Subregional RTEP Committee – Mid-Atlantic
FirstEnergy Supplemental Projects

JCPL Transmission Zone

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

JCPL Transmission Zone M-3 Process
Jerseyville - Smithburg X752 34.5 kV Line

Need Number: JCPL-2026-024

Process Stage: Solution Meeting SRRTEP-MA - 11/12/2026

Previously Presented: Need Meeting SRRTEP-MA - 09/17/2026

Project Driver:

- *Equipment Condition/Performance/Risk*

Specific Assumption References:

System Performance Global Factors

- System reliability/performance
- Substation/Line equipment limits

Problem Statement:

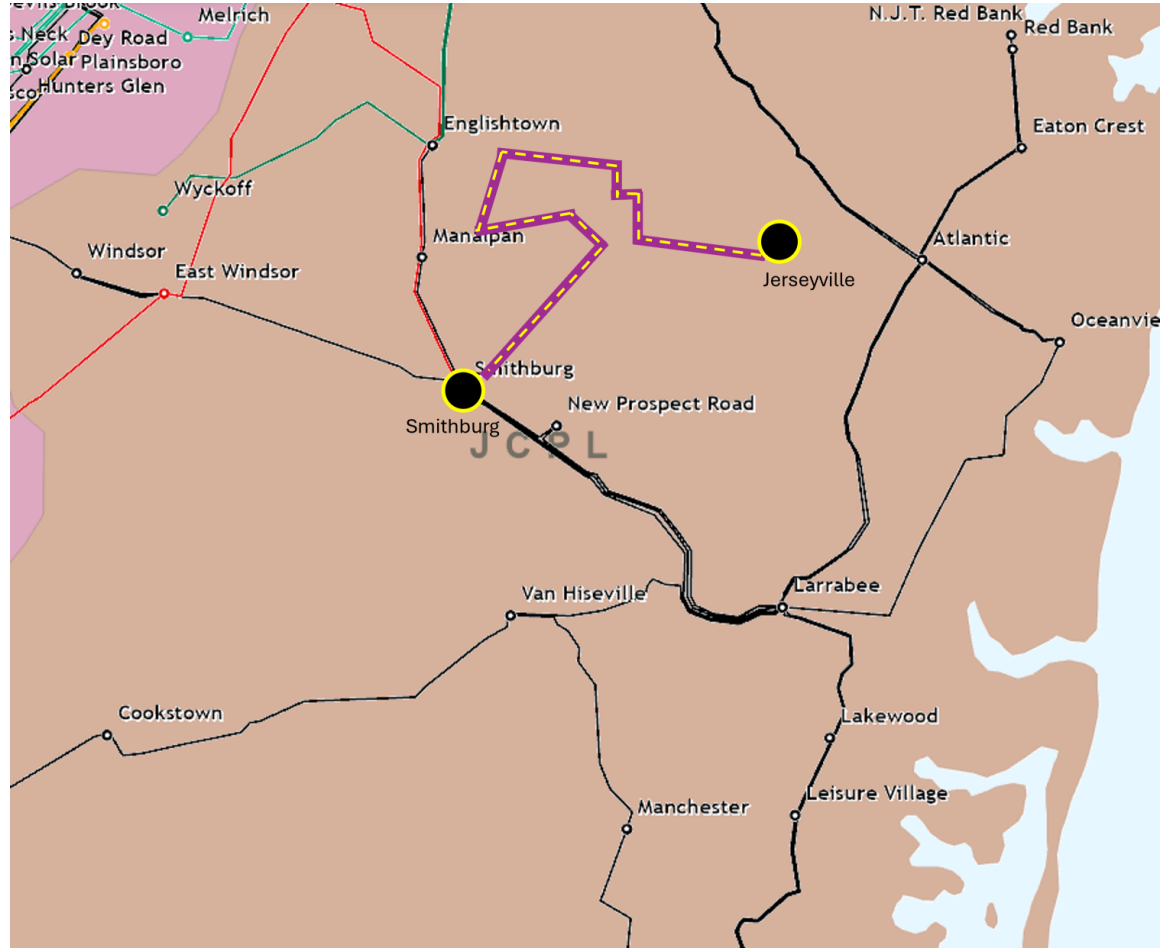
NJDOT has an upgrade project to the State Route 33 corridor beginning in 2028. Approximately 0.33 miles of the Jerseyville - Smithburg X752 34.5 kV Line structures and 0.28 miles of the double circuit Freneau - Jerseyville F32 34.5 kV Line and Englishtown - Jerseyville L12 34.5 kV Line structures will interfere with the proposed modifications upgrades. As a result, the identified single circuit Jerseyville - Smithburg X752 34.5 kV Line structures and double circuit Freneau- Jerseyville F32 34.5 kV and Englishtown - Jerseyville L12 34.5 kV line structures will require relocation as to not interfere with the NJDOT Route 33 upgrades.

