Reliability Slide Deck

Nebiat Tesfa – Principal Engineer

Tarik Bensala – Engineer II

Second Review
Baseline Reliability Projects

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

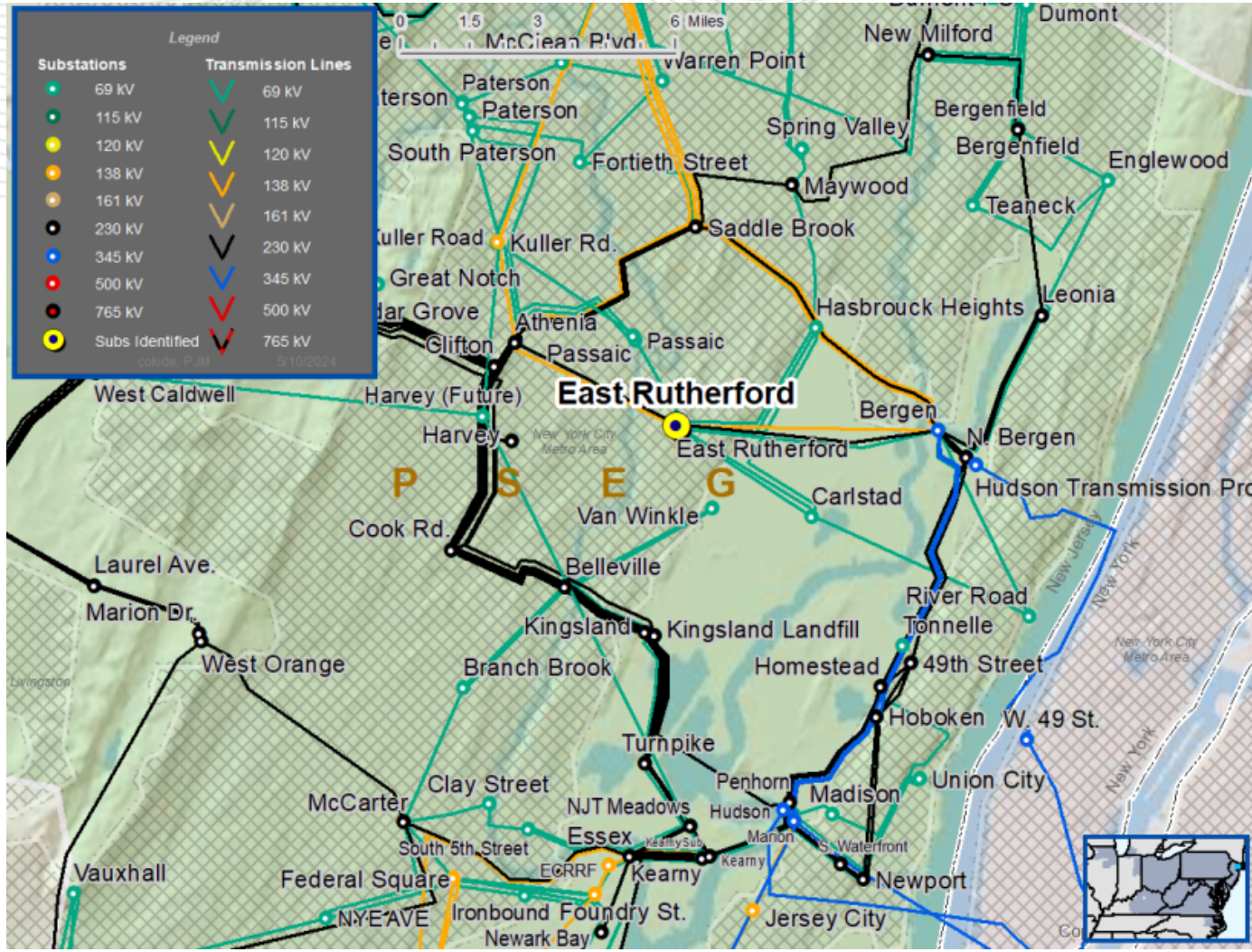
Process Stage: Second Review
Criteria: Short Circuit
Assumption Reference: 2028 RTEP assumption
Model Used for Analysis: 2028 RTEP Short Circuit cases
Proposal Window Exclusion: Below 200KV Exclusion
Problem Statement:
East Rutherford 69kV breakers 11K, 13K, 14K, 15K, 16K, 17K and 18K are over duty.
Existing Facility Rating: 89.6/118.3/94.4/118.3 (SN/SE/WN/WE) MVA

Recommended Solution: Open East Rutherford 69kV Tie Breaker [26K] (**b3848.1**) Move line U-775 [East Rutherford to Hasbrouck Heights] currently on section 2 to section 7 of the ring bus. (**b3848.2**)

