

# 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-2026-003

**Process Stage:** Need Meeting – 05/08/2026

**Project Driver:**

*Equipment Condition/Performance/Risk*

**Specific Assumption Reference:**

- System Performance Global Factors
  - System reliability/performance
  - Substation/Line equipment limits
- Line Condition Rebuild/Replacement
  - Age/condition of Wood H-Frame transmission line structures

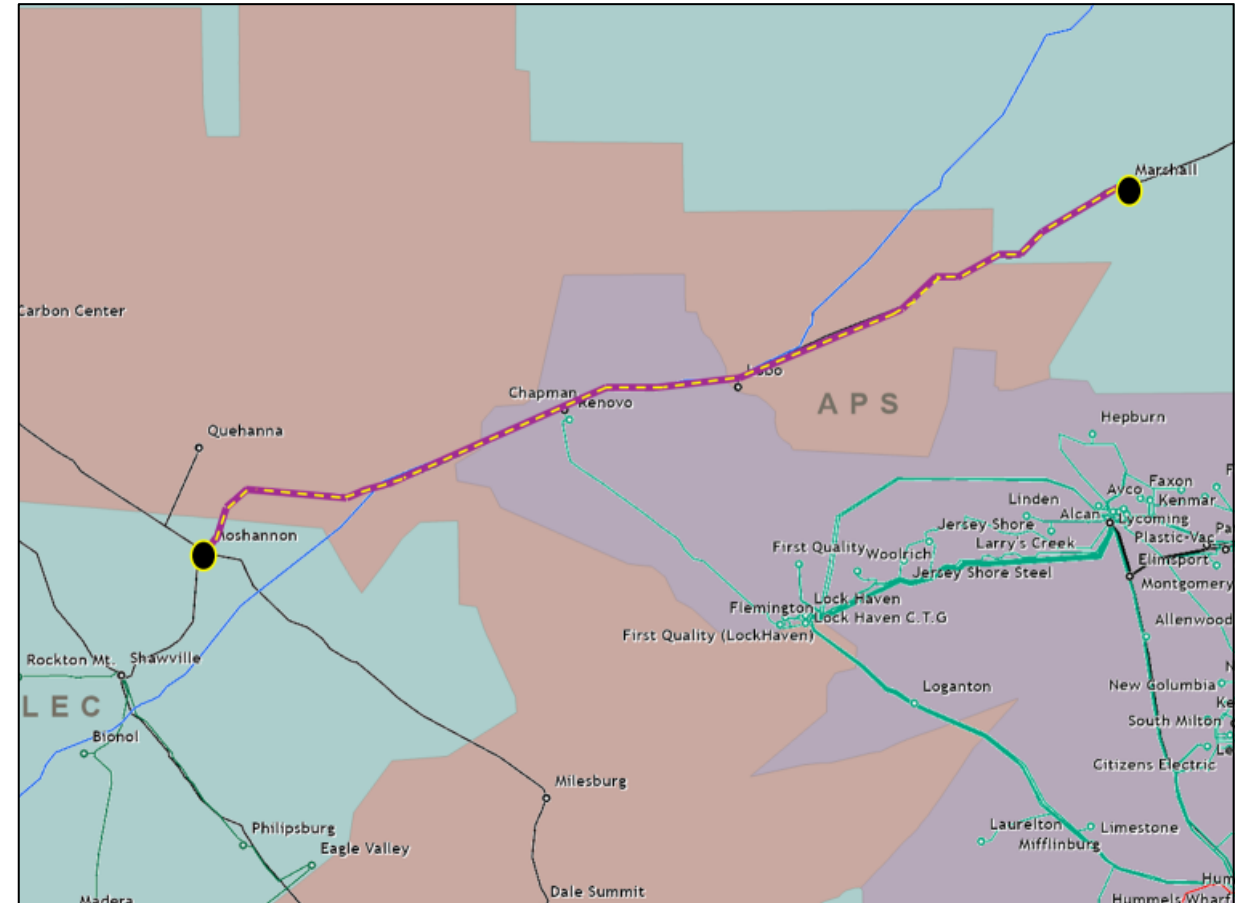
**Problem Statement:**

The Marshall - Moshannon 230 kV Line was constructed approximately 66 years ago and is approaching end of life. It is approximately 69 miles long with 501 wood H-frame transmission line structures.

Per recent inspections, the line is exhibiting deterioration. Inspection findings include:

- 10 structures are phase-raised
- 113 poles failed inspection due to sound
- 404 poles have varying degrees of woodpecker damage
- 192 poles have varying degrees of cracking

*Cont'd to next slide...*



**Need Number:** PN-2026-003

**Process Stage:** Need Meeting – 05/08/2026

**Problem Statement: (Cont'd from previous slide)**

In the last five years, the line has experienced three unscheduled, sustained outages.

