



Sub Regional RTEP Committee PJM Mid-Atlantic Reliability Update

August 18, 2022

First Review

Baseline Reliability Projects

Process Stage: First Review

Criteria: TPL-001-4 R2 section 2.1.5 (Spare Equipment) , Short Circuit

Assumption Reference: 2026 RTEP assumption

Model Used for Analysis: 2022 and 2026 RTEP Summer case

Proposal Window Exclusion: Immediate Need/ Below 200 kV/Substation Equipment

Problem Statement: For the outage of the Bergen series reactors, the normally open bypass switches have to be closed to keep the Bergen – Fairlawn and Bergen – East Rutherford 138 kV operational. The current rating of the two bypass switches are lower than the circuit ratings, as a result the rating of the circuits will be limited by the bypass switches.

In addition, the maximum short circuit current exceeds the two 138 kV bypass circuit switchers existing ratings.

Proposed Solution:

Replace the two existing 1200A Bergen 138kV Circuit Switchers with two (2) 138kV Disconnect Switches to achieve a minimum summer normal device rating of 298 MVA and a minimum summer emergency rating of 454 MVA.

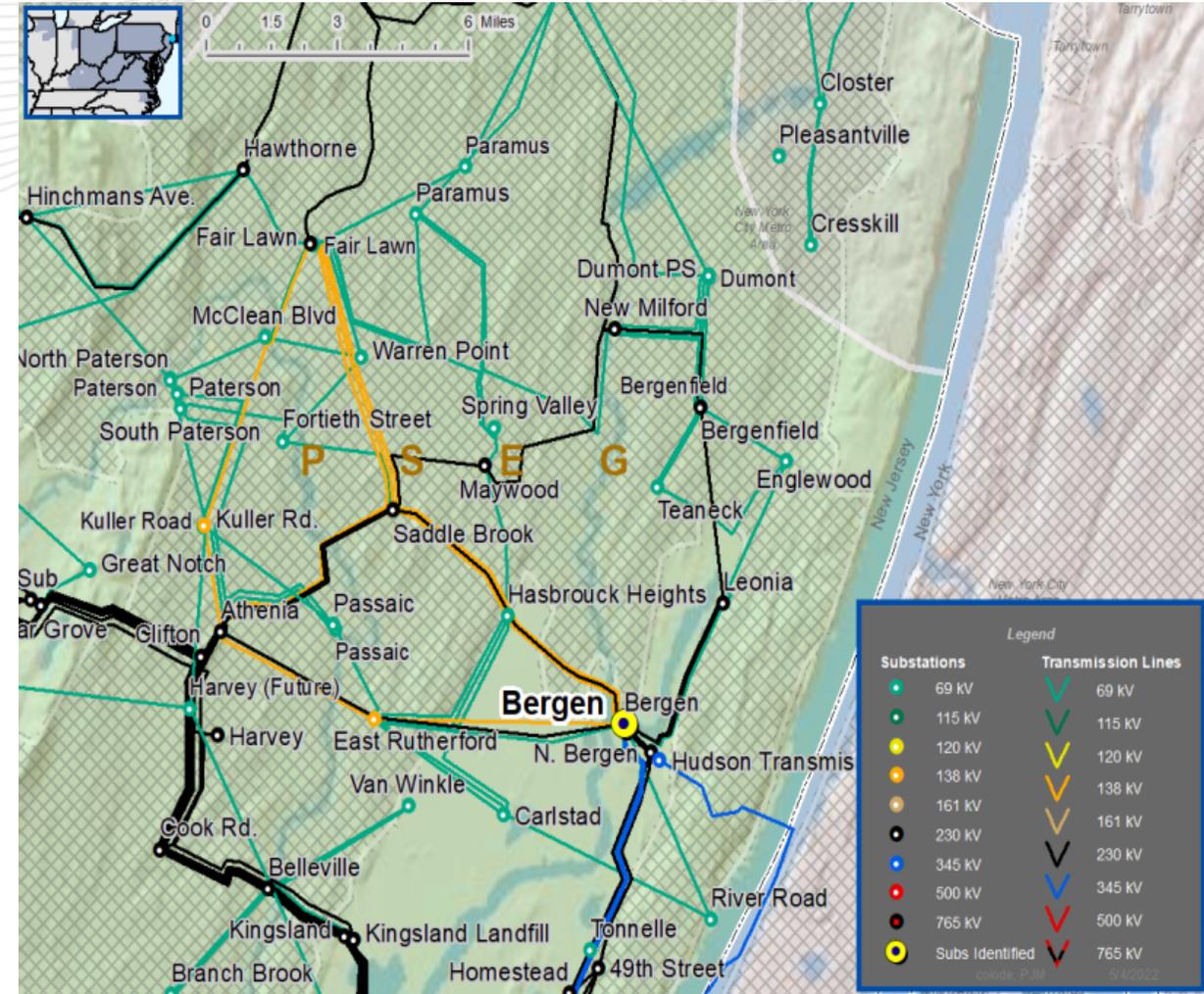
Estimated Cost: \$1.2 M

Alternatives

Replace the two (2) existing 1200A Bergen 138kV Circuit Switchers with two (2) 138kV LTB (No Relay Tripping, Live Tank Breaker). This option was deemed infeasible due to space constraint at Bergen 138kV yard.

- Replace the two (2) existing 1200A Bergen 138kV Circuit Switchers with two (2) 1800A 138kV Circuit Switchers. This option was deemed infeasible due to short circuit withstand rating limitation of the Circuit Switchers.

