

# Western SRRTEP WVPA Supplemental Project

March 15, 2022

# 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

**Need Number:** WVPA-2022-001

**Process Stage:** Solution Meeting 03/15/2024

**Previously Presented:** 9/16/2022

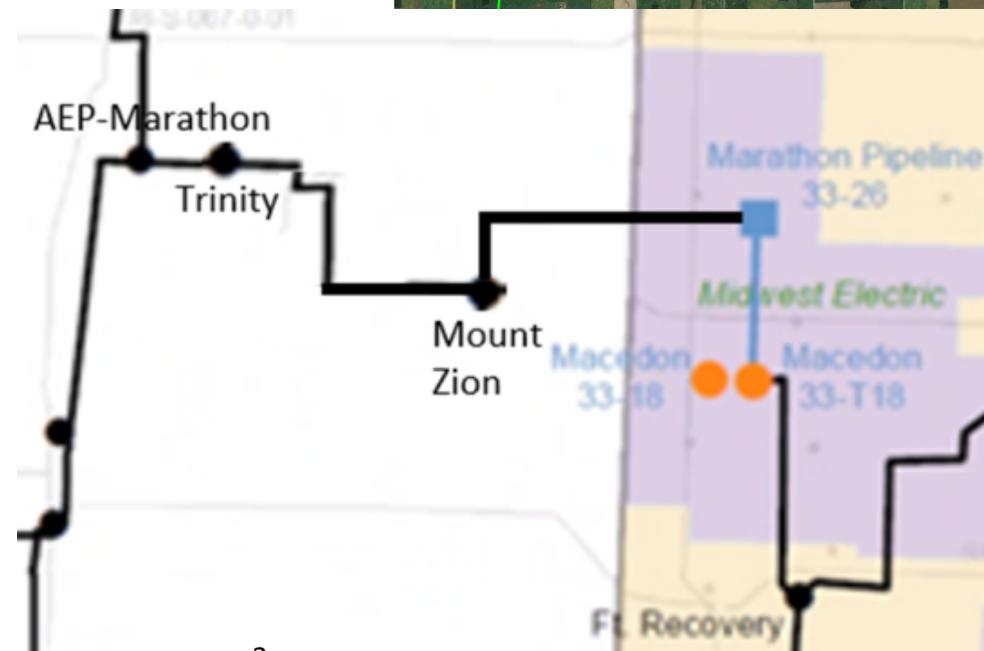
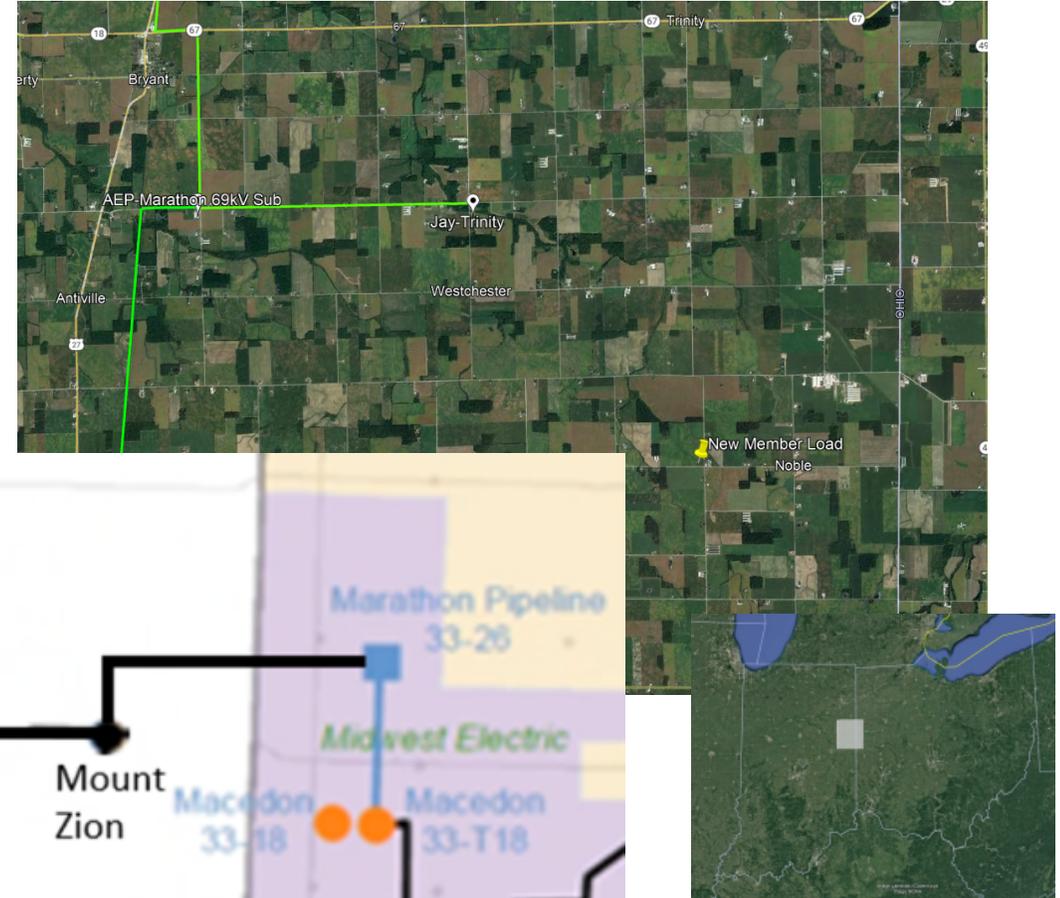
**Supplemental Project Driver:** Member Need

