

Transmission Expansion Advisory Committee – PECO Supplemental Projects

March 7, 2023

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



M-3 Process PECO Transmission Zone

Peach Bottom North Generating Unit #3 MOD/Relay Replacement

Need Number: PE-2023-001

Process Stage: Solutions Meeting 3/7/23

Previously Presented: Need Meeting 2/7/23

Project Driver:

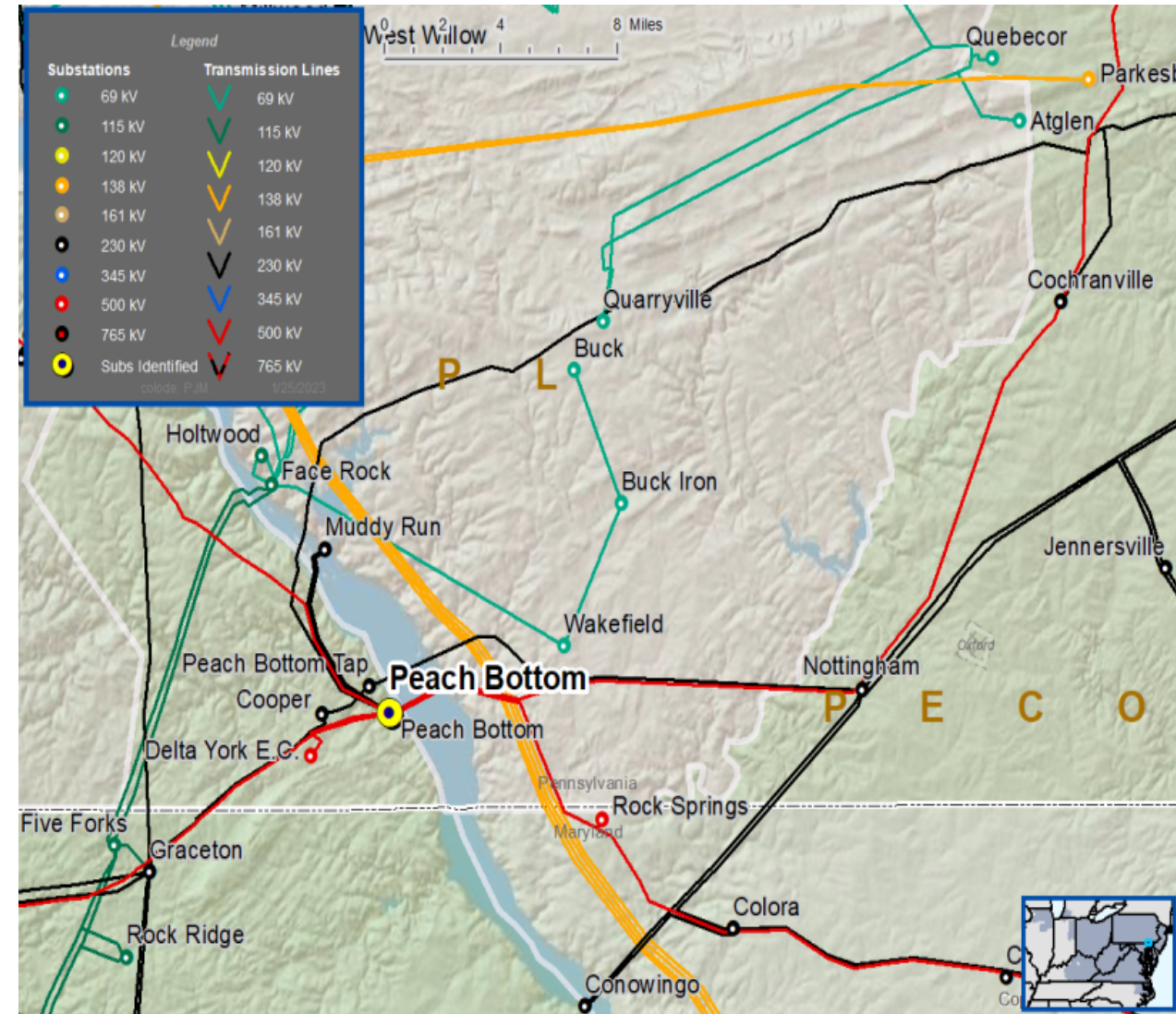
Equipment Material Condition, Performance and Risk

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, etc.

