



# Reliability Analysis Update PJM South

Benjamin Fielder  
Sub Regional RTEP Committee – PJM South

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# Scope Change / Cost Increase

## Process Stage: Cost Increase

Baseline Reliability: TO Criteria Violation (FERC 715 (TO Criteria) Exclusion)

## Problem Statement: Dominion “End of Life Criteria”

115kV Line #141 extends 9.8 miles between Balcony Falls and Skimmer. For 3.8 miles this line was constructed on a combination of double circuit Blaw Knox structures and shares with 115kV Line #28 and single circuit wood H-frame structures. Rest of line #141 is a combination of wood H-frame and Blaw Knox towers to Skimmer.

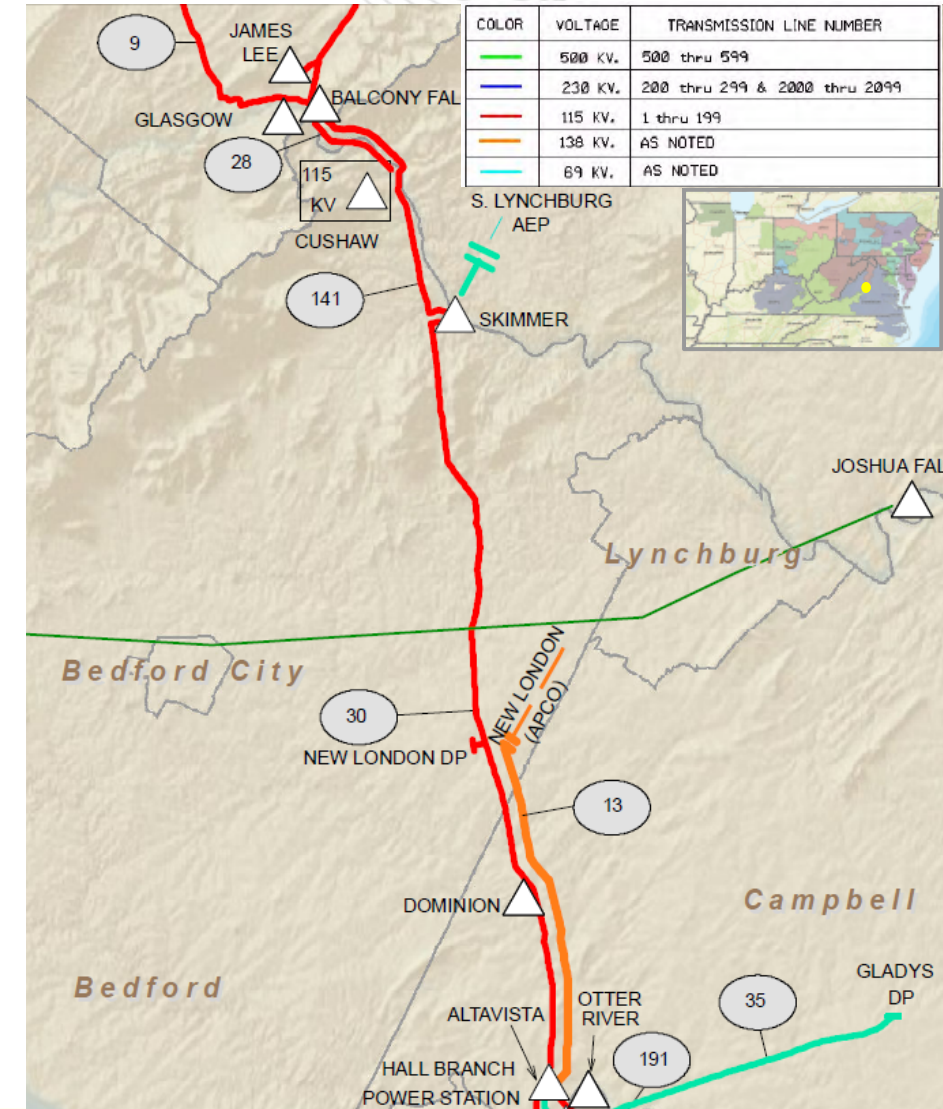
The Blaw Knox structures between Balcony Falls and Skimmer were constructed in the 1920’s, are showing deterioration, and are reaching the end of their useful service life. Wood H-frame structures for both lines are experiencing ground line deterioration, cracking, splitting, or woodpecker holes and have been identified for replacement.

Approximately 9.2 miles of Line #141 and 3.9 miles of Line #28 have 4/0 ACSR conductor that was installed in the 1920’s. Industry guidelines indicate equipment life for wood structures is 35-55 years, conductor and connectors are 40-60 years, and porcelain insulators are 50 years.

