

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-2026-001

Process Stage: Need Meeting – SRRTEP-MA – 02/12/2026

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 transmission line structures

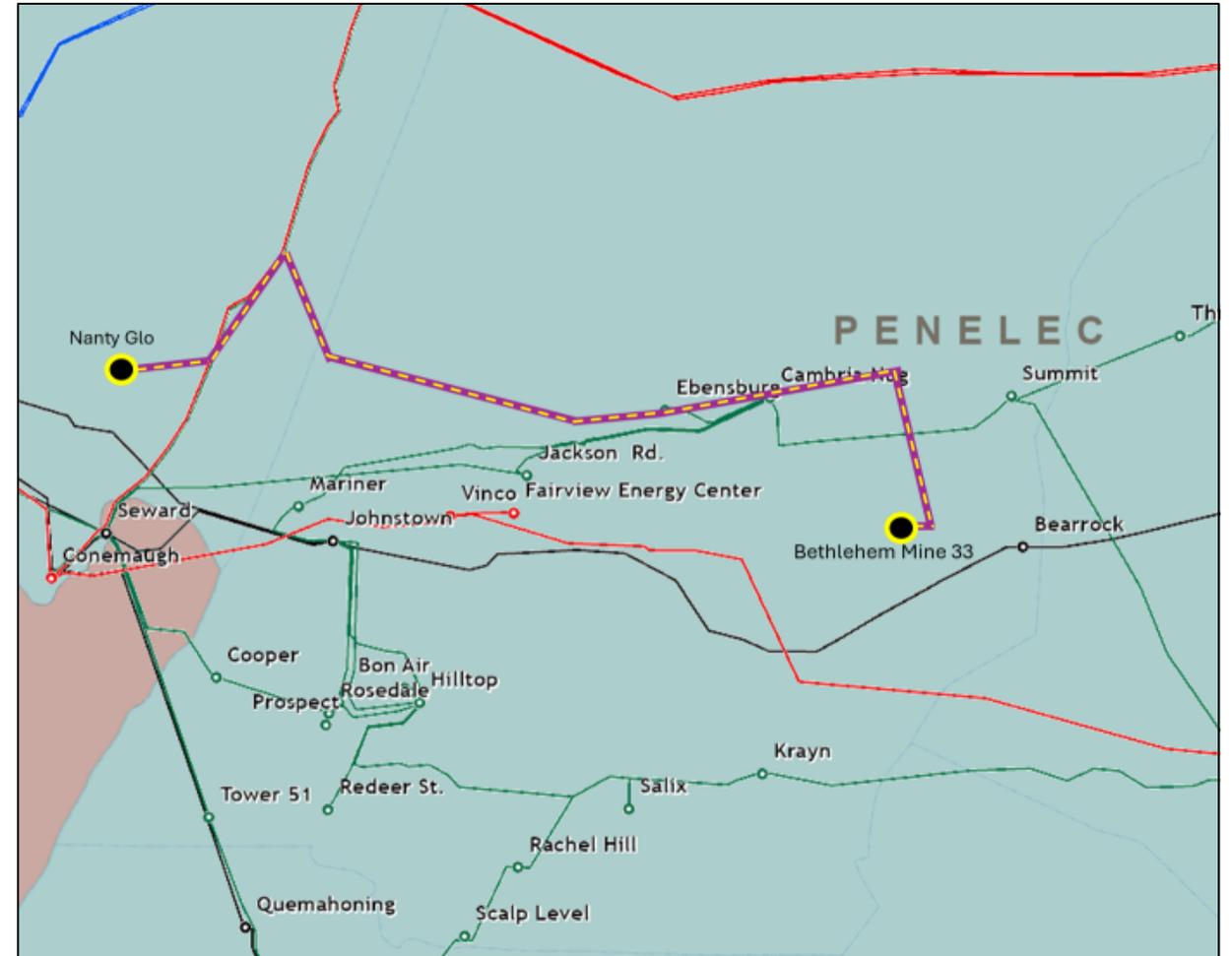
Problem Statement:

The Bethlehem Mine 33 - Nanty Glo 46 kV SGR Line was constructed approximately 78 years ago and is approaching end of life. It is approximately 12 miles long with 233 wood pole transmission line structures.

