

Transmission Expansion Advisory Committee – PEPCO Supplemental Projects

March 8, 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: PEP-2022-004

Process Stage: Need Meeting 03/08/2022

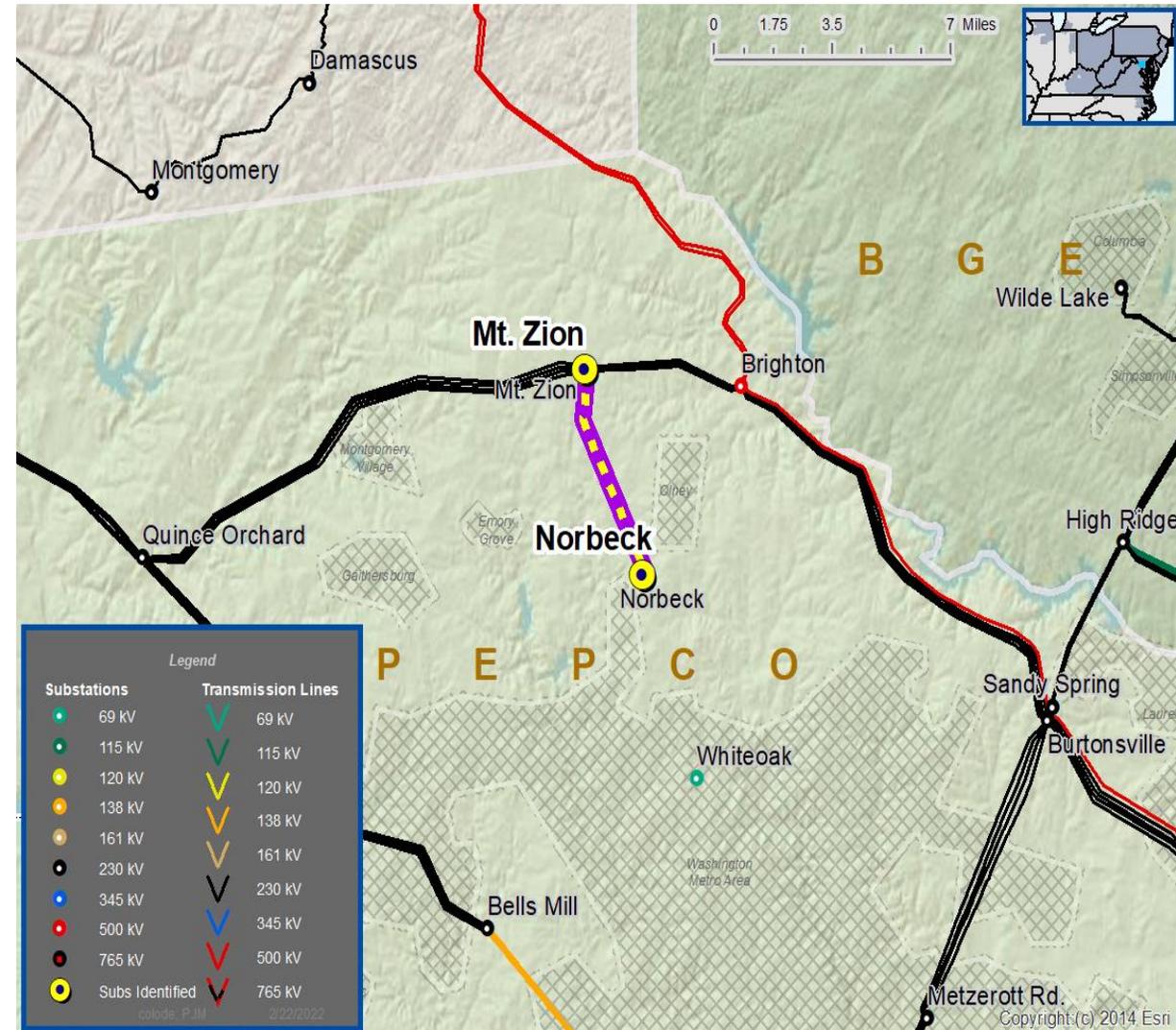
Project Driver: Equipment Material Condition, Performance, and Risk

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:

- 230kV line 23008 (Mt. Zion - Norbeck) has obsolete relays. It is becoming difficult to service existing outdated electro-mechanical relays.



