Subregional RTEP Committee – Mid-Atlantic FirstEnergy (Met-Ed) Supplemental Projects

July 20, 2023

Needs

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: ME-2023-009

Process State: Need Meeting – 07/20/2023

Project Driver:

Performance and Risk, Operational Flexibility and Efficiency

Specific Assumption Reference:

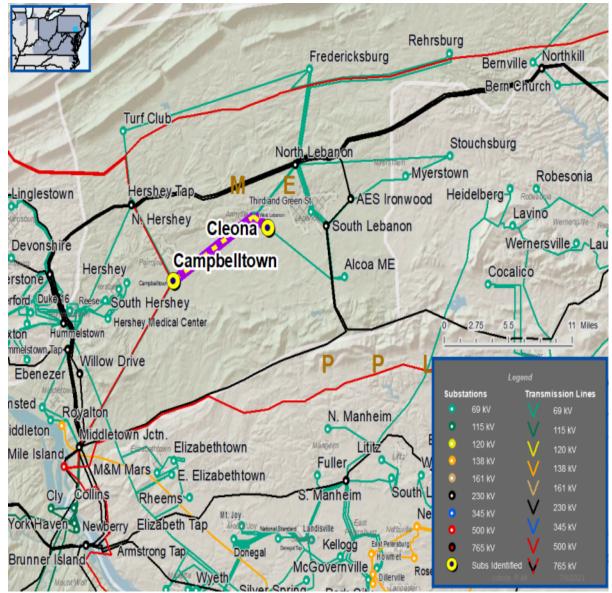
System Performance Projects Global Factors

- System reliability and performance
- Reliability of Non-Bulk Electric System (Non-BES) Facilities
 Upgrade Relay Schemes

Problem Statement:

An N-1-1 outage of the N. Hershey – Mill St. - Campbelltown 69 kV Line & Middletown Jct. 230-69 kV Transformer #3 can cause the North Lebanon - Annville 69 kV line to overload to 131% of its Summer Emergency rating.

Met-Ed Transmission Zone M-3 Process Cleona –Campbelltown 69 kV Line



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



MetEd Transmission Zone M-3 Process Middletown Junction-Smith Street #1 115 kV New Customer

Need Number: ME-2023-005

Process Stage: Solution Meeting – 07/20/2023

Previously Presented: Need Meeting – 5/18/2023

Project Driver(s):

Customer Service

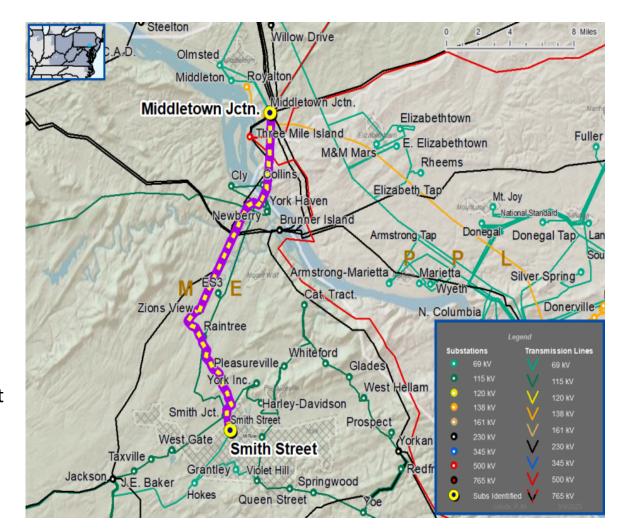
Specific Assumption Reference(s)

New customer connection request will be evaluated per FirstEnergy's "Requirements for Transmission Connected Facilities" document and "Transmission Planning Criteria" document.

Problem Statement

New Customer Connection - has requested a new 115 kV delivery point near the Middletown Junction-Smith Street #1 115 kV line. The anticipated load of the new customer connection is 12 MVA.

Requested in-service date is 05/31/2024.





Met-Ed Transmission Zone M-3 Process Middletown Junction-Smith Street #1 kV New Customer- Solution

Need Number: ME-2023-005

Process Stage: Solution Meeting – 07/20/2023

Proposed Solution:

115 kV Transmission Line Tap

- ■Install three SCADA controlled transmission line switches
- ■Construct approximately 0.2 miles of transmission line using 556 ACSR 26/7 from tap point to customer substation
- ■Install one 115 kV revenue metering package at customer substation
- •Modify relay settings at Middletown Junction and Smith Street substations

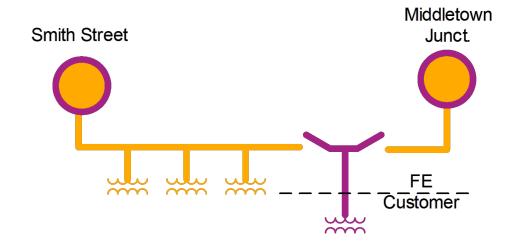
Alternatives Considered:

■No other feasible transmission solution

Estimated Project Cost: \$4.9M

Projected In-Service: 7/3/2024

Status: Engineering



| Legend | | |
|---------|--|--|
| 500 kV | | |
| 345 kV | | |
| 115 kV | | |
| 69 kV | | |
| 34.5 kV | | |
| 23 kV | | |
| New | | |

Questions?



Appendix

High level M-3 Meeting Schedule

| Assumptions | Activity | Timing |
|--------------------|---|---|
| 7 to carription to | 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 |
| | | l — . |
| Submission of | Activity | Timing |
| Supplemental | Do No Harm (DNH) analysis for selected solution | Prior to posting selected solution |
| Projects & Local | Post selected solution(s) | Following completion of DNH analysis |
| Plan | 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

7/10/2023 – V1 – Original version posted to pjm.com