www.pjm.com/committees-and-groups/tech-change-forum.aspx



Questions?



Upcoming TEAC Meetings

2020

- TEAC meetings are the following Tuesdays or Wednesday in 2020
- 1/7, 2/4, 3/10, 4/14, 5/12, 6/2, 7/7, 8/4, 9/1, 10/6, 11/4 (Wednesday), 12/1.



- V1 6/30/2020 Original slides posted
- V2 8/10/2020 Slide #5, added old cost estimate