

Subregional RTEP Committee – Mid-Atlantic 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-2026-006

Process Stage: Need Meeting – SRRTEP-MA – 06/16/2026

Project Driver:

Equipment Condition/Performance/Risk

Specific Assumption References:

- System Performance Global Factors
 - System reliability/performance
 - Substation/Line equipment limits
- Line Condition Rebuild/Replacement
 - Age/condition of wood pole

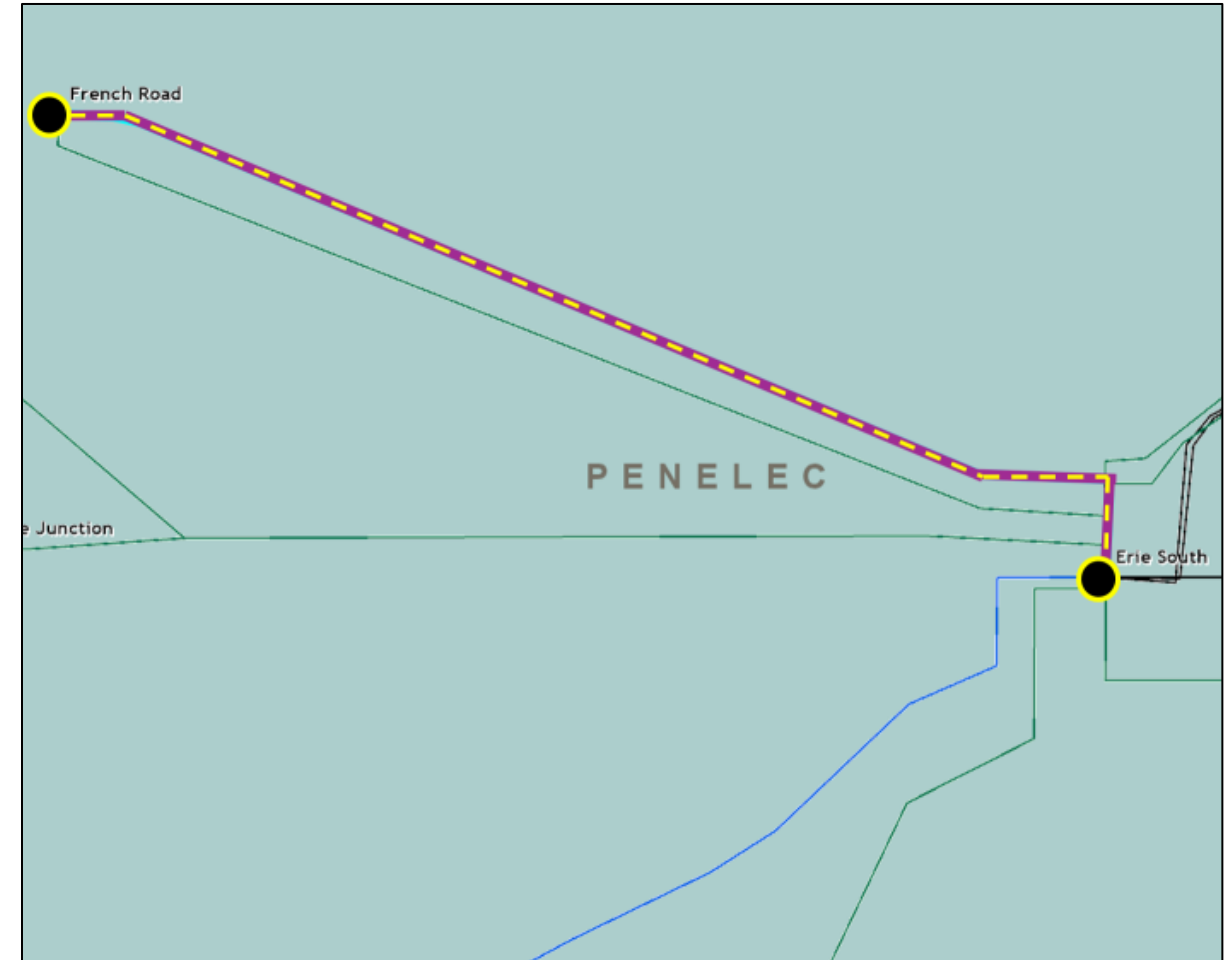
Problem Statement:

The French Road (Erie South) No. 2 115 kV Line was constructed approximately 64 years ago and is approaching end of life. It is 2.6 miles long with 61 wood H-Frame transmission line structures.

