

# Transmission Expansion Advisory Committee – Penelec Supplemental Projects

January 11, 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:** PN-2022-001

**Process Stage:** Need Meeting 1/11/2022

**Project Driver:**

*Equipment Material Condition, Performance and Risk*

**Specific Assumption Reference:**

Line Condition Rebuild/Replacement

- Age/condition of wood pole transmission line structures
- System characteristics including lightning and grounding performance, galloping overlap, insulation coordination, structural capacity needs, clearance margins, and future needs (e.g., fiber path)

System Performance Projects Global Factors

- Substation/line equipment limits

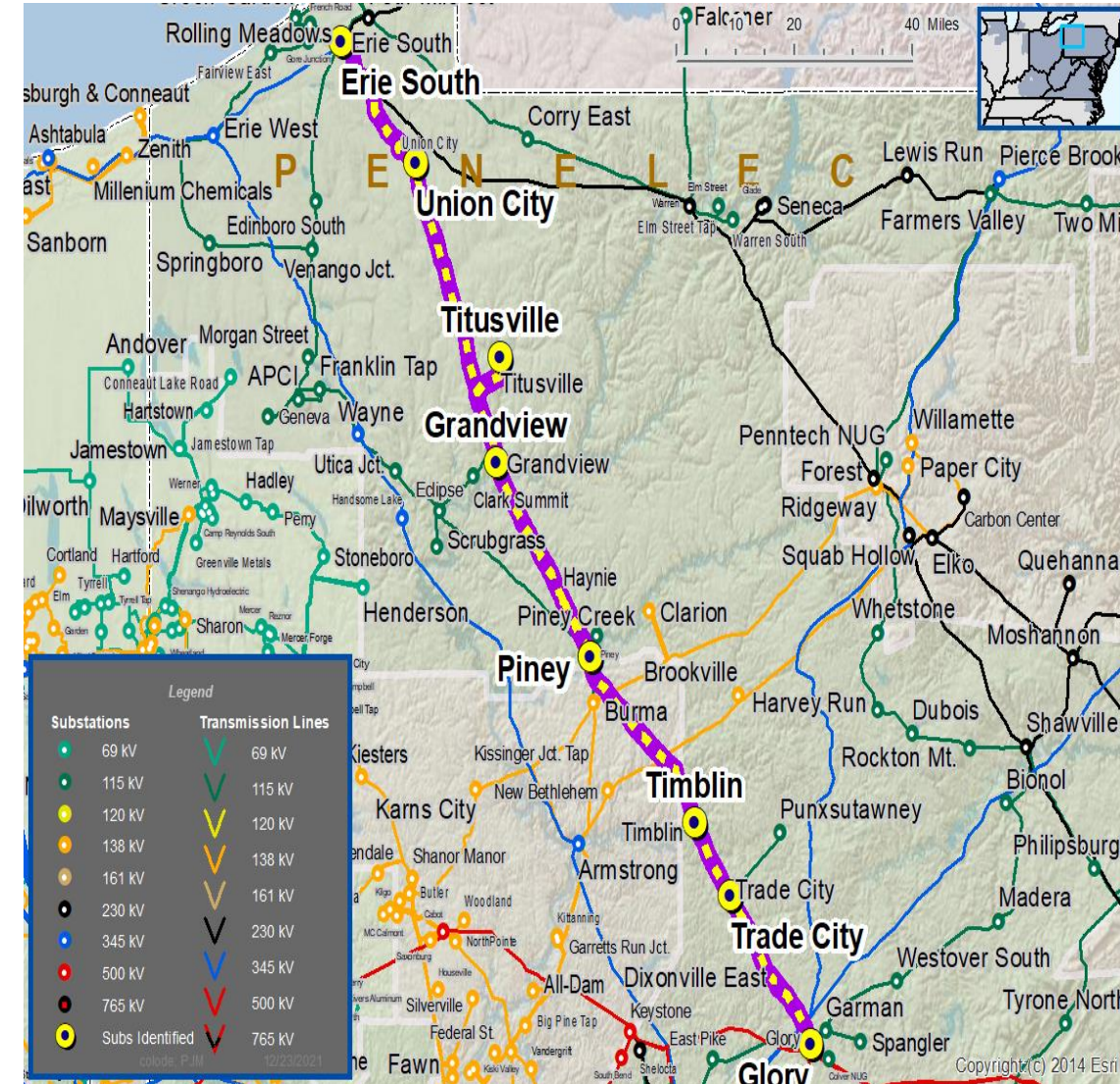
**Problem Statement:**

The Piney – Grandview – Titusville – Union City – Erie South 115 kV line is exhibiting deterioration.

- Total line distance is approximately 82 miles.
- 556 out of 697 structures failed inspection (80% failure rate).
- Failure reasons include age, woodpecker damage, top rot, phase raised, failed sound test, and weatherization.

The design of the Glory – Trade City – Timblin – Piney 115 kV line is substandard.

- Total line distance is approximately 48 miles.
- Line was originally constructed in the 1930s for subtransmission operation and was later converted to 115 kV.
- The line is a worst performer for lightning strikes and phase-to-phase conductor contact despite the structures being modified in the 1970s for phase clearance and in approximately 2006 to raise the static wire.



# 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

12/30/2021 - V1 – Original version posted to pjm.com

1/3/2022 – V2 – Corrected a typo on slide #1