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: PEP-2022-001

Process Stage: Solutions Meeting 03/08/2022

Previously Presented: Need Meeting 02/08/2022

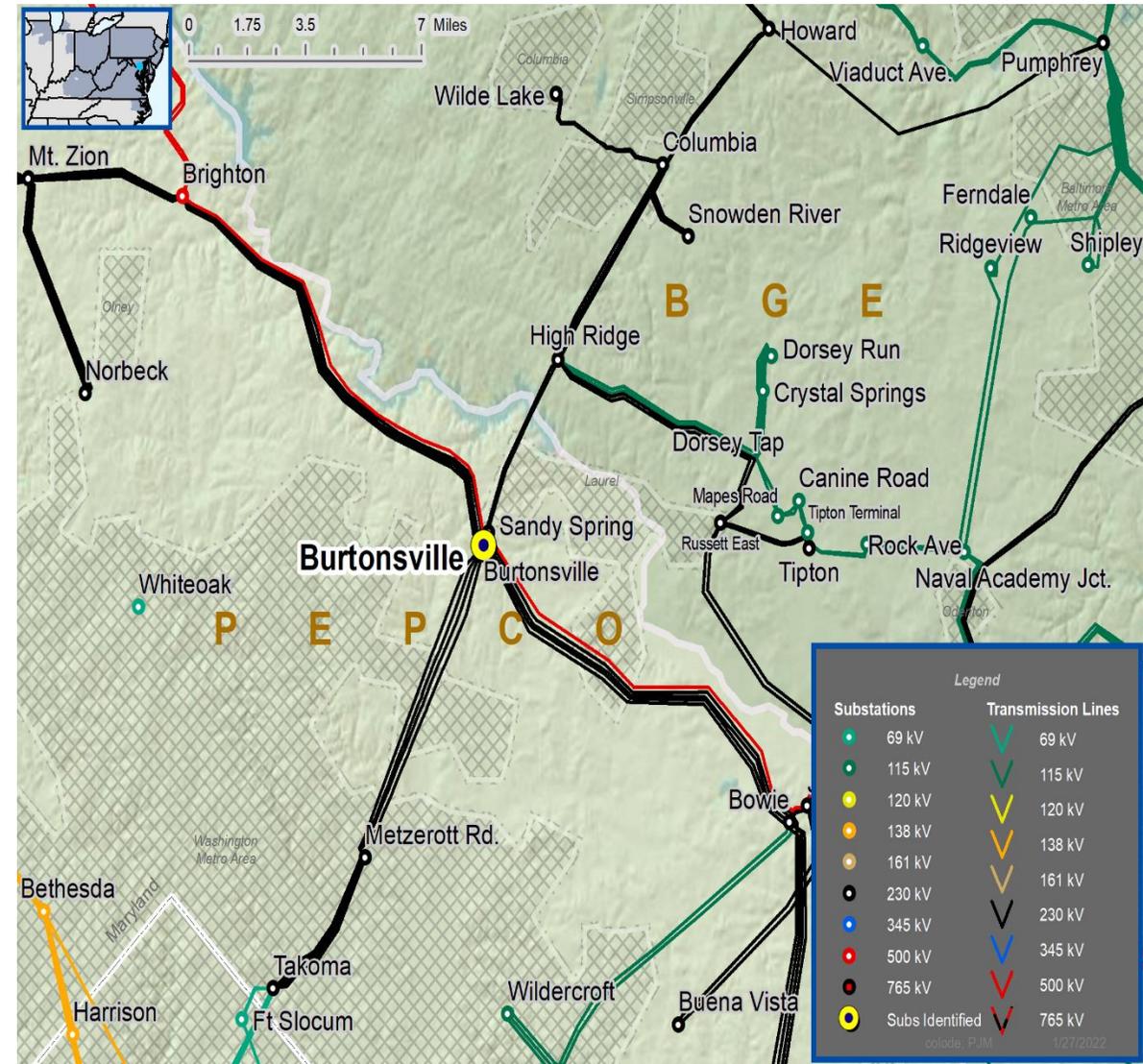
Project Driver: Equipment Material Condition, Performance, and Risk

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:

- Burtonsville 230kV oil circuit breaker #3A installed in 1969 is in deteriorating condition, has lack of replacement parts and elevated maintenance cost.



Need Number: PEP-2022-001

Process Stage: Solutions Meeting 03/08/2022

Proposed Solution:

- Replace 230kV Circuit Breaker #3A at Burtonsville, associated disconnect switches and strain bus.