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

- 24 poles require repair due to deterioration
- 61 poles require replacement due to deterioration
- 61 structures require repairs to insulators and related hardware
- 29 structures failed inspection due to sound test, woodpecker damage, top rot, decay, cracking, and/ or delamination of cross-arms.

Cont'd on next slide...



Need Number: PN-2026-006

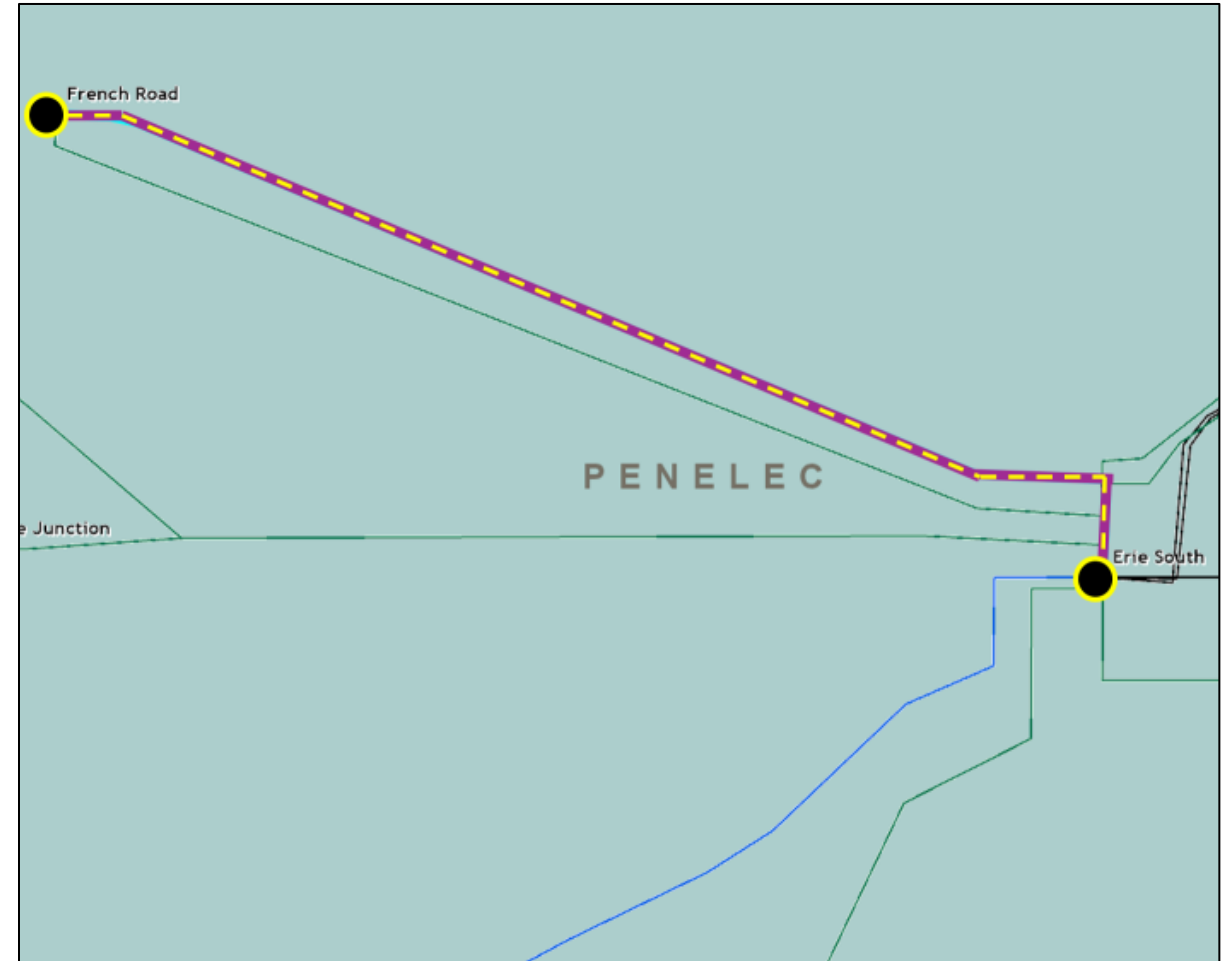
Problem Statement: *(Cont'd from previous slide)*

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

Replacement components are difficult to source leading to non-standard repair.