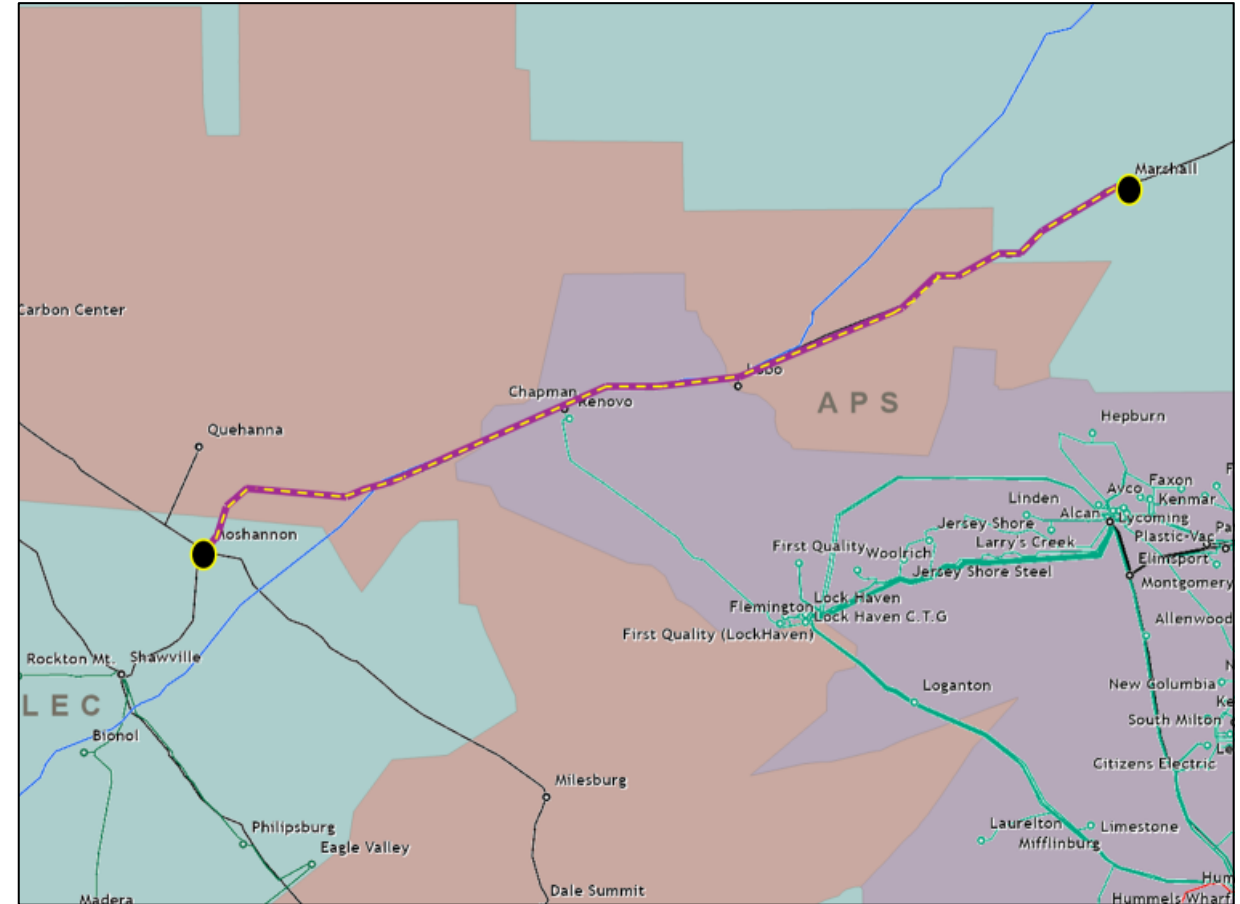
The line is currently limited by terminal equipment.

Existing Transmission Line Ratings:

- 520 / 621 / 619 / 710 MVA (SN/SE/WN/WE)

Existing Transmission Conductor Ratings:

- 520 / 621 / 640 / 710 MVA (SN/SE/WN/WE)



**Need Number:** PN-2026-004

**Process Stage:** Need Meeting – 05/08/2026

**Project Driver:**

*Equipment Condition/Performance/Risk*

**Specific Assumption Reference:**

- System Performance Global Factors
  - System reliability/performance
- Line Condition Rebuild/Replacement
  - Age/condition of wood pole transmission line structures

**Problem Statement:**

The Altoona - Bear Rock 230 kV AB Line was constructed approximately 55 years ago and is approaching end of life. It is approximately 16 miles long with 104 wood pole transmission line structures.