Estimated cost: \$1.07M

Expected ratings changes:

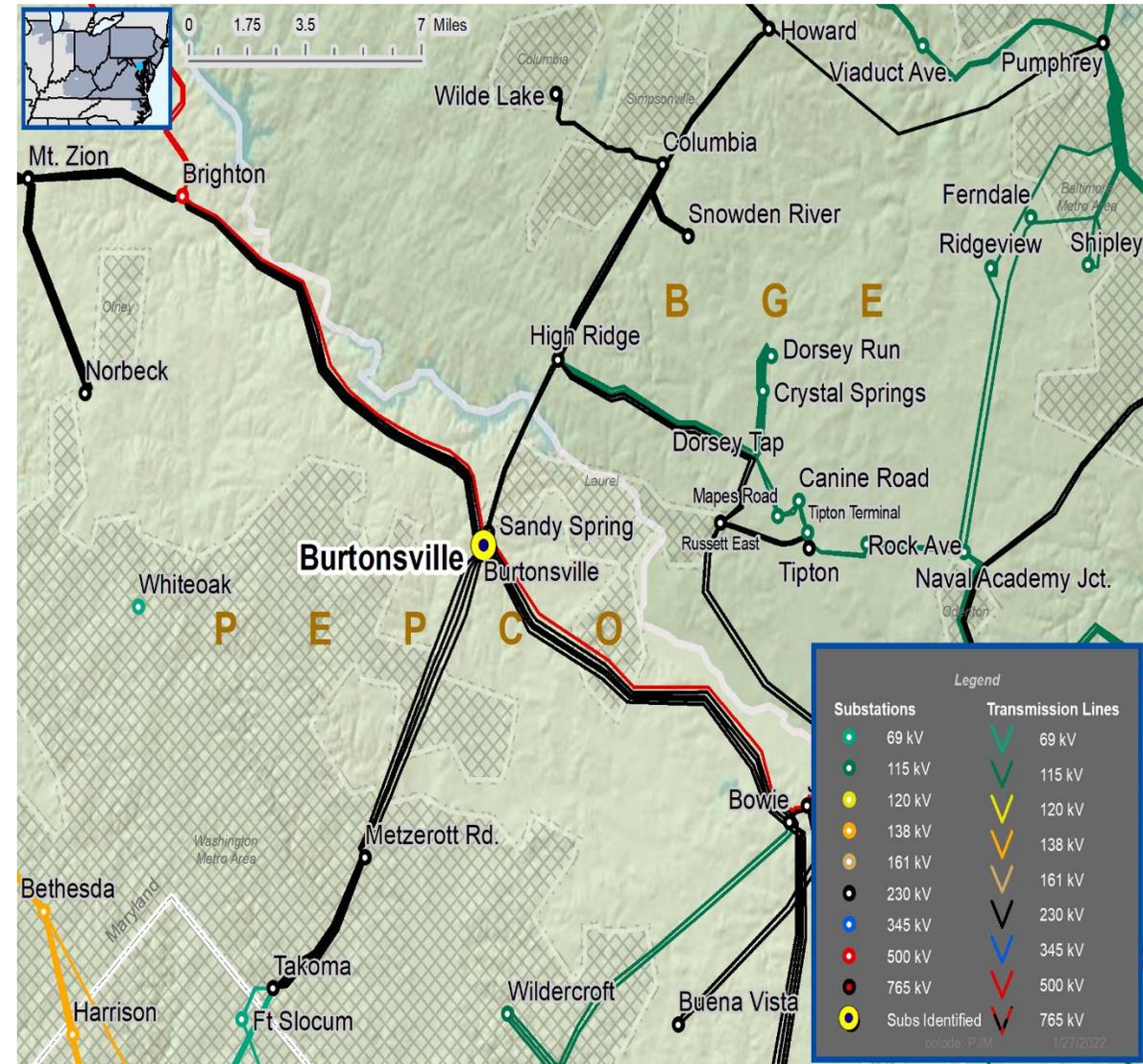
- Breaker Ratings before proposed solution: 1600A, 50.2kA
- Breaker Ratings after proposed solution: 3000A, 63kA
- 23013 Circuit Ratings before proposed solution:
SN/SE/WN/WE = 559/680/643/793 MVA
- 23013 Circuit Ratings after proposed solution:
SN/SE/WN/WE = 582/738/694/854 MVA