The line is currently limited by terminal equipment.

- Existing Transmission Line Ratings: 137 / 174 / 171 / 199 MVA (SN/SE/WN/WE)
- Existing Conductor Ratings: 202 / 245 / 228 / 290 MVA (SN/SE/WN/WE)



Need Number: PN-2026-007

Process Stage: Need Meeting – SRRTEP-MA – 06/16/2026

Project Driver:

Equipment Condition/Performance/Risk

Specific Assumption References:

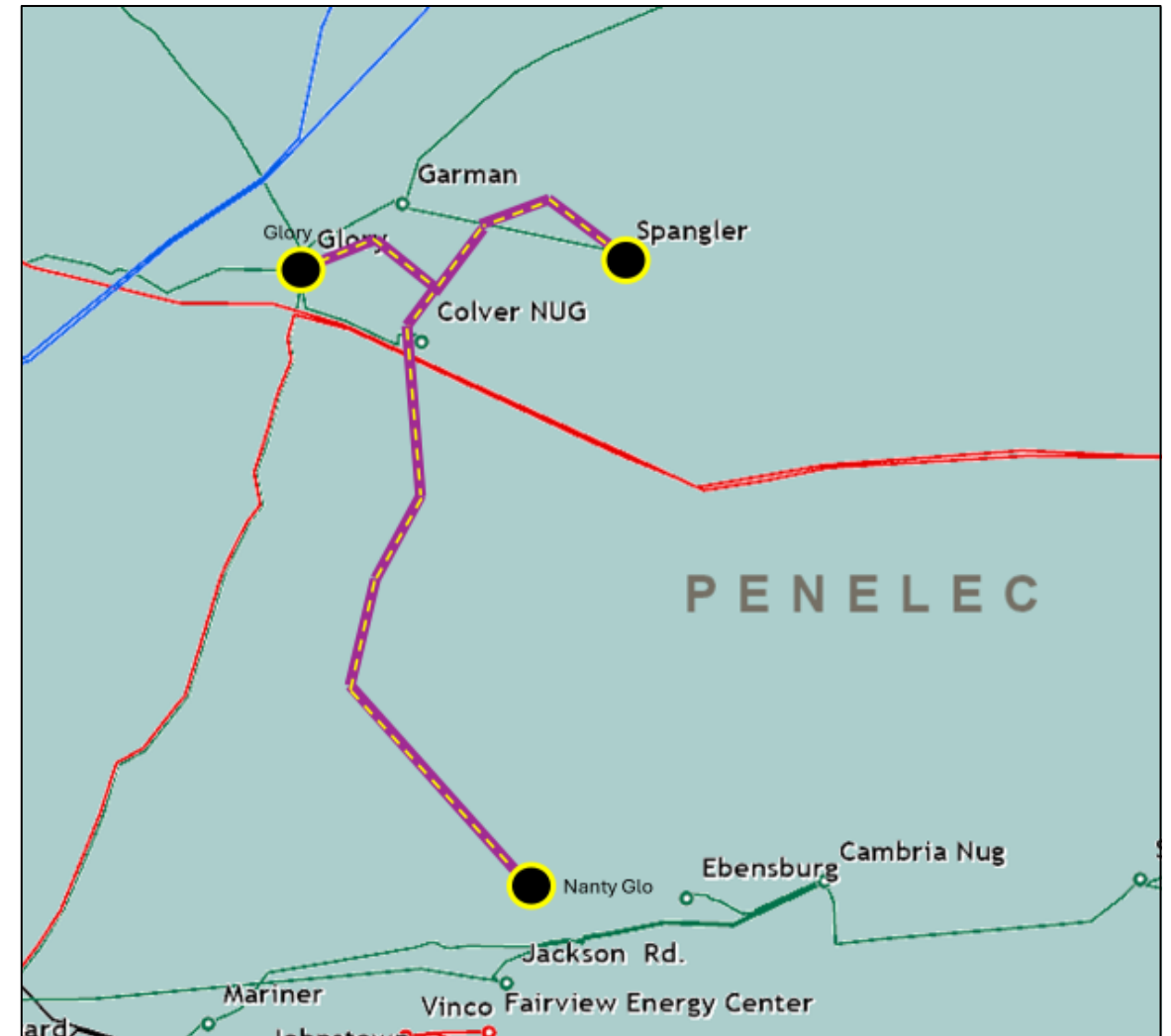
- System Performance Global Factors
 - System reliability/performance
 - Substation/Line equipment limits
- Line Condition Rebuild/Replacement
 - Age/condition of line equipment

