PECO 2020
Submission of Supplemental Projects for Inclusion in the Local Plan

M-3 Process PECO Transmission Zone
PE-2020-003

Need Number: PE-2020-003

Process Stage - Submission of Supplemental Project for inclusion in the Local Plan 9/10/2020

Previously Presented:

Need – 3/10/2020

Solution – 6/2/2020

Project Driver:

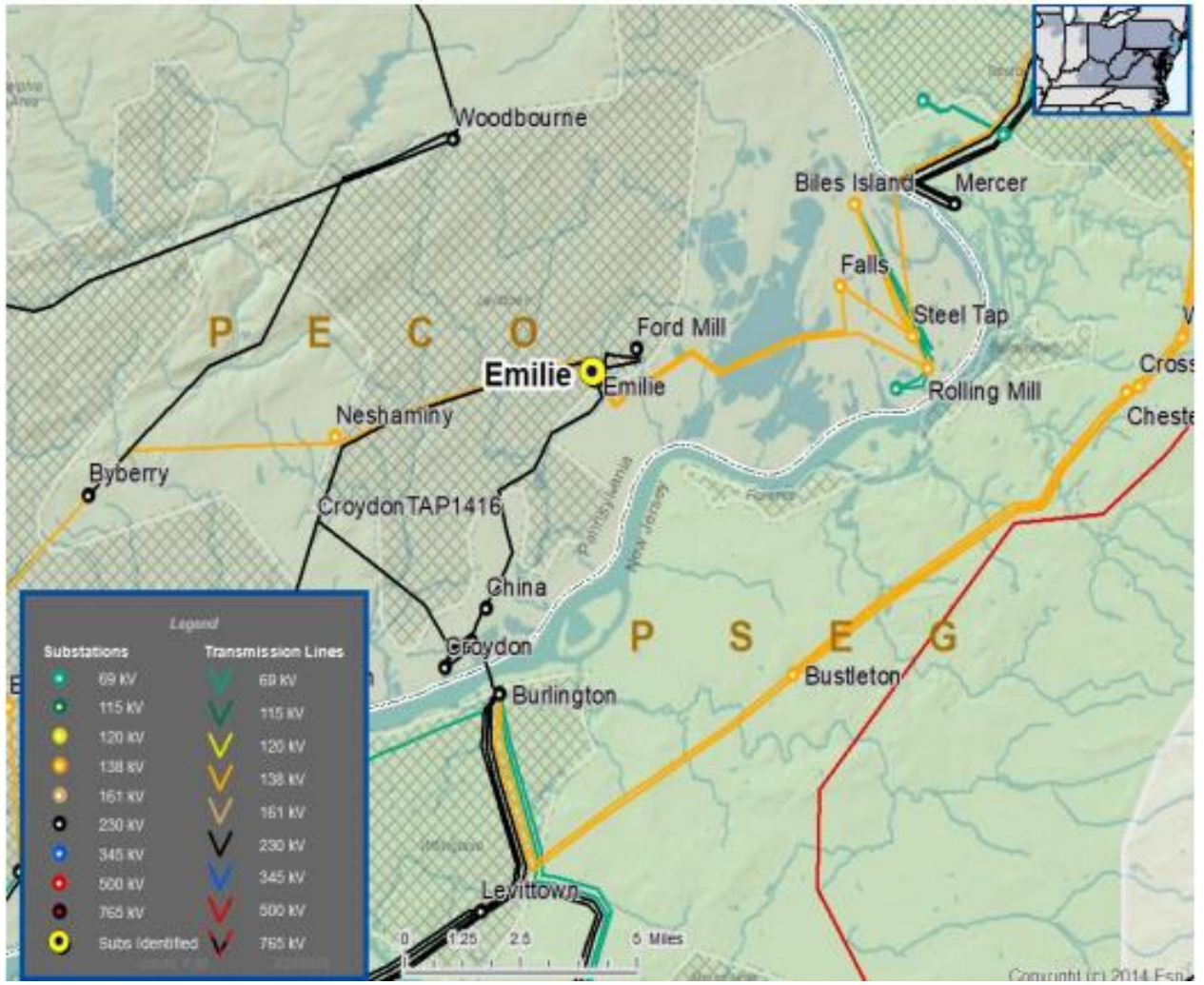
Equipment Material Condition, Performance, and Risk

Specific Assumption Reference:

- Transmission infrastructure replacements (EOL/condition/obsolescence) that are consistent with efficient asset management decisions

Problem Statement:

- Emilie #8 230/138kV auto transformer is in deteriorating condition. Dissolved gas analysis (DGA) results indicate internal issues within the transformer.



