

Subregional RTEP Committee – Mid-Atlantic FirstEnergy Supplemental Projects

JCPL 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: JCPL-2026-003

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
- Substation Condition Rebuild/Replacement
 - Age/condition of substation equipment
 - Circuit breakers and other fault interrupting devices

Problem Statement:

The LF, FN, NX, and XL 34.5 kV breakers at Jerseyville Substation are over 68 years old and approaching end of life. Replacement components are difficult to source leading to non-standard repairs.

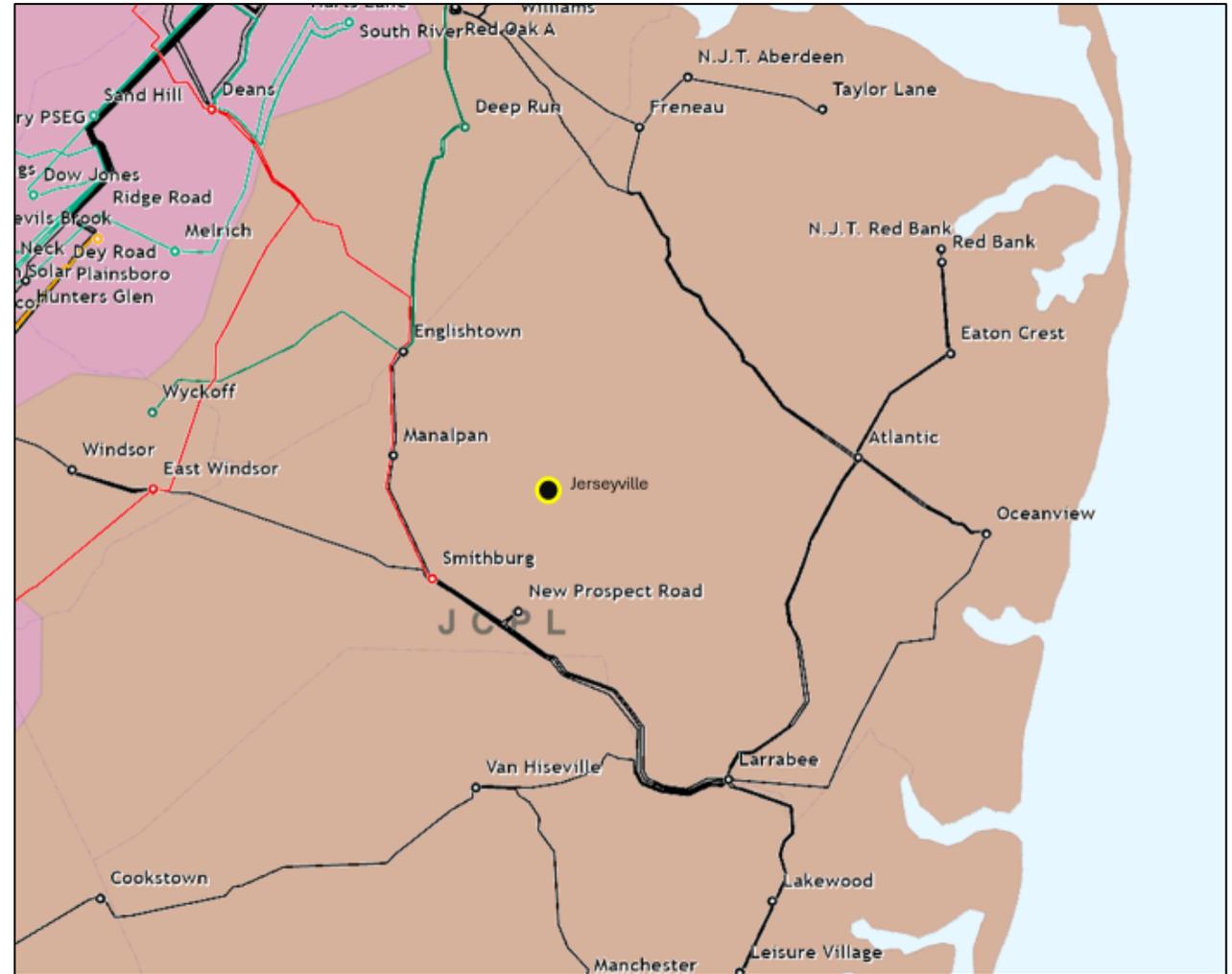
Lines are currently limited by terminal equipment.