Problem Statement:

The existing Glory - Nanty Glo - Spangler 46 kV N Line switches (A-111, A-112, and A-113) are 44 years old and are approaching end of life. Replacement components are difficult to source leading to non-standard repair.

The line is currently limited by terminal equipment.

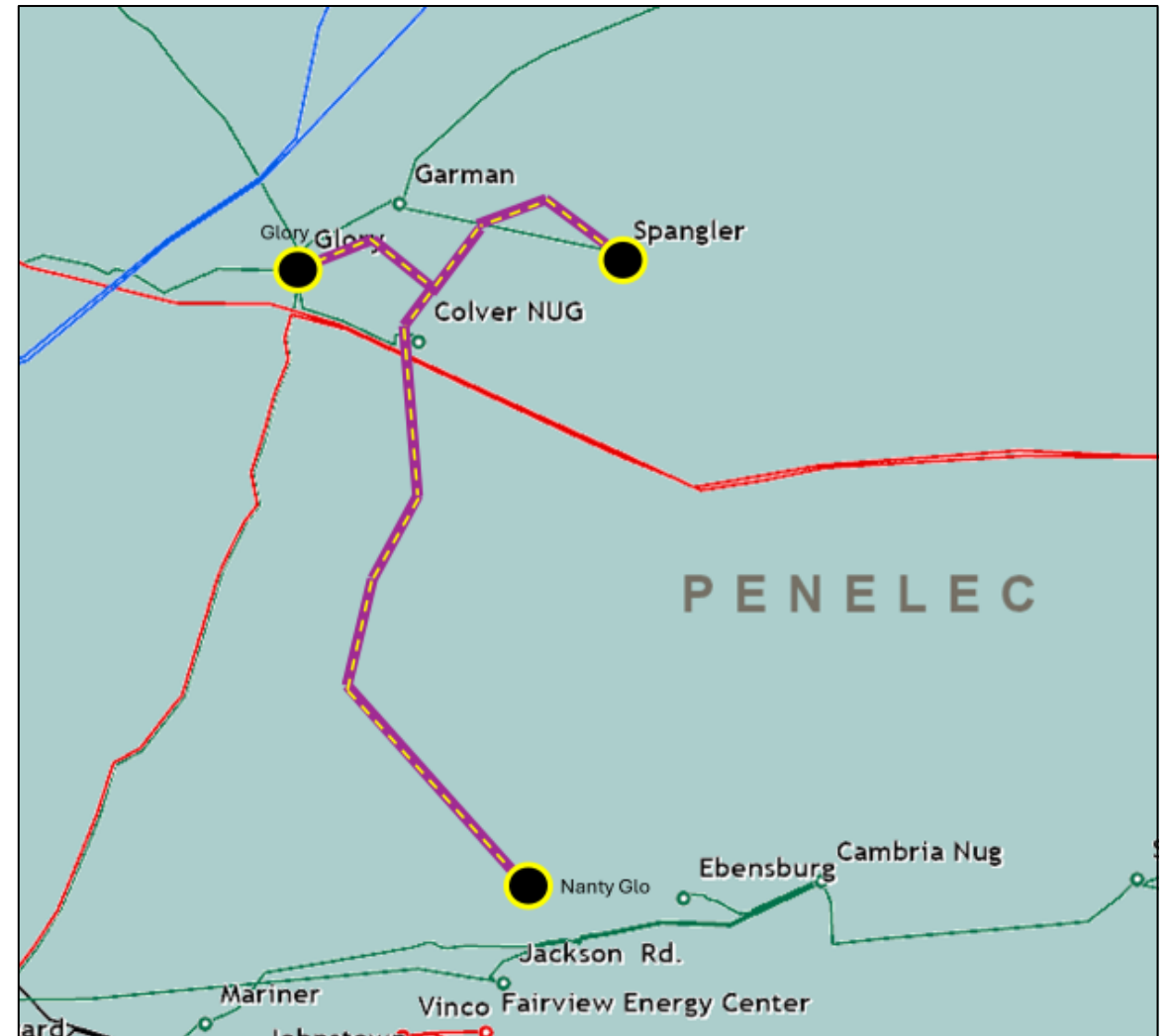
Cont'd on next slide...