M-3 Process PECO Transmission Zone
PE-2020-003

Need Number: PE-2020-003

Process Stage: Submission of Supplemental Project for inclusion in the Local Plan 9/10/2020

Selected Solution:

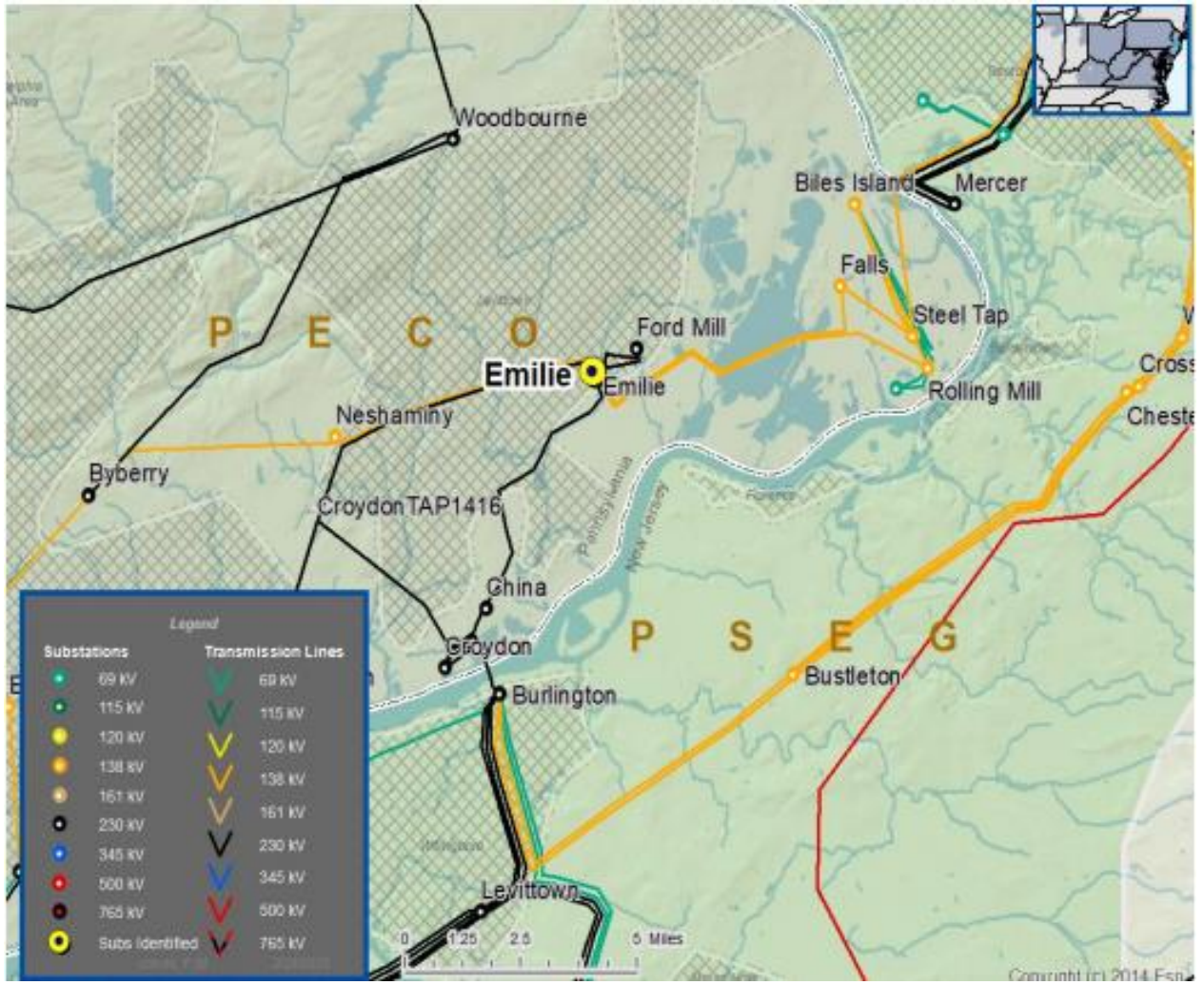
- Replace Emilie #8 230/138kV transformer and low side circuit breaker. Both the transformer and circuit breaker were installed in 1969. The estimated cost of the project is $8.3M
- Current Ratings - 341 MVA/453 MVA (1428A/1897A)
- Proposed Ratings - 395 MVA/525 MVA (1653A/2197A)