Bradevelt - Jerseyville F32 34.5 kV Line:

- Existing Transmission Line Ratings: 36 / 36 / 36 / 36 MVA (SN/SE/WN/WE)
- Existing Conductor Ratings: 37 / 38 / 42 / 42 MVA (SN/SE/WN/WE)

Jerseyville - Smithburg X752 34.5 kV Line:

- Existing Transmission Line Ratings: 41 / 48 / 48 / 48 MVA (SN/SE/WN/WE)
- Existing Conductor Ratings: 41 / 50 / 48 / 60 MVA (SN/SE/WN/WE)



Need Number: JCPL-2026-005

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
- Substation Condition Rebuild/Replacement
 - Age/condition of substation equipment
 - Circuit breakers and other fault interrupting devices

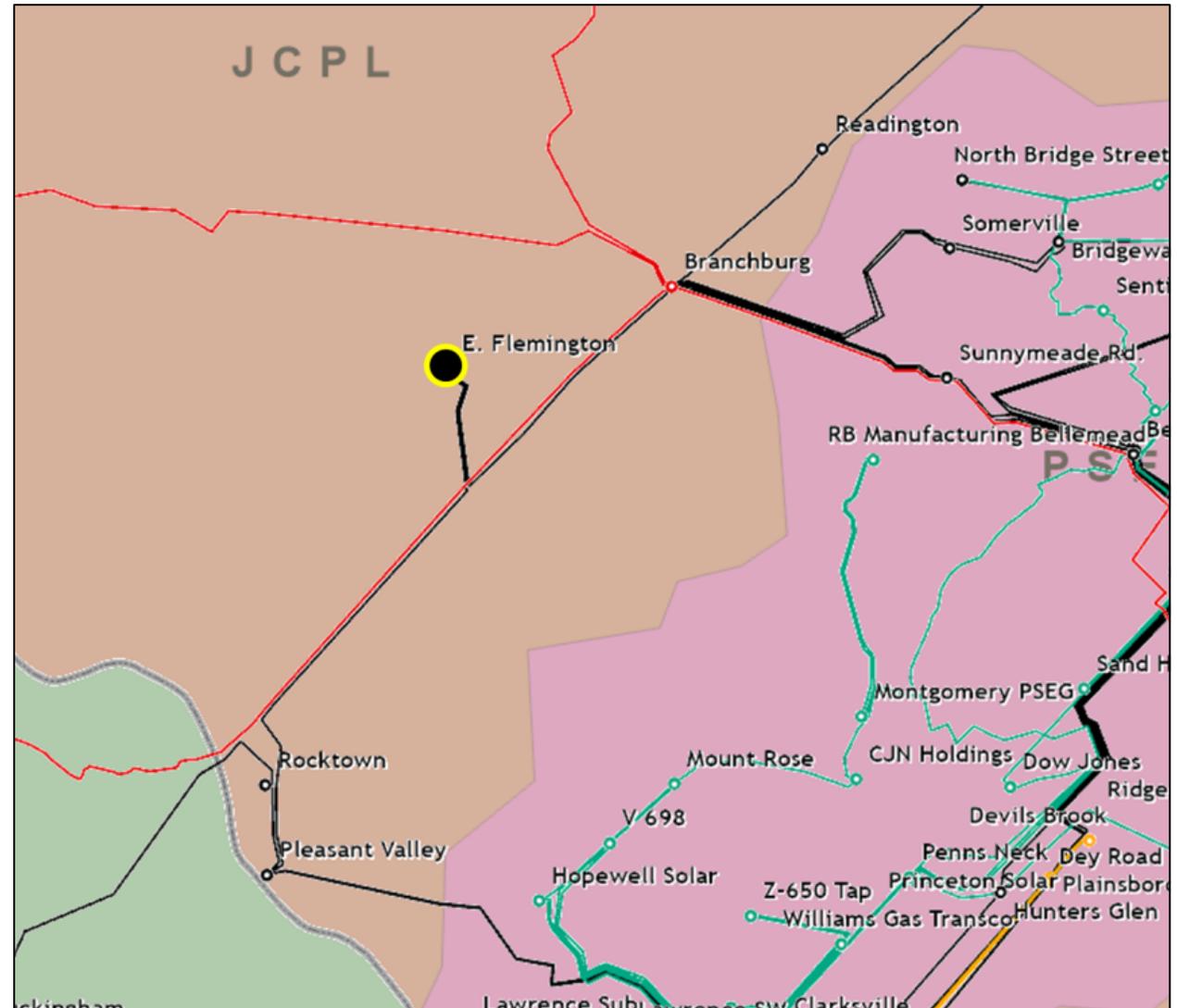
Problem Statement:

The C731, V724, A729, TC, H736, AV, YH and Y727 34.5 kV OCB breakers, associated disconnect switches and protective relaying at East Flemington Substation are more than 45 years old and are approaching end of life.

The existing capacitor banks, Bank 1, Bank 2 and Bank 3 are 45 years old and are approaching end of life.

Replacement components are difficult to source leading to non-standard repairs.

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Need Number: JCPL-2026-005

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

Problem Statement: (Cont'd from previous slide)

The following lines are currently limited by terminal equipment.