Required In-Service: 2022



MetEd - Project B3671 Cancellation

- Project B3671 was identified in the 2021 RTEP window 1 to address an overload on the N. Boyertown - W. Boyertown 69 kV circuit, see slide # 5 for detail.
- The N. Boyertown - W. Boyertown 69 kV circuit overload is addressed by s2566 project that was completed in April 2022.
- The B3671 project will be canceled.

Process Stage: Second Review

Criteria: FERC Form 715

Assumption Reference: 2026 RTEP assumption

Model Used for Analysis: 2026 RTEP Summer case

Proposal Window Exclusion: Below 200 kV exclusion

Problem Statement: N. Boyertown - W. Boyertown 69 kV circuit is overloaded for multiple breaker contingencies.

Violations were posted as part of the 2021 Window 1: (FG# ME-T1 and ME-T2)

Existing Facility Rating: 71SN/72SE, 72WN/72WE MVA

Proposed Facility Rating: 139SN/169SE, 158WN/201WE MVA

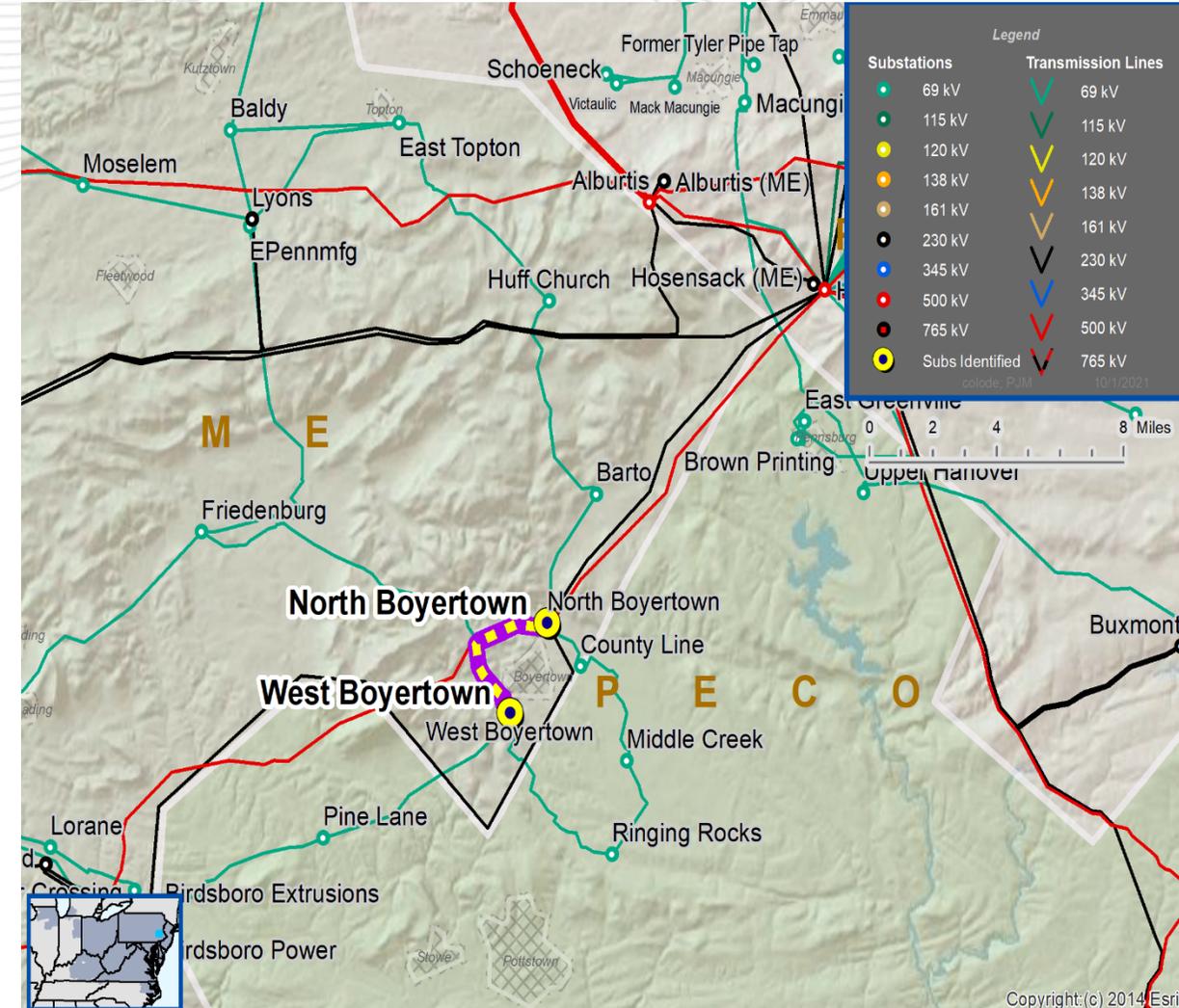
Recommended Solution:

Rebuild approx. 3.6 miles of N. Boyertown - W. Boyertown 69 kV circuit # 875 with 795 ACSR. Upgrade terminal equipment (circuit breaker, disconnect switches, substation conductor) and relays at N. Boyertown and W. Boyertown substation. **(B3671)**

Estimated Cost: \$8.79 M

Alternatives N/A

Required In-Service: 6/1/2026



Questions?



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2022

- The Next 2022 Mid-Atlantic SRRTEP meetings are as followed
- 9/15
- 10/13
- 11/17
- 12/14



V1 – 8/12/2022 – Original slides posted