Projected In-Service: 12/31/2021

Supplemental Project ID: s2278

Project Status: Engineering

Model: 2025 RTEP



M-3 Process PECO Transmission Zone
Heaton 230kV circuit breaker

Need Number: PE-2020-004

Process Stage: Submission of Supplemental Project for inclusion in the Local Plan 11/13/2020

Previously Presented:

Need – 7/7/2020

Solution – 10/6/2020

Supplemental Project Driver:

Project Driver:

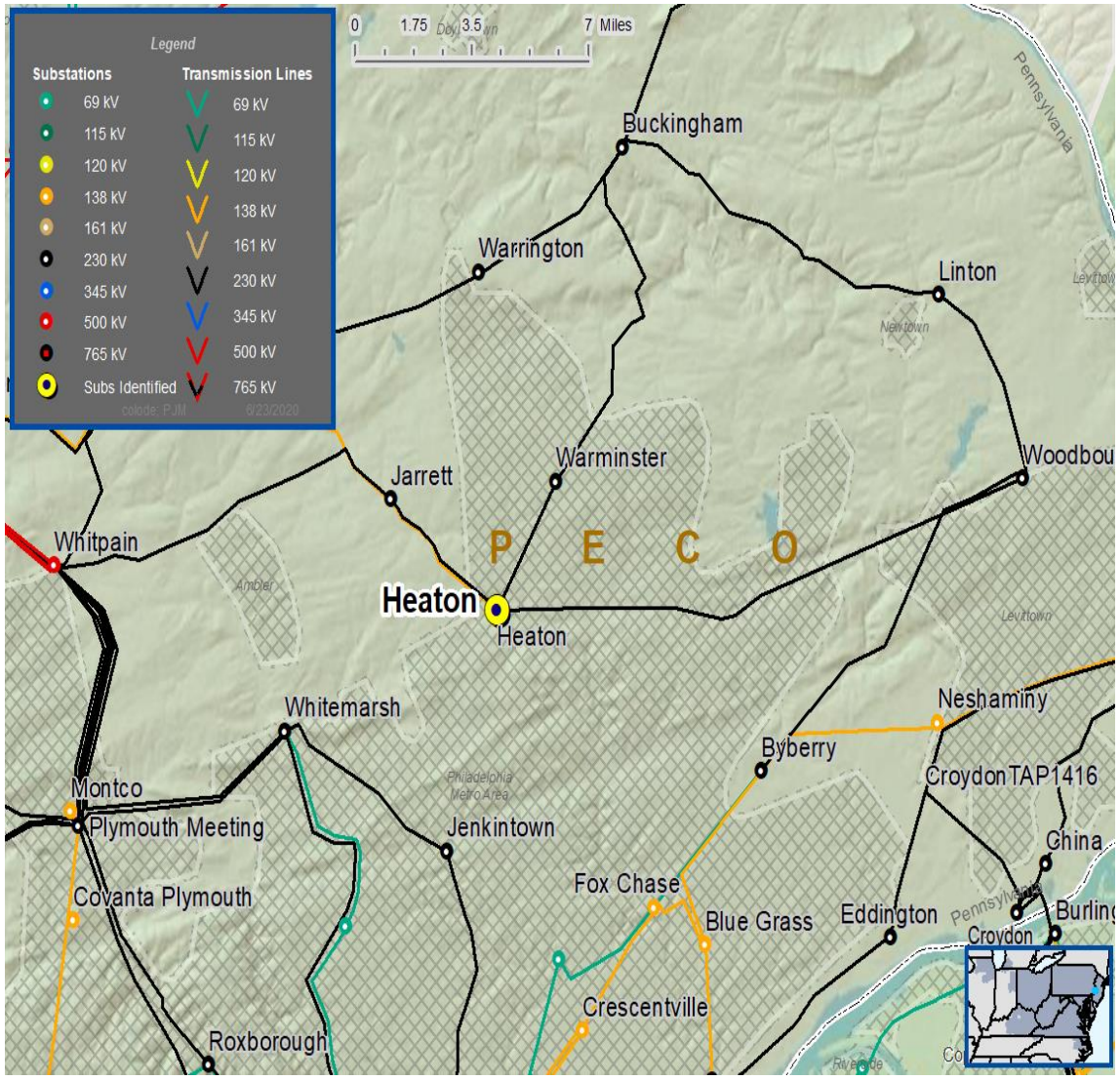
Equipment Material Condition, Performance, and Risk

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:

Heaton 230kV circuit breaker #805 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
Heaton 230kV circuit breaker

Need Number: PE-2020-004

Process Stage: Submission of Supplemental Project for inclusion in the Local Plan 11/13/2020

Selected Solution:

Replace Heaton 230kV circuit breaker #805.

