

Sub Region RTEP Mid-Atlantic Committee AEC Supplemental Projects

March 17, 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-2022-005

Process Stage: Need Meeting 3/17/2022

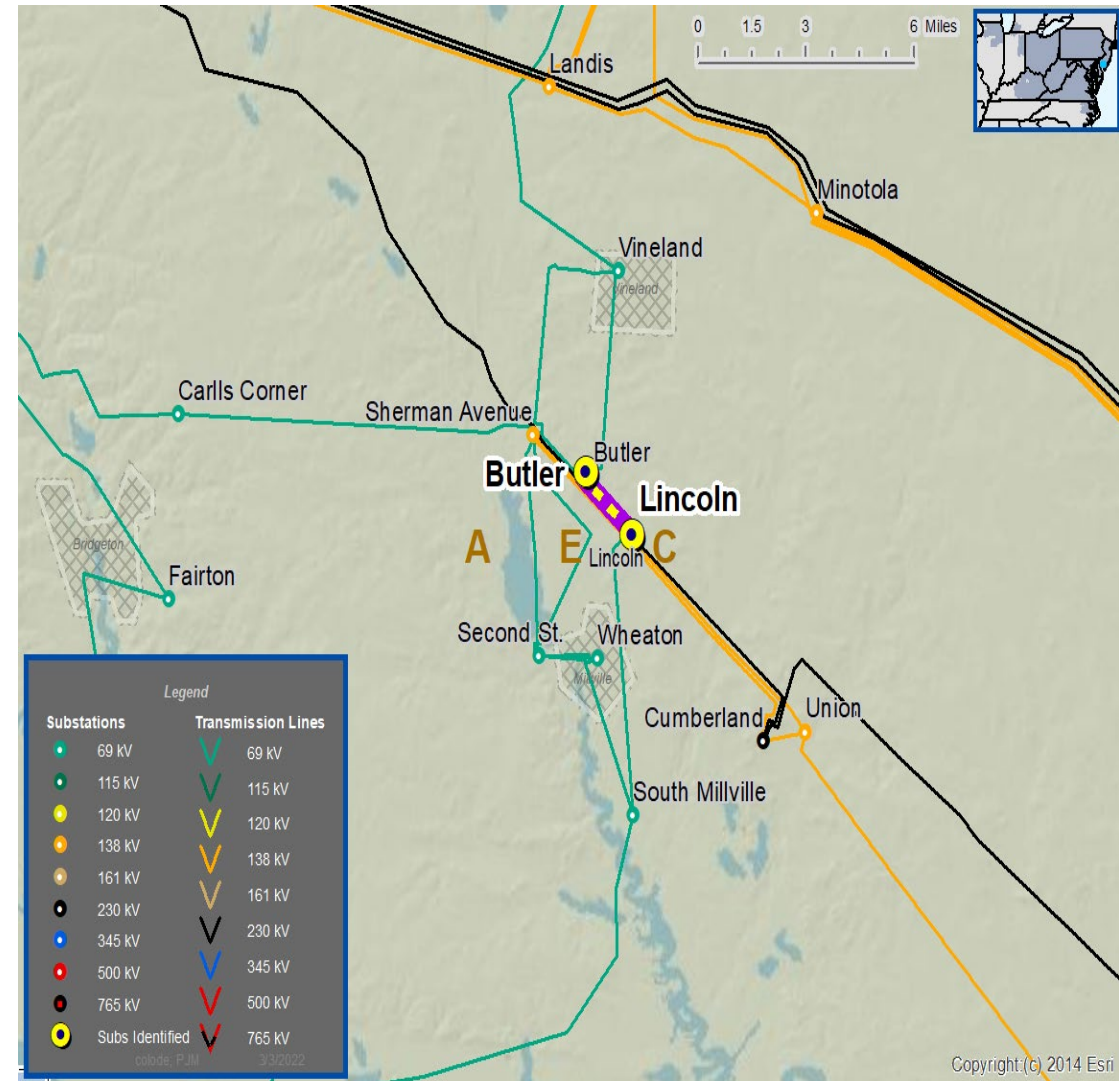
Project Driver: Equipment Material Condition, Performance and Risk, Operational Flexibility and Efficiency

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.
- Internal and/or regulatory recommended design guidelines or standards
- Enhancing system functionality, flexibility, visibility, or operability

Problem Statement:

Existing 69 kV 0764 line between Butler and Lincoln substations is 70 years old and is in deteriorating condition. This line experienced two outages since 2017.



