

Reliability Slide Deck

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First Review Baseline Reliability Projects



PSEG Transmission Zone: Baseline East Rutherford 69kV Station Short Circuit Upgrade

Process Stage: First Review

Criteria: Short Circuit

Assumption Reference: 2028 RTEP assumption

Model Used for Analysis: 2028 RTEP Short Circuit cases

Proposal Window Exclusion: Below 200KV Exclusion

Problem Statement:

East Rutherford 69kV breakers 11K, 13K, 14K, 15K, 16K, 17K and 18K are over duty.

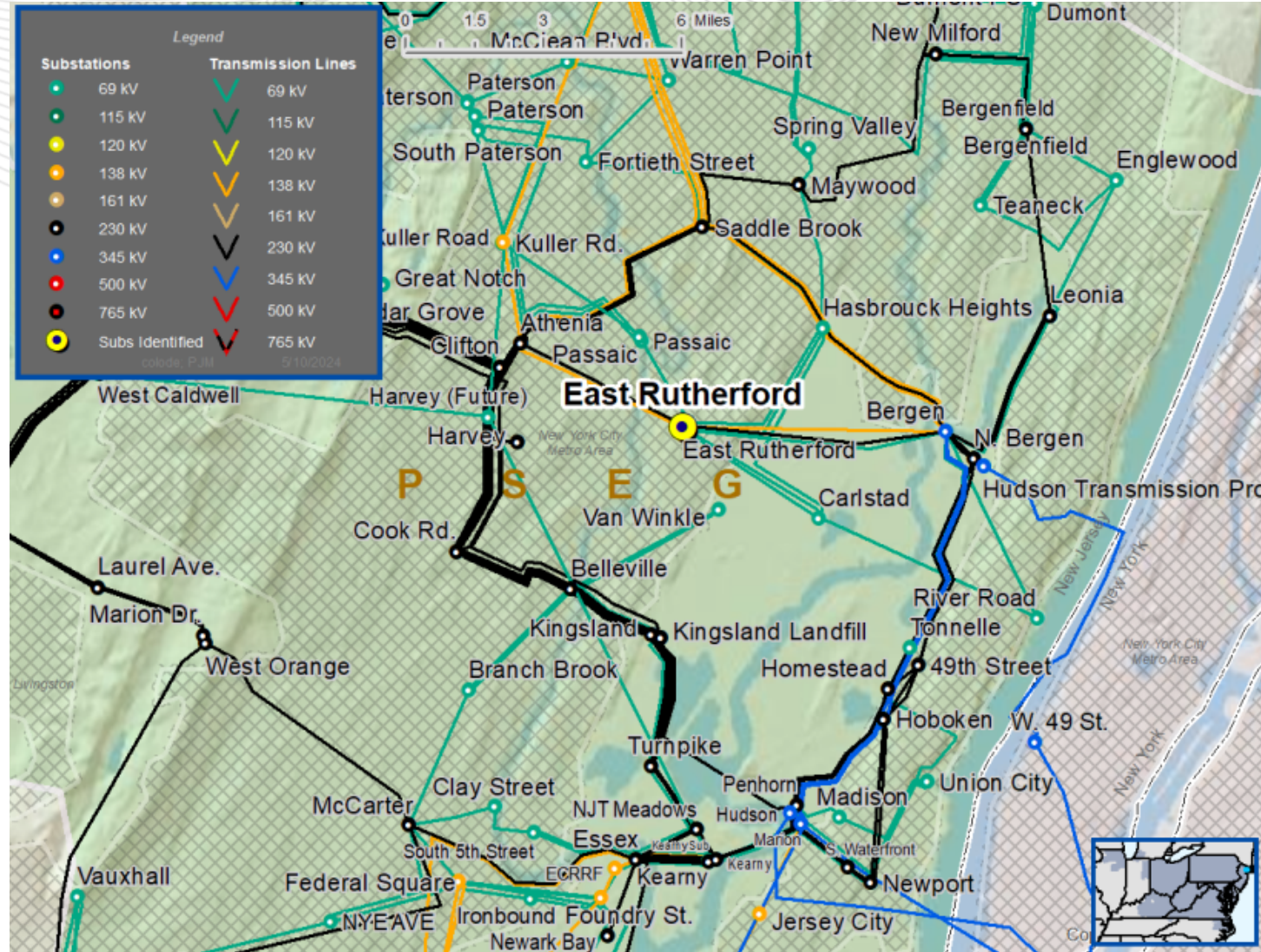
Violations were posted as part of the 2023 Window 2:

FG: 2024-2023-W2-PSEG-SC1, 2024-2023-W2-PSEG-SC2, 2024-2023-W2-PSEG-SC3, 2024-2023-W2-PSEG-SC4, 2024-2023-W2-PSEG-SC5, 2024-2023-W2-PSEG-SC6, 2024-2023-W2-PSEG-SC7

Contingency:

Existing Facility Rating:

Branch	SN/SE/WN/WE (MVA)
East Rutherford 69kV - Hasbrouck Heights (69)	89.6/118.3/94.4/118.3





PSEG Transmission Zone: Baseline East Rutherford 69kV Station Short Circuit Upgrade

Proposed Solution: Open East Rutherford 69kV Tie Breaker [26K] and move line U-775 [East Rutherford to Hasbrouck Heights] currently on section 2 to section 7 of the ring bus.

Estimated Cost: 2.14M

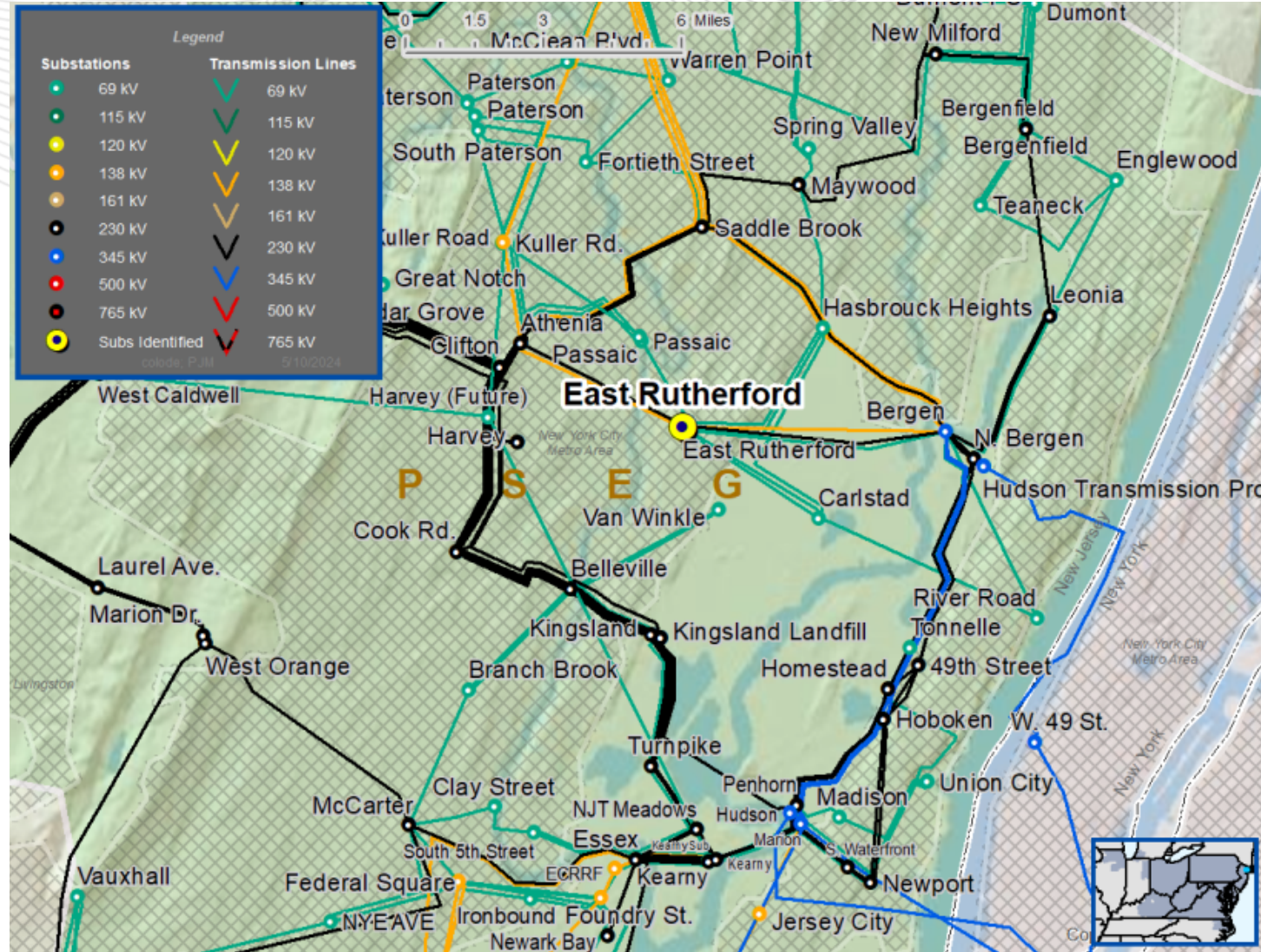
Preliminary Facility Rating:

Branch	SN/SE/WN/WE (MVA)
East Rutherford 69kV - Hasbrouck Heights (69)	89.6/118.3/94.4/118.3

Alternatives: Wreck and Rebuild Both 69kV GIS Ring Buses with a higher breaker rated GIS.

Ancillary Benefits: N/A

Required In-Service: 06-01-2028





PSEG Transmission Zone: Baseline Fair Lawn 69kV Station Short Circuit Upgrade

Process Stage: First Review

Criteria: Short Circuit

Assumption Reference: 2028 RTEP assumption

Model Used for Analysis: 2028 RTEP Short Circuit cases

Proposal Window Exclusion: Below 200KV Exclusion

Problem Statement:

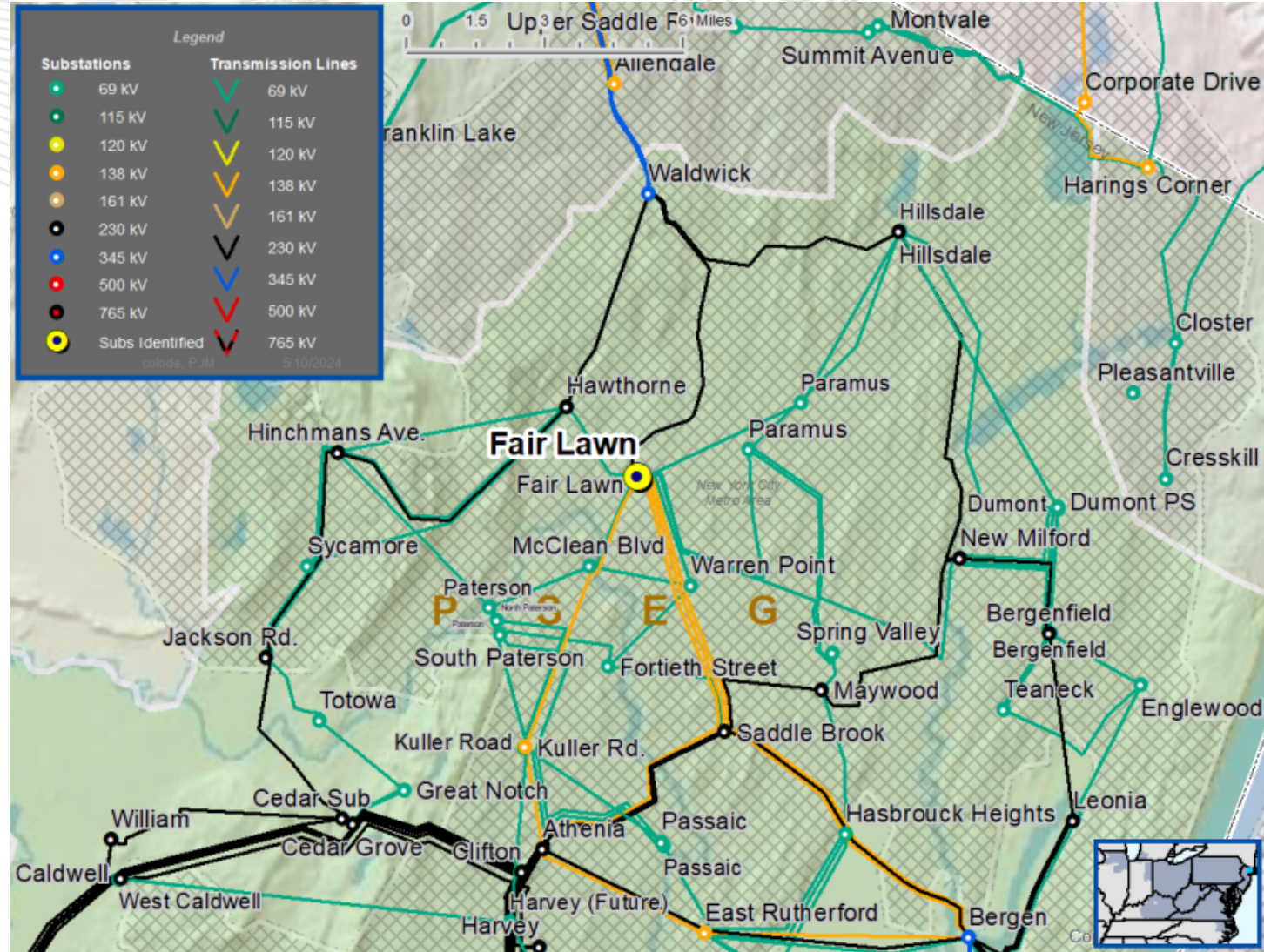
The intention of this project is to address stressed circuit breakers at Fair Lawn 69kV Station identified in the 2028 PJM Short Circuit Case. Fair Lawn 69kV breakers 11K, 15K, 21K, 25K, 31K, 35K, 41K, 43K, and 45K are over duty.

Violations were posted as part of the 2023 Window 2:

FG: 2024-2023-W2-PSEG-SC10, 2024-2023-W2-PSEG-SC11, 2024-2023-W2-PSEG-SC12, 2024-2023-W2-PSEG-SC13, 2024-2023-W2-PSEG-SC14, 2024-2023-W2-PSEG-SC15, 2024-2023-W2-PSEG-SC16, 2024-2023-W2-PSEG-SC8, 2024-2023-W2-PSEG-SC9

Existing Facility Rating:

Branch	Capacity (KA)
11K	50
13K	50
15K	50
21K	50
23K	50
25K	50
31K	50
33K	50
35K	50
41K	50
43K	50
45K	50





PSEG Transmission Zone: Baseline Fair Lawn 69kV Station Short Circuit Upgrade

Proposed Solution: Perform all necessary engineering design and evaluation to increase Fairlawn 69kV GIS from 50kA to 55kA.