Alternatives Considered: None

Projected In-Service: 12/01/2022

Project Status: Conceptual

Model: 2026 RTEP



Need Number: PEP-2022-002

Process Stage: Solutions Meeting 03/08/2022

Previously Presented: Need Meeting 02/08/2022

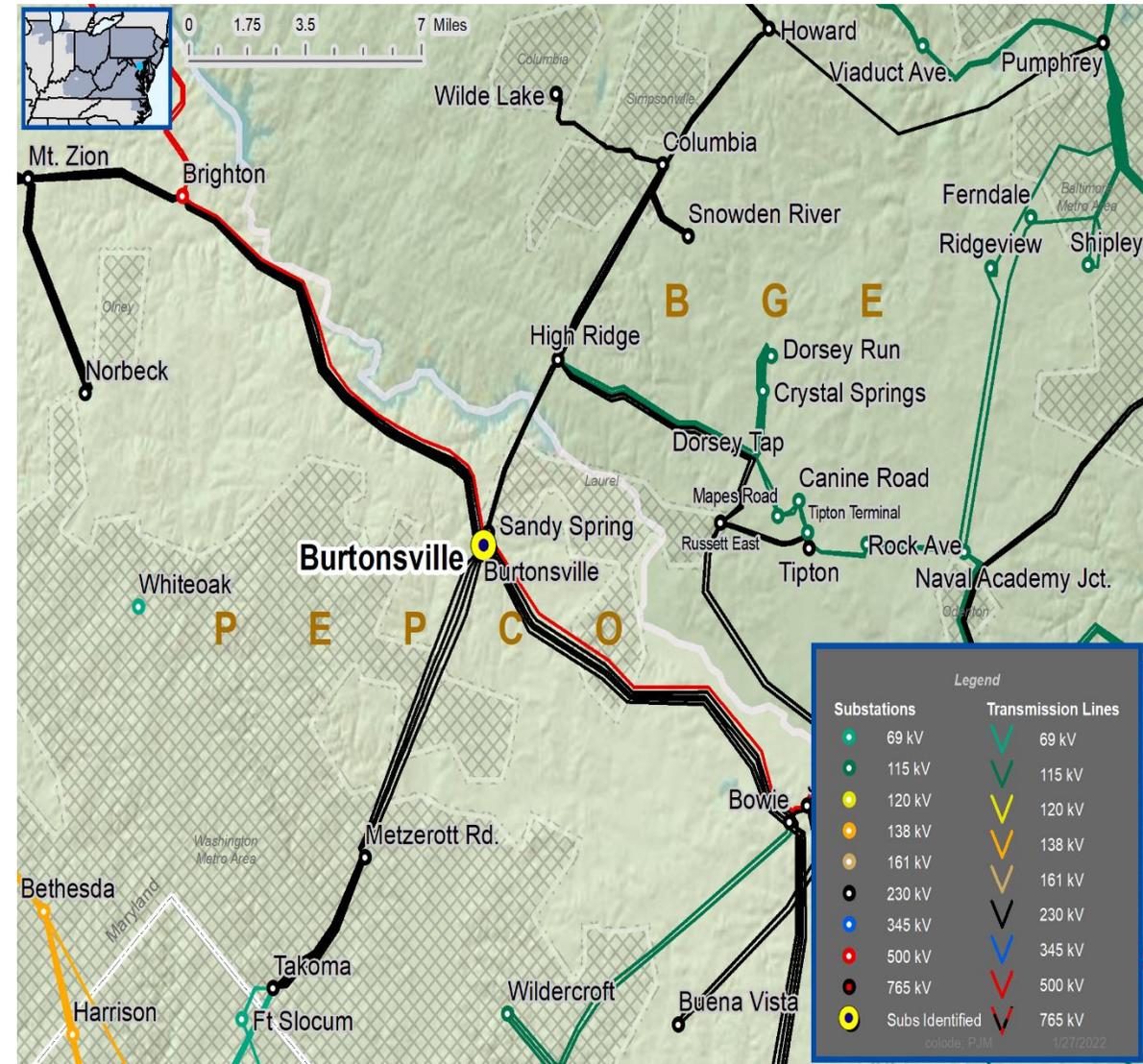
Project Driver: Equipment Material Condition, Performance, and Risk

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:

- Burtonsville 230kV oil circuit breaker #4A installed in 1969 is in deteriorating condition, has lack of replacement parts and elevated maintenance cost.