Need Number: ACE-2022-006

Process Stage: Need Meeting 3/17/2022

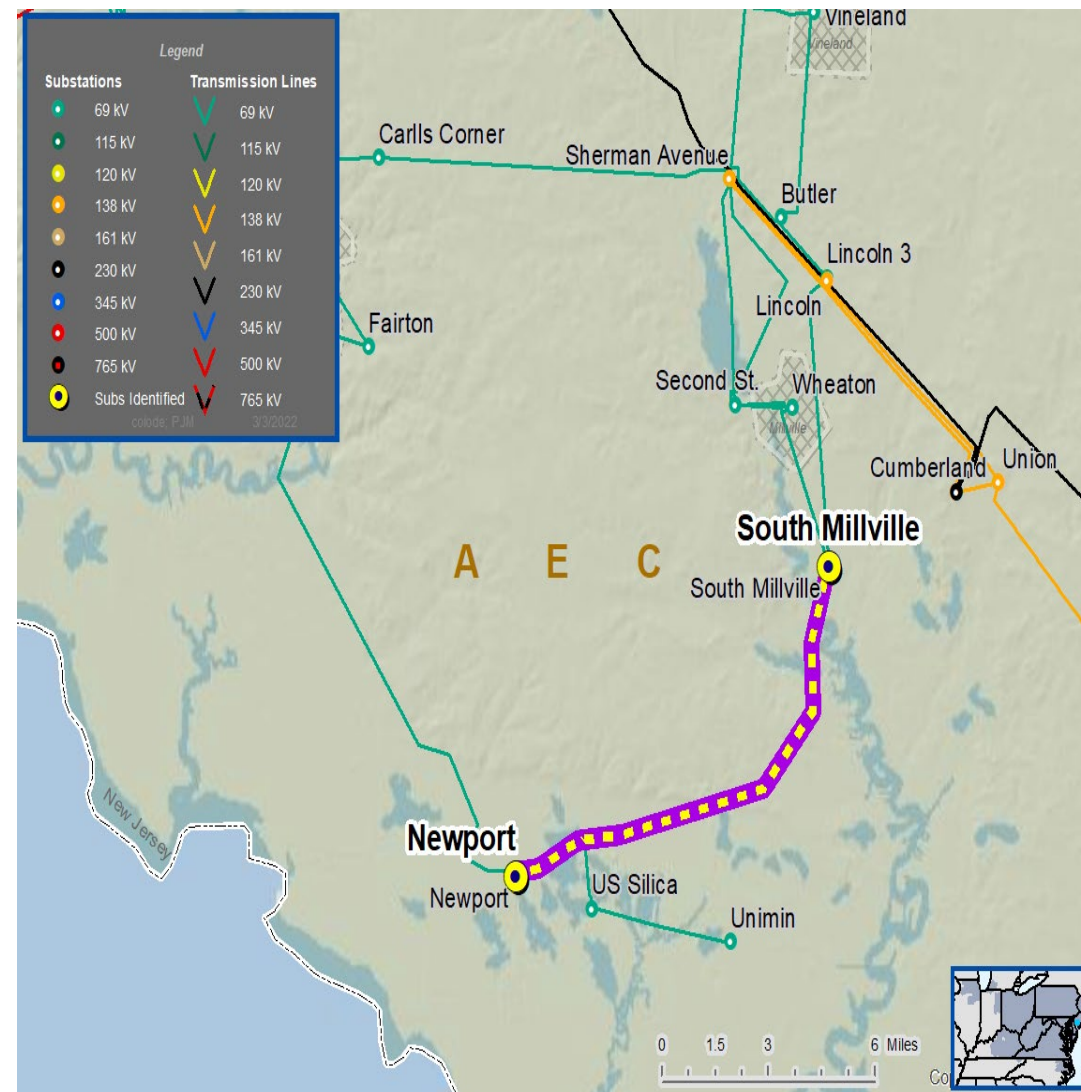
Project Driver: Equipment Material Condition, Performance and Risk, Operational Flexibility and Efficiency

