



Transmission Expansion Advisory Committee PEPCO Supplemental Projects

January, 7 2025

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

Need Number: PEP-2024-003

Process Stage: Solutions Meeting 1/7/2025

Previously Presented:

Need Meeting 11/6/2024

Project Driver:

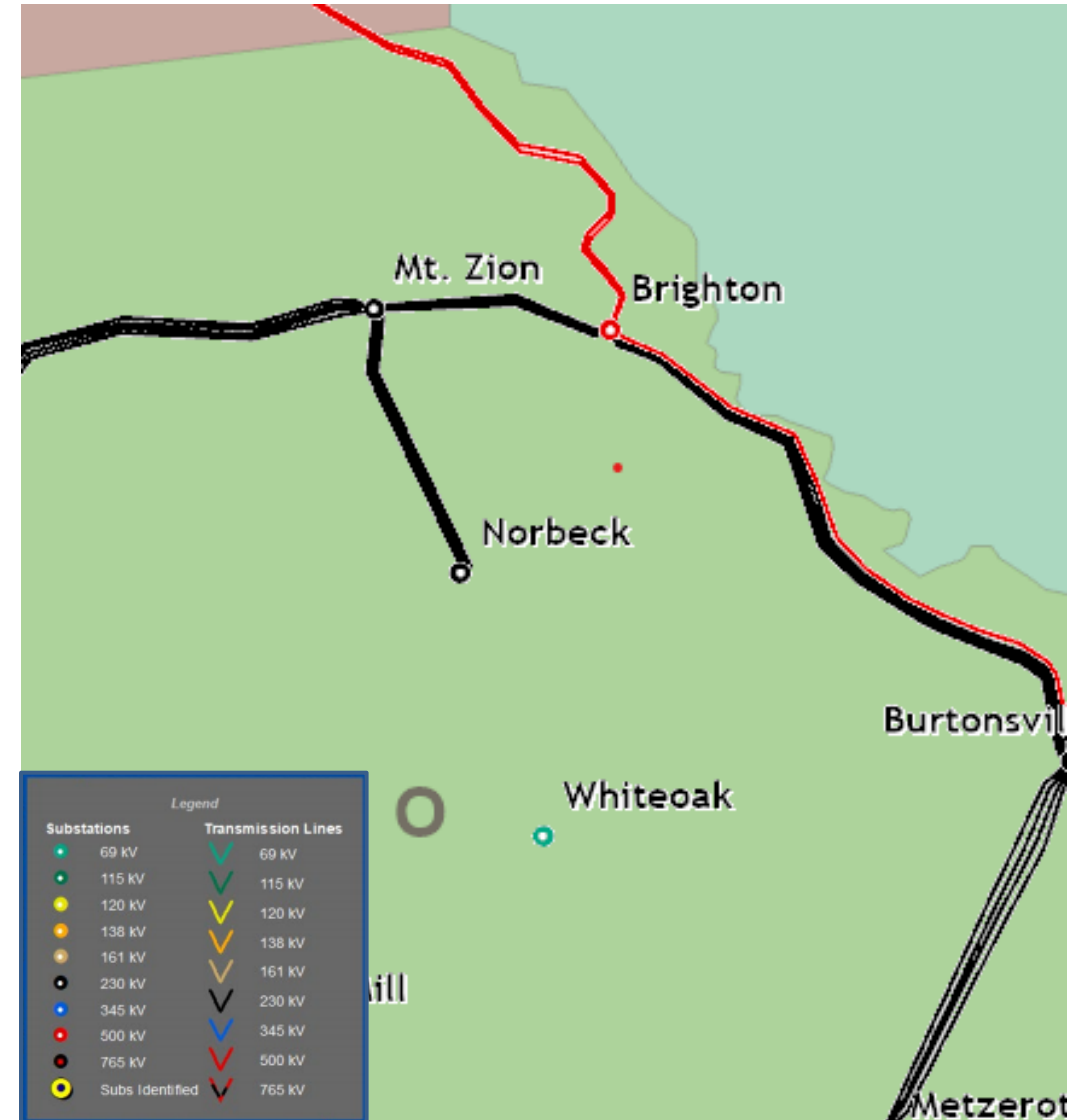
Operational Flexibility and Efficiency

Specific Assumption Reference:

- Enhancing system functionality, flexibility, visibility, or operability
- Provide Operations more options to deal with non-standard operating conditions
- Limiting the number of taps on a transmission line (causing simultaneous outages of multiple networked elements for a single event)

Problem Statement:

Mt. Zion Substation contains multiple 230 kV networked elements with tapped facilities serving a large area of downstream load.



Need Number: PEP-2024-003

Process Stage: Solutions Meeting 1/7/2025

Proposed Solution:

- Install (12) 3000 Amp 230kV breakers at Mt Zion.
- Replace (24) disconnects switches with (24) 3000 Amp Motor operated disconnects (MODs).
- Install relays for each new breaker and at the remote end stations.
- Install new telecom equipment to support breaker protection.
- Adding breakers and MODs will improve system functionality, flexibility, and operability by giving operations more options to handle various operating conditions.
- Integrating breakers will eliminate the tapped transmission line configuration at Mt Zion, preventing simultaneous outages of multiple networked elements during a single event.

Total estimated cost: \$22M

Alternatives Considered:

Complete rebuild of Mt Zion Substation. Total estimated cost in excess of \$100M.

Projected In-Service: 6/1/2030

Project Status: Engineering

Model: RTEP 2028

PEPCO Transmission Zone M-3 Process Mt. Zion 230kV Breakers



Questions?



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

12/27/2023 - V1 – Original version posted to pjm.com