Need Number: PEP-2022-002

Process Stage: Solutions Meeting 03/08/2022

Proposed Solution:

- Replace 230kV Circuit Breaker #4A at Burtonsville, associated disconnect switches and strain bus.

Estimated cost: \$1.07M

Expected ratings changes:

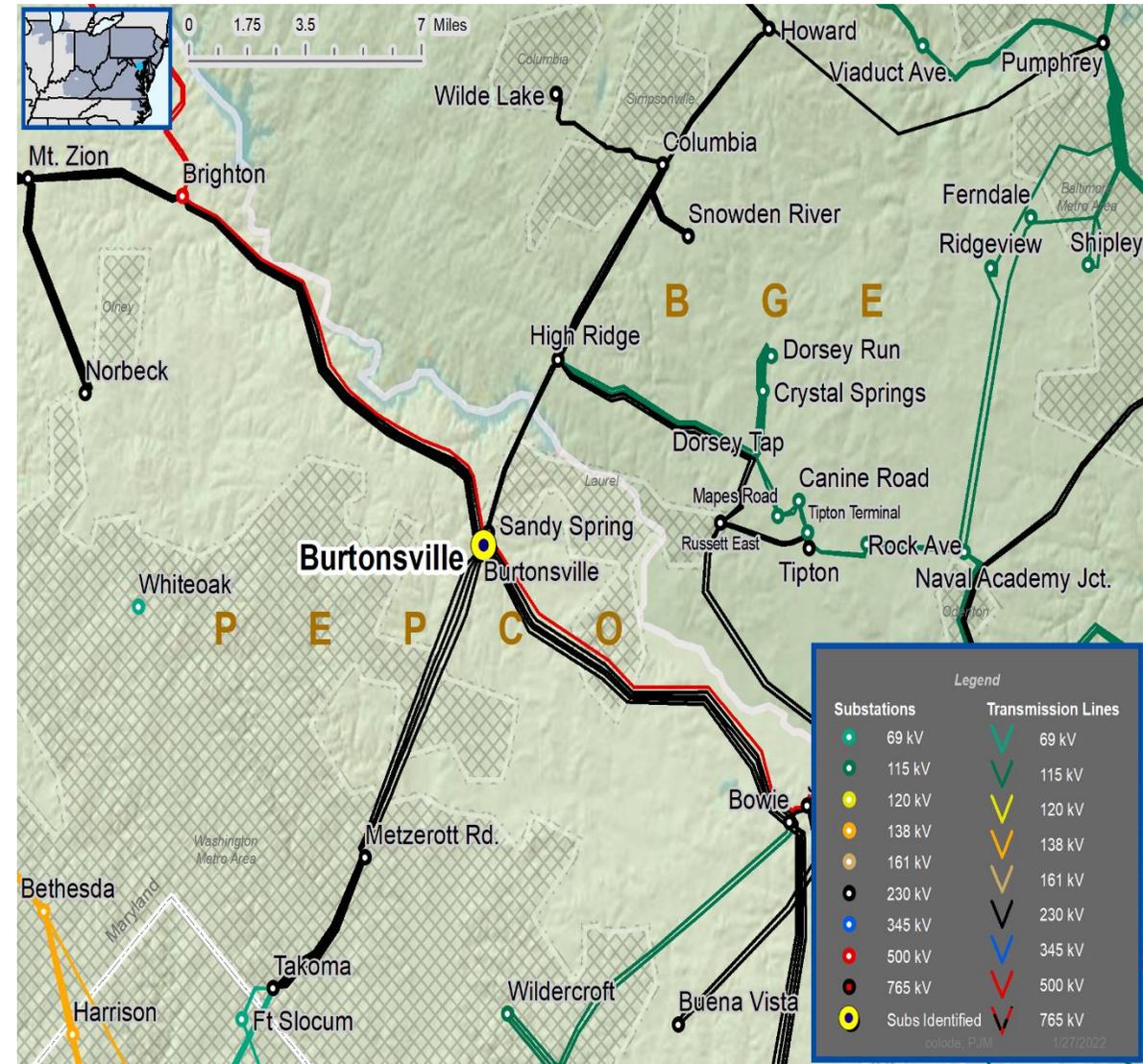
- Breaker Ratings before proposed solution: 2000A, 50.2kA
- Breaker Ratings after proposed solution: 3000A, 63kA
- 23014 Circuit Ratings before proposed solution:
SN/SE/WN/WE = 559/680/643/793 MVA
- 23014 Circuit Ratings after proposed solution:
SN/SE/WN/WE = 582/738/694/854 MVA

