

Western Sub Regional RTEP: AEP Supplemental Projects

June 16, 2023

Needs

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

Need Number: AEP-2023-AP016

Process Stage: Needs Meeting 6/16/2023

Supplemental Project Driver: Customer Service

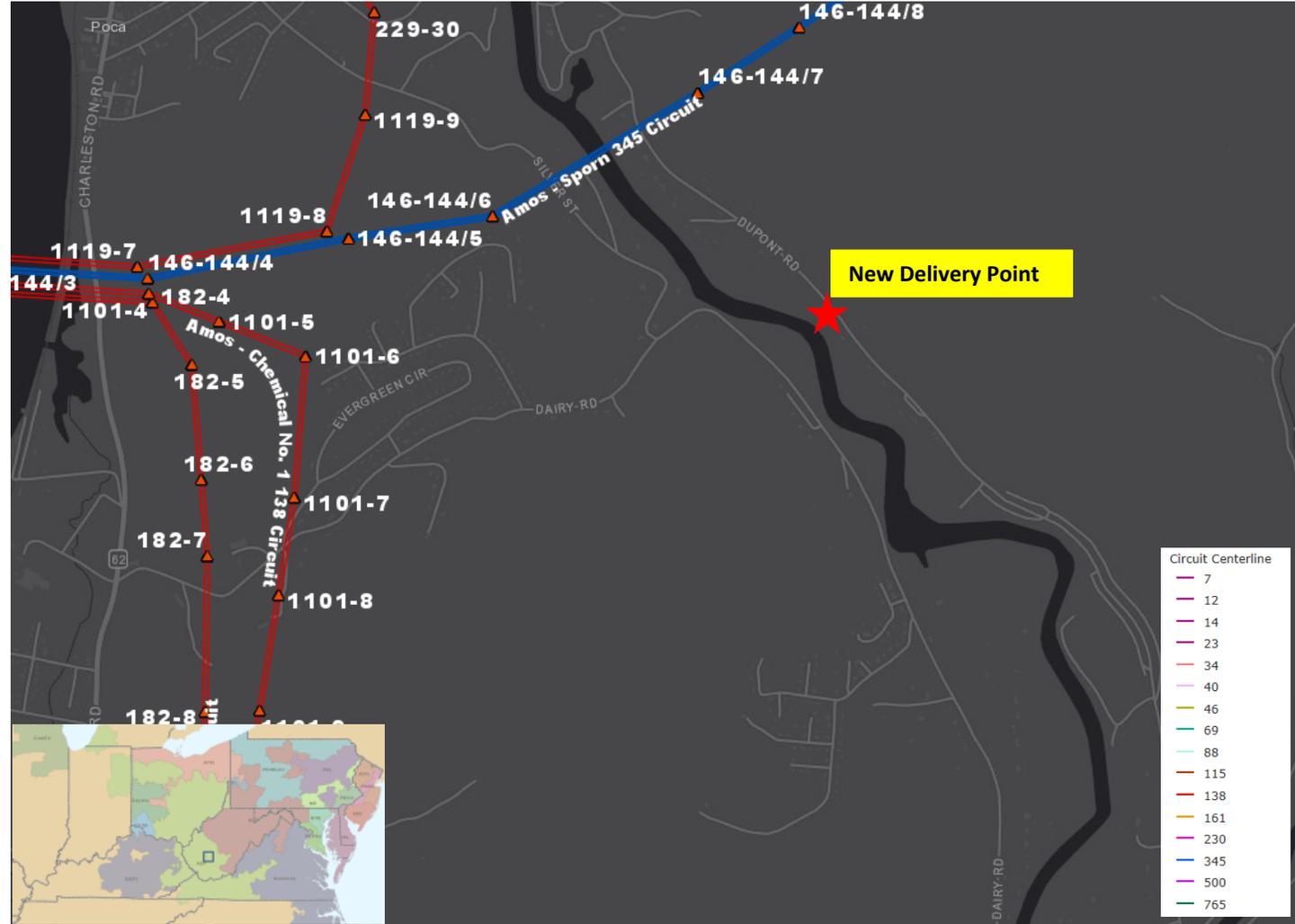
Specific Assumption References: AEP Connection Requirements for the AEP Transmission System (AEP Assumptions Slide 12)

Problem Statement:

APCO Distribution has requested a new transmission delivery point and the requested ISD is 11/1/2025.

Projected Summer Peak: 8 MVA

Projected Winter Peak: 11.2 MVA



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 Scio, Ohio

Need Number: AEP-2023-OH064
Process Stage: Solution Meeting 06/16/2023
Previously Presented: Need Meeting 04/21/2023
Project Driver: Customer Service; Equipment Material/Condition/Performance/Risk
Specific Assumption Reference: AEP Connection Requirements for the AEP Transmission System (AEP Assumptions Slide 12); AEP Guidelines for Transmission Owner Identified Needs (AEP Assumptions Slide 13)

Problem Statement:
 AEP Ohio's Scio distribution station does not have any SCADA functionality, limiting the ability of T & D operations personnel to properly monitor real-time conditions at the station. It can also lead to lengthier outage times for customers.
 In addition, it has an outdated ungrounded 69 kV capacitor bank (9.6 MVAR) that has been prone to malfunction. The capacitor was manufactured in 1989. This cap bank is a manually switched bank with no SCADA control of the switcher.



Need Number: AEP-2023-OH064

Process Stage: Solution Meeting 06/16/2023

Proposed Solution:

Remove the 69kV cap bank and cap switcher at Scio. A new RTU will be added along with standard SCADA functionality for transmission & distribution equipment.

Total Transmission Cost: \$0.1M

Alternatives Considered: The obsolete 69kV cap bank and cap-switcher could be upgraded with new equipment. However, the area has plentiful cap banks on the transmission system for voltage support, so this unit is no longer needed.

Alternative Cost = \$1.2 Million

Projected In-Service: 12/01/2024

Project Status: Scoping

Model: 2027 PJM RTEP Load-Flow Model

69kV capacitor bank removal only. Bubble diagram not applicable.

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

6/6/2022– V1 – Original version posted to pjm.com