The estimated cost of the project is $0.8M

Existing rating 2500 A, 42kA

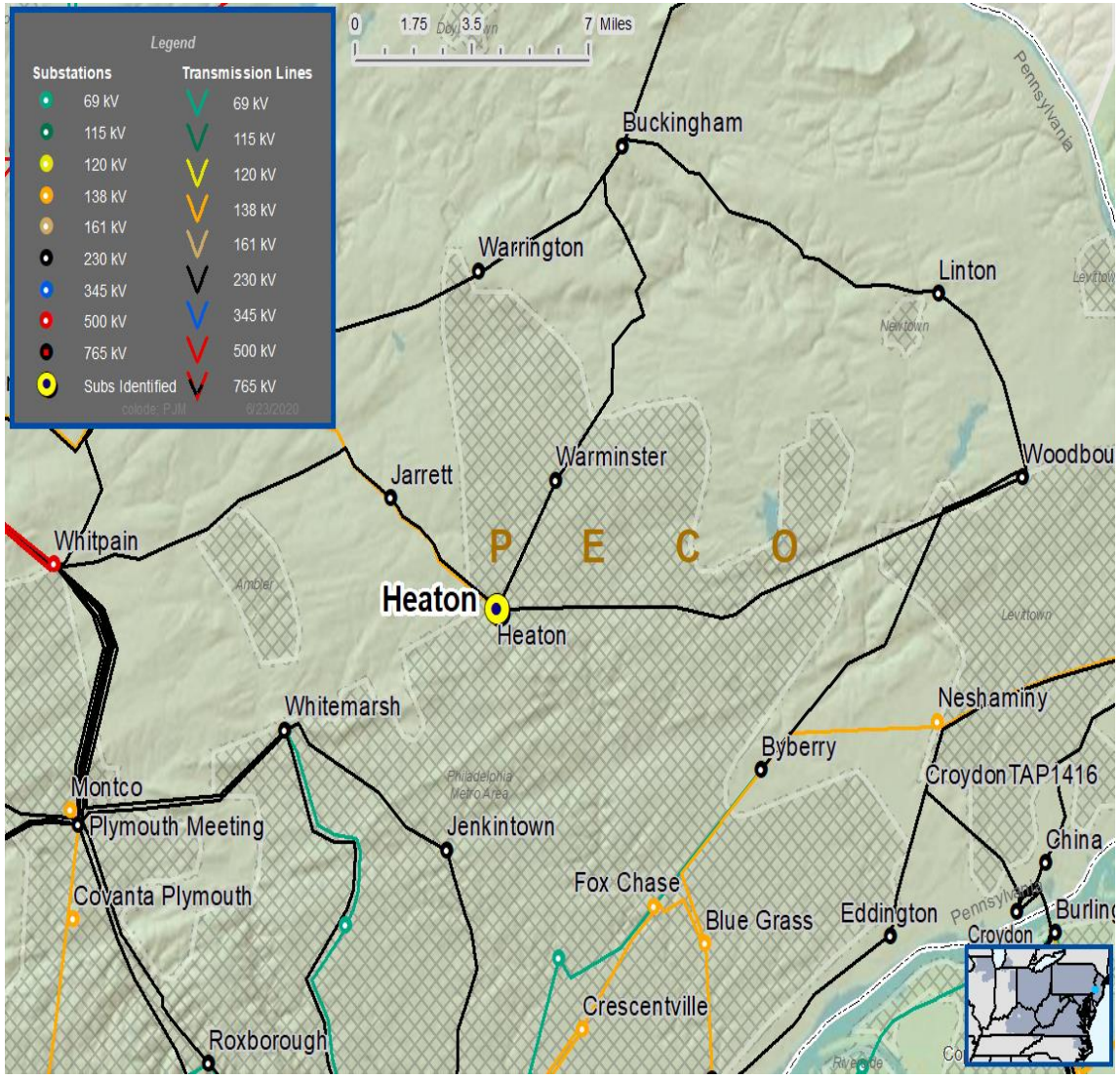
New rating 3000 A, 63kA

Projected In-Service: 12/31/2020

Supplemental Project ID: s2361

Project Status: Engineering

Model: 2025 RTEP



M-3 Process PECO Transmission Zone
Woodbourne 230kV circuit breaker

Need Number: PE-2020-005

Process Stage: Submission of Supplemental Project for inclusion in the Local Plan 11/13/2020