Estimated Cost: $**2.14 M**

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

Required In-Service: 06/01/2028
Projected In-Service: 06/01/2028

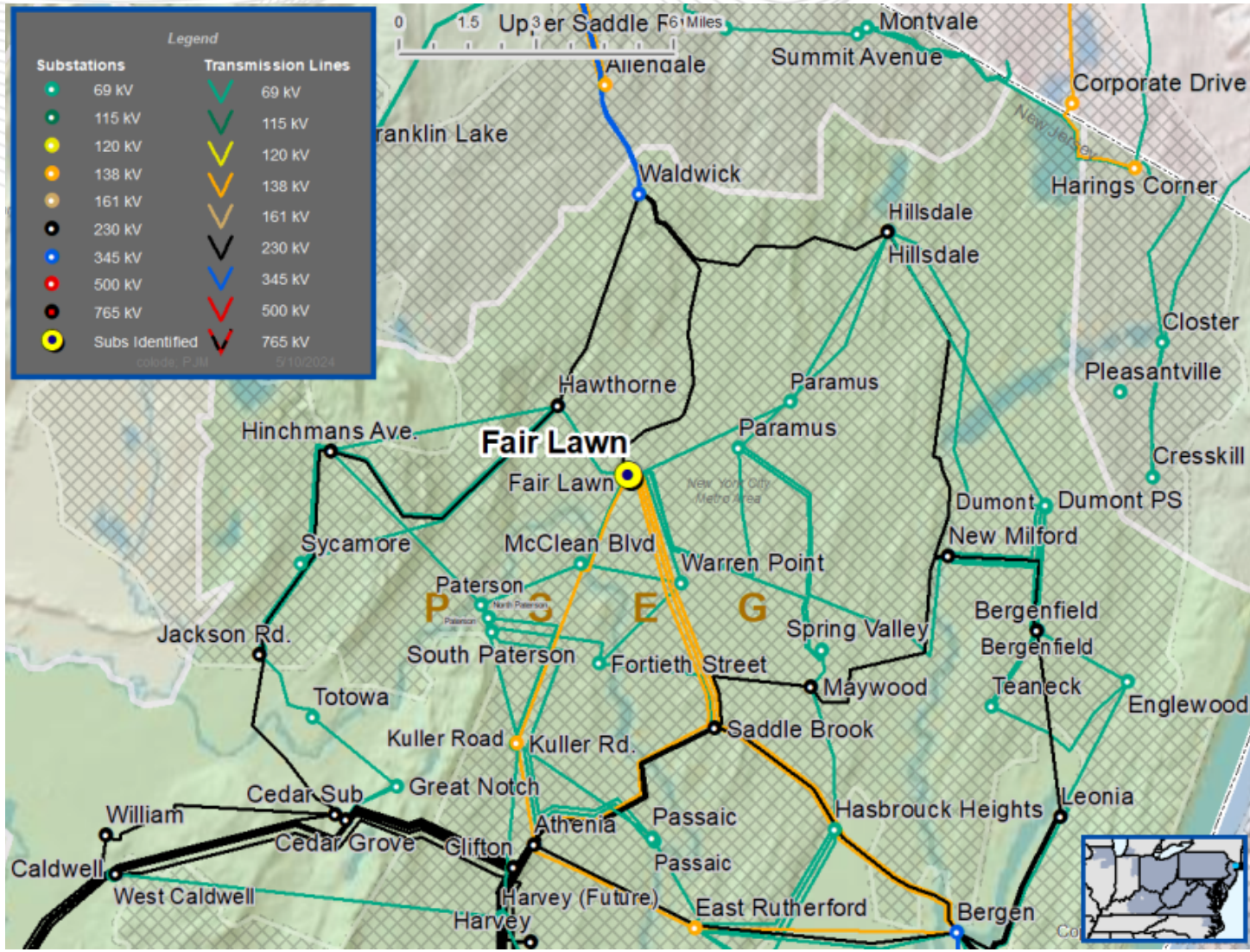


PSEG Transmission Zone: Baseline
Fair Lawn 69kV Station Short Circuit Upgrade

Process Stage: Second 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.
Existing Facility Rating: 50KA

Recommended Solution: Perform all necessary engineering design and evaluation to increase Fairlawn 69kV GIS from 50kA to 55kA. (**b3849.1**)
Estimated Cost: $**1.49 M**

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.
Required In-Service: 06/01/2028
Projected In-Service: 06/01/2028



Questions?

Upcoming SRRTEP Meetings

2024

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

Revision History

V1 – 06/10/2024 – Original slides posted