Need Number: PN-2026-007

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

- Glory - Nicktown Ckt (A-112 Switch) (Glory - Nanty Glo - Spangler 46 kV N Line)
 - Existing Transmission Line Ratings: 34 / 44 / 49 / 55 MVA (SN/SE/WN/WE)
 - Existing Conductor Ratings: 49 / 50 / 55 / 55 MVA (SN/SE/WN/WE)
- Nicktown - Moss Creek Ckt (A-111 Switch) (Glory - Nanty Glo - Spangler 46 kV N Line)
 - Existing Transmission Line Ratings: 55 / 69 / 72 / 83 MVA (SN/SE/WN/WE)
 - Existing Conductor Ratings: 81 / 98 / 91 / 116 MVA (SN/SE/WN/WE)
- Teakettle - Nicktown Ckt (A-113 Switch) (Glory - Nanty Glo - Spangler 46 kV N Line)
 - Existing Transmission Line Ratings: 55 / 69 / 72 / 83 MVA (SN/SE/WN/WE)
 - Existing Conductor Ratings: 81 / 98 / 91 / 116 MVA (SN/SE/WN/WE)



Need Number: PN-2026-008

Process Stage: Need Meeting – SRRTEP-MA – 06/16/2026

Project Driver:

Equipment Condition/Performance/Risk

Specific Assumption References:

- System Performance Global Factors
 - System reliability/performance
 - Substation/Line equipment limits
- Substation Condition Rebuild/Replacement
 - Age/condition of substation equipment
 - Circuit breakers and other fault interrupting devices

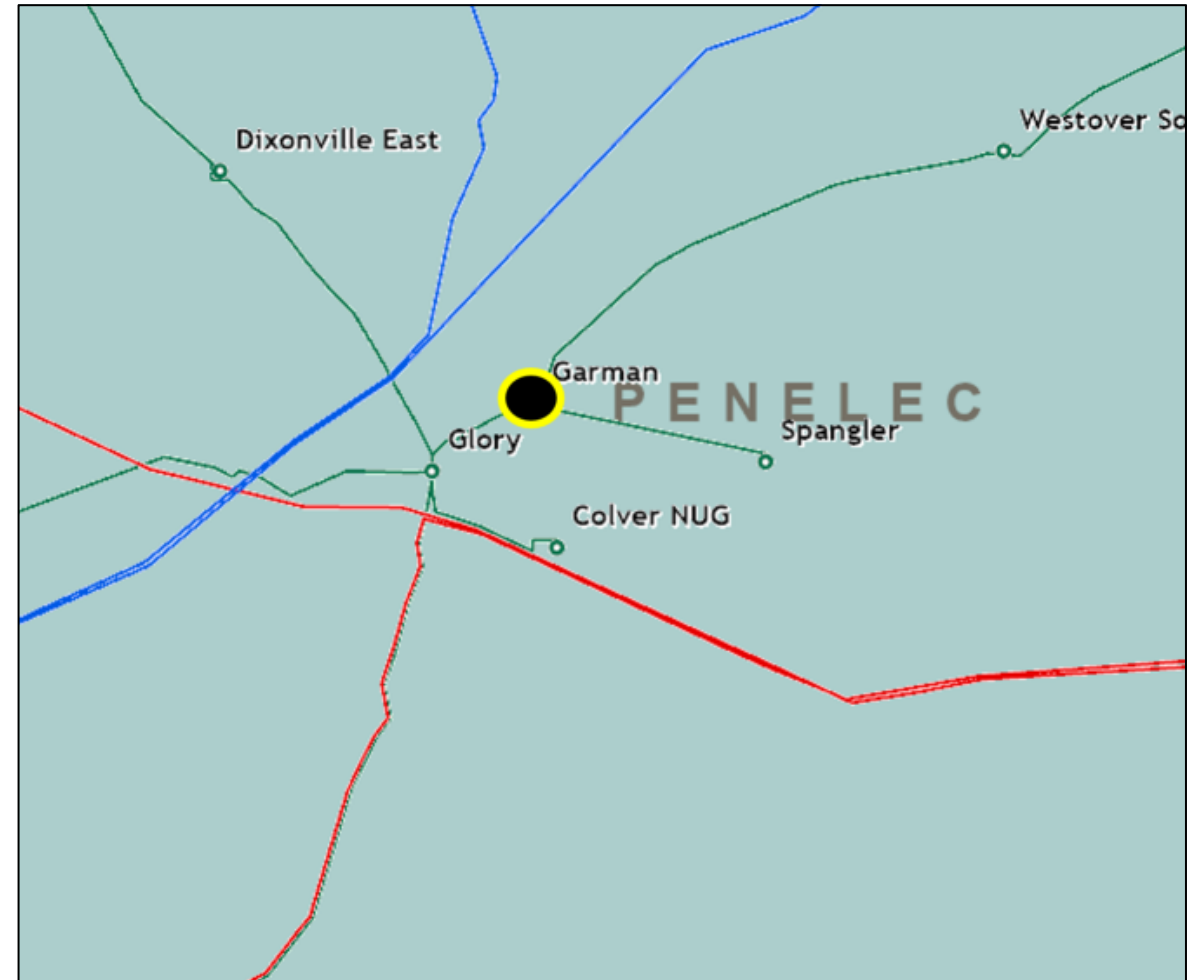
Problem Statement:

The existing B3 115 kV breaker at Garman Substation is 59 years old and is approaching end of life.

Replacement components are difficult to source leading to non-standard repairs.

The line is currently limited by terminal equipment.

- Existing Transmission Line Ratings: 193 / 246 / 242 / 284 MVA (SN/SE/WN/WE)
- Existing Conductor Ratings: 232 / 282 / 263 / 334 MVA (SN/SE/WN/WE)



Need Number: PN-2026-010

Process Stage: Need Meeting – SRRTEP-MA – 06/16/2026

Project Driver:

Equipment Condition/Performance/Risk

Specific Assumption References:

- System Performance Global Factors
 - System reliability/performance
 - Substation/Line equipment limits
- Line Condition Rebuild/Replacement
 - Age/condition of copper conductor and wood transmission line structures

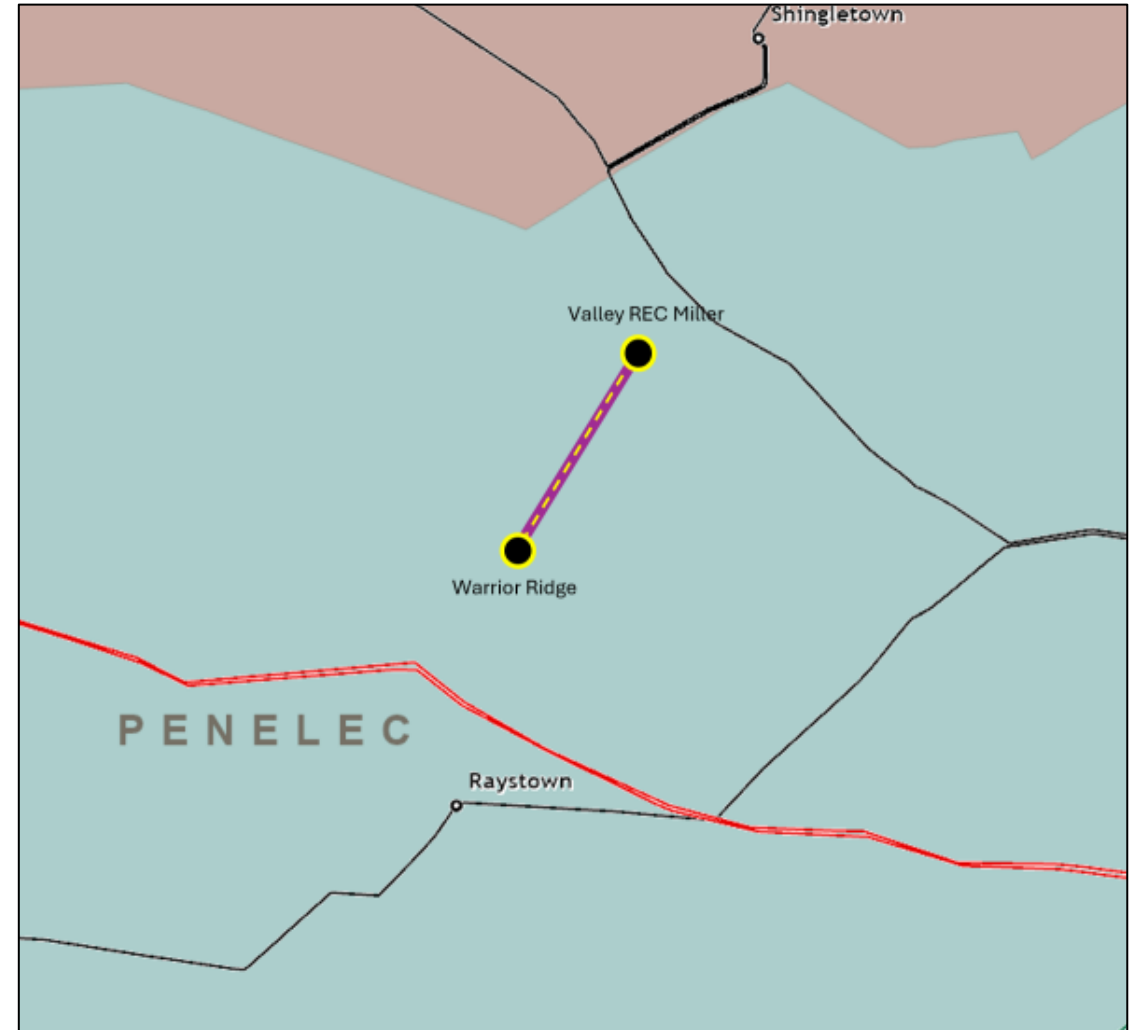
Problem Statement:

The Miller REC (Warrior Ridge) 46 kV Line was constructed approximately 76 years ago and is approaching end of life. It is approximately 8 miles long with 90 wood transmission line structures.

The line conductor is exhibiting deterioration. Inspection findings include:

- No static wire for approximately two miles due to cut and clear after a failure
- Of 35% of structures able to be accessed, three poles failed sound test, and all had woodpecker holes, decay, rot and/or cracking.
- Ten unscheduled outages since 2021 including four due to equipment failures

Existing Transmission Line Ratings: 32 / 32 / 35 / 35 MVA (SN/SE/WN/WE)



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: PN-2024-027

Process Stage: Solution Meeting – SRRTEP-MA – 06/16/2026

Previously Presented: Need Meeting – SRRTEP-MA – 11/14/2024

Project Driver:

Equipment Material Condition, Performance and Risk

Specific Assumption Reference:

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

Problem Statement:

The East Pike – Glory 115 kV Line was constructed approximately 66 years ago and is approaching end of life. The line is approximately 13 miles long with 104 wood pole and two lattice transmission line structures.