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.
- Internal and/or regulatory recommended design guidelines or standards
- Enhancing system functionality, flexibility, visibility, or operability

Problem Statement:

Existing 69kV circuit 0762 between Newport and South Millville substations is 46 years old and is in deteriorating condition. This line experienced 11 interruptions (including momentary) since 2018.



Need Number: ACE-2022-007

Process Stage: Need Meeting 3/17/2022

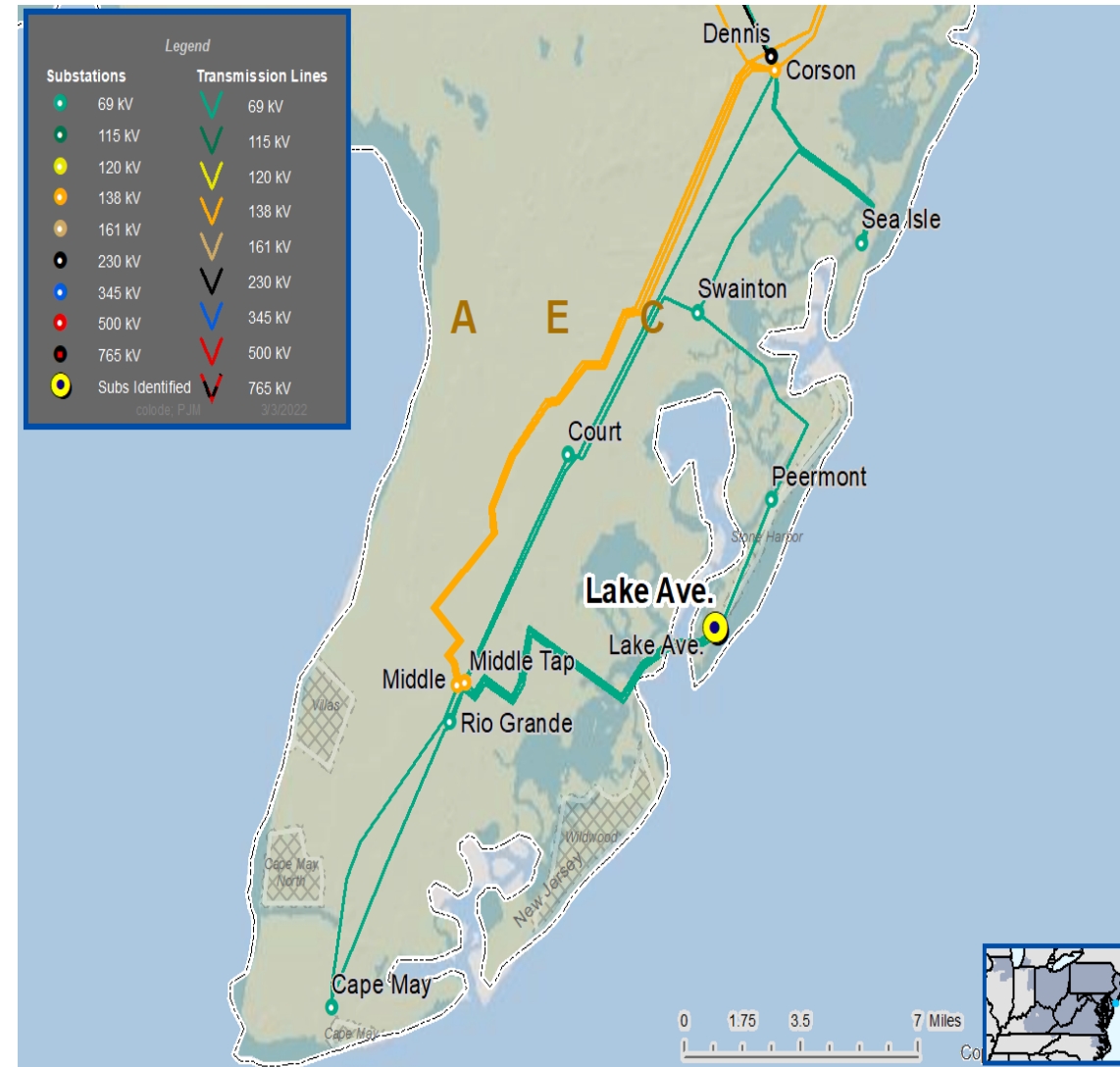
Project Driver: Operational Flexibility and Efficiency

