

PEPCO 2025 Submission of Supplemental Projects for Inclusion in the Local Plan

4/22/2025

Submission of Supplemental Projects for Inclusion in the Local Plan



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

Need Number: PEP-2024-003

Process Stage: Process Stage: Submission of Supplemental Project for inclusion in the Local Plan 4/22/2025

Previously Presented:

Solutions Meeting 1/7/2025, 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.



⊘ exelon[™]

Need Number: PEP-2024-003

Process Stage: Submission of Supplemental Project for inclusion in the Local Plan 4/22/2025

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.

Supplemental Project ID: s3572.1, s3572.2, s3572.3, s3572.4,

Projected In-Service: 6/1/2030

Project Status: Engineering

Model: RTEP 2028

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



04/22/25 – V1 – Posted s3572.1, s3572.2, s3572.3, s3572.4