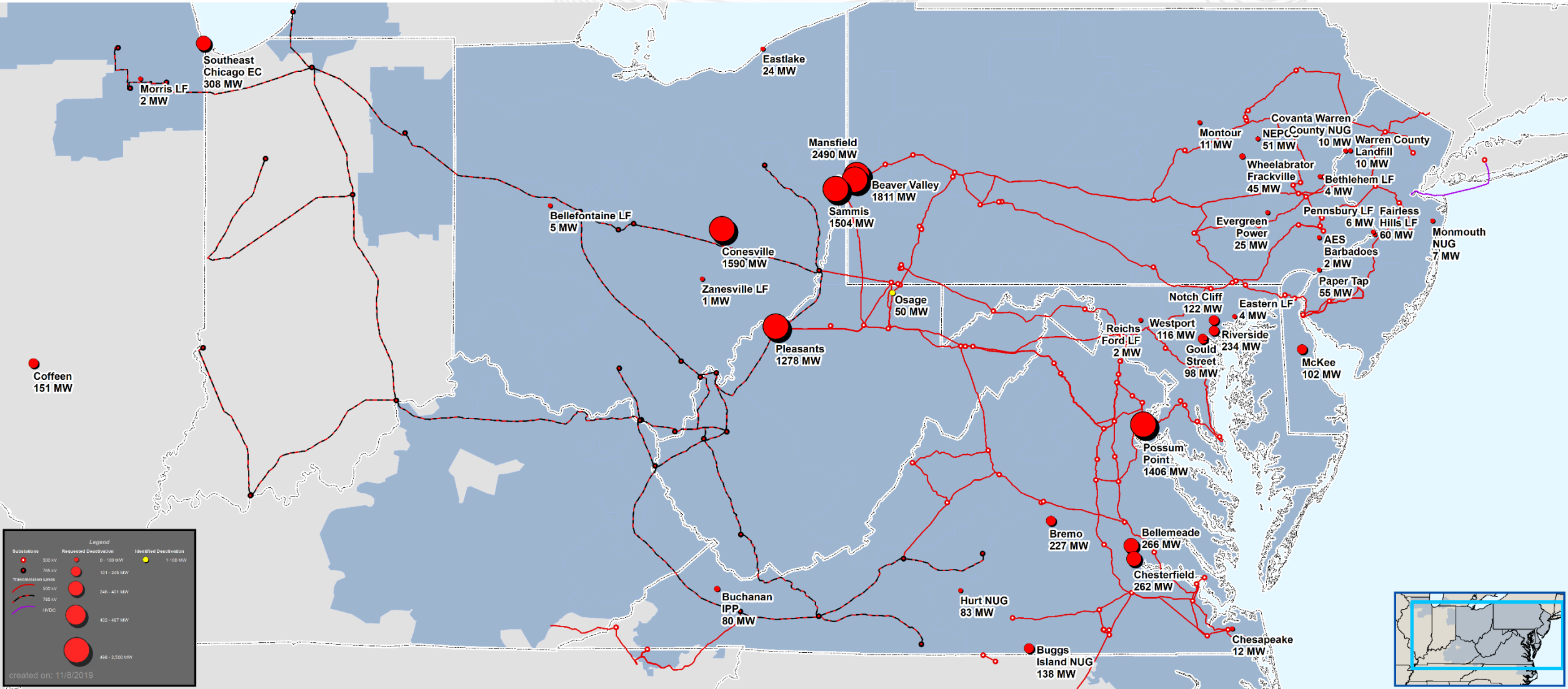




# Generation Deactivation Notification Update

Transmission Expansion Advisory  
Committee

November 14, 2019



Unit(s)	Transmission Zone	Requested Deactivation Date	PJM Reliability Status
Osage (50 MW)	APS	01/01/2020	Reliability analysis Complete. No violation identified

# Second Read

## Problem Statement: N-1-1 thermal for Buchanan 1 and 2 Deactivation: AEP FERC 715 violation

Garden Creek – Whetstone 69 kV line is overloaded for the following scenarios.

