Subregional RTEP Committee – Mid-Atlantic FirstEnergy Supplemental Projects

January 16, 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



Met-Ed Transmission Zone M-3 Process Belfast Substation

Need Number: ME-2024-014

Process Stage: Solution Meeting 1/16/2025

Previously Presented: Needs Meeting 5/16/2024

Project Driver:

Operational Flexibility and Efficiency

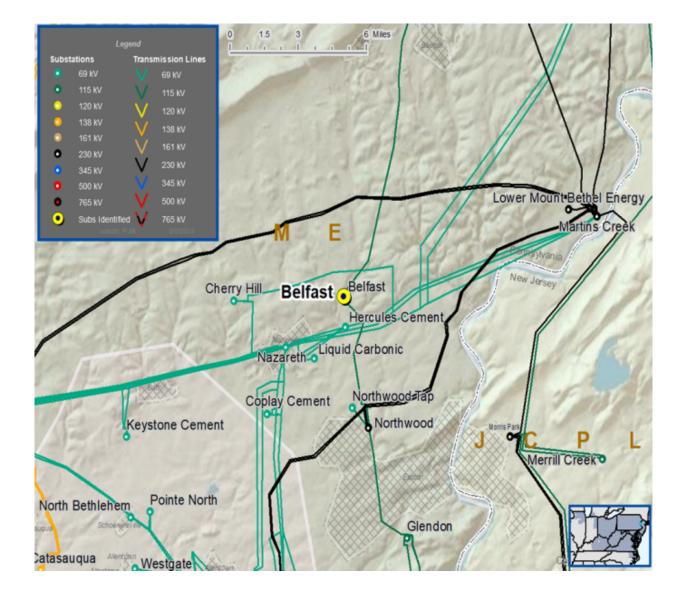
Specific Assumption Reference:

System Performance Projects

- Add/Expand Bus Configuration
- Load at risk in planning and operational scenarios
- Reduce the amount of exposed potential local load loss during contingency conditions
- Eliminate simultaneous outages to multiple networked elements

Problem Statement:

Belfast Substation serves approximately 78 MW of load and 12,100 customers. A transformer fault, bus fault, or stuck breaker would result in a complete outage of the substation.





Met-Ed Transmission Zone M-3 Process Belfast Substation

46 kV 34.5 kV 23 kV New

Need Number: ME-2024-014

Process Stage: Solutions Meeting 1/16/2025

Proposed Solution:

- Construct a four breaker 115 kV ring bus at Belfast Substation:
 - Install four 115 kV circuit breakers, disconnect switches, line traps, and relaying.
 - Update relaying at North Bangor and Glendon substations.
 - Re-terminate the North Bangor and Northwood 115 kV terminals at Belfast Substation.

Alternatives Considered:

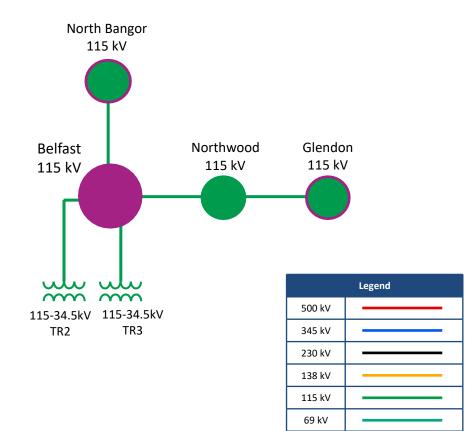
Maintain existing configuration with elevated risk of load loss under contingency scenarios.

Estimated Project Cost: \$14.3M

Projected In-Service: 6/1/2028

Project Status: Conceptual

Model: 2024 RTEP model for 2029 Summer (50/50)



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

Solutions

Submission of Supplemental Projects & Local Plan

Activity	Timing
TOs and Stakeholders Post Needs Meeting slides	10 days before Needs Meeting
Stakeholder comments	10 days after Needs Meeting

Activity	Timing
TOs and Stakeholders Post Solutions Meeting slides	10 days before Solutions Meeting
Stakeholder comments	10 days after Solutions Meeting

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 1/6/2025 – V1 – Original version posted to pjm.com