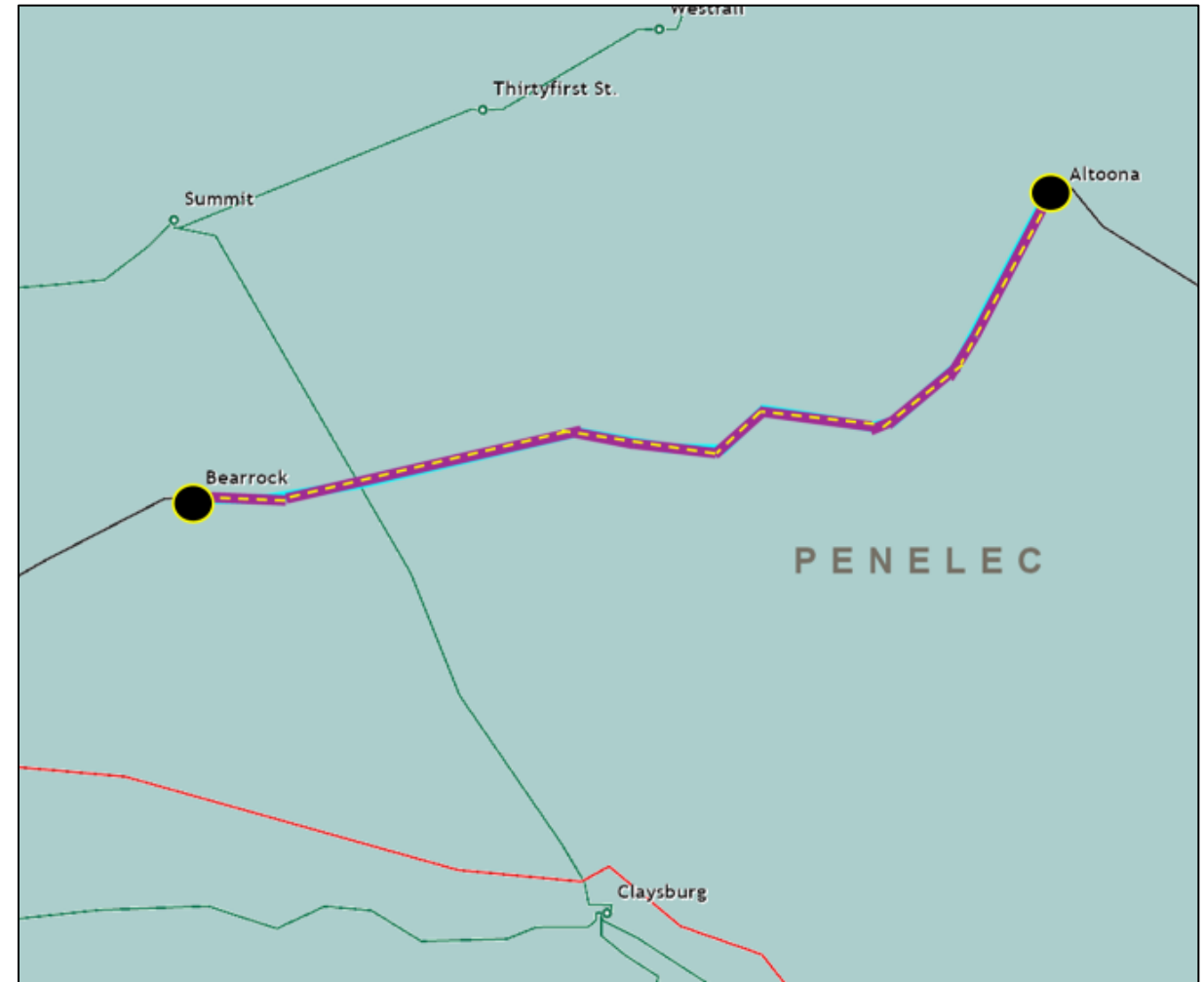
Per recent inspections, the line is exhibiting deterioration. Inspection findings include:

- 11 structures are phase-raised
- 77 structures failed inspection due to sound, woodpecker damage, top rot, decay, cracking, and/or delamination of cross-arms

In the last five years, the line has had one unscheduled sustained outage.

Existing Transmission Line Ratings:

- 546 / 666 / 619 / 790 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

04/28/2025 – V1 – Original version posted to pjm.com