**Specific Assumption Reference:** WVPA Member Load Growth Identified Needs (WVPA Assumptions Slide 6)

**Problem Statement:**

WVPA's member has requested a new delivery point east of Portland, Indiana to serve 14MW of load, Of this 5.2MW of load transferred from the Salamoniametering point and 8.8MW of new load. The requested in-service date is 10/31/2024.

DPL has requested a potential new delivery point connecting into the east side of Indiana on the WVPA system which would create a tie between AEP-WVPA-DPL.



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**Proposed Solution:**

**1. Trinity-Mt Zion**

Construct a new 69/12kV Mt Zion substation with a 3 position 69kV ring to serve new member load. Approximately 6.5 miles of new 69kV will be constructed from Trinity to Mt Zion using 954 ACSS/TW.

Conductor rating: 196MVA/212MVA SN/SE

**Line Estimate: \$14M, ISD 6/1/2025**

**Substation Estimate: \$8M, ISD 9/1/2025**

**2. Mt Zion – Macedon (AES)**

Construct approximately 2.5 miles of 69kV from Mt Zion to the IN-OH border where AES will assume ownership and construct the remaining 69kV to the AES-Marathon substation.

Conductor rating: 196MVA/212MVA SN/SE

**Total Estimate: \$5M, ISD 12/31/2026**

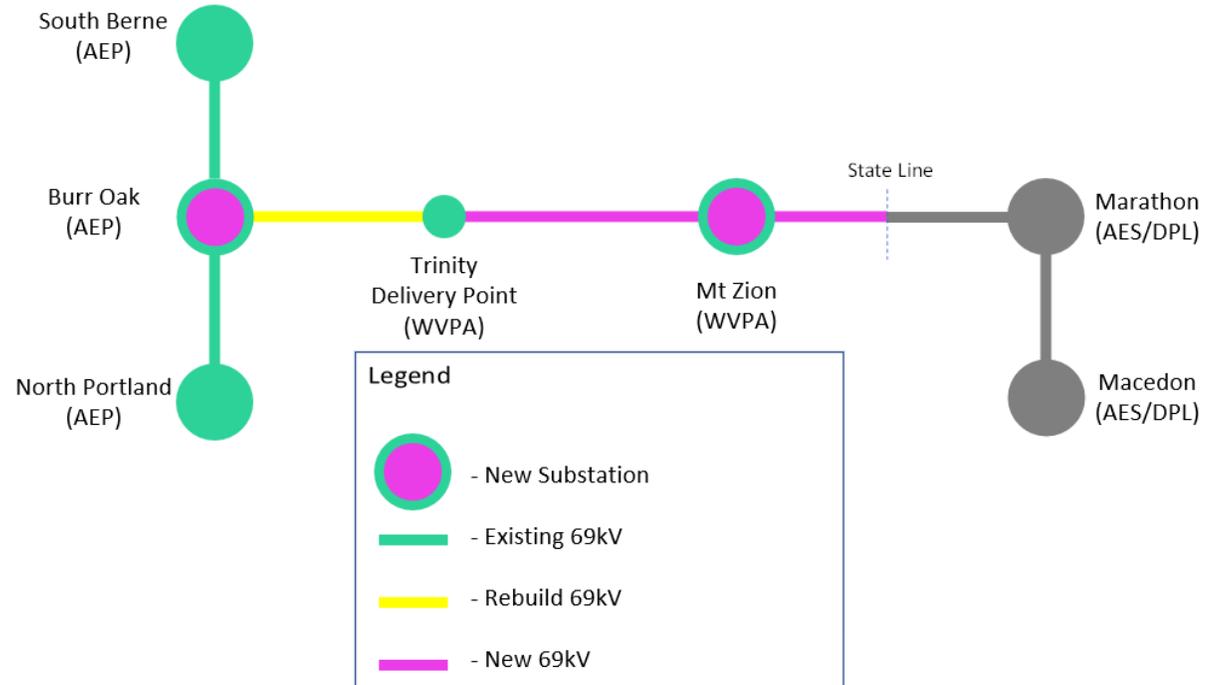
**3. AEP-Burr Oak to Trinity 69kV Rebuild**