## Recommended Solution

- Replace all Line #141 and Line #28 structures and both lines will be rebuilt to current standards with a minimum rating of 261MVA. (b3098) ~~\$20M~~ **\$65M**
- Rebuild Balcony Falls Substation (b3098.1) **\$9M**

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# Dominion Transmission Zone: Baseline 115kV Line #141 & #28 Rebuild

**Process Stage:** Cost Increase  
**Baseline Reliability:** TO Criteria Violation (FERC 715 (TO Criteria) Exclusion)

## Reason for Cost Increase:

Cost increase based on updated conceptual estimates. Cost increases take into consideration drivers such as permitting and construction.

## Alternatives Considered:

No feasible alternatives

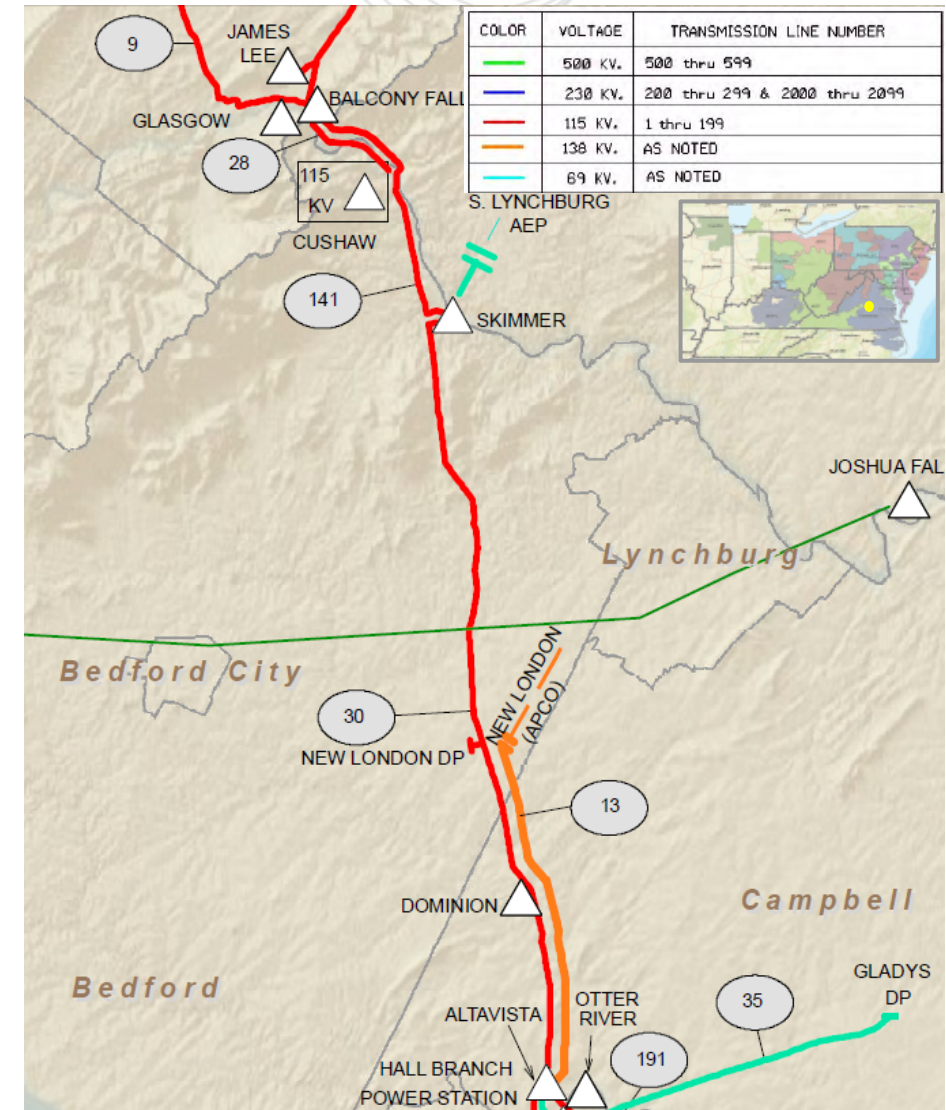
**Date Originally Presented:** 02/20/2019 (SRRTEP), 05/21/2020 (SRRTEP)

**Required In-service Date:** Immediate Need

**Projected IS Date:** ~~12/31/2023~~ 5/30/2025

**PJM Board Approval Date:** 7/29/2019

**Project Status:** Construction



Facilitator:

Sami Abdulsalam,  
[Sami.Abdulsalam@pjm.com](mailto:Sami.Abdulsalam@pjm.com)

Secretary:

Antonio Papaconstandinou,  
[Antonio.Papaconstandinou@pjm.com](mailto:Antonio.Papaconstandinou@pjm.com)

SME/Presenter:

Benjamin Fielder  
[Benjamin.Fiedler@pjm.com](mailto:Benjamin.Fiedler@pjm.com)

## Reliability Analysis Update

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### Member Hotline

(610) 666 – 8980

(866) 400 – 8980

[custsvc@pjm.com](mailto:custsvc@pjm.com)

Version No.	Date	Description
1	May 12 , 2025	<ul style="list-style-type: none"><li>• Original slides posted</li></ul>

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