



# Reliability Analysis Update Part A

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Sub Regional RTEP Committee - PJM West  
November 18, 2022

# First Review

## Baseline Reliability Projects



# AEP Transmission Zone: Baseline Jug Street 138kV Breaker Replacement

**Process Stage:** First Review

**Criteria:** Short Circuit

**Assumption Reference:** 2027 RTEP Assumption

**Model Used for Analysis:** 2022 Series 2024 RTEP Short Circuit Model

**Proposal Window Exclusion:** Immediate Need, Below 200 kV

**Problem Statement:**

2022W1-SC-1 through 4, 2022W1-SC-6, 2022W1-SC-7, 2022W1-SC-10 through 2022W1-SC-13, and 2022W1-SC-24 through 2022W1-SC-27

Jug Street 138kV breakers M, N, BC, BF, BD, BE, D, H, J, L, BG, BH, BJ, BK are overdutied.

**Existing Facility Rating:** 40kA

**Proposed Solution:**

Replace the Jug Street 138kV breakers M, N, BC, BF, BD, BE, D, H, J, L, BG, BH, BJ, BK with 80KA breakers

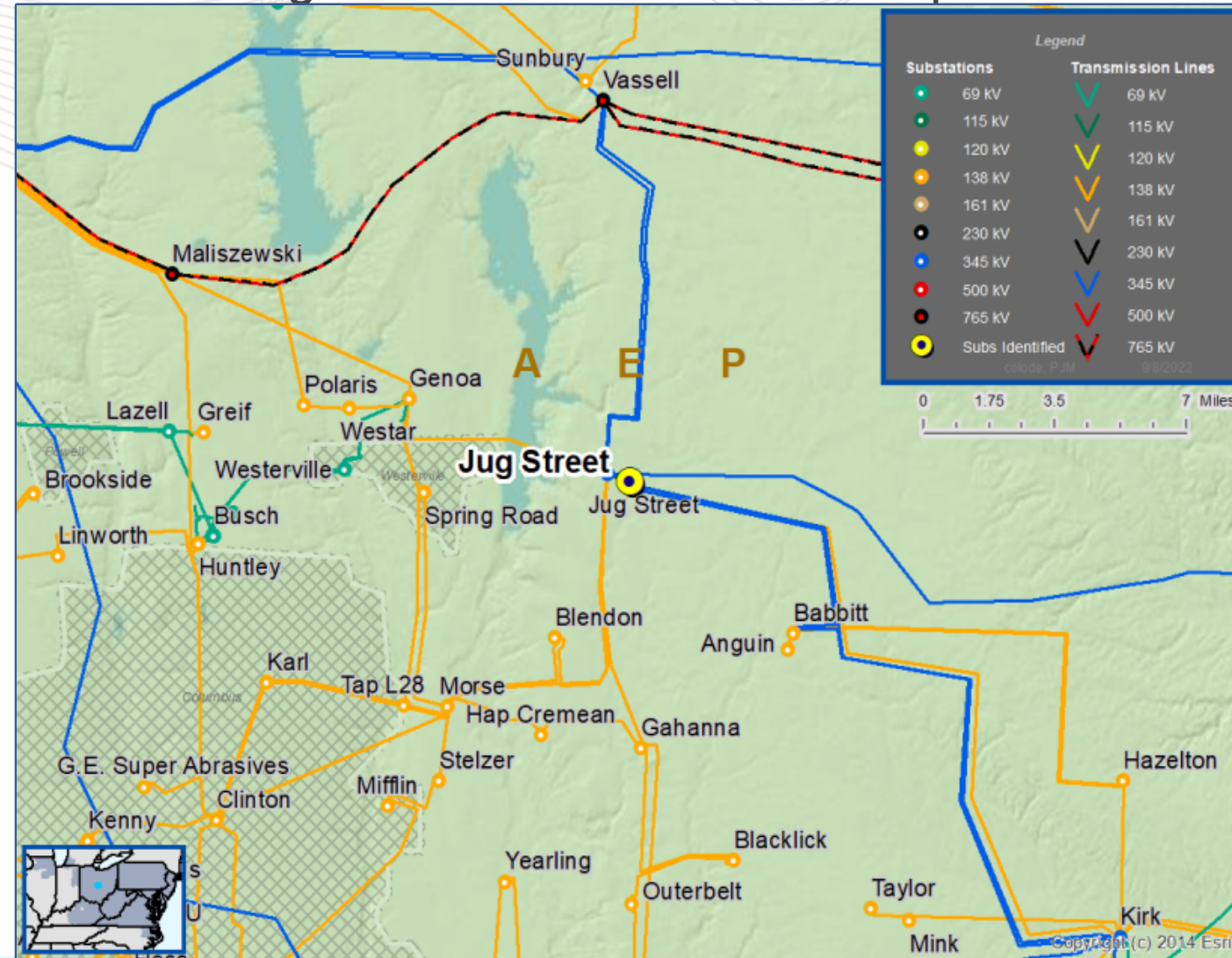
**Estimated Total Cost:** \$14M

**Preliminary Facility Rating:** 80kA

**Alternatives:** Replace the circuit breakers to 63 kA, and replace them with 80 kA later due to the local load growth. This is not economic.

