

Submission of Supplemental Projects for Inclusion in the Local Plan



**NEET MA IN Rebuild :
PJM Supplemental Project ID s2631**

NEET MA IN Transmission Zone M-3 Process Indiana

Need Number: NEET-2021-02

Process Stage: Submission for Supplemental Project for inclusion in the Local Plan December 3, 2021

Previously Presented:

Needs Meeting 02/09/2021, 5/11/2021

Solutions Meeting 08/10/2021

Project Driver:

Equipment Material Condition, Performance and Risk

Specific Assumption Reference:

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

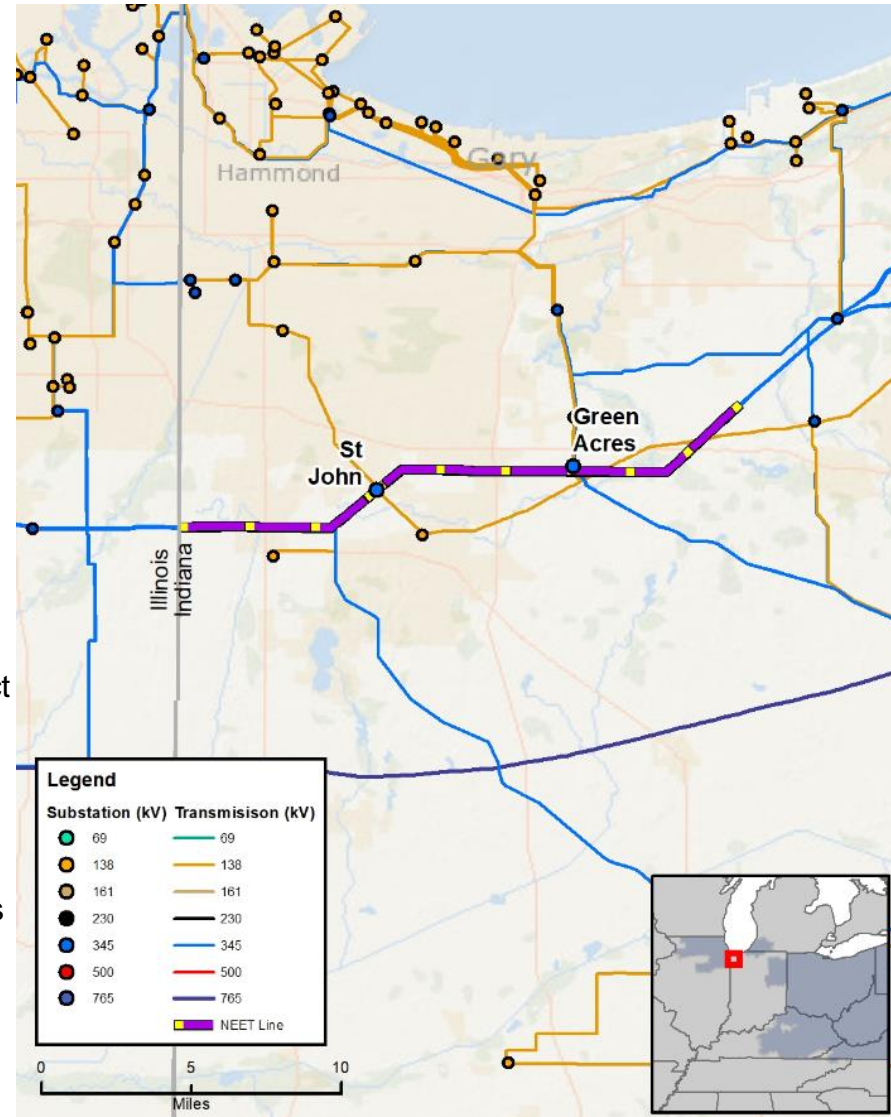
EOL/Condition/Obsolescence

Problem Statement:

NEET MidAtlantic IN 345kV (double-circuit) transmission line assets are ~20 miles representing four segments. This project is for three of the four segments.

[Circuit 1: Crete-St.Johns-Green Acres-Olive \(L94507, L6617, L6615\)](#)

- Transmission conductor is 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- The existing 1414 kCMIL (62/19) paper expanded conductor is obsolete and no longer manufactured
- Components are exhibiting significant deterioration



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Potential Solution:

Reconductor Circuit 1 of the ~20 mile double-circuit lines from Crete-St.Johns-Green Acres-Olive (L94507, L6617, L6615) with new conductor:

- 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: ~\$11.5M¹

Alternatives Considered:

- Do Nothing: Maintain existing condition with elevated risk of failure and limited options for repair during an event due to obsolescence of conductor (Not Feasible)

Supplemental Project ID: s2631

Projected In-Service Date: 6/1/2023

Project Status: Engineering/Procurement

Model: 2025 RTEP



Footnote 1 – Continuous Extended Double-Circuit Outage; includes AFUDC; Nominal Dollars

NEET MA IN Transmission Zone M-3 Process Indiana

Need Number: NEET-2021-02

Process Stage: Included in NEETMA IN's Local Plan

Solution:

Reconductor Circuit 1 of the ~13 mile double-circuit lines from St.Johns-Green Acres-Olive (L6617, L6615) with new conductor¹:

- 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: ~\$9.5M²

Alternatives Considered:

- Do Nothing: Maintain existing condition with elevated risk of failure and limited options for repair during an event due to obsolesce of conductor (Not Feasible)

Supplemental Project ID: s2631

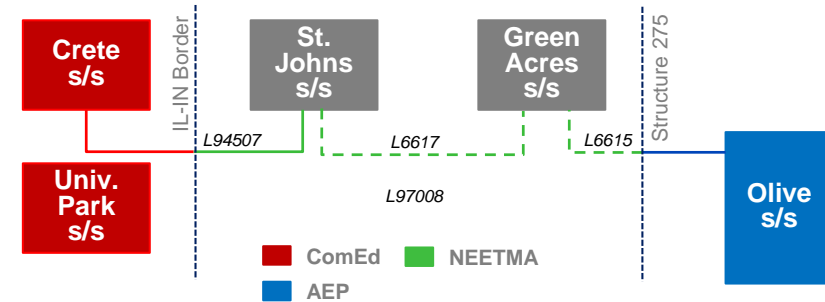
Projected In-Service Date: 6/1/2023

Project Status: Engineering/Procurement

Model: 2025 RTEP

Footnote 1 – The NEETMA IN's ~7 mile portion of the Crete – St. John's line (L94507) is to be reconducted with the same "Curlew" conductor as the line sections in project s2631 as part of the 2022 Multi-Driver Window proposal 644, component 3 at an estimated cost of \$1.99M

Footnote 2 – Continuous Extended Double-Circuit Outage; includes AFUDC; Nominal Dollars



Revision History

12/3/2021 – V1 – Added s2631

1/12/2023 – V2 – Added Slide #5 to reflect s2631 scope and cost change due to partially conversion to baseline (B3775.2)