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

April 19, 2022

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-2022-002

Process Stage: Need Meeting 04/19/2022
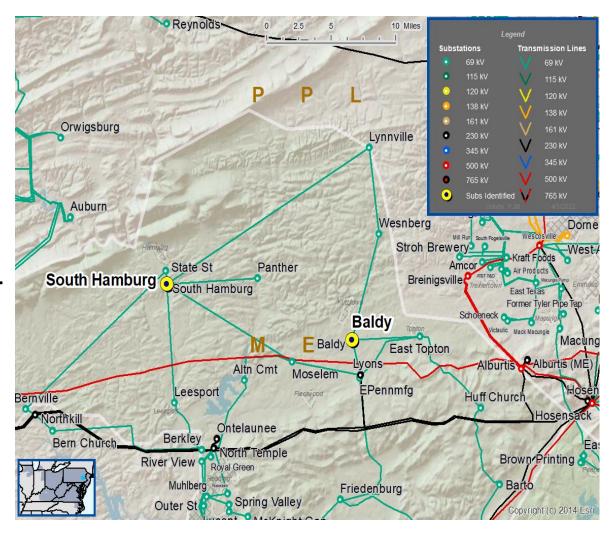
Project Driver:

Customer Service

Specific Assumption Reference:

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

Problem Statement:

New Customer Connection – A customer requested 69 kV service; anticipated load is 13 MVA; location is near the Baldy – South Hamburg 69kV line.

Requested in-service date is 8/30/2023

Need Number: ME-2022-003

Process Stage: Need Meeting 04/19/2022
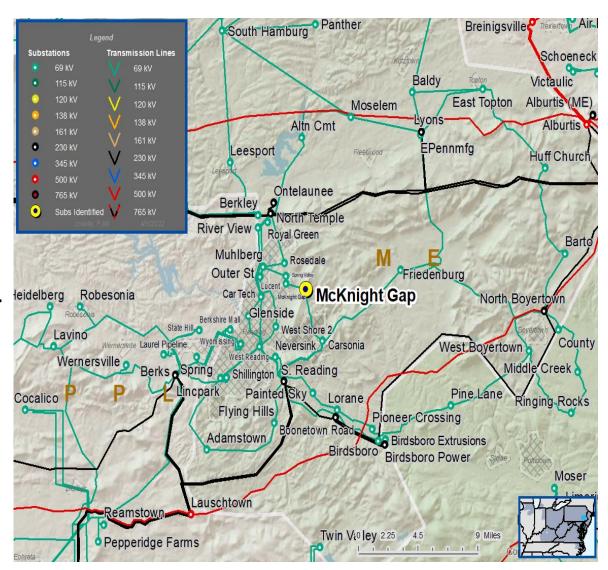
Project Driver:

Customer Service

Specific Assumption Reference:

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

Problem Statement:

Customer Connection – Met-Ed's existing McKnights Gap 69-13.2 kV substation transformer experienced a failure. Met-Ed has requested to re-build the substation as a modular substation.

Requested in-service date is 12/29/2023

Need Number: ME-2022-004

Process Stage: Need Meeting 4/19/2022

Project Driver:

Equipment Material Condition, Performance and Risk, Operational Flexibility and Efficiency
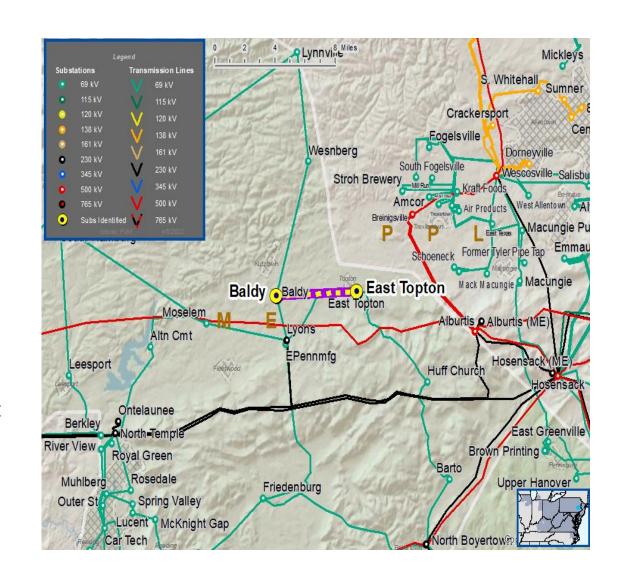
Specific Assumption Reference:

System Performance Projects Global Factors

- System reliability and performance
- Substation/line equipment limits

Upgrade Relay Schemes

- Relay schemes that have a history of misoperation
- Obsolete and difficult to repair communication equipment (DTT, Blocking, etc.)
- Communication technology upgrades
- Bus protection schemes

Continued on next slide…

Problem Statement:

- FirstEnergy has identified protection schemes using a certain vintage of relays and communication equipment that have a history of misoperation.
- Proper operation of the protection scheme requires all the separate components perform adequately during a fault.
- In many cases the protection equipment cannot be repaired due to a lack of replacement part and available expertise in the outdated technology.
- Transmission line ratings are limited by terminal equipment.

ME-2022-	Transmission Line / Substation Locations	Existing Line Rating (SN / SE)	Existing Conductor Rating (SN / SE)	Limiting Terminal Equipment
004	Baldy – Kutztown Tap 69 kV Line Kutztown Tap – East Topton	76/90 62/62	80/96 80/96	Substation Conductor Relays, and Substation Conductor

Questions?

Appendix

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

4/8/2022 – V1 – Original version posted to pjm.com