



# Sub Regional RTEP Committee PJM West

May 22, 2020



# ATSI Transmission Zone: Baseline East Akron 138kV Substation Breaker Upgrade

**Process Stage:** First Review

**Criteria:** Short Circuit: Overduted Breaker

**Assumption Reference:** Davis Besse, Perry, Sammis reinstatement

**Model Used for Analysis:** 2024 RTEP

**Proposal Window Exclusion:** Station Equipment

**Problem Statement:** The East Akron 138 kV breaker B-22 is overduted due to the Davis Besse 1, Perry 1, Sammis 5-7 reinstatement

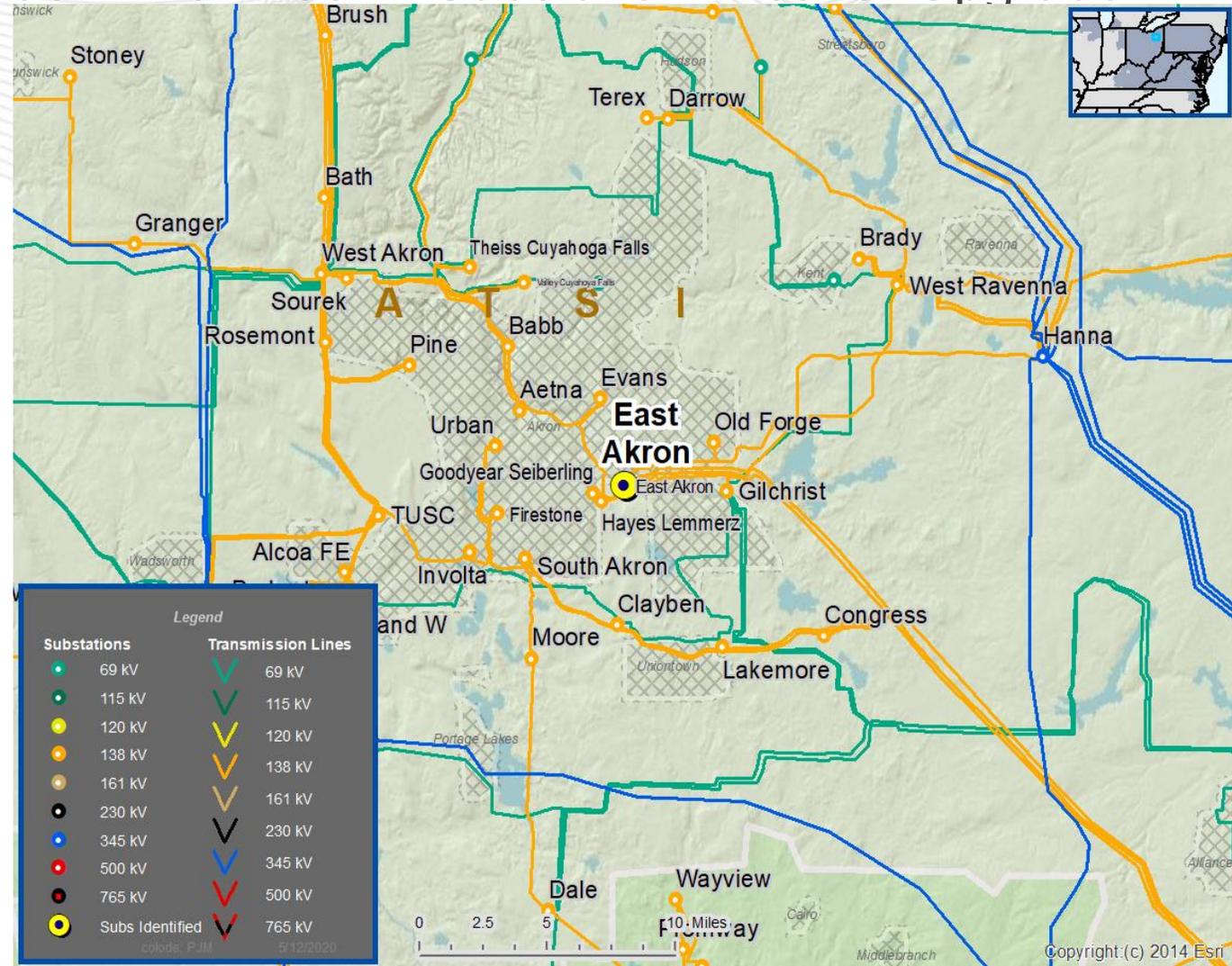
**Existing Facility Rating:** 20 kA

**Proposed Solution:** Replace the existing East Akron 138 kV breaker B-22 with 3000A continuous, 40 KA momentary current interrupting rating circuit breaker.

