Transmission Expansion Advisory Committee – PECO Supplemental Projects

January 6, 2021

Solution

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 Grays Ferry 230kV circuit breaker

Need Number: PE-2020-009

Process Stage: Solution Meeting 01/06/2020

Previously Presented: Need Meeting 12/1/2020

Supplemental Project Driver:

Project Driver:

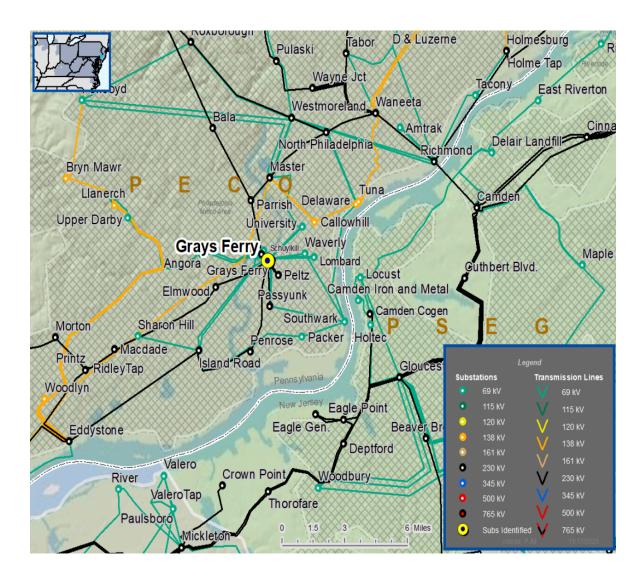
Equipment Material Condition, Performance, and Risk

Specific Assumption Reference:

- Transmission infrastructure replacements (EOL/condition/obsolescence) that are consistent with efficient asset management decisions
- Programmatic replacement of breakers, relays, wood poles, cables, etc.

Problem Statement:

Grays Ferry 230kV circuit breaker #375 installed in 1970 is in deteriorating condition due to SF6 gas leaks, replacement part availability, and elevated maintenance cost





Need Number: PE-2020-009

Process Stage: Solution Meeting 01/06/2020

Proposed Solution:

Replace the Grays Ferry 230kV circuit breaker #375.

The estimated cost of the project is \$0.9M

Existing rating 2500 A, 42kA

New rating 3000 A, 63kA

Alternatives Considered:

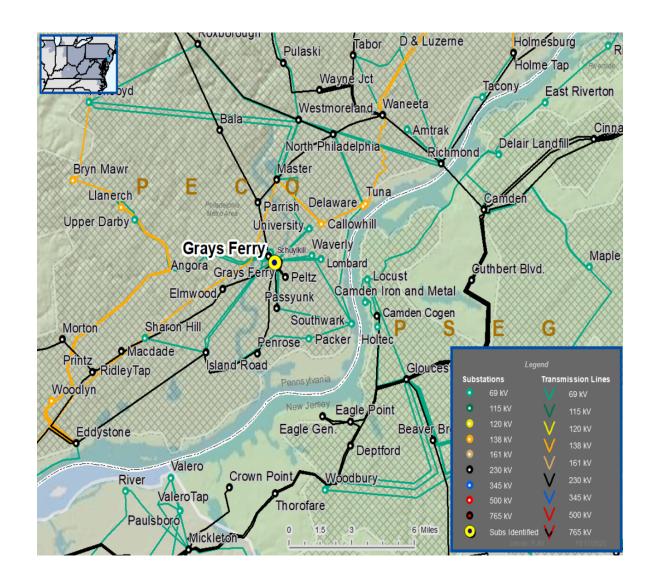
None

Projected In-Service: 6/1//2021

Project Status: Engineering

Model: 2025 RTEP

M-3 Process PECO Transmission Zone Grays Ferry 230kV circuit breaker





M-3 Process PECO Transmission Zone Whitpain 500kV circuit breaker #575

Need Number: PE-2020-010

Process Stage: Solution Meeting 01/06/2020

Previously Presented: Need Meeting 12/1/2020

Supplemental Project Driver:

Project Driver:

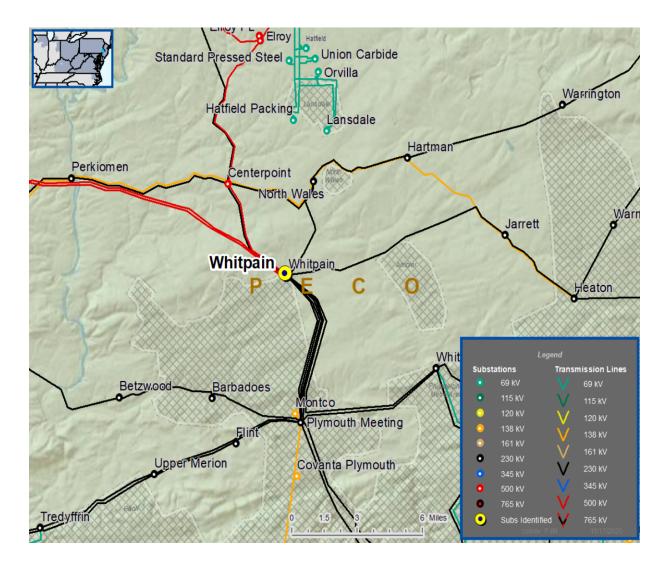
Equipment Material Condition, Performance, and Risk

Specific Assumption Reference:

- Transmission infrastructure replacements (EOL/condition/obsolescence) that are consistent with efficient asset management decisions
- Programmatic replacement of breakers, relays, wood poles, cables, etc.

Problem Statement:

Whitpain 500kV circuit breaker #575 installed in 1968 is in deteriorating condition due to SF6 gas leaks, replacement part availability, and elevated maintenance cost.