Problem Statement:

- There are obsolete relays on Peach Bottom North Generating Unit #3. It is becoming difficult to service existing electromechanical relays.
- Peach Bottom #67 motor operated disconnect has lack of vendor support and has become obsolete.





M-3 Process PECO Transmission Zone Peach Bottom North Generating Unit #3 MOD/Relay Replacement

Need Number: PE-2023-001

Process Stage: Solution Meeting 3/7/23

Proposed Solution:

Upgrade primary & backup relays, communication, and replace #67 motor operated disconnect on Peach Bottom North Generating Unit #3

#67 MOD Ratings:

Existing rating 2500A, 70kA

New rating 4000A and 63kA

Existing ratings (MVA):	SN/SE	WN/WE
Peach-Bottom #3 GSU Lead	2477/2598	2598/2598
Proposed ratings (MVA):	SN/SE	WN/WE
Peach-Bottom #3 GSU Lead	2598/3016	2598/3118

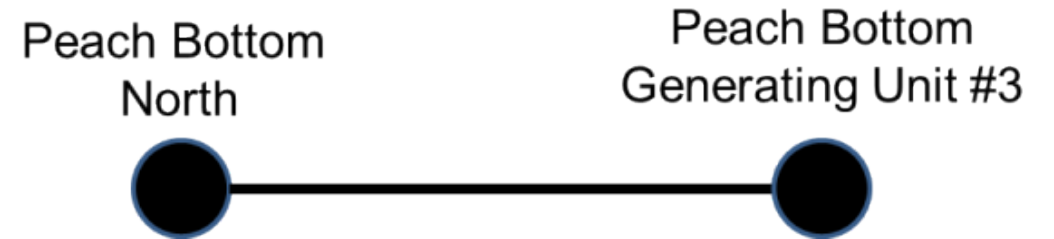
Estimated cost: \$1.04M

Alternatives Considered: No feasible alternatives

Projected In-Service: 11/3/2023

Project Status: Engineering

Model: 2027 RTEP





M-3 Process PECO Transmission Zone Concord 230 kV Circuit Breaker #565 Replacement

Need Number: PE-2023-002

Process Stage: Solution Meeting 3/7/2023

Previously Presented: Need Meeting 2/7/23

Project Driver:

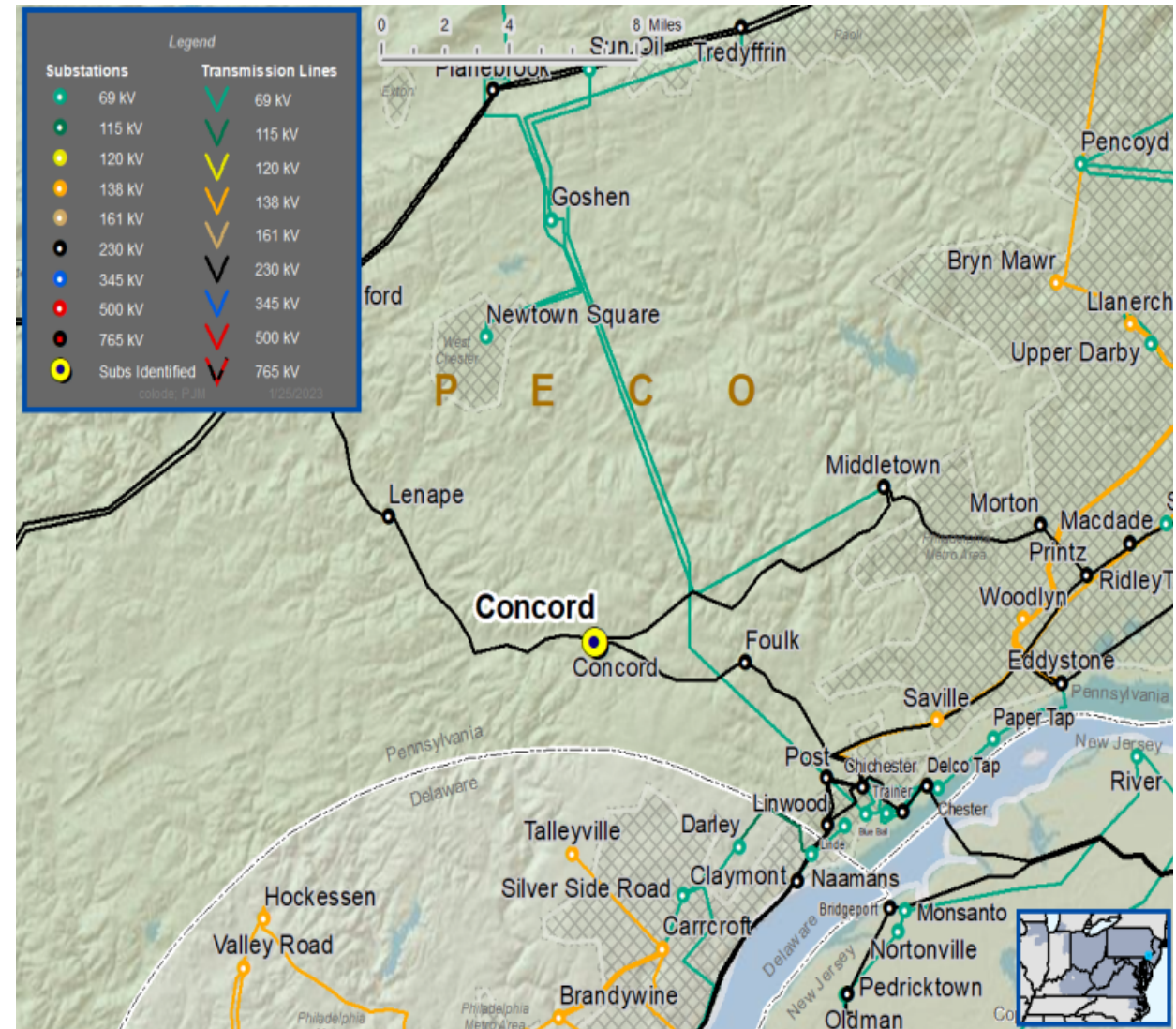
Equipment Material Condition, Performance, and Risk

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:

Concord 230 kV circuit breaker #565, installed in 1974, is in deteriorating condition, has lack of replacement parts, and elevated maintenance cost.





M-3 Process PECO Transmission Zone Concord 230 kV Circuit Breaker #565 Replacement

Need Number: PE-2023-002

Process Stage: Solution Meeting 3/7/23

Proposed Solution:

Replace Concord 230 kV circuit breaker #565

Existing rating 3000A, 50kA

New rating 3,000A and 63kA

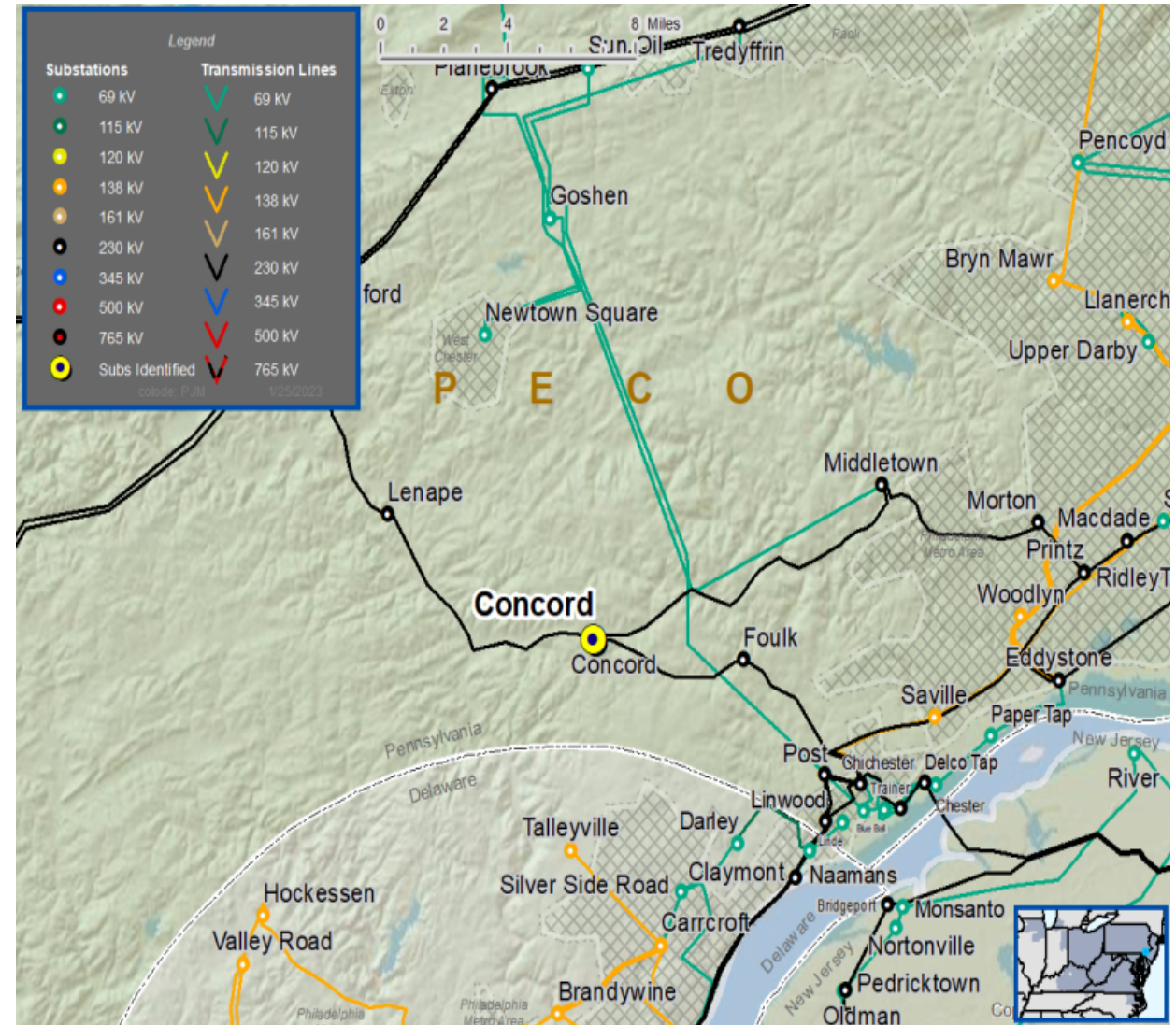
Estimated cost: \$0.85M

Alternatives Considered: No feasible alternatives

Projected In-Service: 11/11/2023

Project Status: Engineering

Model: 2027 RTEP



Need Number: PE-2023-004

Process Stage: Solution Meeting 3/7/2023

Previously Presented: Need Meeting 2/7/23

Project Driver:

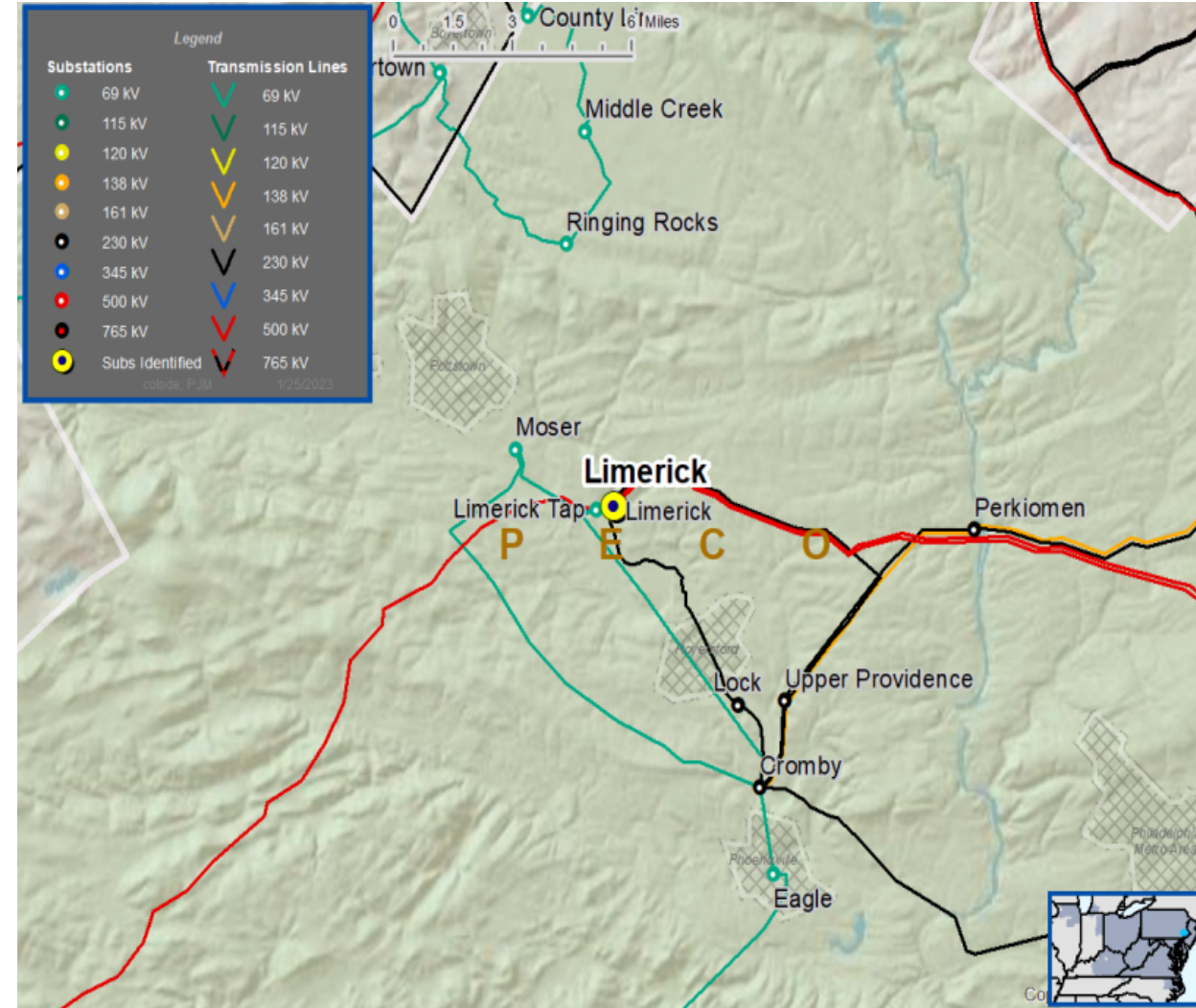
Equipment Material Condition, Performance, and Risk

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:

Limerick 500 kV circuit breaker #355, installed in 1992, is in deteriorating condition, has lack of replacement parts, and elevated maintenance cost.



