

Subregional RTEP Committee – Mid-Atlantic FirstEnergy Supplemental Projects

March 13, 2025

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-2025-001

Process Stage: Need Meeting 03/13/2025

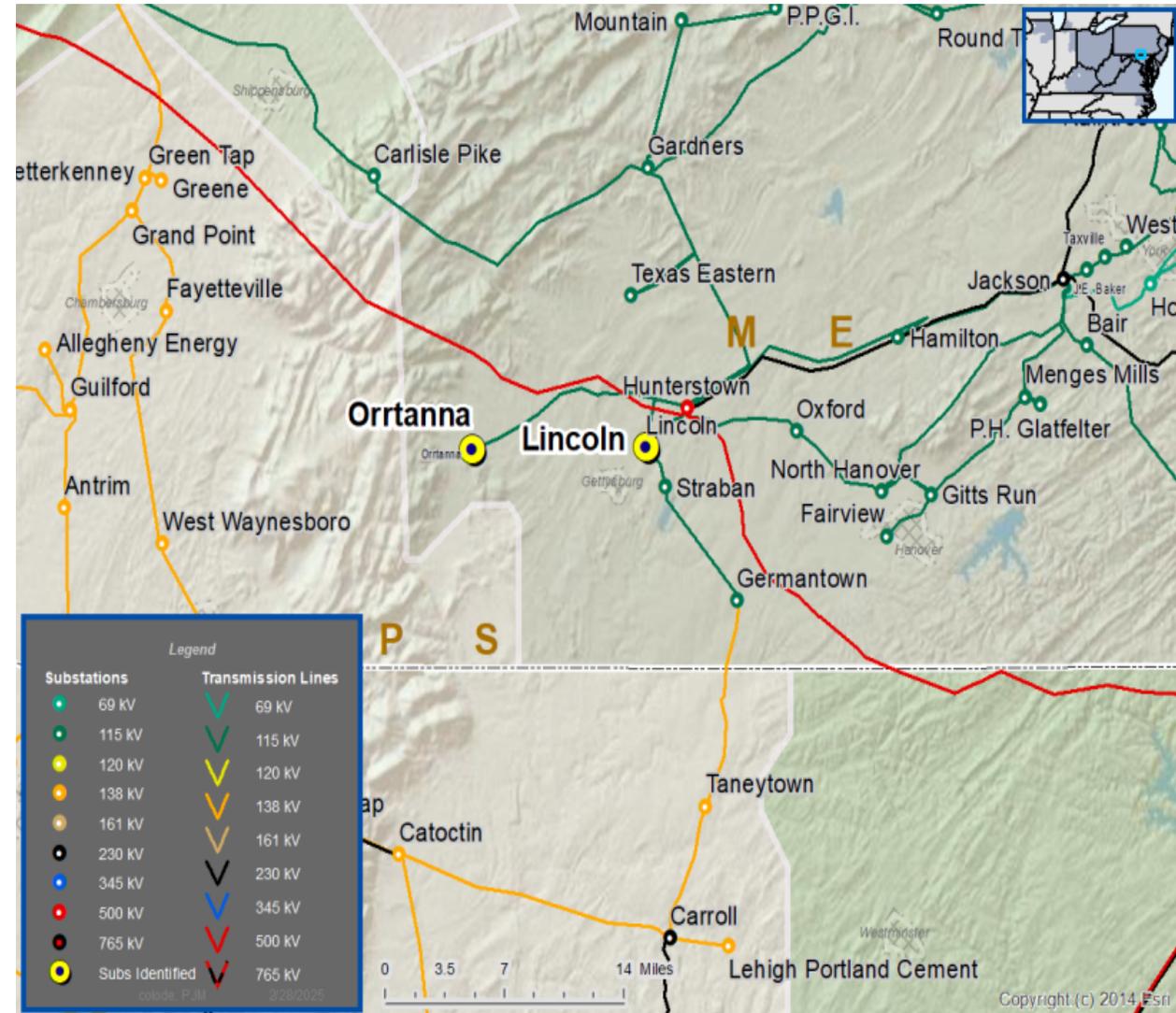
Project Driver: Customer Service

Specific Assumption References:

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

Problem Statement:

New Customer Connection – A customer requested a new 115 kV delivery point near the Lincoln - Orrtanna 115 kV Line. The anticipated load of the new customer connection is 22 MVA. The request is approximately three miles from Orrtanna Substation.