- Single contingency loss of Richland – Claypool Hill and Claypool Hill - Broadford 138 kV line followed by single contingency loss of the Hales Branch – Garden Creek and Hales Branch – Shack Mills 38 kV line.
- Single contingency loss of Richland – Claypool Hill and Claypool Hill - Broadford 138 kV line followed by single contingency loss of the Hales Branch – Shack Mills 138 kV line and the Hales Branch – Whitewood 138 k line

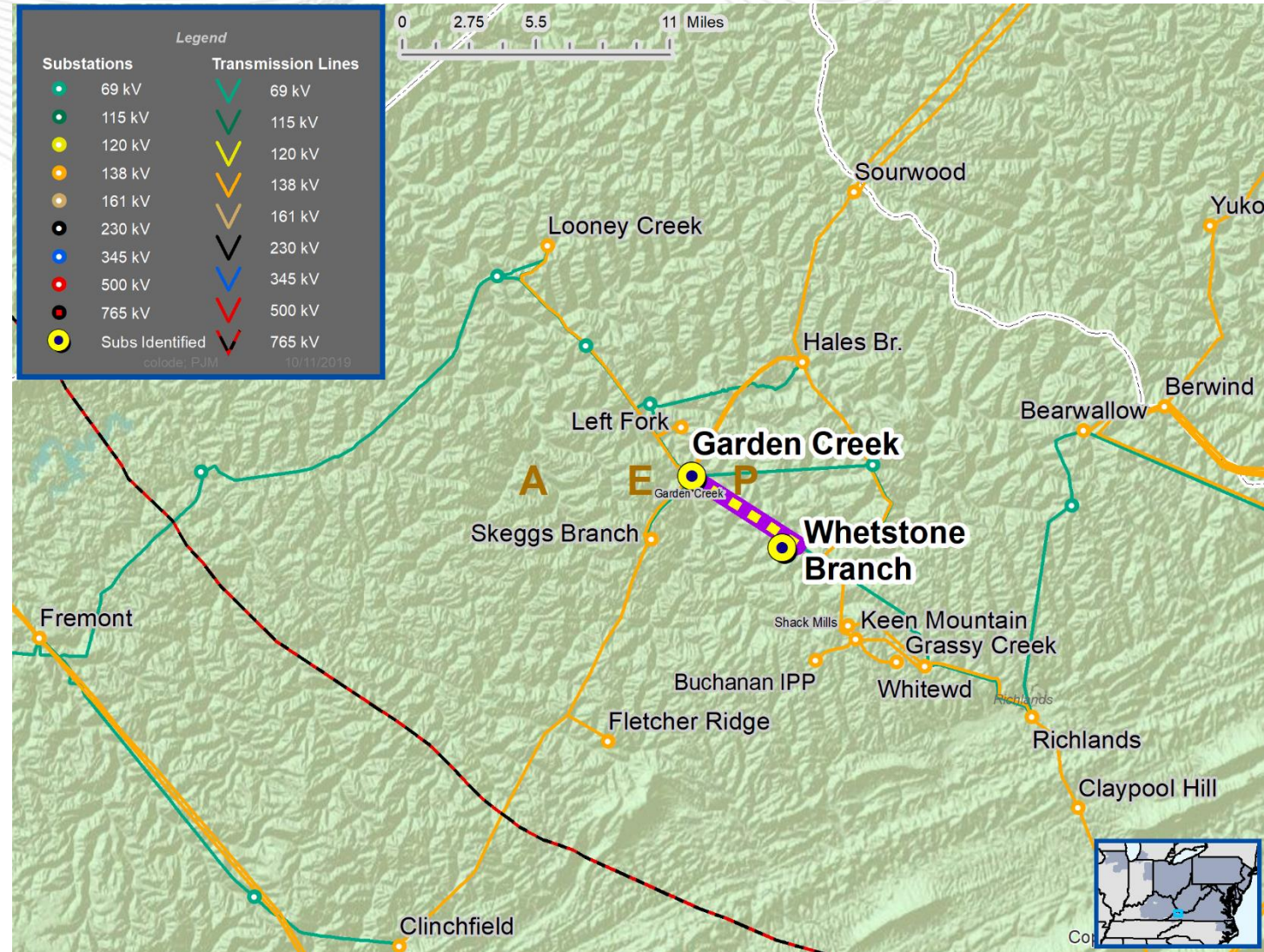
### Recommended Solution:

- Rebuild the Garden Creek - Whetstone 69 kV line (4.65 mile) (b3139).
- Existing Scope Rating: 44 MVA SN / 44 MVA SE
- New Scope Rating: 102 MVA SN / 142 MVA SE

**Required IS Date:** 06/01/2023

**Projected IS Date:** 06/01/2023

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



**Problem Statement: N-1-1 thermal for Buchanan 1 and 2  
Deactivation: AEP FERC 715 violation**

Whetstone - Knox Creek - Coal Creek 69kV line is overloaded for the following scenarios:

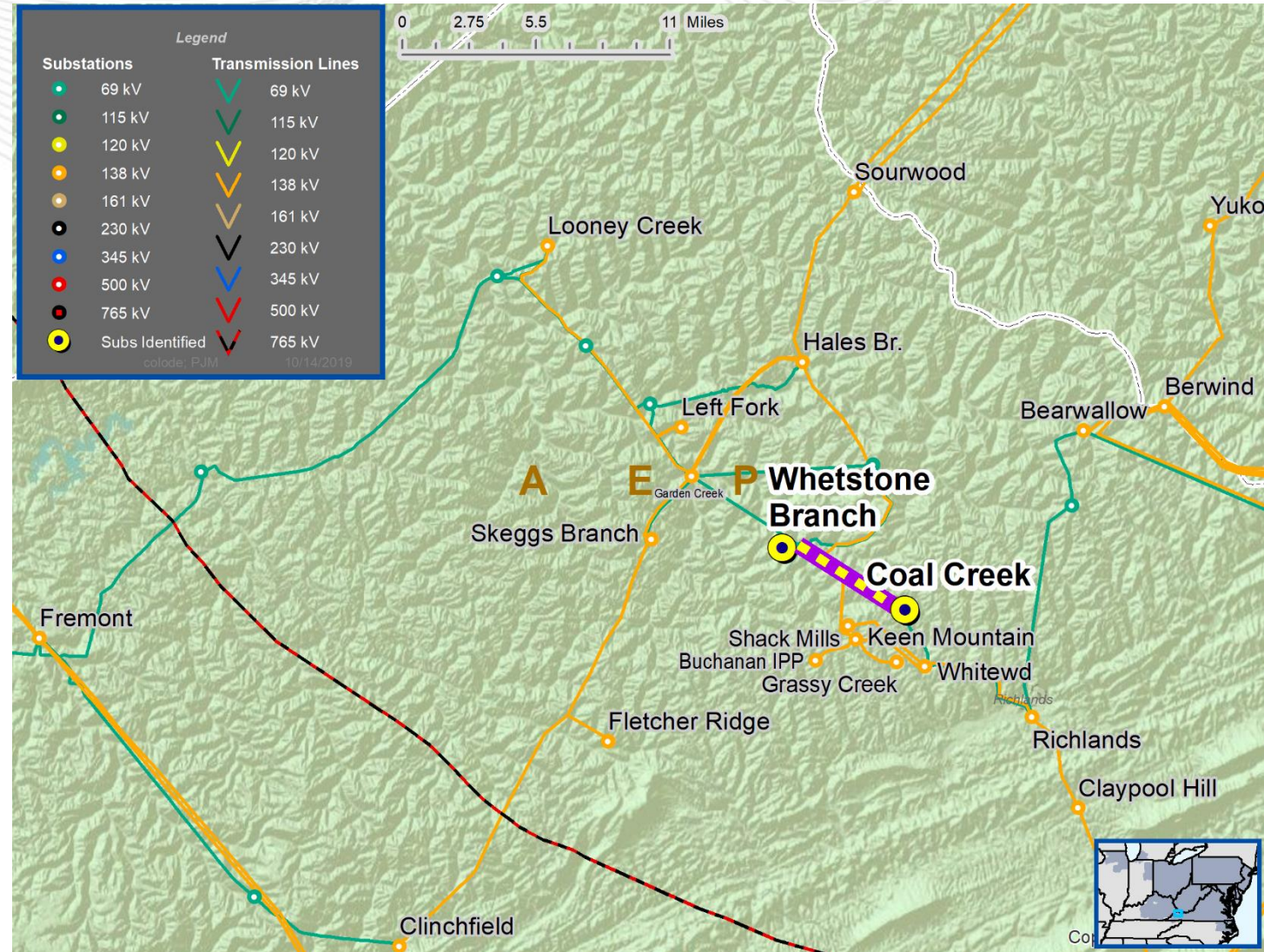
- Single contingency loss of Richlands - Broadford 138 kV line followed by single contingency loss of the Whitewood – Hales Branch 138 kV line.
- Single contingency loss of Clinch River – Hales Branch 138 kV line followed by single contingency loss of the Richlands – Whitewood 138 k line.

**Recommended Solution:**

- Rebuild the Whetstone - Knox Creek 69 kV line (3.1 mile) (b3140).
- Rebuild the Knox Creek –Coal Creek 69 kV line (2.9 mile) (b3141).
- Existing Scope Rating: 44 MVA SN / 44 MVA SE
- New Scope Rating: 102 MVA SN / 142 MVA SE

**Required IS Date:** 06/01/2023  
**Projected IS Date:** 06/01/2023

**Estimated Project Cost:** \$9M – b3140  
\$9M – b3141



- V1 - 11/08/2019 - Original slides posted