

Sub Region RTEP Mid-Atlantic Committee AEC Supplemental Projects

May 16, 2022

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: ACE-2022-008

Process Stage: Need Meeting 5/16/2022

Project Driver: Operational Flexibility and Efficiency.
Equipment Material Condition, Performance and Risk

Specific Assumption Reference:

- Enhancing system functionality, flexibility, visibility, or operability
- Provide Operations more options to deal with non-standard operating conditions
- Transmission infrastructure replacements (EOL/condition/obsolescence) that are consistent with efficient asset management decisions

Problem Statement:

- The Newport substation was originally built in 1939 and is in deteriorating condition. A fault anywhere on the 69kv bus would result in the loss of both 69kv sources: Newport–Fairton (0727 Line) & Newport–South Millville (0762 Line), as well as the loss of all 12kV Load.



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

Need Number: ACE-2022-004

Process Stage: Solution Meeting 5/16/2022

Previously Presented: Need Meeting 2/17/22

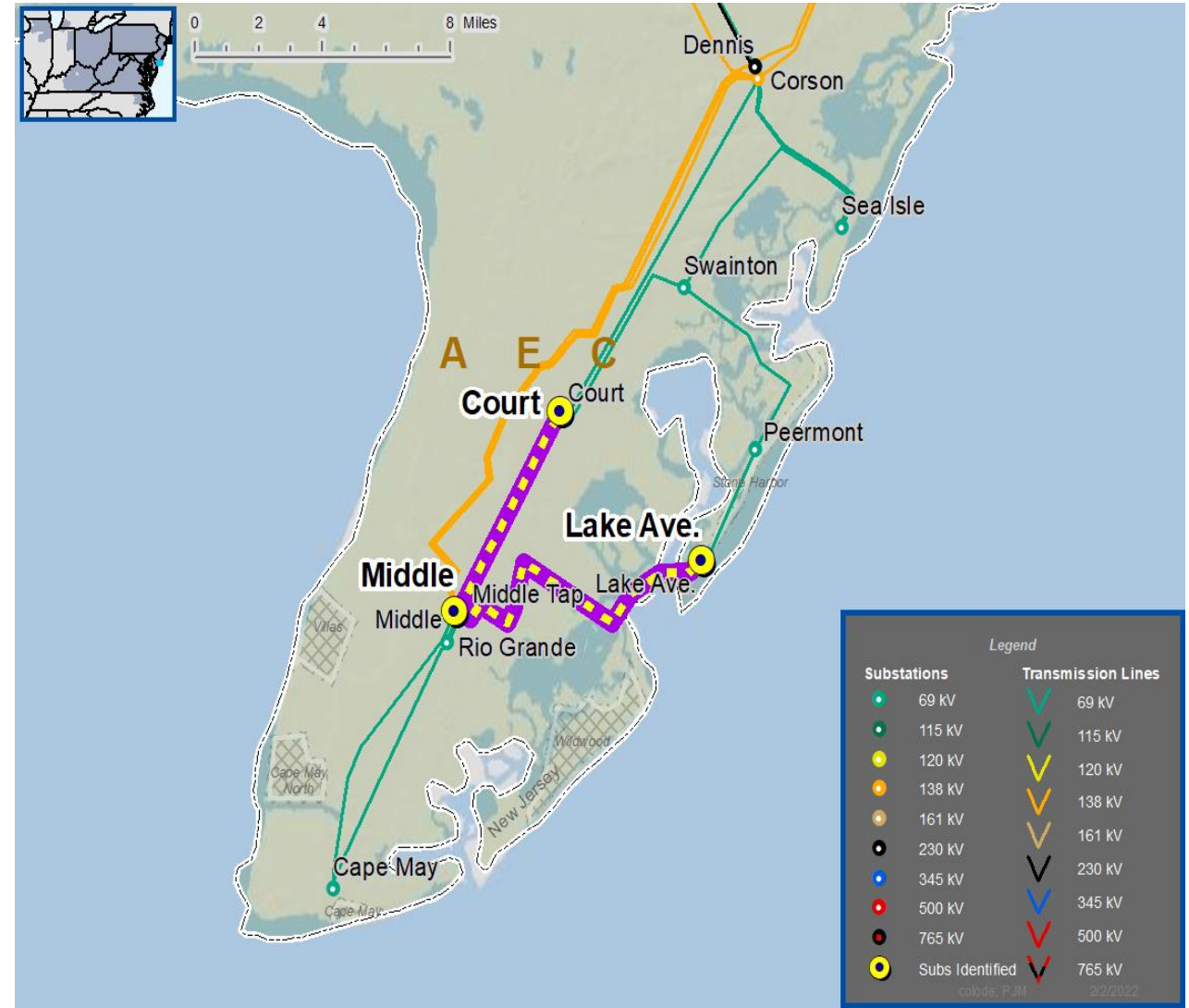
Project Driver: Equipment Material Condition, Performance and Risk, Operational Flexibility and Efficiency

Specific Assumption Reference:

- Transmission infrastructure replacements (EOL/condition/obsolescence) that are consistent with efficient asset management decisions
- Programmatic review and/or replacement of breakers, relays, wood poles, cables, etc.
- Enhancing system functionality, flexibility, visibility, or operability.