Previously Presented:

Need – 7/7/ 2020

Solution – 10/6/2020

Supplemental Project Driver:

Project Driver:

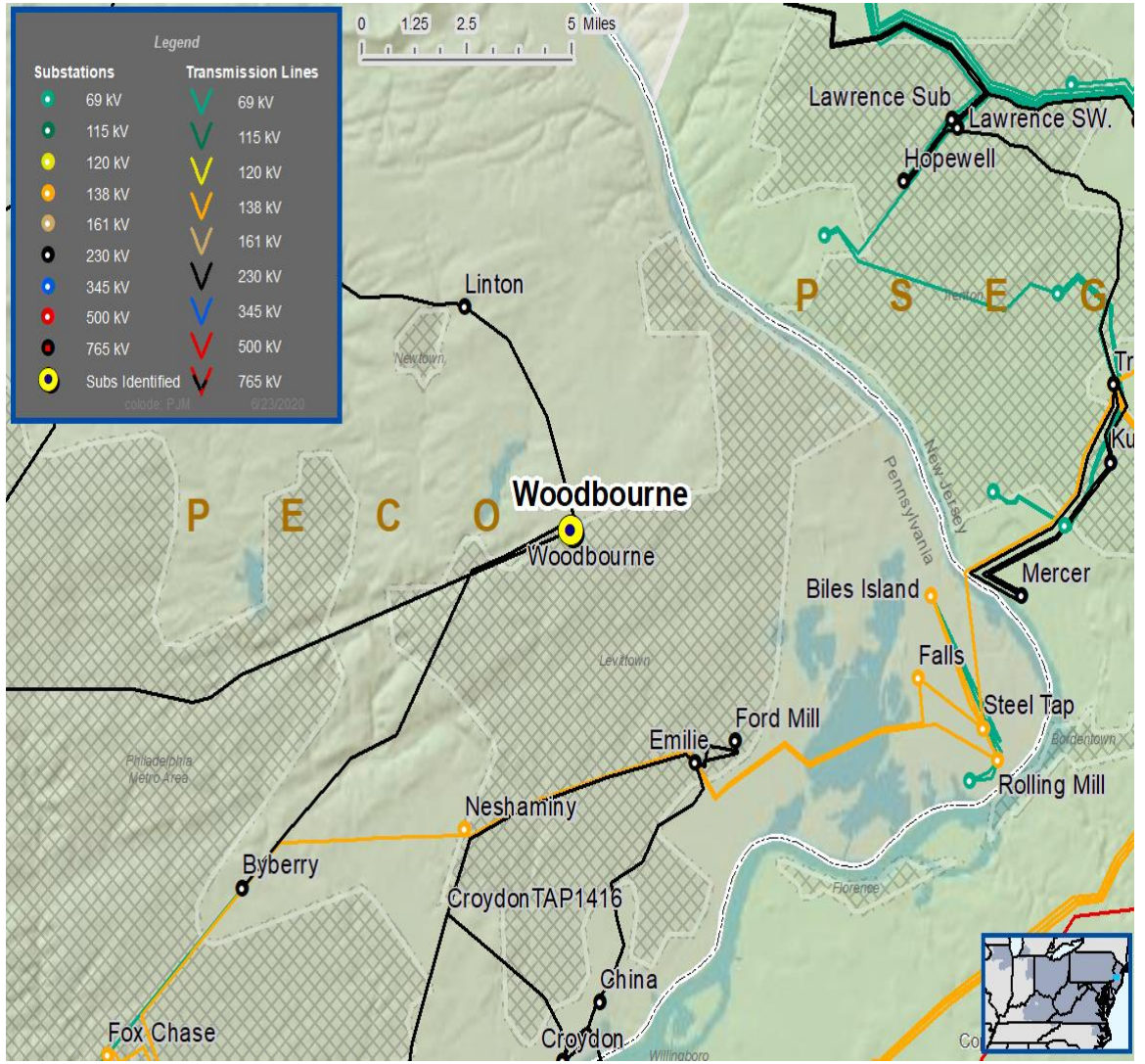
Equipment Material Condition, Performance, and Risk

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:

Woodbourne 230kV circuit breaker #905 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
Woodbourne 230kV circuit breaker

Need Number: PE-2020-005

Process Stage: Submission of Supplemental Project for inclusion in the Local Plan 11/13/2020

Selected Solution:

Replace Woodbourne 230kV circuit breaker #905.