Estimated Cost: 1.49M

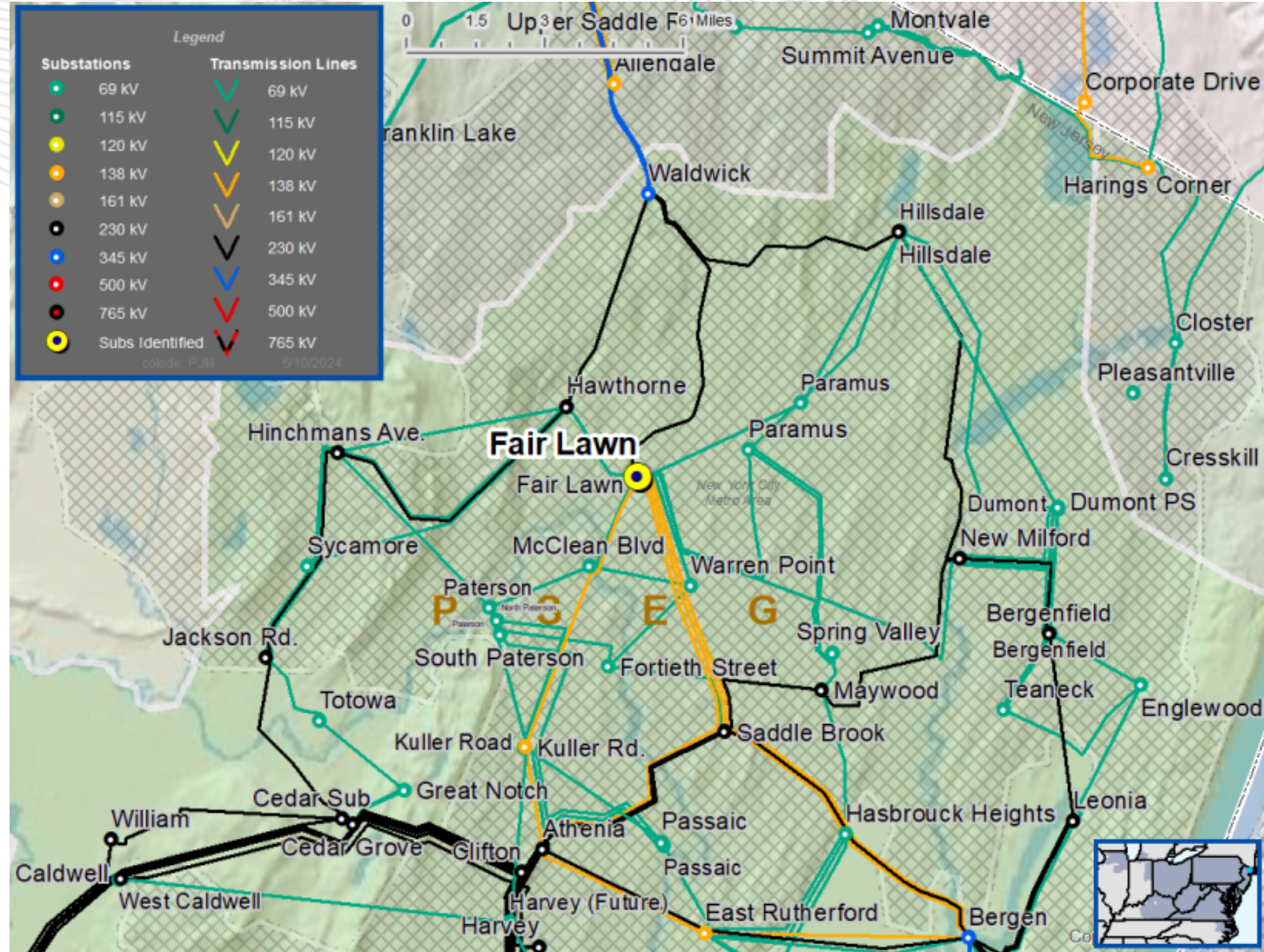
Preliminary Facility Rating:

Branch	Capacity (KA)
11K	55
13K	55
15K	55
21K	55
23K	55
25K	55
31K	55
33K	55
35K	55
41K	55
43K	55
45K	55

Alternatives: 1. Tie Fairlawn to McLean Blvd 69kV line to one of the Fairlawn 138/69kV Transformers [132-4] and disconnect both from the Fairlawn 69kV Station. 2. Rebuild the GIS Station to 63 kA.

Ancillary Benefits: N/A

Required In-Service: 06-01-2028



Questions?



2024

- The Next 2024 Mid-Atlantic SRRTEP meetings are as followed
- 06/13/2024
- 07/18/2024
- 08/15/2024



Revision History

V1 – 05/13/2024 – Original slides posted