



Reliability Analysis Update PJM – Mid-Atlantic

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Subregional RTEP Committee – PJM MA

12/11/2025



Baseline Cost Update – b3134

Previously Presented: SRRTEP-MA 9/24/2019

Criteria: ODEC Planning Criteria Violation

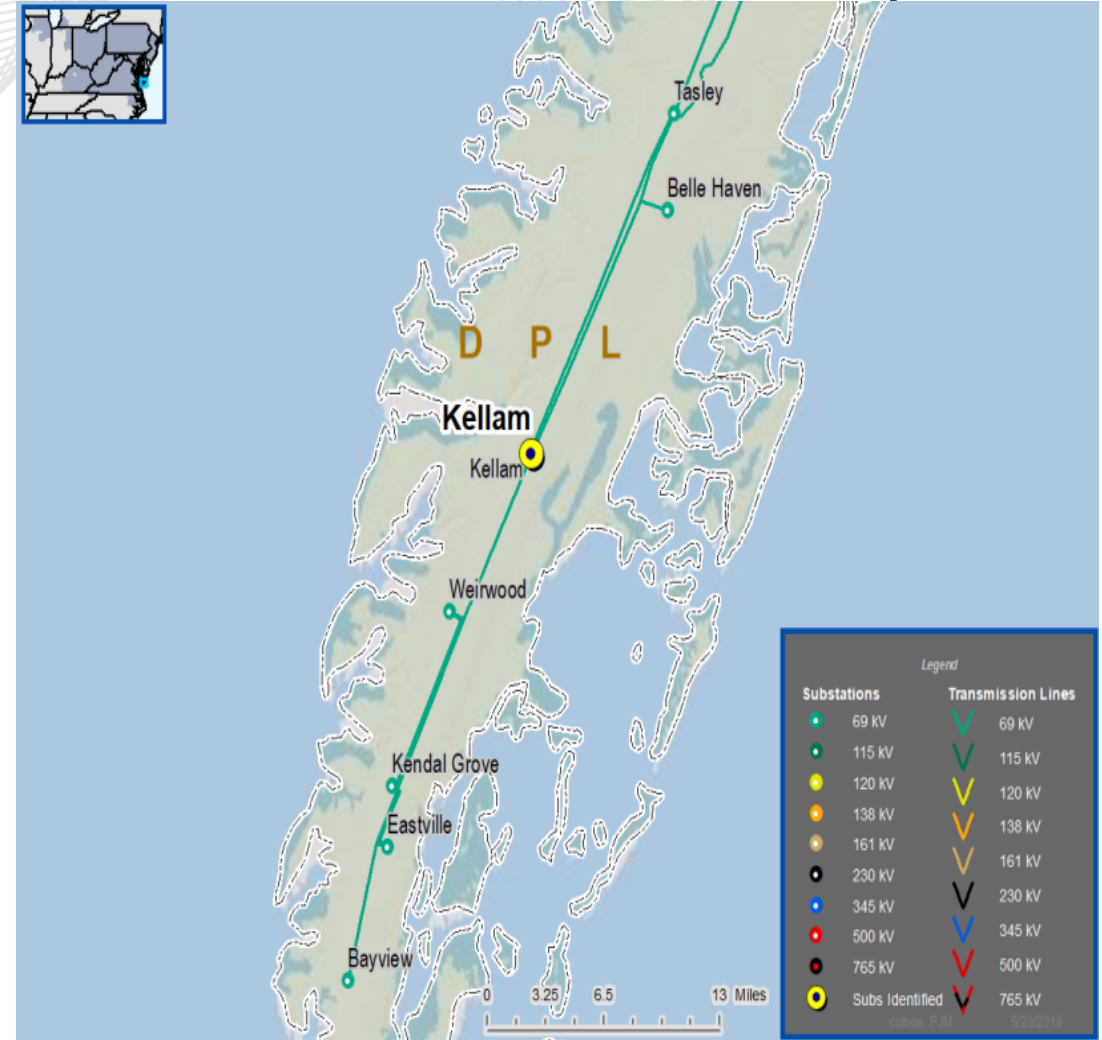
Assumption Reference: ODEC Planning Criteria 6/14/2018

