

Transmission Expansion Advisory Committee

FirstEnergy Supplemental Projects

Penelec Transmission Zone

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-2026-002

Process Stage: Need Meeting – 01/06/2026

Project Driver:

Equipment Condition/Performance/Risk

Specific Assumption Reference:

- System Performance Global Factors
 - System reliability and performance
- Add/Replace Transformers
- Past System Reliability/Performance

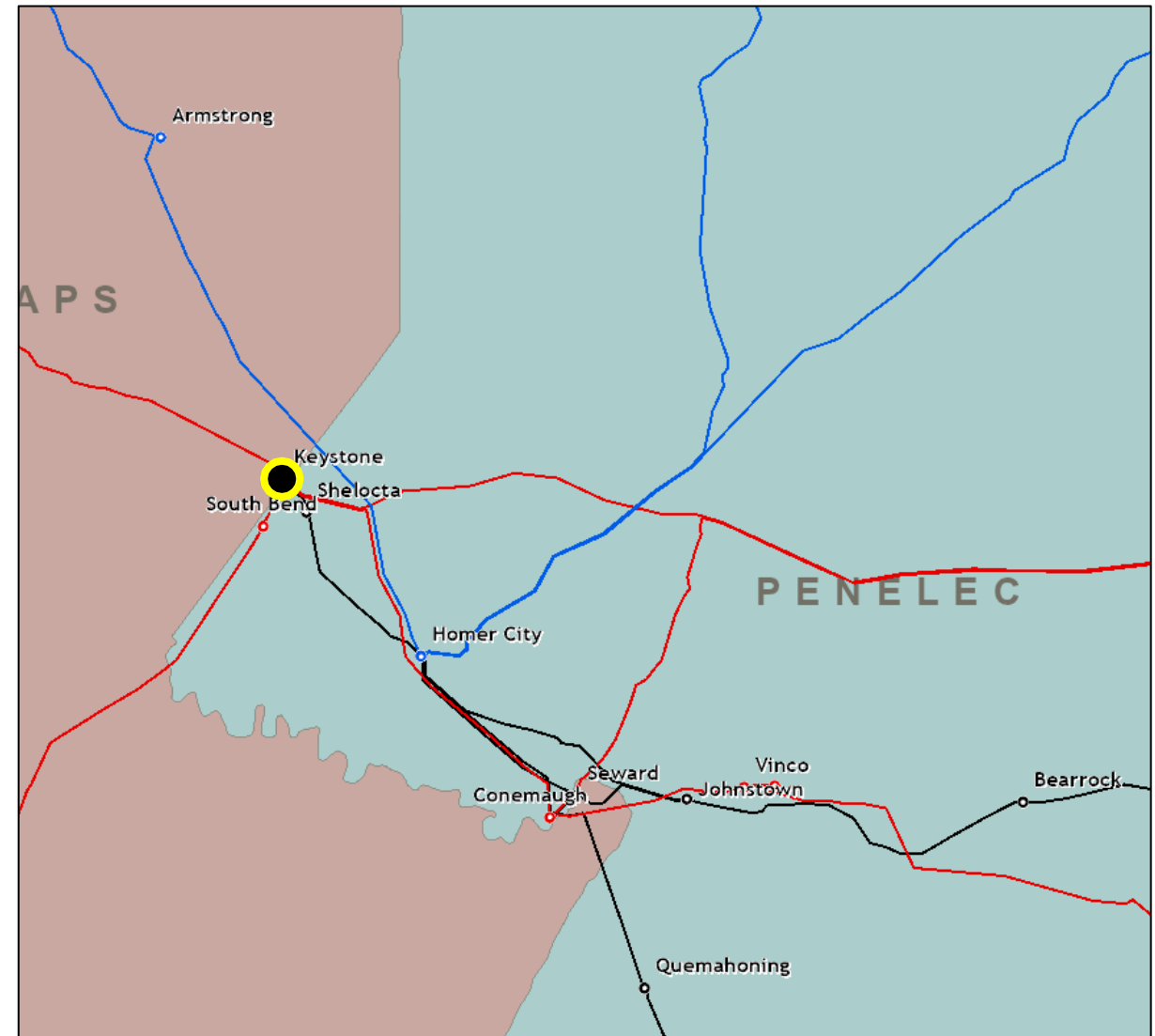
Problem Statement:

The Keystone No. 4 500/230 kV Transformer is approximately 56 years old and is approaching end of life.

The transformer is experiencing higher level specific heat gases, indicating probable internal faults. The transformer is leaking as indicated by high nitrogen consumption.

Existing Transformer Ratings:

- 443 / 478 MVA (SN/SSTE)
- 550 / 665 MVA (WN/WSTE)



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

12/22/2025 – V1 – Original version posted to pjm.com