The estimated cost of the project is $0.8M

Existing rating 2500 A, 42kA

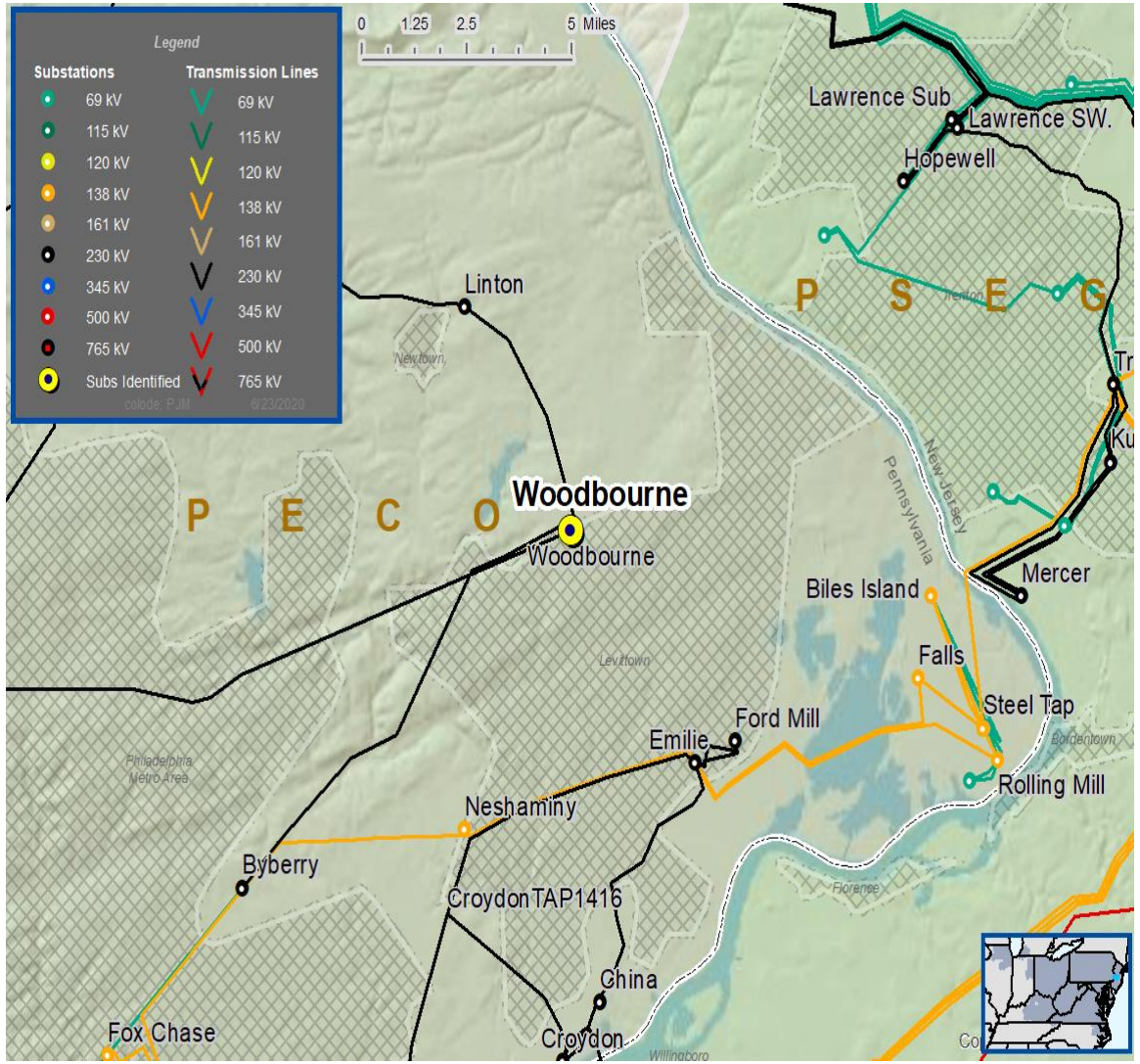
New rating 3000 A, 63kA

Projected In-Service: 12/31/2020

Supplemental Project ID: s2362

Project Status: Engineering

Model: 2025 RTEP



PECO Transmission Zone M-3 Process

Need Number: PE-2020-006

Process Stage: Submission of Supplemental Project for inclusion in the Local Plan 11/13/2020

