

Subregional RTEP Committee – Mid-Atlantic FirstEnergy Supplemental Projects

November 14, 2024

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-2024-022

Process Stage: Need Meeting – 11/14/2024

Project Driver:

Equipment Material Condition, Performance, and Risk

Specific Assumption Reference:

System Performance Global Factors

- Past system reliability/performance

Line Condition Rebuild/Replacement

- Age/condition of wood pole transmission line structures

Problem Statement:

- The Frystown – South Lebanon 69 kV Line was constructed approximately 52 years ago and is approaching end of life. The line is approximately 15 miles long with a total of 311 structures; 295 wood pole structures, two steel structures, and 13 are laminate transmission line structures.
- Large sections (approximately six miles) of the Frystown – South Lebanon 69 kV Line have copper conductor.
- Since 2019, the line has had 16 unscheduled, sustained outages. Most of the outages were due to conductors contacting.
- Frystown – South Lebanon 69 kV Line
 - Existing Transmission Line Ratings: 55 / 56 / 62 / 62 MVA (SN/SE/WN/WE)
 - Existing Transmission Line Conductor Ratings: 55 / 56 / 62 / 62 MVA (SN/SE/WN/WE)



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Project Driver:

Equipment Material Condition, Performance, and Risk

Specific Assumption Reference:

System Performance Global Factors

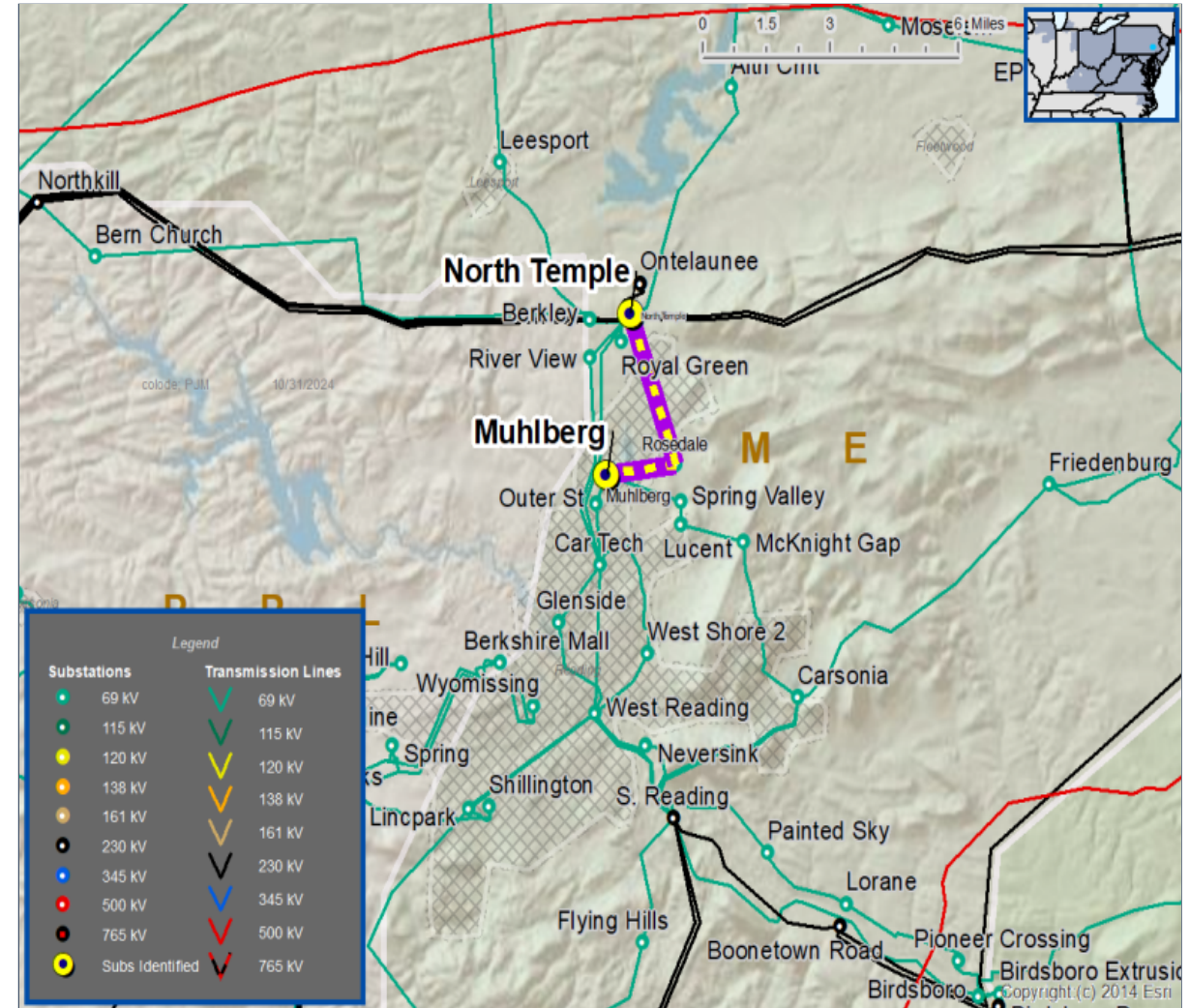
- Past system reliability/performance

Line Condition Rebuild/Replacement

- Age/condition of wood pole transmission line structures

Problem Statement:

- The Muhlenberg – North Temple 69 kV Line was constructed approximately 70 years ago and is approaching end of life. The line is approximately five miles long with 143 total structures; 128 are wood pole structures and 15 are steel transmission line structures.
- Since 2019, the line has had seven unscheduled, sustained outages caused by insulator or hardware failures.
- Muhlenberg – Rosedale 69 kV Line
 - Existing Transmission Line Ratings: 105 / 125 / 125 / 143 MVA (SN/SE/WN/WE)
 - Existing Transmission Line Conductor Ratings: 111 / 134 / 125 / 159 MVA (SN/SE/WN/WE)
- Rosedale – North Temple 69 kV Line
 - Existing Transmission Line Ratings: 111 / 134 / 125 / 159 MVA (SN/SE/WN/WE)
 - Existing Transmission Line Conductor Ratings: 111 / 134 / 125 / 159 MVA (SN/SE/WN/WE)



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

11/04/2024 – V1 – Original version posted to pjm.com

11/14/2024 – V2 – Maps Updated