**Required In-Service:** 06/01/2024

**Projected In-Service:** 06/01/2024





# AEP Transmission Zone: Baseline Hyatt 138kV Breaker Replacements

**Process Stage:** First Review

**Criteria:** Short Circuit

**Assumption Reference:** 2027 RTEP Assumption

**Model Used for Analysis:** 2022 Series 2024 RTEP Short Circuit Model

**Proposal Window Exclusion:** Immediate Need, Below 200 kV

**Problem Statement:**

2022W1-SC-15 and 2022W1-SC-23

Hyatt 138kV breakers AB1 and AD1 are overdutied.

**Existing Facility Rating:** 50kA

**Proposed Solution:**

Replace the Hyatt 138kV breakers AB1 and AD1 with 63kA breakers

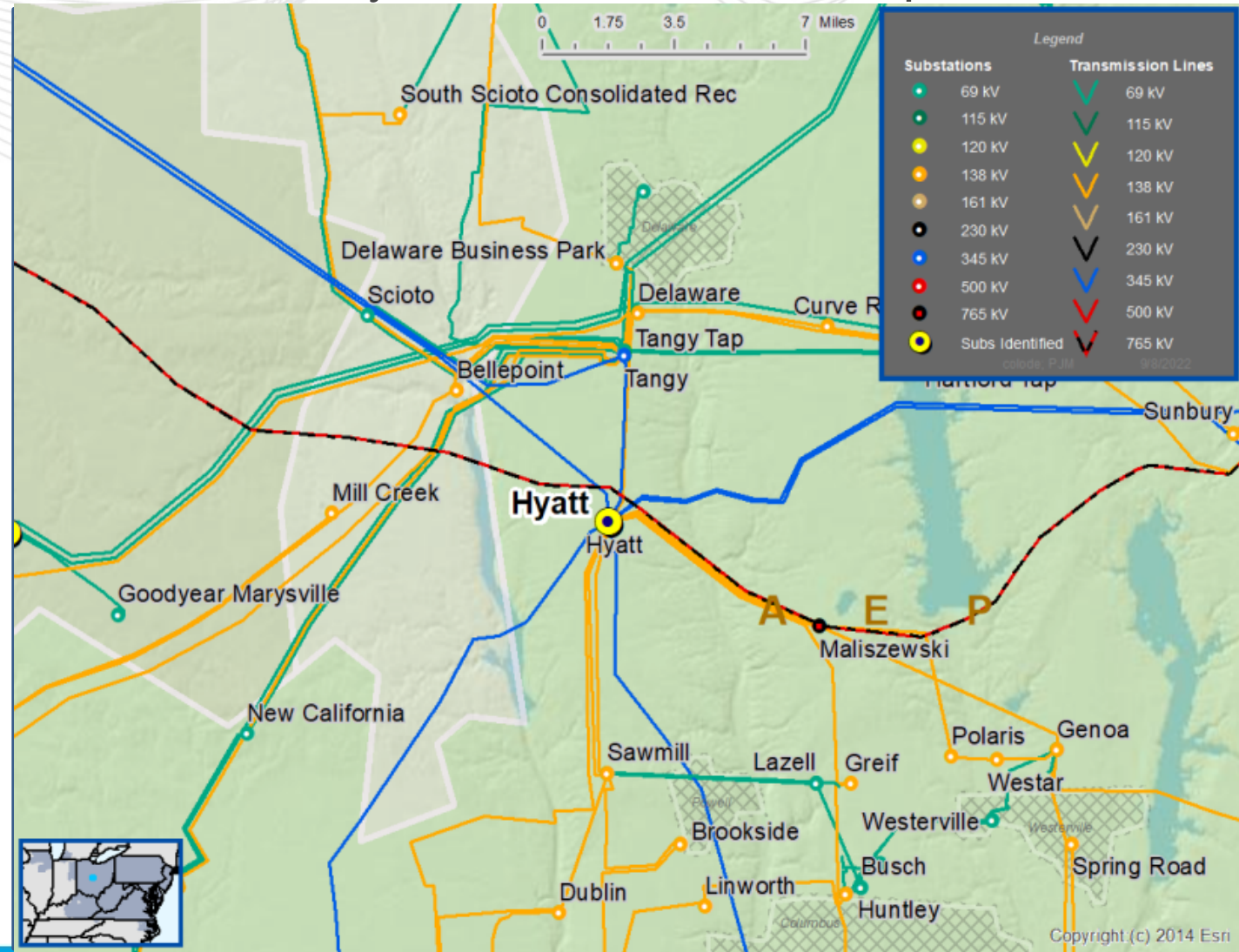
**Existing Facility Rating:** 63kA

**Estimated Total Cost:** \$2M (\$1M each)

**Alternatives:** None

**Required In-Service:** 06/01/2024

**Projected In-Service:** 06/01/2024



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**SRRTEP-W Reliability Analysis Update**



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- V1 – 11/8/2022 – Original slides posted

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