

# **NEET MA IN Rebuild : PJM Supplemental Project**

**May 11, 2021**

## 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

# NEET MA IN Transmission Zone M-3 Process Indiana

**Need Number:** NEET-2021-02

**Process Stage:** Needs Meeting 05/11/2021

**Previously Presented:** Needs Meeting 02/09/2021

**Project Driver:**

Equipment Material Condition, Performance and Risk

**Specific Assumption Reference:**

[NEET MA IN 2021 Annual Assumption](#) and [Asset Management Strategy](#)

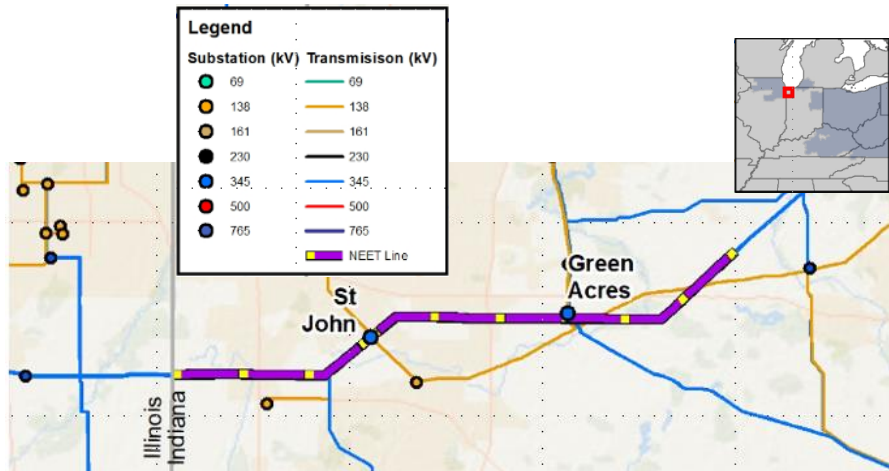
EOL/Condition/Obsolescence

**Problem Statement:**

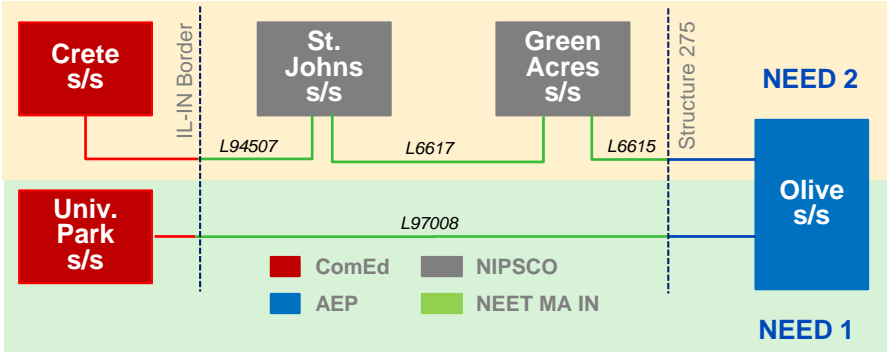
NEET MidAtlantic IN 345kV (double-circuit) transmission line assets are ~20 miles representing four segments. Asset represents 115 galvanized steel lattice structures:

[St. Johns to Green Acres 3 \(L6617\); Crete to St. Johns \(L95407 - Portion\); Green Acres to Olive \(L6615 - Portion\)](#)

- Transmission lines were built in 1958 and are over 60 years old. Reliability concerns with increased failure probability is expected as components have exceeded the industry recommended service life
- The existing 1414 kCMIL (62/19) paper expanded conductor is obsolete and no longer manufactured



**SPLITTING OF NEEDS**



## **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

# NEET MA IN Transmission Zone M-3 Process Indiana

**Need Number:** NEET-2021-01

**Process Stage:** Solutions Meeting 05/11/2021

**Previously Presented:** Solutions Meeting 03/09/2021; Needs Meeting 02/09/2021

**Project Driver:**

Equipment Material Condition, Performance and Risk

**Specific Assumption Reference:**

[NEET MA IN 2021 Annual Assumption](#) and [Asset Management Strategy](#)