East Flemington - Rocktown Road 34.5 kV Y727 Line:

- Existing Transmission Line Ratings: 39 / 46 / 43 / 53 MVA (SN/SE/WN/WE)

Neshanic (East Flemington) 34.5 kV H736 Line:

- Existing Transmission Line Ratings: 40 / 48 / 40 / 48 MVA (SN/SE/WN/WE)

Flemington (East Flemington) 34.5 kV V724 Line:

- Existing Transmission Line Ratings: 39 / 46 / 43 / 53 MVA (SN/SE/WN/WE)

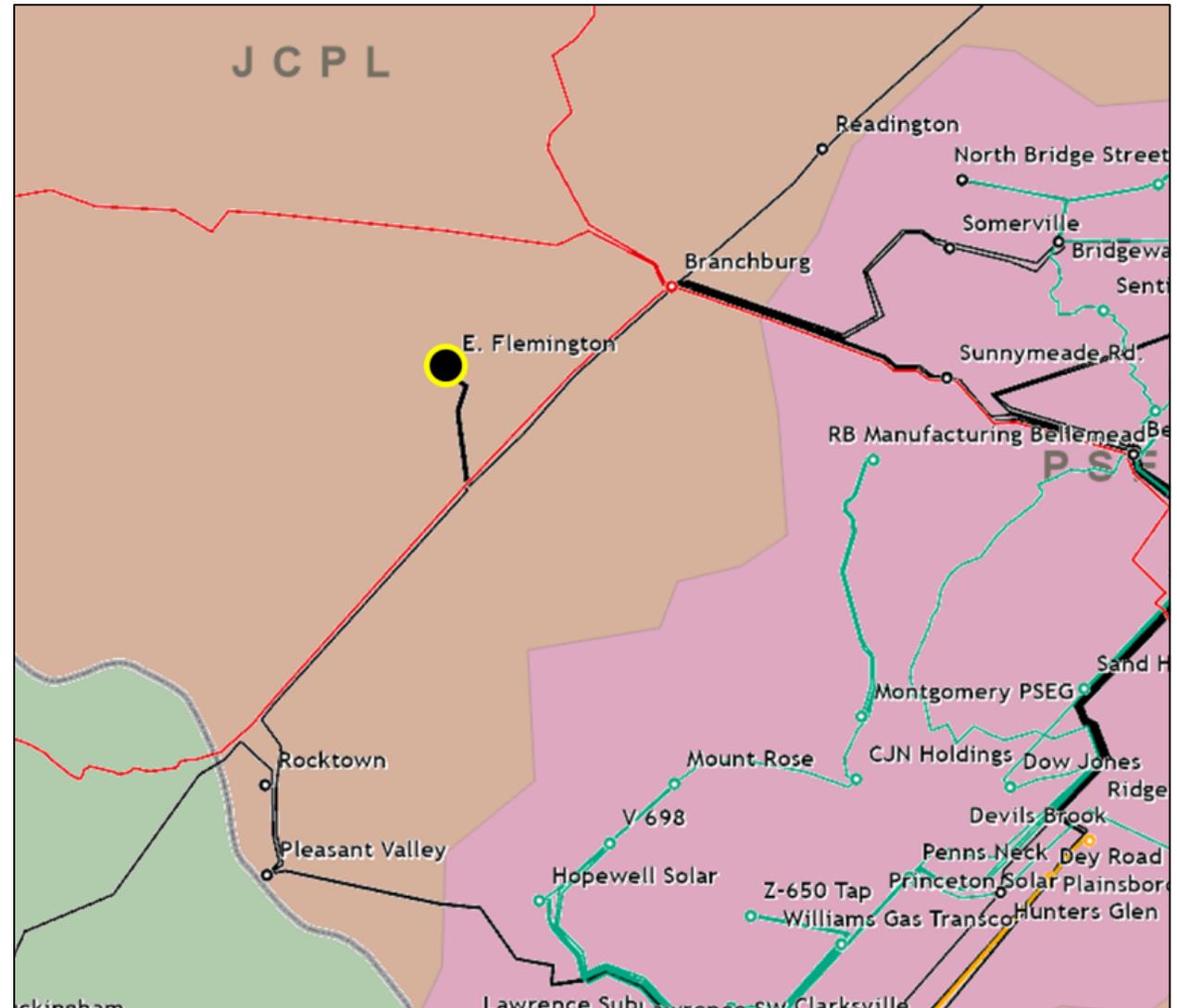
The following lines are currently limited by line conductor.

West Flemington (East Flemington) 34.5 kV A729 Line:

- Existing Transmission Line Ratings: 39 / 48 / 45 / 56 MVA (SN/SE/WN/WE)

East Flemington - Glen Gardner 34.5 kV C731 Line:

- Existing Transmission Line Ratings: 35 / 45 / 35 / 43 MVA (SN/SE/WN/WE)



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