Previously Presented:

Need – 7/16/ 2020

Solution – 9/10/2020

Supplemental Project Driver:

Project Driver:

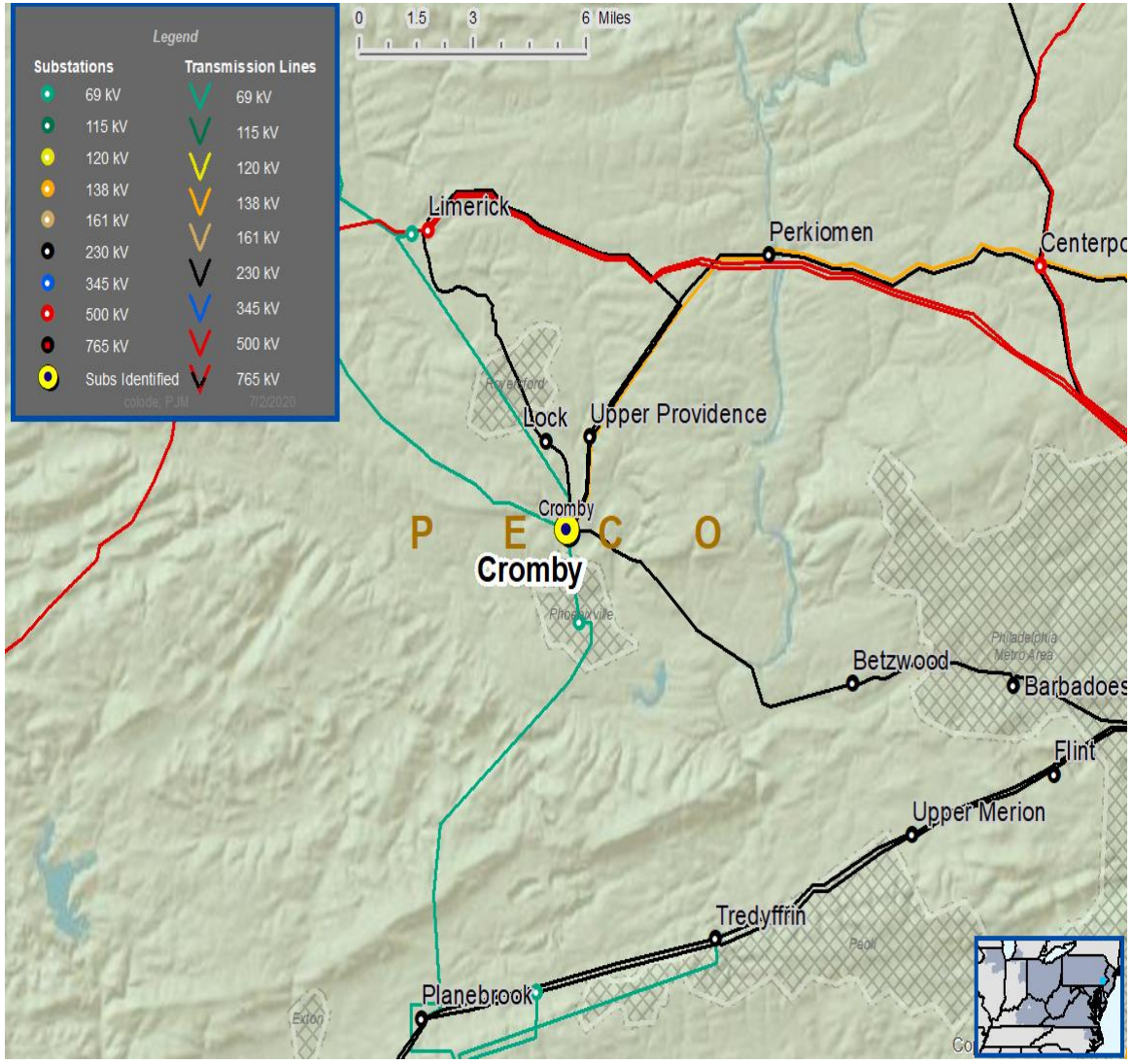
- Equipment Material Condition, Performance, and Risk

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:

- Cromby 138kV circuit breaker #270 installed in 1953 is in deteriorating condition due to oil leaks, spare part availability, and elevated maintenance cost.