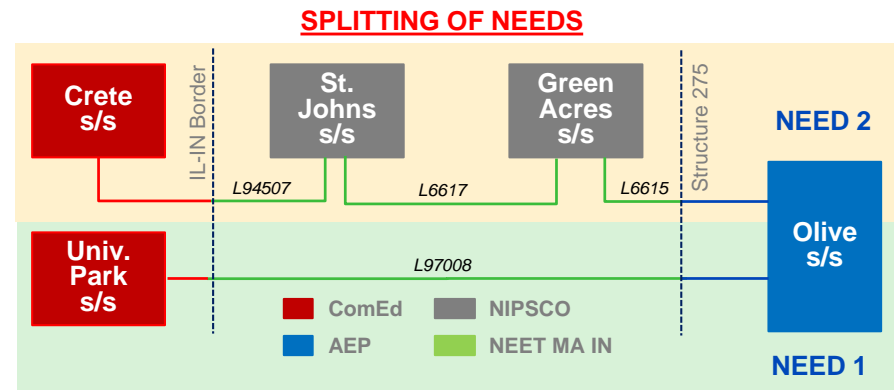
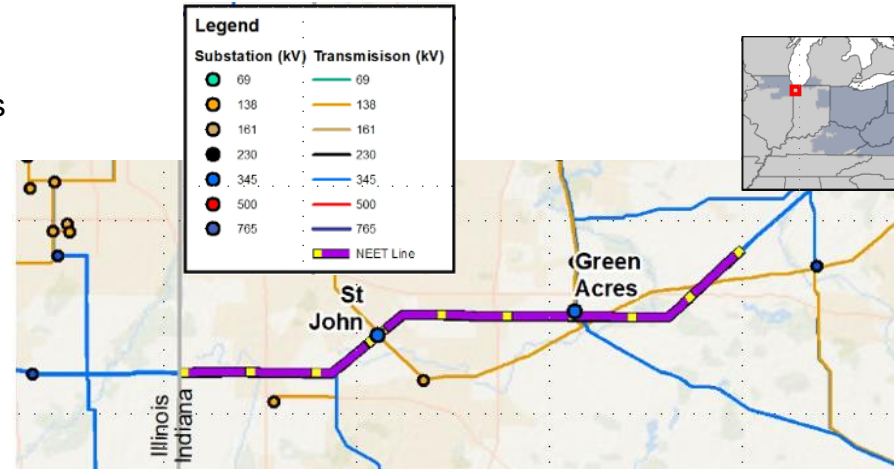
EOL/Condition/Obsolescence

**Problem Statement:**

NEET MidAtlantic IN 345kV (double-circuit) transmission line assets are ~20 miles representing four segments. Asset represents 115 galvanized steel lattice structures:

University Park to Olive (L97008)

- Transmission lines were built in 1958 and are over 60 years old. Reliability concerns with increased failure probability is expected as components have exceeded the industry recommended service life
- The existing 1414 kCMIL (62/19) paper expanded conductor is obsolete and no longer manufactured
- Structural components are exhibiting significant deterioration
  - Structural corrosion, insulator EOL, foundation wear, lack of cathodic protection, missing structural components and section loss, etc.



# NEET MA IN Transmission Zone M-3 Process Indiana

**Need Number:** NEET-2021-01

**Process Stage:** Solutions Meeting 05/11/2021

## Potential Solution:

Rebuild the (L97008) of the ~20 mile double-circuit line with monopoles and new conductor utilizing existing ROW:

- Facility Before: 1414 ACSR Paper Expanded Conductor
- Facility After: 2 x 1033.5 ACSS “Curlew” Conductor
- The Circuit Rating is limited by Substation Equipment

**Estimated Project Cost:** ~~\$63.4M~~~\$51.9M<sup>1</sup>

## Alternatives Considered:

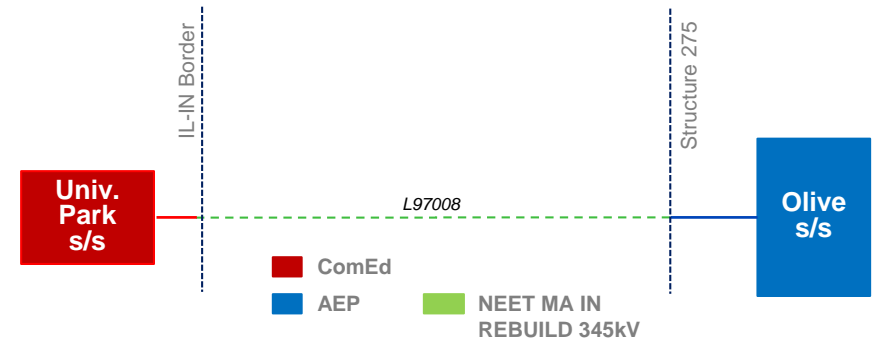
- Do Nothing: Maintain existing condition with elevated risk of failure (Not Feasible)
- Partial Remediation: Reconductor transmission line, strengthen towers, remediate critical components, and defer the plan to replace other ageing components at future date.
  - Not Feasible: Uneconomic and Does not Address EOL Criteria Violation

**Projected In-Service Date:** 1/1/2023

**Project Status:** Conceptual

**Model:** 2025 RTEP

*Footnote 1 – Continuous Extended Double-Circuit Outage; includes AFUDC; Nominal Dollars, Assumes Scope of Work performed to address Needs (NEET-2021-01 and NEET-2021-02) is addressed simultaneously for efficient cost management.*



# 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

4/28/2021– V1 – Original version posted to pjm.com