M-3 Process PECO Transmission Zone Limerick 500 kV Circuit Breaker #355 Replacement

Need Number: PE-2023-004

Process Stage: Solution Meeting 3/7/23

Proposed Solution:

Replace Limerick 500 kV circuit breaker #355

Existing rating 3000A, 40kA

New rating 4000A and 63kA

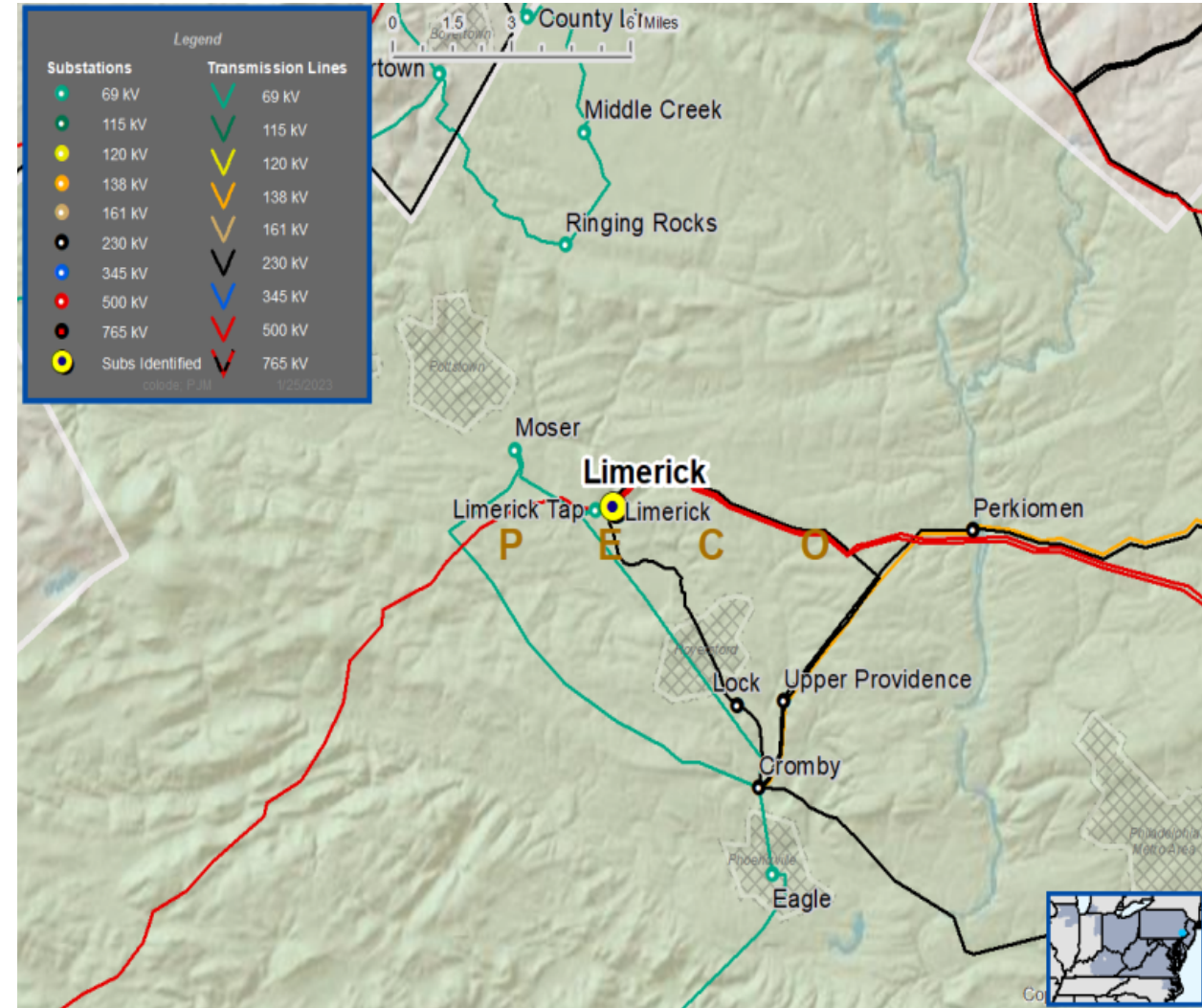
Estimated cost: \$0.78M

Alternatives Considered: No feasible alternatives

Projected In-Service: 05/1/2023

Project Status: Engineering

Model: 2027 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

2/24/2023 - V1 – Original version posted to pjm.com

3/2/2023 –V2 – Exelon logo correction