Alternatives Considered: None

Projected In-Service: 06/01/2022

Project Status: Engineering

Model: 2026 RTEP



Need Number: PEP-2022-003

Process Stage: Solutions Meeting 03/08/2022

Previously Presented: Need Meeting 02/08/2022

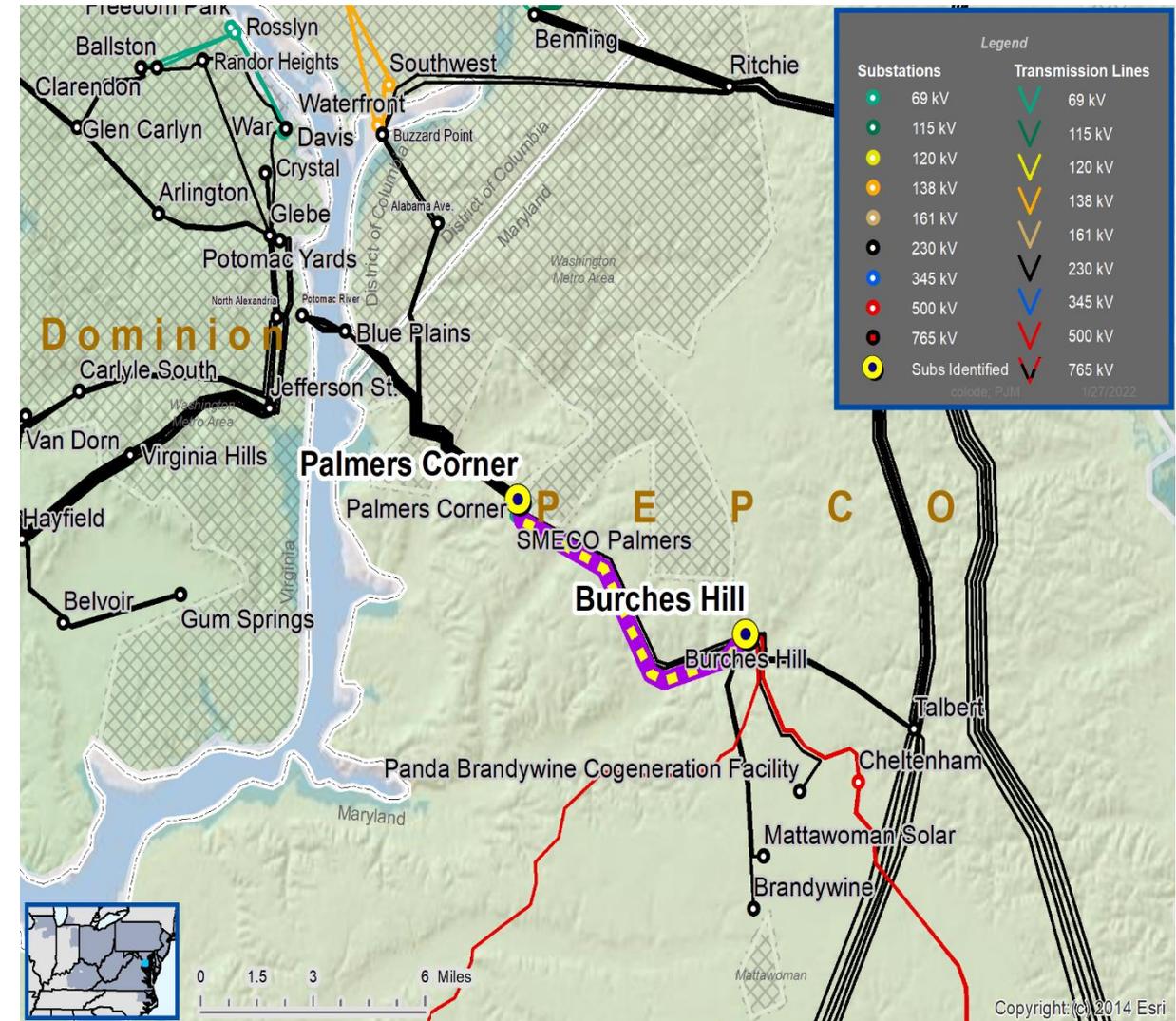
Project Driver: Equipment Material Condition, Performance, and Risk

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:

- 230kV line 23090 (Burches Hill – Palmers Corner) has obsolete relays. It is becoming difficult to service existing outdated electro-mechanical relays.



