

# Transmission Expansion Advisory Committee AEP Supplemental Projects

October 17, 2019

# Solutions

Stakeholders must submit any comments within 10 days of this meeting in order to provide time necessary to consider these comments prior to the next phase of the M-3 process

## AEP Transmission Zone M-3 Process Sullivan Breaker Failure

**Need Number:** AEP-2019-IM036

**Process Stage:** Solutions Meeting 10/17/2019

**Process Chronology:** Needs Meeting 09/12/2019

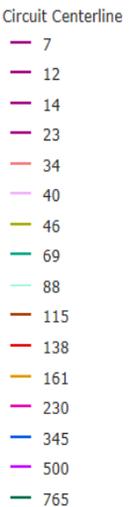
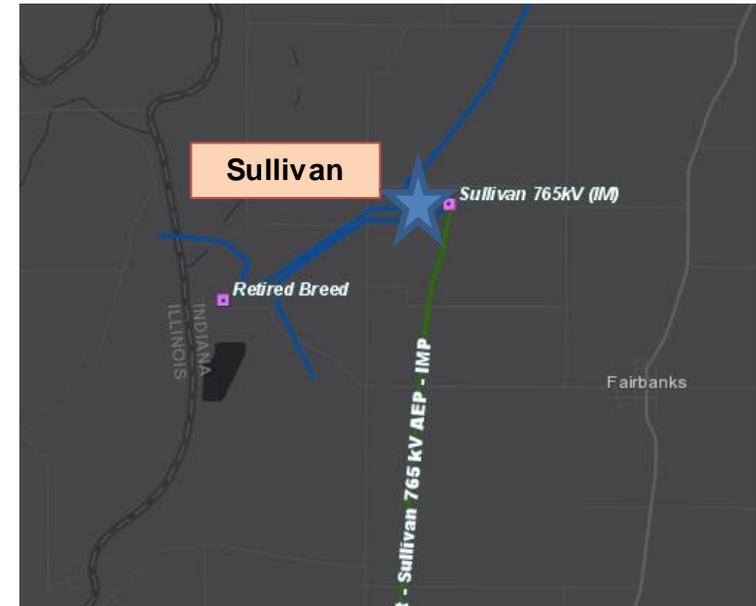
**Supplemental Project Driver:** Equipment Condition/Performance/Risk

**Specific Assumptions Reference:** AEP Guidelines for Transmission Owner Identified Needs (AEP Assumptions Slide 8)

### Problem Statement:

Sullivan 765/345kV Station

- 765kV CB "A"
  - Legacy ELF type circuit breaker that has a record of failure within AEP.
  - Limited availability of parts should a failure event happen.
  - Breaker CT's are developing combustible gasses to the point where AEP has deemed this breaker a hazard and have disconnected it from the system until it's been replaced.



# AEP Transmission Zone: Supplemental Sullivan 765kV Breaker Failure

**Need Number:** AEP-2019-IM036  
**Process Stage:** Solutions Meeting 10/17/2019

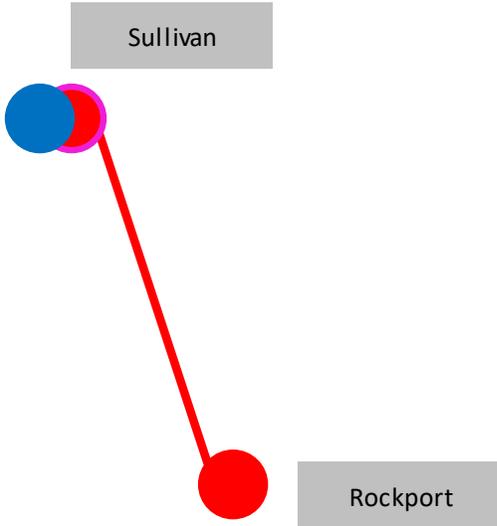
**Proposed Solution:**

**Sullivan 765kV station:**  
 Replace failed CB “A” with a capital spare  
**Estimated Cost: \$3.16M**

**Alternatives Considered:**

No alternates identified

**Projected In-Service:** 11/22/2019  
**Project Status:** Construction



Legend	
500 kV	
345 kV	
138 kV	
69 kV	
34.5 kV	
23 kV	
New	



# AEP Transmission Zone: Supplemental Dumont Station Solution

**Need Number:** AEP-2019-IM033

**Process Stage:** Solutions Meeting 10/17/2019

**Proposed Solution:**

- Replace Dumont 765/345kV, 1500 MVA Transformer T2 with new 2250 MVA and install associated protective equipment, including 2-345 kV breakers.

**Estimated Cost:** \$27.8M

**Alternatives:**

Due to the main driver of the project being major equipment failure, no viable alternatives were identified.

**Ancillary Benefits:**

A failed 765kV 3-phase switch will also be replaced to take advantage of outage and work planning coordination.

**Projected In-Service:** 11/01/2020

**Project Status:** Scoping

Dumont



Legend	
765kV	
345kV	
New	

# Appendix

# High Level M-3 Meeting Schedule

Assumptions	Activity	Timing
	Posting of TO Assumptions Meeting information	20 days before Assumptions Meeting
	Stakeholder comments	10 days after Assumptions Meeting
Needs	Activity	Timing
	TOs and Stakeholders Post Needs Meeting slides	10 days before Needs Meeting
	Stakeholder comments	10 days after Needs Meeting
Solutions	Activity	Timing
	TOs and Stakeholders Post Solutions Meeting slides	10 days before Solutions Meeting
	Stakeholder comments	10 days after Solutions Meeting
Submission of Supplemental Projects & Local Plan	Activity	Timing
	Do No Harm (DNH) analysis for selected solution	Prior to posting selected solution
	Post selected solution(s)	Following completion of DNH analysis
	Stakeholder comments	10 days prior to Local Plan Submission for integration into RTEP
	Local Plan submitted to PJM for integration into RTEP	Following review and consideration of comments received after posting of selected solutions

# Revision History

10/07/2019 – V1 – Original version posted to pjm.com