Problem Statement:

The 69 kV Court – Middle – Lake 0798 line is 67 years old and in deteriorating condition. The three terminal line has had several interruptions over the last five years.



Need Number: ACE-2022-007

Process Stage: Solution Meeting 5/16/2022

Previously Presented: Need Meeting 3/17/22

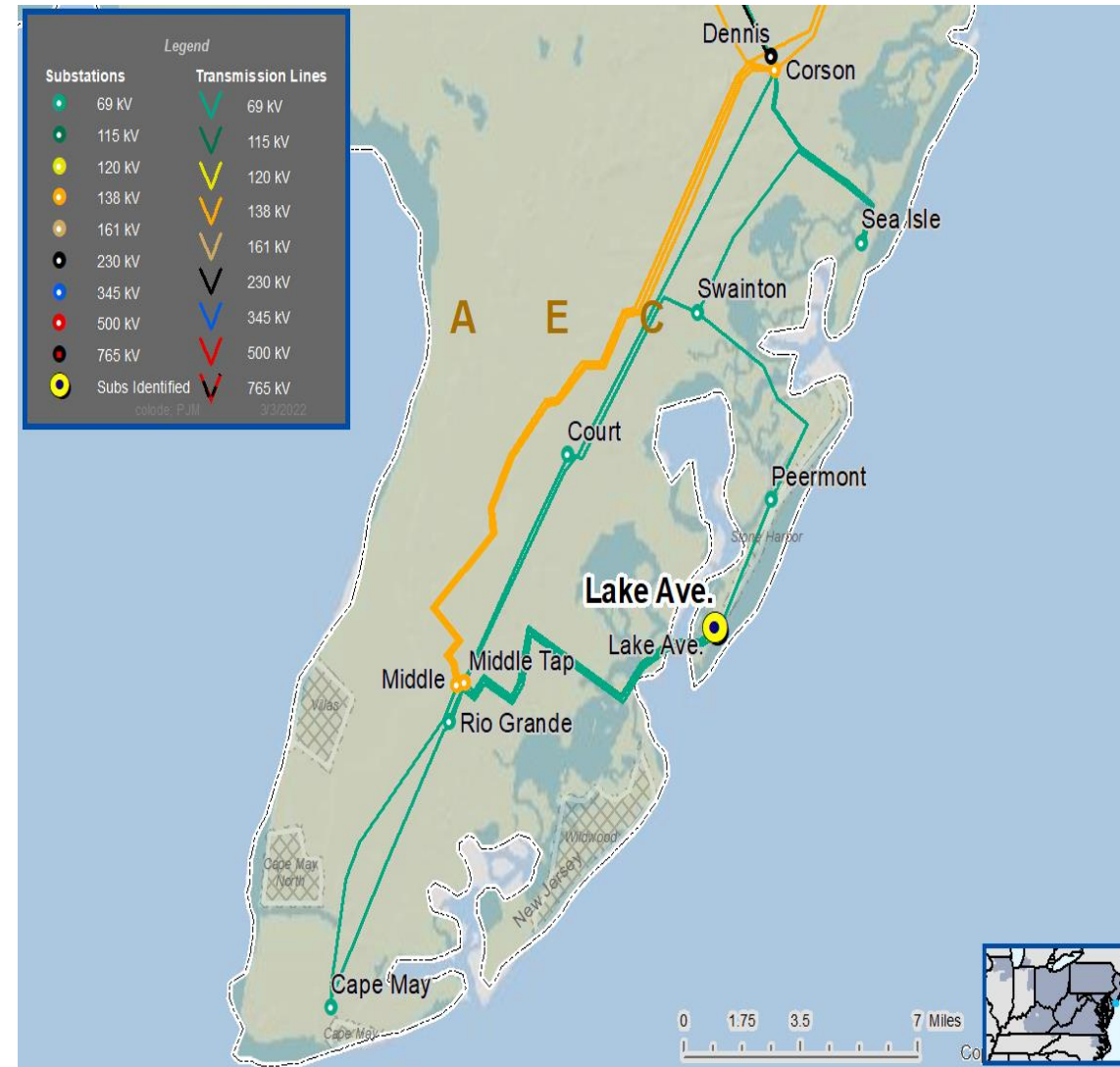
Project Driver: Operational Flexibility and Efficiency

Specific Assumption Reference:

- Enhancing system functionality, flexibility, visibility, or operability
- Remedy recurring operational problems
- Provide Operations more options to deal with non-standard operating conditions

Problem Statement:

Lake Avenue Substation's present 69kV bus configuration is not operated as a closed ring. Transformers in the station are fed by two lines, a tap from 0798 Middle-Court line and 0736 line from Middle. There have been 17 interruptions on 0798 line and 6 interruptions on 0736 line during the past five years.