**Estimated Cost:** \$552.5K

**Required In-Service:** 6/1/2021

**Projected In-Service:** 6/1/2021



# Oak Mound 138kV Substation Breakers “Bus-Tie” and “Waldo Run #2” Upgrade

**Process Stage:** First Review

**Criteria:** Short Circuit: Overduted Breaker

**Assumption Reference:** Davis Besse, Perry, Sammis reinstatement

**Model Used for Analysis:** 2024 RTEP

**Proposal Window Exclusion:** Station Equipment

**Problem Statement:**

At Oak Mound substation, the bus tie and Waldo Run #2 138 kV breakers are overduted for the Generation Reinstatement study of Davis-Besse 1, Perry 1, and Sammis 5-7.

**Existing Facility Rating:** 20 kA

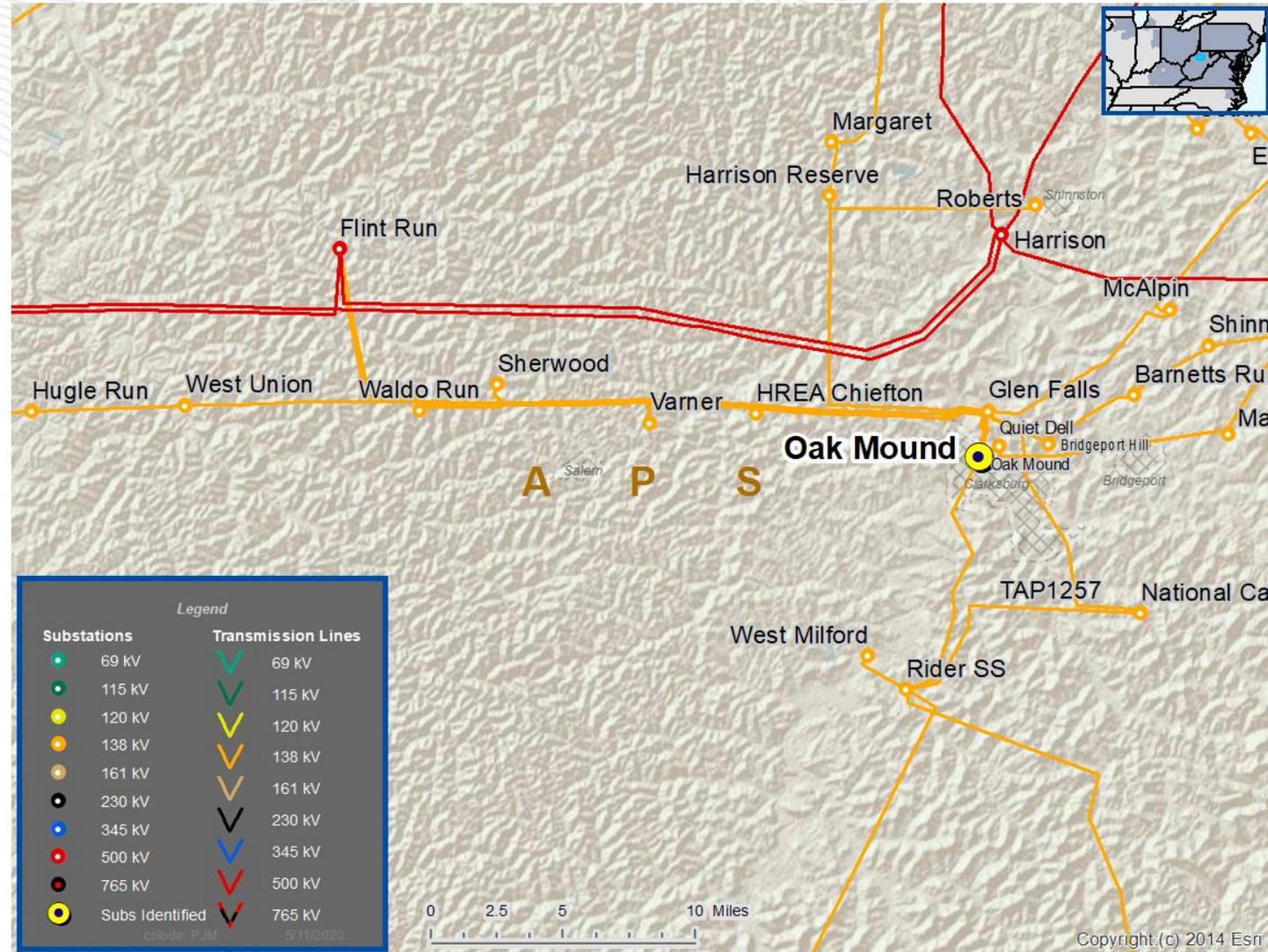
**Proposed Solution:**

At Oak Mound 138 kV substation, replace the 138 kV bus tie and Waldo Run #2 breakers with 40 kA, 3000 amp units. Install CTs as 2000/5 MR.