PECO Transmission Zone M-3 Process

Need Number: PE-2020-006

Process Stage: Submission of Supplemental Project for inclusion in the Local Plan 11/13/2020

Selected Solution:

Replace Cromby 138kV circuit breaker #270.

The estimated cost of the project is $0.8M

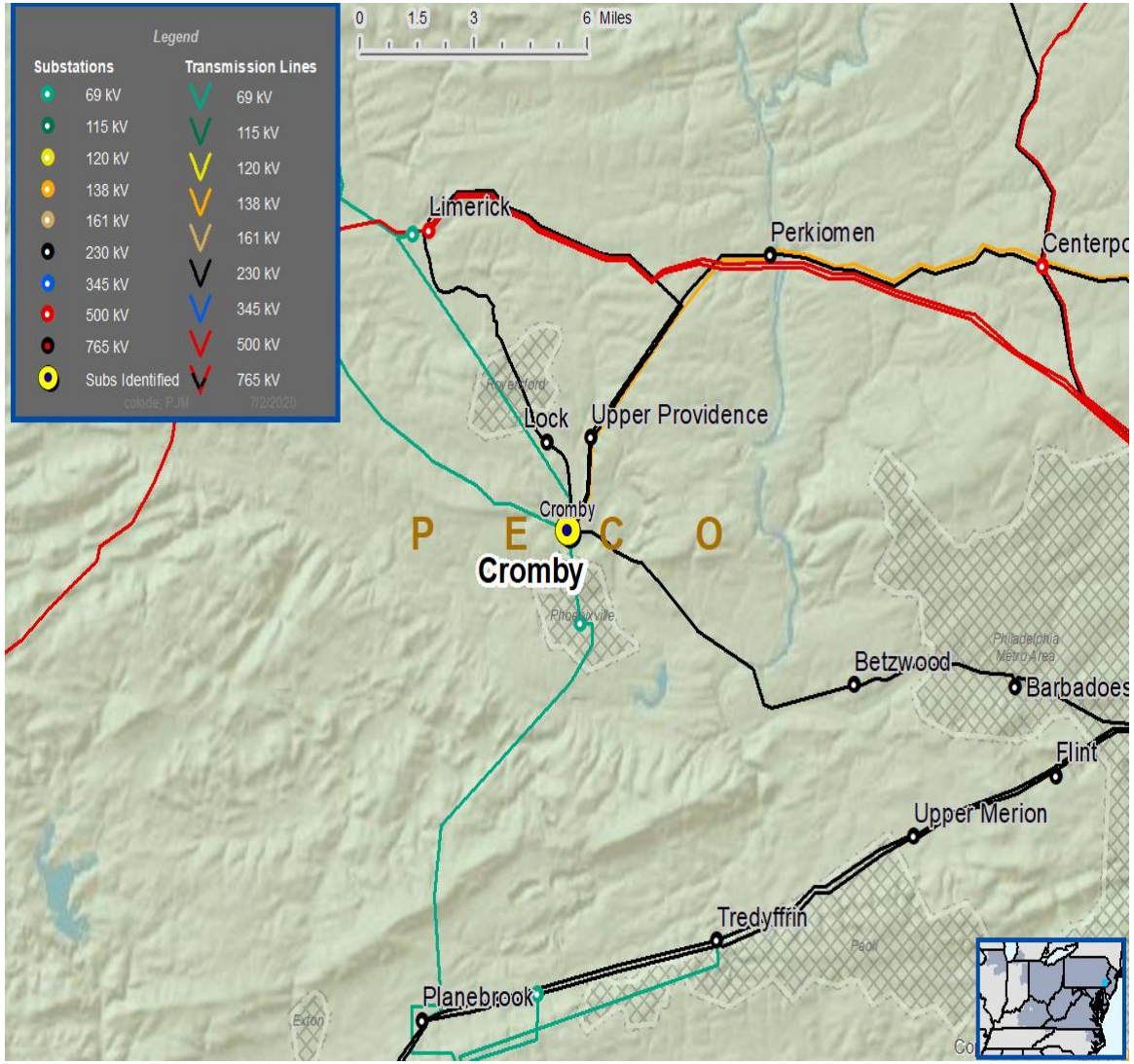
- Existing rating 1200 A, 14.7kA
- New rating 3000 A, 63kA

Projected In-Service: 12/31/2020

Supplemental Project ID: s2357

Project Status: Engineering

Model: 2025 RTEP



Revision History

9/10/2020 – V1 – Added local plan for S2778

11/13/2020 – V2 – Added local plan for S2361, 2362 and S2357