

Transmission Expansion Advisory Committee FirstEnergy Penelec Supplemental Projects

February 06, 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: PN-2024-007

Process Stage: Need Meeting 02/06/2024

Project Driver:

Operational Flexibility and Efficiency

Equipment Material Condition, Performance, and Risk

Specific Assumption Reference:

System Performance Projects Global Factors

- System reliability and performance
- Failure risk, age and condition, obsolescence, operational or design limitations

System Performance

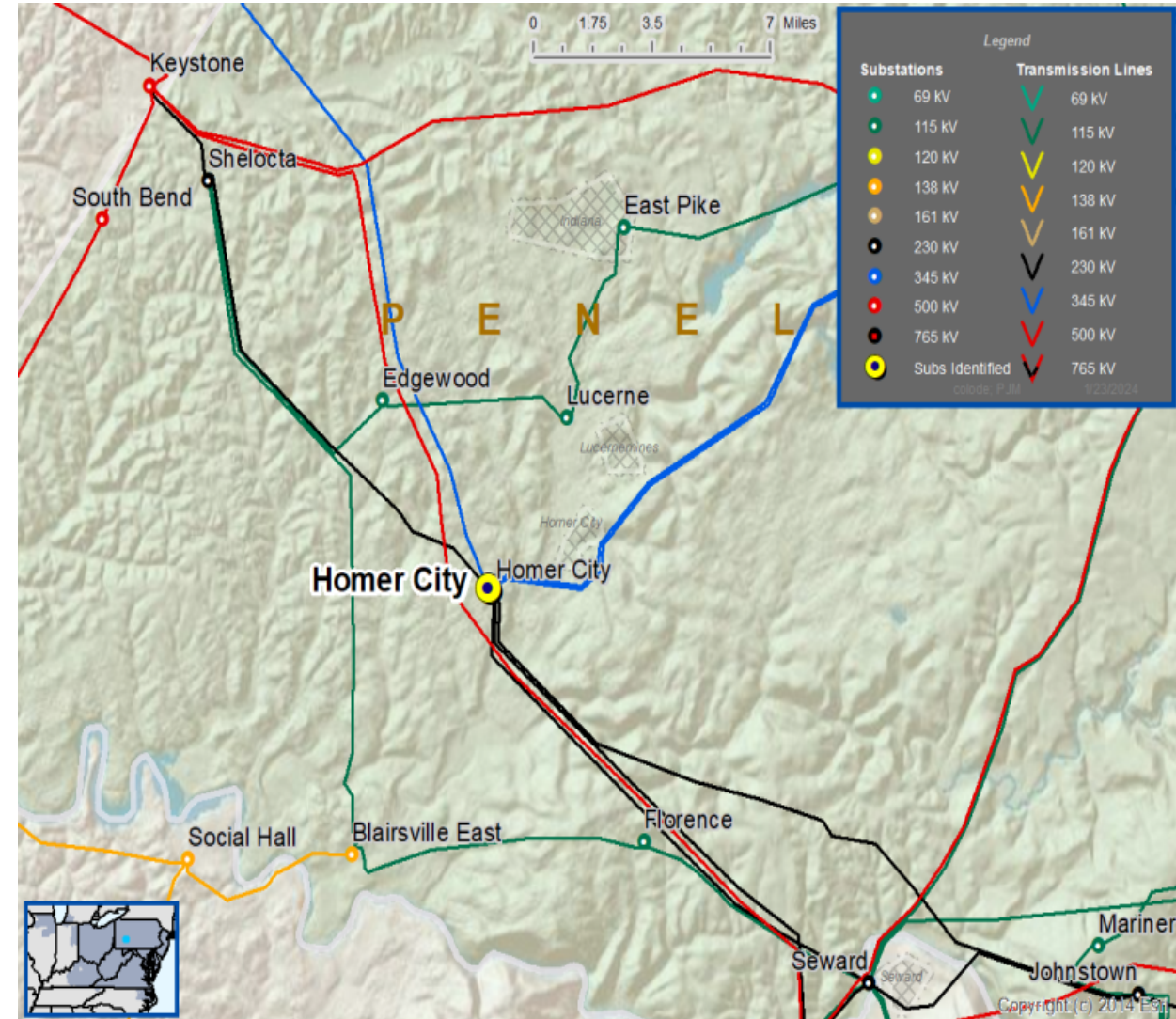
- Add / Replace Transformers

Problem Statement:

The Homer City 345/230-23 kV South Bank Transformer is 48 years old and is approaching its end of life. Transformer parts are obsolete, as the original equipment manufacturer (OEM) has discontinued support for troubleshooting and maintenance. Oil samples in recent years have indicated that the transformer is leaking. Moisture concentration has increased due to aging paper breakdown.

Transformer protection relaying is composed of obsolete, electromechanical equipment that is over 40 years old.

Existing transformer ratings: 649 / 836 / 793 / 984 MVA (SN/SSTE/WN/WSTE)



Questions?



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

1/26/2024 - V1 – Original version posted to pjm.com