Existing Transmission Line Ratings:

Jerseyville - Smithburg X752 34.5 kV Line: 41 / 48 / 48 / 48 MVA (SN/SE/WN/WE)

Freneau - Jerseyville F32 34.5 kV Line: 36 / 36 / 36 / 36 MVA (SN/SE/WN/WE)

Jerseyville - Nestle 34.5 kV L12 34.5 kV Line: 45 / 54 / 50 / 55 MVA (SN/SE/WN/WE)



JCPL Transmission Zone M-3 Process
Jerseyville - Smithburg X752 34.5 kV Line

Need Number: JCPL-2026-024

Process Stage: Solution Meeting SRRTEP-MA - 11/12/2026

Proposed Solution:

Relocate 0.33 miles of the Jerseyville - Smithburg X752 34.5 kV Line structures, 0.28 miles of the Freneau - Jerseyville F32 34.5 kV double circuit line structures, and 0.28 miles of the Englishtown - Jerseyville L12 34.5 kV double circuit line structures to accommodate the NJDOT Route 33 upgrades.

Transmission Line Ratings:

Jerseyville - Smithburg X752 34.5 kV Line:

- Before Proposed Solution: 41 / 48 / 48 / 48 MVA (SN/SE/WN/WE)
- After Proposed Solution: 41 / 48 / 48 / 48 MVA (SN/SE/WN/WE)

Freneau - Jerseyville F32 34.5 kV Line

- Before Proposed Solution: 36 / 36 / 36 / 36 MVA (SN/SE/WN/WE)
- After Proposed Solution: 36 / 36 / 36 / 36 MVA (SN/SE/WN/WE)

Jerseyville - Nestle L12 34.5 kV Line

- Before Proposed Solution: 45 / 54 / 50 / 55 MVA (SN/SE/WN/WE)
- After Proposed Solution: 45 / 54 / 50 / 55 MVA (SN/SE/WN/WE)

Alternatives Considered:

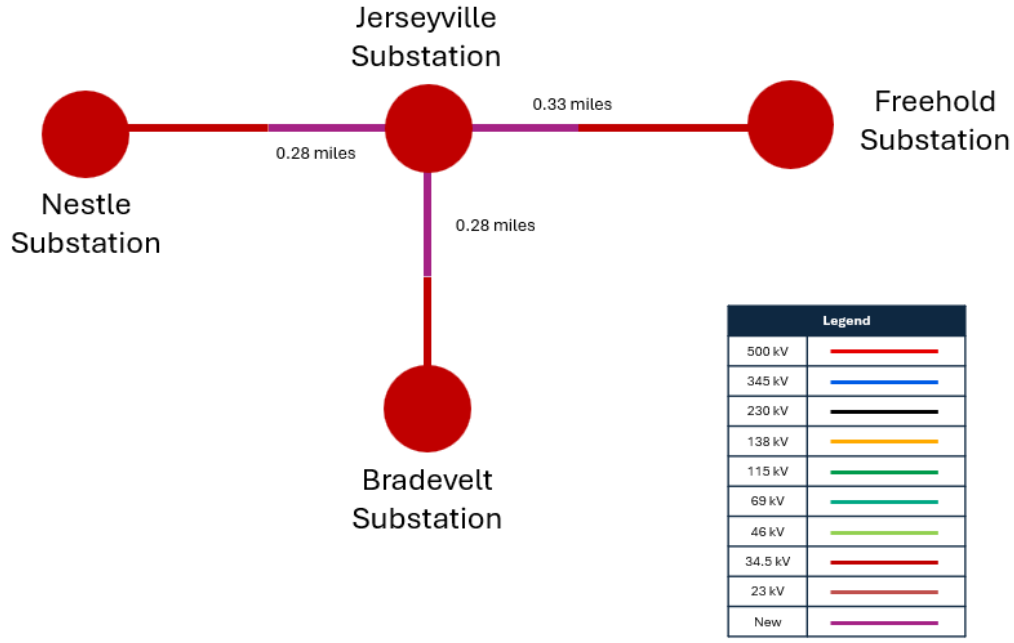
No reasonable alternatives due to the proximity of the NJDOT upgrades to the Jerseyville - Smithburg X752 34.5 kV Line, Freneau - Jerseyville F32 34.5 kV Line, and the Englishtown - Jerseyville L12 34.5 kV Line.

Transmission Cost Estimate: $0.7 M

Projected In-Service: 06/21/2027

Project Status: Conceptual

Model: 2025 RTEP Model for 2030 Summer



Revision History

11/02/2026 – V1 – Original version posted to pjm.com