**Estimated Cost:** \$0.6M

**Required In-Service:** 6/1/2021

**Projected In-Service:** 6/1/2021



# Project Update



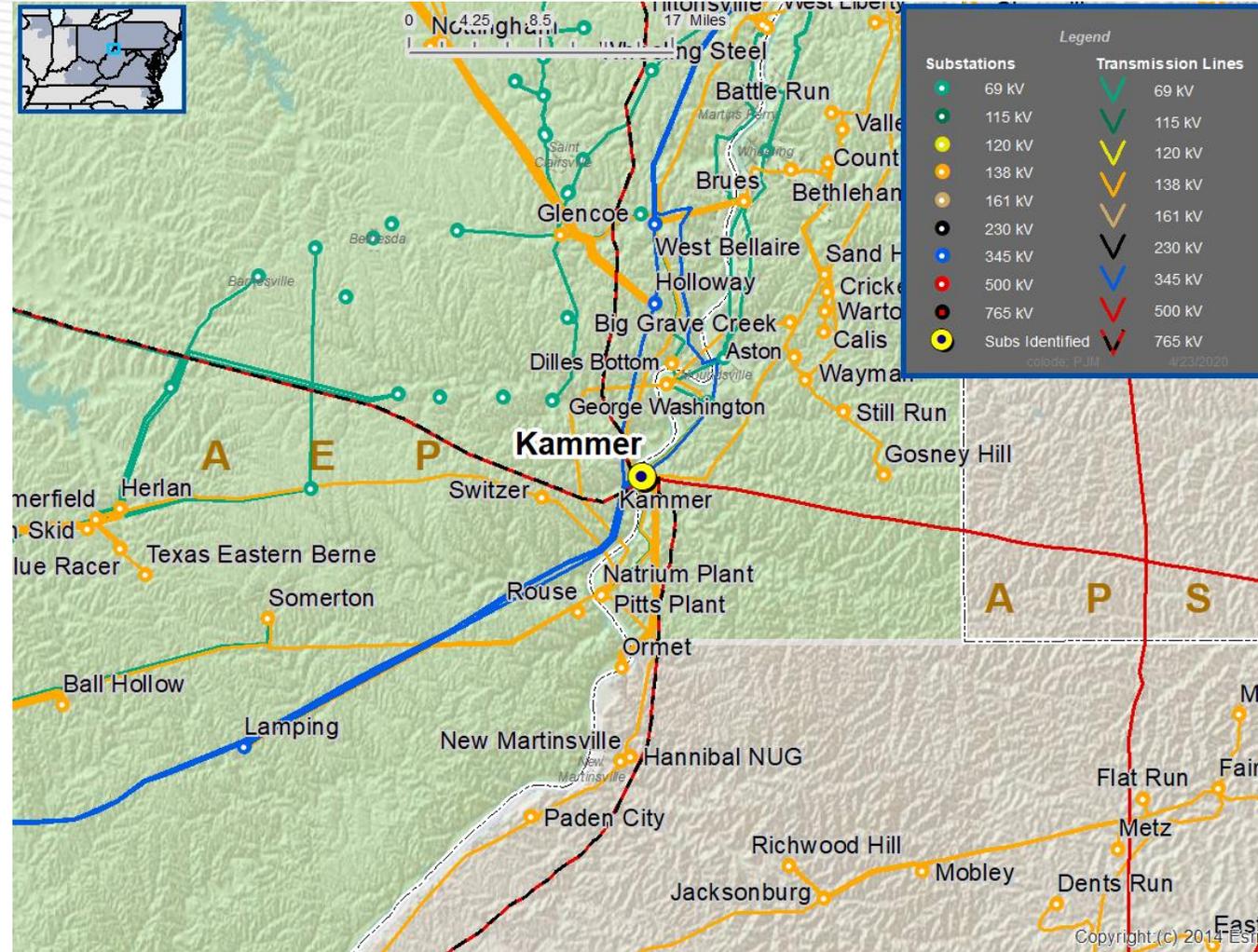
# AEP Transmission Zone

**Required IS Date Change (B2753.9)**  
**Previously Presented: 6/30/2017**  
**7/21/2017 SRTEAC**

**B2753.9: Remove/Open Kammer 345/138 kV transformer #301**

**Estimated Cost: \$0M**  
**Old Required IS Date: 5/31/2020**  
**New Required IS Date: 9/13/2021**

**Reasons for the Required IS Date Change:**  
Opening of Kammer 345-138kV transformer 301 is to address overdutied breakers at Kammer 138kV. Due to the withdrawn queue of Y3-068, re-studied shows the breakers are overduty only after AB2-093, whose IS date is 9/13/2021.



## Scope Change (B3099)

Previously Presented: 1/11/2019, 2/20/2019 SRTEAC

**Old Scope:** Install a 138 kV 3000A 40 kA circuit switcher on the high side of the existing 138/34.5 kV transformer #5 at Holston station.