- A radial 69 kV transmission line shall feed no more than 10,000 consumers, 50 megawatts of load, or have more than 700 MW-Miles of exposure (MW-Mile = Peak MW X Radial Line Length) Once a radial loading limit exceeds any of these thresholds, an additional transmission source is required. This may be a separate source, or it may be a loop back to the source of the original radial line

Proposal Window Exclusion: Below 200 kV

Problem Statement:

The load south of Kellam Substation violates the MW-Mile criteria. 21 Miles x 37.2 MW = 781.2 MW-Miles





ODEC Transmission Zone b3134 Cost Update

Proposed Solution:

- Reconfigure the Kellam ring station to create a line terminal for the new 69 kV circuit to Cheriton S/S. Cheriton S/S is a new under construction station (ID s2027) with a 2023 in-service date (**b3134.1**)
- Build a new single circuit 69 kV overhead line from Kellam S/S to new Cheriton S/S (21 miles). (**b3134.2**)

Old Estimated Cost: \$22M

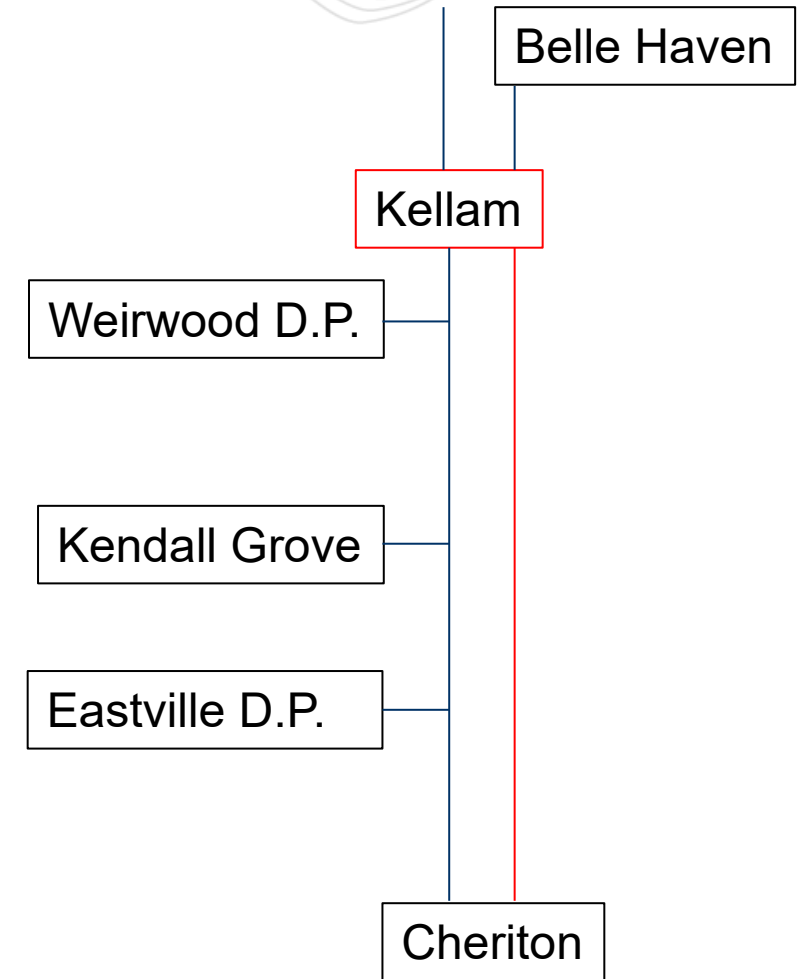
New Estimated Cost: \$43.4M

Projected In-Service Date: 12/31/2027

Reason For Cost Increase:

Significantly higher material and construction costs as compared to pre-Covid estimates. Further design changes were required to minimize community impact, meet APLIC guidelines and stay within the existing ROW easements; taller, more robust, un-guyed monopole structures with deeper foundations were required. As well as substation scope expansion including line re-termination and protection and control upgrades.

Status: EP



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Reliability Analysis Update



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1	December 8 th , 2025	<ul style="list-style-type: none">• Original slides posted

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