Need Number: PEP-2022-003

Process Stage: Solutions Meeting 03/08/2022

Proposed Solution:

- Upgrade relays & metering on 230kV Circuit 23090 (Burches Hill – Palmers Corner)

Estimated cost: \$264K

Expected ratings changes:

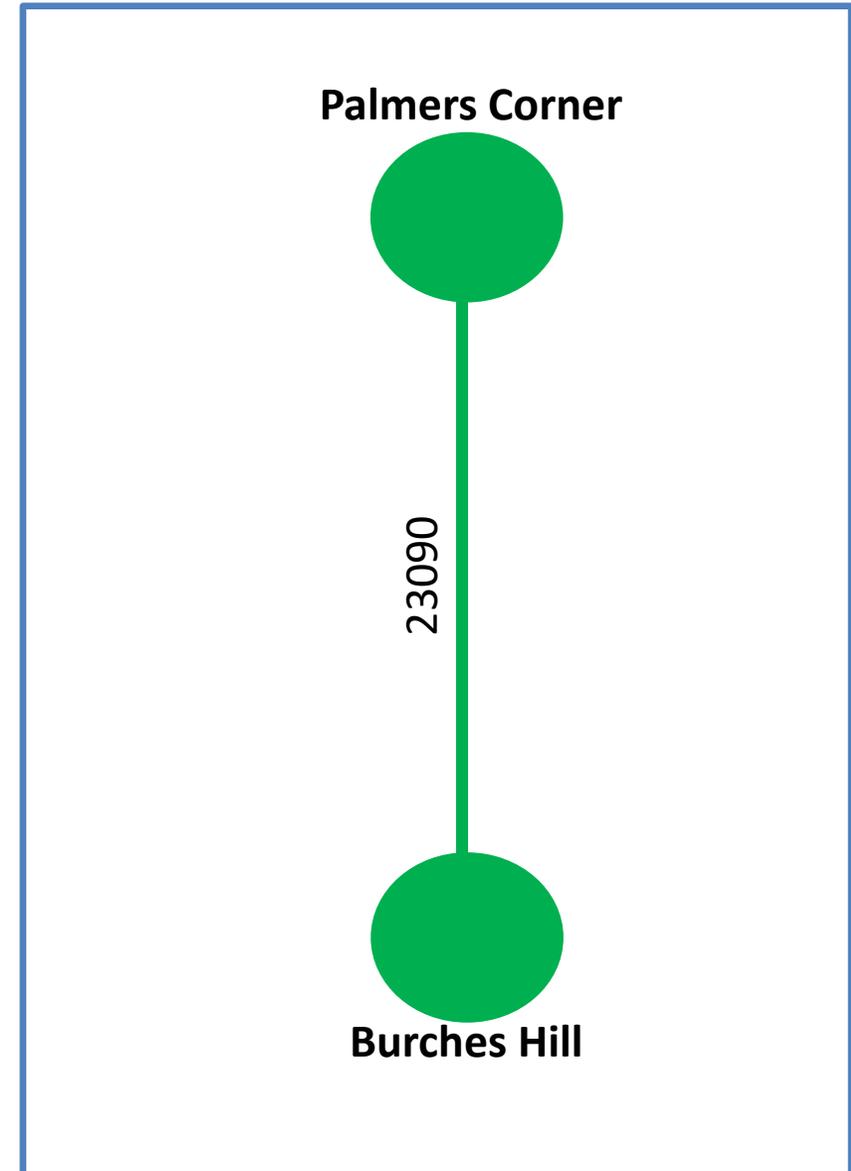
- Ratings Before proposed Solutions:
SN/SE/WN/WE = 521/521/521/521 MVA
- Ratings After proposed Solutions:
SN/SE/WN/WE = 1089/1200/1144/1253 MVA

Alternatives Considered: None

Projected In-Service: 12/01/2022

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

2/25/2022 - V1 – Original version posted to pjm.com