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.



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-2022-003

Process Stage: Solution Meeting 3/17/22

Previously Presented: Need Meeting 2/17/22

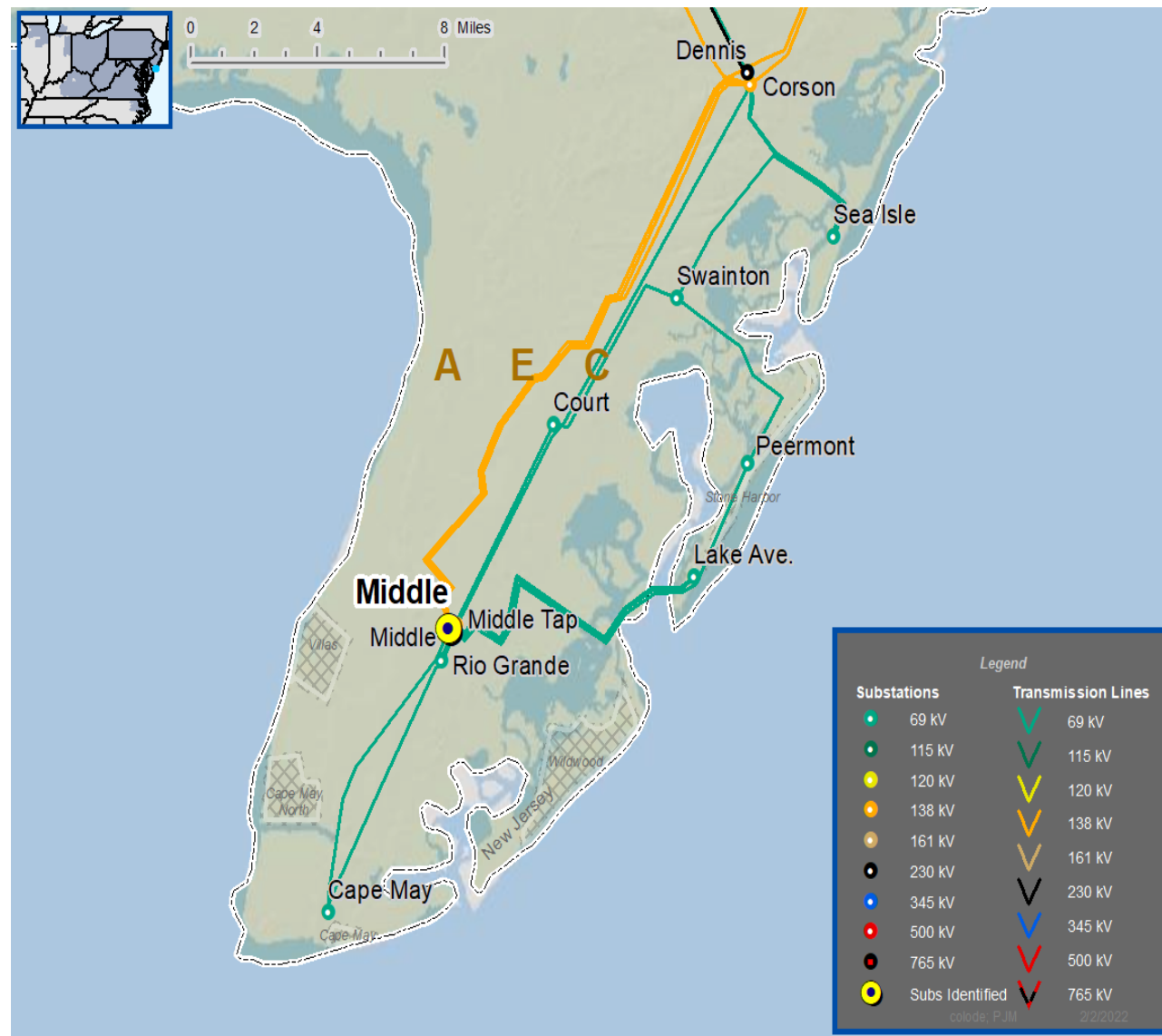
Project Driver: Equipment Material Condition, Performance and Risk