**Estimated Cost: \$0.7 M**

**New Scope:** Install a 138 kV 3000A 40 kA circuit switcher on the high side of the existing 138/34.5 kV transformer #5 **and a 138 kV 3000A 40 kA circuit switcher transformer #7** at Holston station.

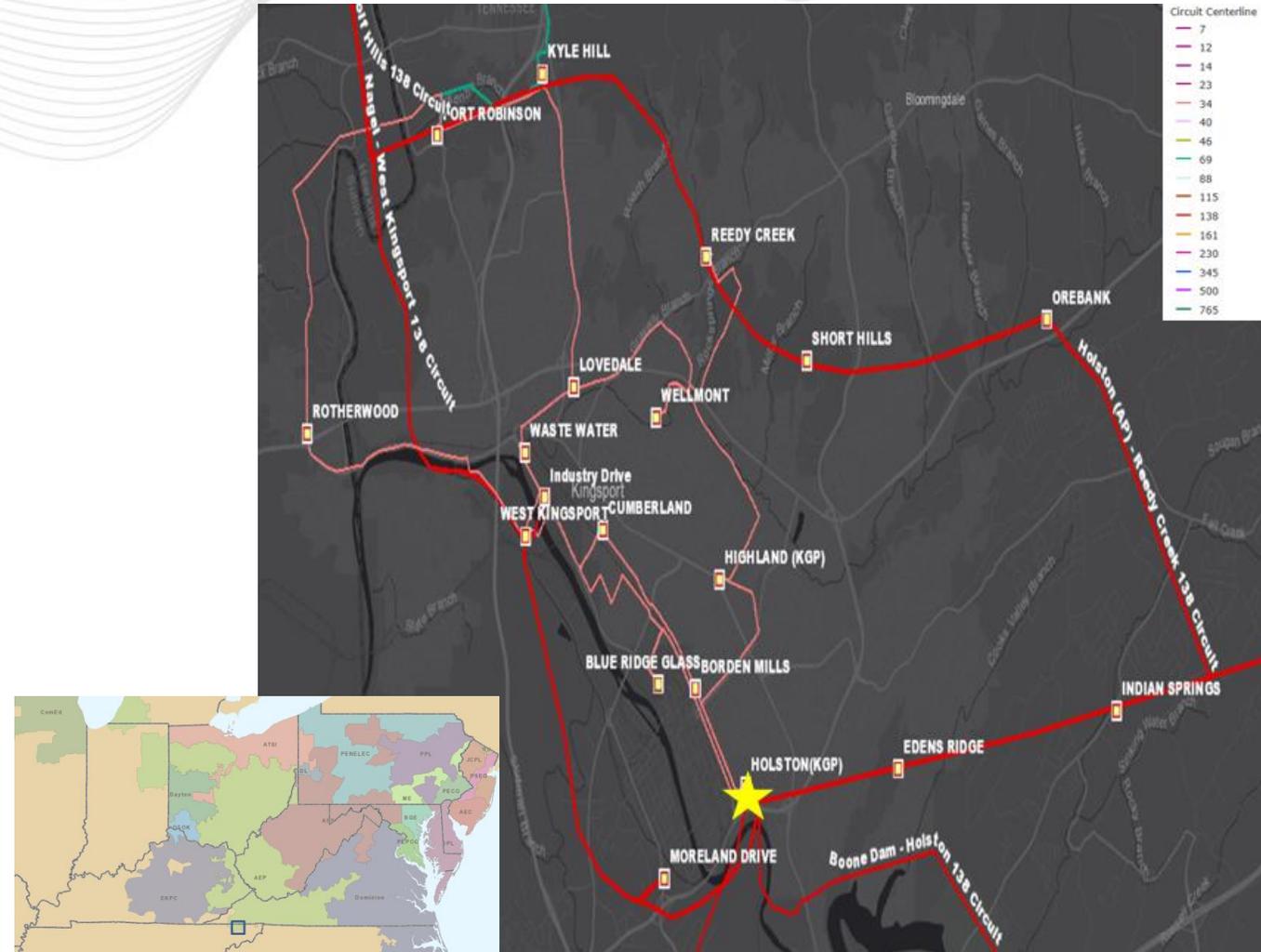
**Estimated Cost: ~~\$0.7 M~~ \$1.4 M**

**Reason for change:** Transformer 7 serves distribution customers but is located in a Transmission station. After investigating the cost responsibility for the switcher installation with Distribution, the cost should be assigned to Transmission.

**Required In-service:** 6/1/2022

**Projected In-service:** 6/1/2022

**Project Status:** Scoping



# Questions?



- V1 – 5/15/2020 – Original slides posted
- V2 – 5/21/2020 – Slide #6, update “Reason for Change”