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

Need Number: ME-2019-009

Process Stage: Solution Meeting SRRTPEP-MA - 03/13/2025

Previously Presented: Need Meeting 02/22/2019

Project Driver: Equipment Condition/Performance/Risk

Specific Assumption References:

Line Condition Rebuild/Replacement

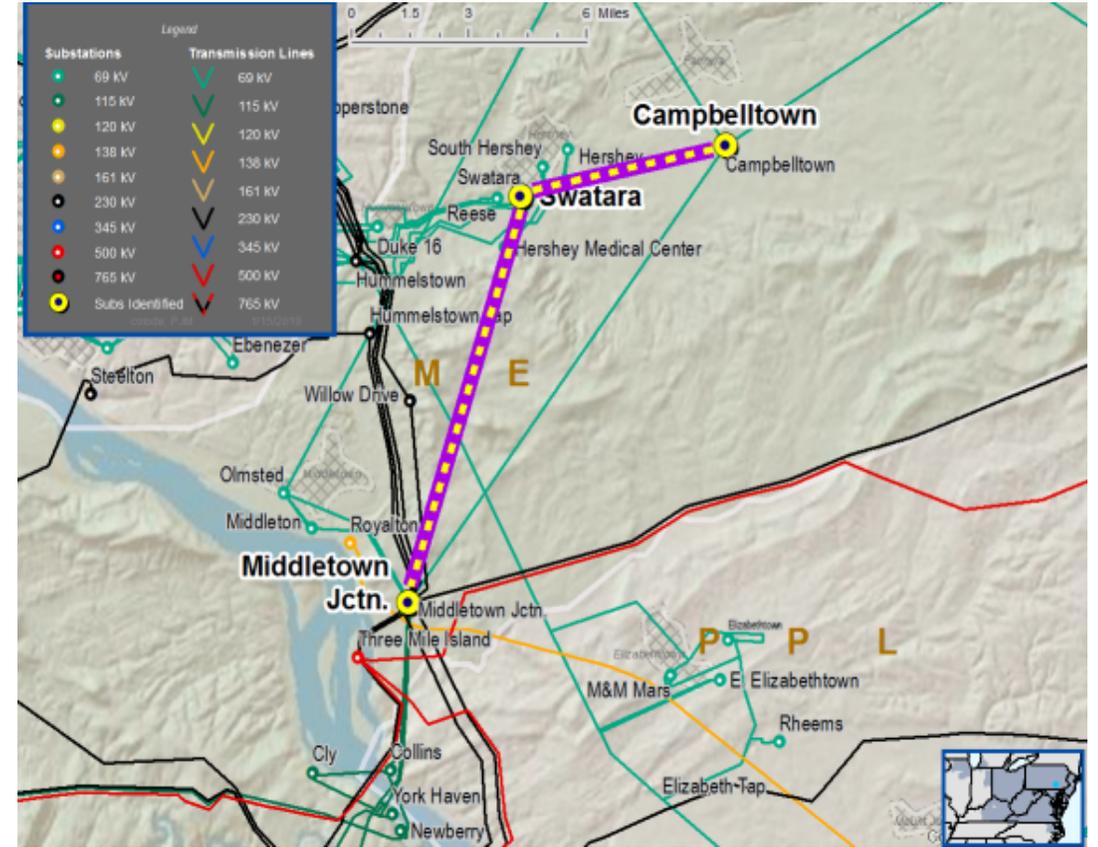
- Age/condition of wood pole transmission line structures
- Age/condition of steel tower or steel pole transmission line structures
- Age/condition of transmission line conductors

System Performance Projects

- Substation/line equipment limits

Problem Statement:

- Line sections are exhibiting deterioration, increasing maintenance needs. Transmission line is approaching end of life
- Transmission line ratings are limited by terminal equipment.



ME-2019-	Transmission Line / Substation Locations	Existing Circuit Rating (SN / SE)	Existing Conductor Rating (SN / SE)	Limiting Terminal Equipment	Length of Line (miles)	Identified Structures (end of life / total)	Failure reasons
009	Campbelltown – Swatara Hill 69 kV Line	71 / 90	74 / 90	Substation Conductor	10.5	57 / 288 (20% Failure Rate)	Age, top rot, voids, woodpecker holes
	Swatara Hill – Middletown Junction 69 kV Line	71 / 91	121 / 150	Substation Conductor, Disconnect Switches	2.5		

Need number(s): ME-2019-009

Process Stage: Solution Meeting SRRTEP-MA - 03/13/2025

Proposed Solution:

Middletown Junction – Swatara Hill – Campbelltown 69 kV Line: - Rebuild approximately 9 miles of Campbelltown – Middletown Junction 69 kV Line. Estimated Cost: \$8.467 M

Middletown Junction 69 kV Substations: - At Middletown Junction Review and revise relaying. Estimated Cost: \$8.467 M

Campbelltown 69 kV Substations: - At Campbelltown Substation Review and revise relaying. Estimated Cost: \$8.467 M

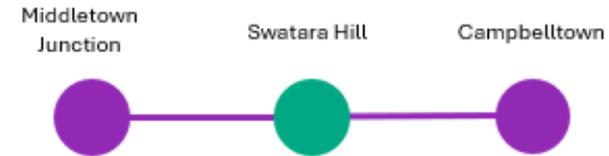
Transmission Cost Estimate: \$25.4 M

Alternatives Considered:

Maintain existing condition and elevated risk of failure due to aging infrastructure.

Projected In-Service: 12/31/2026

Project Status: Conceptual



Legend	
500 kV	
230 kV	
138 kV	
115 kV	
69 kV	
46 kV	
New	

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

03/03/2025 – V1 – Original version posted to pjm.com