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.

Problem Statement:

Middle 138/69 kV T4 transformer is 41 years old, is in deteriorating condition, and has elevated maintenance costs.



Need Number: ACE-2022-003

Process Stage: Solution Meeting 3/17/22

Proposed Solution: At Middle Substation, replace the T4 transformer bank with a 138/69 kV, 225 MVA three-phase autotransformer with tap changer.

Estimated cost: \$8.7M

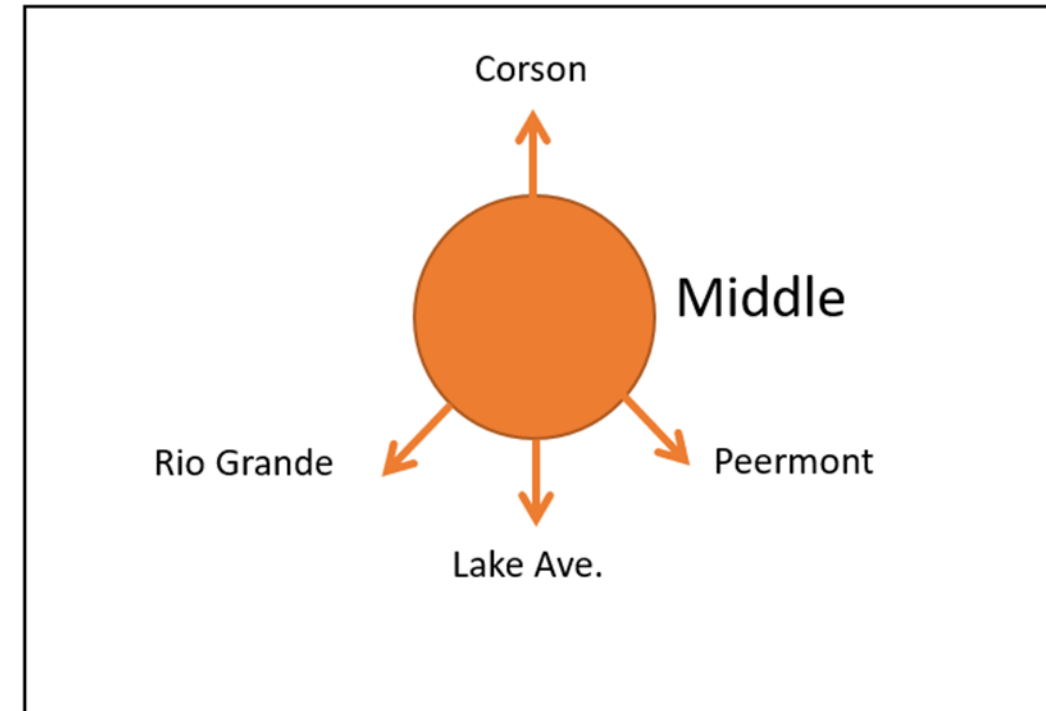
Alternatives Considered:

- Do Nothing
 - Higher maintenance cost and probable failure with no time for proper plans.

Projected In-Service: 12/31/25

Project Status: Conceptual

Model: 2026 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

3/7/2022 – V1 – Original version posted to pjm.com