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

- 65 structures failed inspection due to sound
- 30 structures have extensive woodpecker damage
- 106 have damaged or cut ground wire systems
- 70% of the conductor on this line is approximately 78 years old

Cont'd on next slide...





Penelec Transmission Zone M-3 Process Bethlehem Mine 33 - Nanty Glo 46 kV SGR Line, PA

Need Number: PN-2026-001

Process Stage: Need Meeting – SRRTEP-MA – 02/12/2026

Problem Statement: (Cont'd from previous slide)

Since 2021, the Bethlehem Mine 33 - Nanty Glo 46 kV SGR Line has had nine unscheduled, sustained outages. Five of the outages are related to failed line equipment. Two of the outages are related to failed conductor.

Bethlehem Mine 33 - Cambria County Prison 46 kV Line:

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

Cambria County Prison - Reese REA Tap 46 kV Line:

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

REA Energy Reese - Ebensburg 46 kV Line:

- Existing Transmission Line and Conductor Ratings: 37 / 37 / 41 / 41 MVA (SN/SE/WN/WE)

Ebensburg - Revloc 46 kV Line:

- Existing Transmission Line and Conductor Ratings: 30 / 31 / 35 / 35 MVA (SN/SE/WN/WE)

Revloc - Nanty Glo 46 kV Line:

- Existing Transmission Line Ratings: 26 / 33 / 36 / 41 MVA (SN/SE/WN/WE)
- Existing Conductor Ratings: 37 / 37 / 41 / 41 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-2025-009

Process Stage: Solution Meeting – SRRTEP-MA – 02/12/2026

Previously Presented: Need Meeting – SRRTEP-MA – 12/11/2025

Project Driver:

Equipment Condition/Performance/Risk

Specific Assumption References:

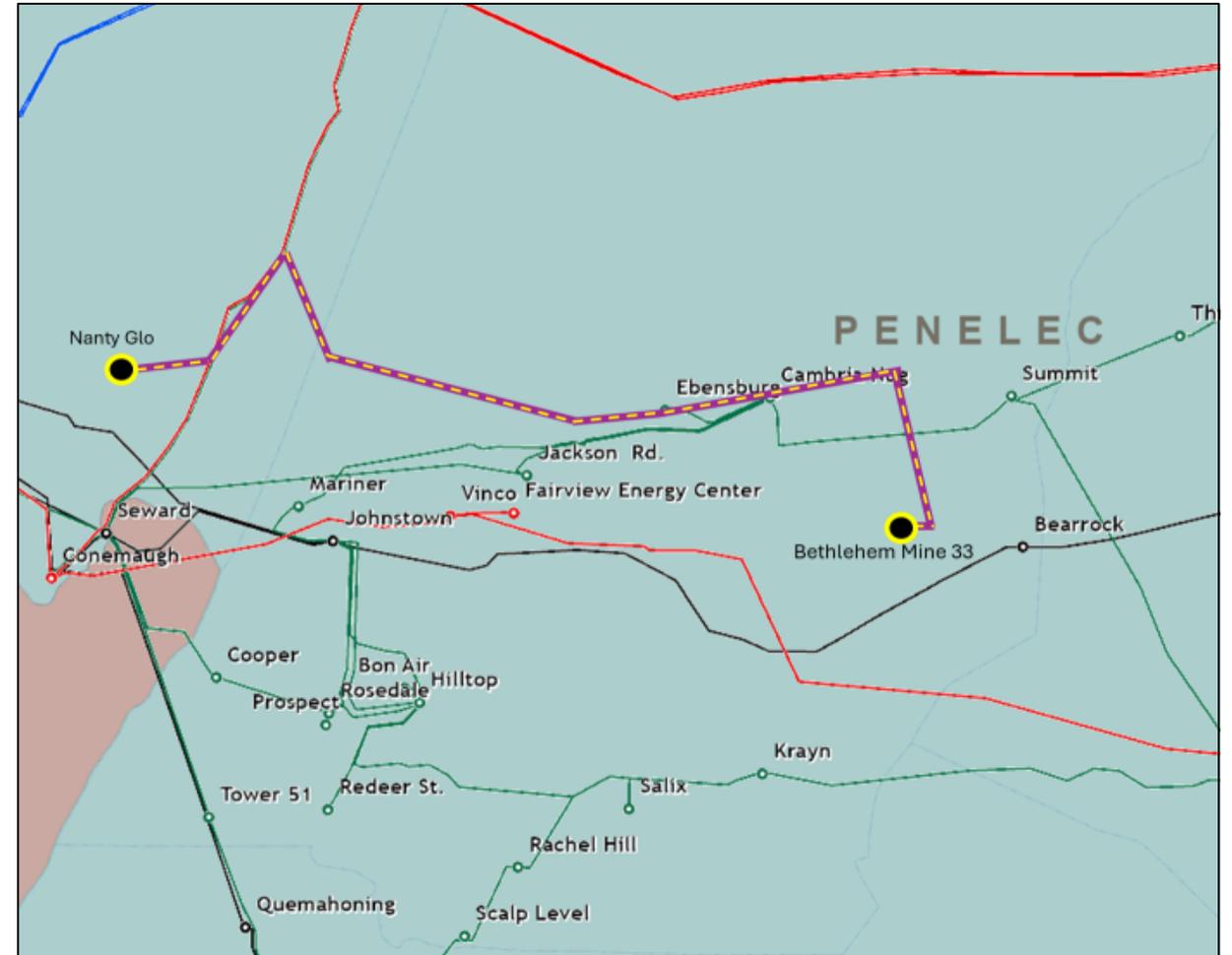
- Line Condition Rebuild/Replacement

Problem Statement:

The Bethlehem - Nanty Glo 46 kV SGR Line is 12 miles in length. Per recent inspection, safety concerns were identified on four spans as this circuit passes above and adjacent to several buildings and above existing distribution circuits. The four spans are located on the Ebensburg - Revloc 46 kV Line section. The line is currently derated due to insufficient clearance.

Existing Ratings for Ebensburg - Revloc 46 kV Line:

- Derating: 30 / 31 / 35 / 35 MVA (SN/SE/WN/WE)
- Conductor: 32 / 32 / 35 / 35 MVA (SN/SE/WN/WE)





Penelec Transmission Zone M-3 Process Bethlehem Mine 33 - Nanty Glo 46 kV SGR Line, PA

Need number: PN-2025-009

Process Stage: Solution Meeting –SRRTEP-MA – 02/12/2026

Proposed Solution:

Reroute the existing 46 kV Line overbuilding an existing distribution ROW to eliminate the clearance concern:

- Raise span #332 to #333, span #350 to #351, and span #370 to #371 due to clearance concerns

Transmission Line Ratings:

Ebensburg - Revloc 46 kV Line

- Before Proposed Solution: 30 / 31 / 35 / 35 MVA (SN/SE/WN/WE)
- After Proposed Solution: 32 / 32 / 35 / 35 MVA (SN/SE/WN/WE)

Alternatives Considered:

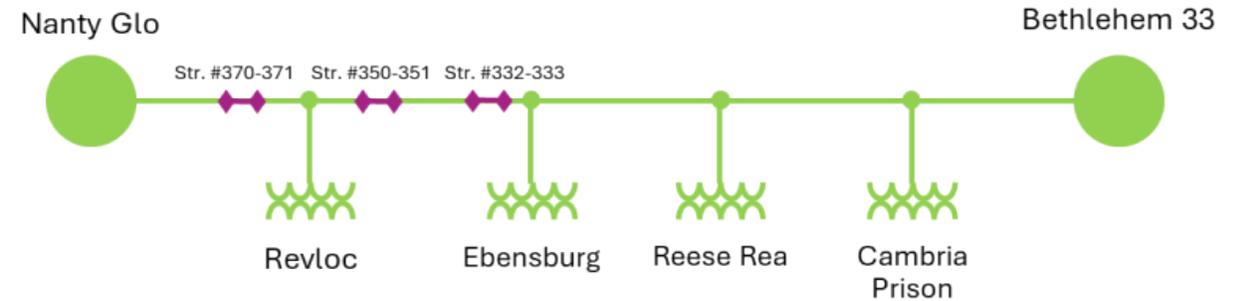
Maintain existing configuration with clearance concerns.

Estimated Project Cost: \$1.67M

Projected In-Service: 05/21/2027

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

02/02/2026 – V1 – Original version posted to pjm.com