

NEET MA IN Rebuild : PJM Supplemental Project

March 09, 2021

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 03/09/2021

Previously Presented: Needs Meeting 02/09/2021

Project Driver:

Equipment Material Condition, Performance and Risk

Specific Assumption Reference:

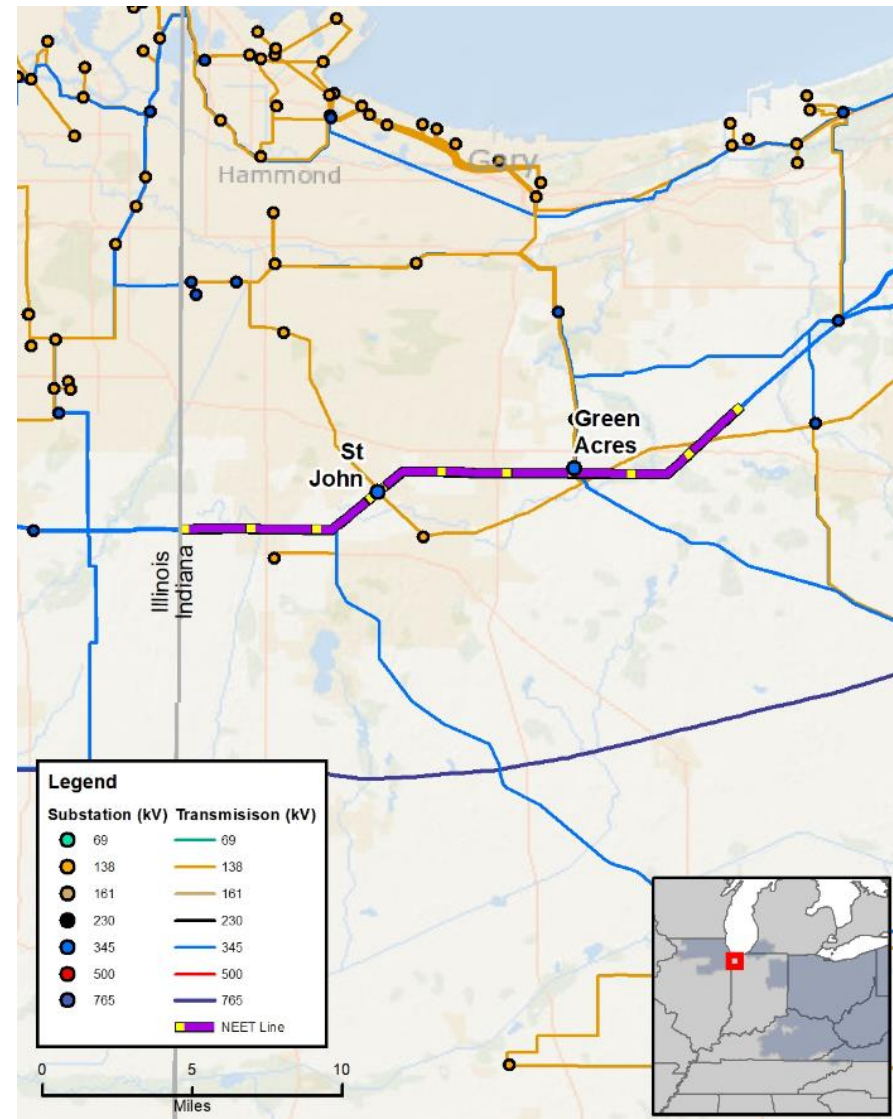
[NEET MA IN 2021 Annual Assumption](#) and
[Asset Management Strategy](#)

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:

- 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- The existing 1414 kCMIL (62/19) paper expanded conductor is obsolete and no longer manufactured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 03/09/2021

Potential Solution:

Rebuild the ~20 mile double-circuit line (L94507, L6615, L6617, L97008) 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: ~\$63.4M¹

Alternatives Considered:

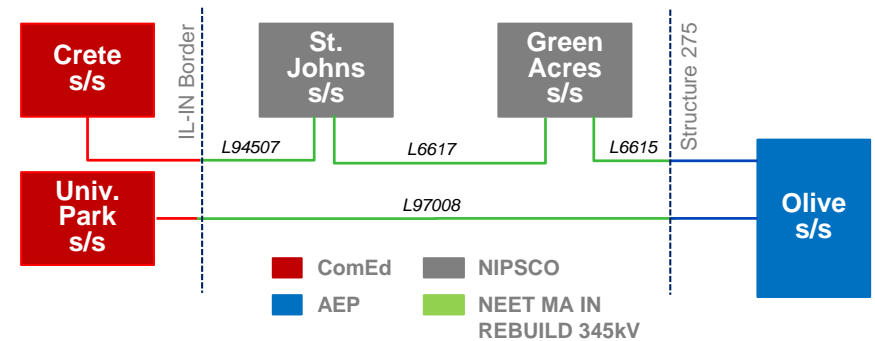
- Do Nothing: Maintain existing condition with elevated risk of failure (Not Feasible)
- Partial Remediation: Reconductor transmission line, strengthen towers, remediate critical components, and defer the plan to replace other ageing components at future date.
 - Not Feasible: Uneconomic and Does not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



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

2/26/2021 - V1 – Original version posted to pjm.com