Need Number: ACE-2022-004 & ACE-2022-007

Process Stage: Solution Meeting 5/16/22

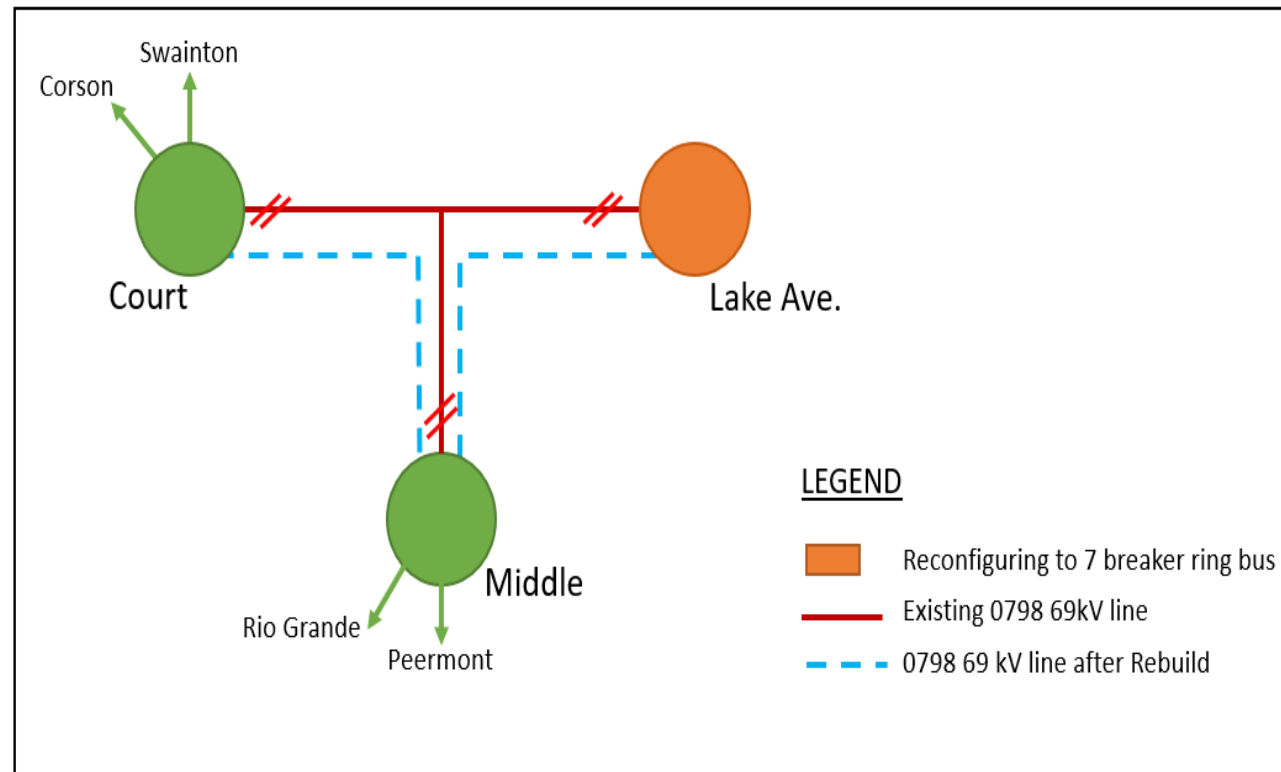
Proposed Solution:

- Install 2 new circuit breakers to reconfigure Lake Ave substation as a 7-breaker ring bus.
- Rebuild the existing 0798 Court- Middle- Lake 69 kV line as two circuits. After rebuild, 0798 line will be from Court to Middle and the new line will be from Middle-Lake Ave.
- For better reliability, a second tie breaker will be installed in Middle substation to prevent an event from deenergizing the entire 69kV bus.

Estimated cost: \$ 21 M

Alternatives Considered:

- Do nothing
 - Recurring outage and maintenance.
- **Projected In-Service:** 12/31/24
- **Project Status:** Engineering
- **Model:** 2025 RTEP



Questions?



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

5/6/2022 – V1 – Original version posted to pjm.com