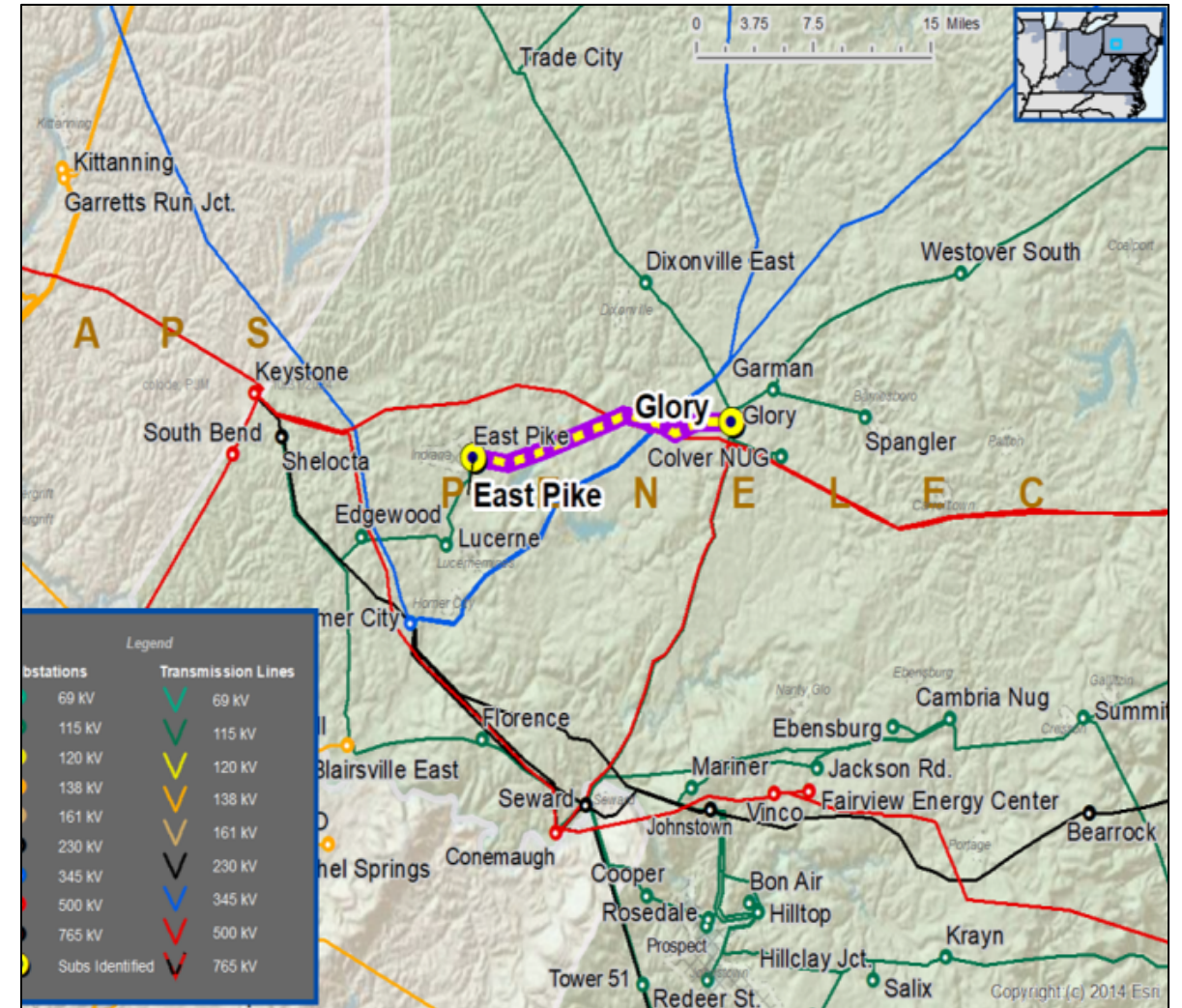
Per recent inspections, the line is exhibiting deterioration. Inspection findings include:

- 56 structures have cracked/deteriorated wood poles and/or braces.
- 14 structures are phase raised.

Since 2019, the line has had two unscheduled, sustained outages.

Existing Transmission Line Rating: 202 / 245 / 228 / 290 MVA (SN/SE/WN/WE)

Existing Transmission Conductor Line Rating: 202 / 245 / 228 / 290 MVA (SN/SE/WN/WE)



Need number: PN-2024-027

Process Stage: Solution Meeting –SRRTEP-MA – 06/16/2026

Proposed Solution:

Rebuild 13.04 miles on the East Pike - Glory 115 kV Line and install new conductor.

At East Pike Substation, adjust relay settings as necessary.

At Glory Substation, adjust relay settings as necessary.

Ratings:

- Before Proposed Solution: 137 / 177 / 188 / 245 MVA (SN/SE/WN/WE)
- After Proposed Solution: 232 / 282 / 263 / 334 MVA (SN/SE/WN/WE)

Alternatives Considered:

Maintain existing condition with elevated risk of failure due to equipment deterioration.

Estimated Project Cost: \$47.73M

Projected In-Service: 12/19/2029

Project Status: Conceptual

Model: 2024 RTEP model for 2029 Summer (50/50)



Legend	
500 kV	
345 kV	
230 kV	
138 kV	
115 kV	
69 kV	
46 kV	
34.5 kV	
23 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

06/05/2026 – V1 – Original version posted to pjm.com