M-3 Process PECO Transmission Zone Whitpain 500kV circuit breaker #575

Need Number: PE-2020-010

Process Stage: Solution Meeting 01/06/2020

Proposed Solution:

Replace the Whitpain 500kV circuit breaker #575.

The estimated cost of the project is \$1.3M

Existing rating 3000 A, 40kA

New rating 4000 A, 63kA

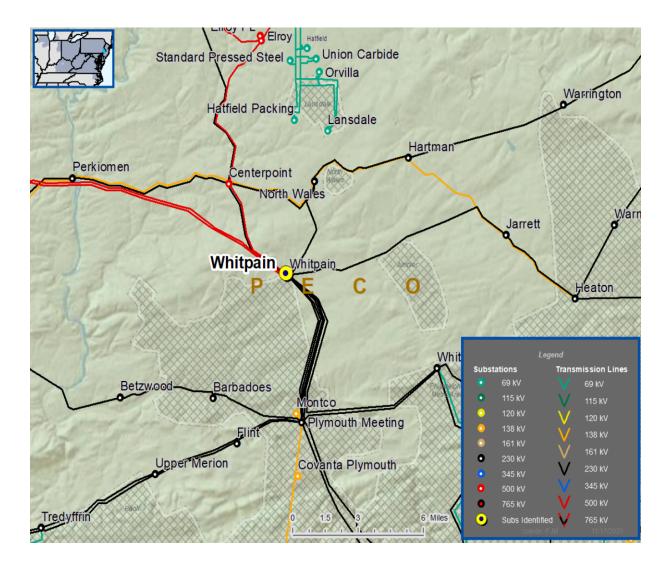
Alternatives Considered:

None

Projected In-Service: 6/1//2021

Project Status: Engineering

Model: 2025 RTEP





M-3 Process PECO Transmission Zone Whitpain 500kV circuit breaker #385

Need Number: PE-2020-011

Process Stage: Solution Meeting 01/06/2020

Previously Presented: Need Meeting 12/1/2020

Supplemental Project Driver:

Project Driver:

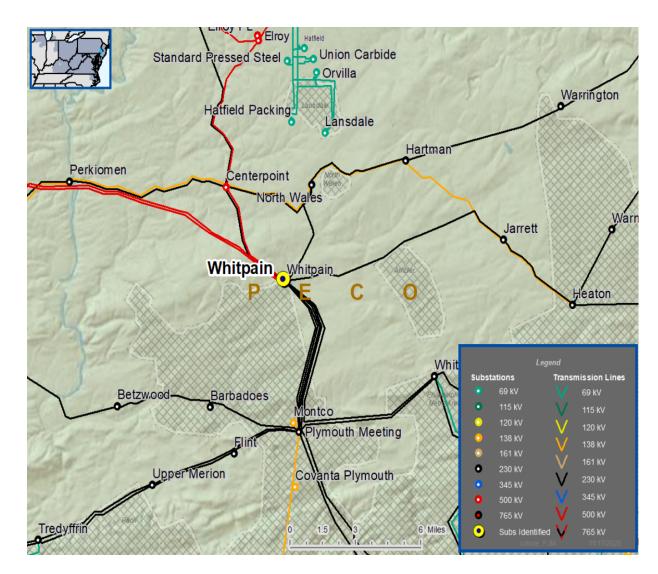
Equipment Material Condition, Performance, and Risk

Specific Assumption Reference:

- Transmission infrastructure replacements (EOL/condition/obsolescence) that are consistent with efficient asset management decisions
- Programmatic replacement of breakers, relays, wood poles, cables, etc.

Problem Statement:

Whitpain 500kV circuit breaker #385 installed in 1968 is in deteriorating condition due to SF6 gas leaks, replacement part availability, and elevated maintenance cost.





M-3 Process PECO Transmission Zone Whitpain 500kV circuit breaker #385

Need Number: PE-2020-011

Process Stage: Solution Meeting 01/06/2020

Proposed Solution:

Replace the Whitpain 500kV circuit breaker #385.

The estimated cost of the project is \$1.3M

Existing rating 3000 A, 40kA

New rating 4000 A, 63kA

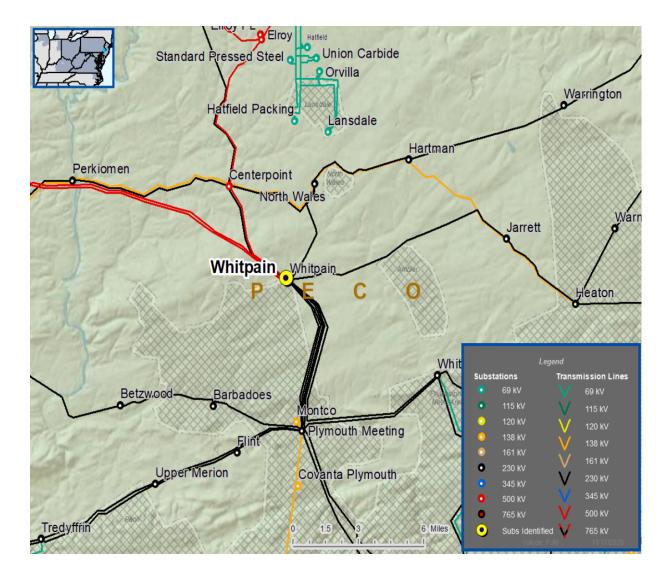
Alternatives Considered:

None

Projected In-Service: 6/1//2021

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	Activity	Timing
Supplemental	Do No Harm (DNH) analysis for selected solution	Prior to posting selected solution
Projects & Local	Post selected solution(s)	Following completion of DNH analysis
Plan	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

12/23/2020 - V1 – Original version posted to pjm.com

PJM TEAC- PECO Supplemental 01/06/2021