Rebuild 3.2 miles of 69kV from AEP-Marathon to Trinity with 954ACSS/TW, AEP to build Burr Oak 3 terminal 69kV ring. This tie will provide improved reliability for WVPA’s Trinity and Mt Zion stations as well as to AES-Marathon that is currently served on a long radial.

Conductor rating: 196MVA/212MVA SN/SE

**WVPA Line Estimate: \$6.5M, ISD 12/31/2027**

**Alternatives Considered:** None



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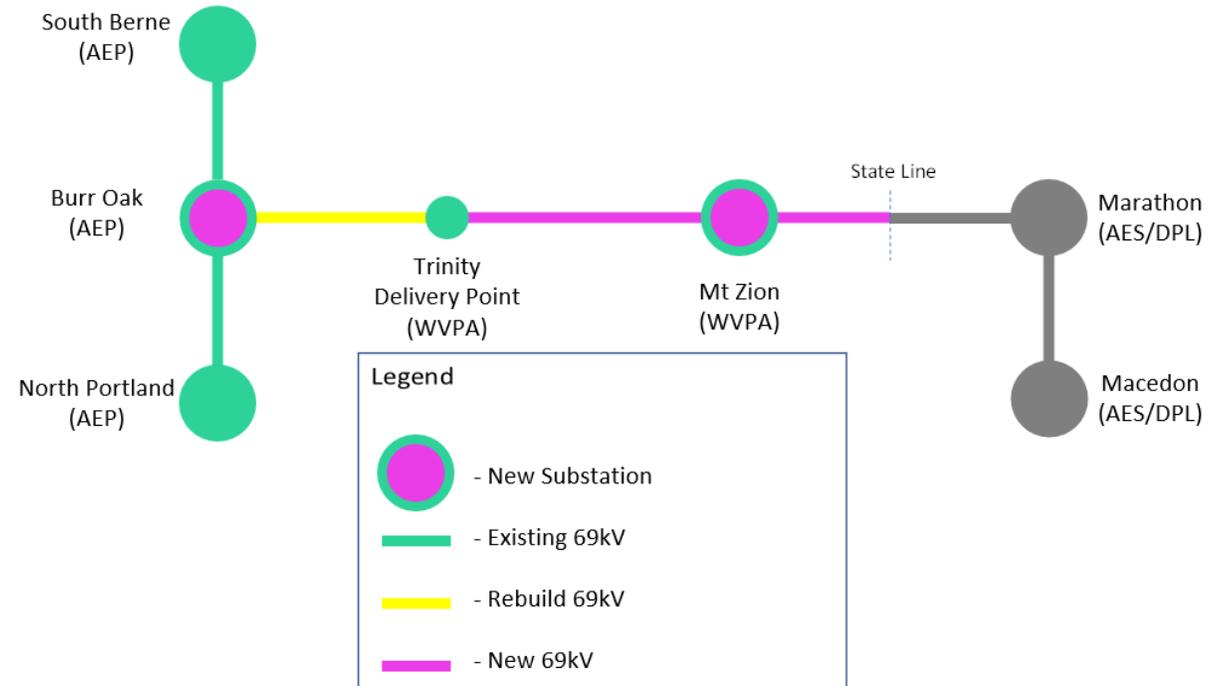
**Previously presented:** Needs Meeting 9/16/2022

#### 4. Burr Oak (AEP)

To help facilitate a new network connection from AEP to WVPA to Dayton, build a new 4-69 kV circuit breaker ring bus. The following cost includes the new station construction, property purchase, metering, remote end relay upgrades, the Portland – Marathon 69 kV line connection, Marathon – Berne 69 kV line connection and Trinity radial line AEP removal.

**Total Estimated AEP Transmission Cost: \$ 8.7M, ISD 12/31/2027**

**Alternatives Considered:** Keep the existing AEP switch in place on the 69 kV line. Considering the location of the request from WVPA and the proposed tie to DPL that would create a three terminal line to AEP’s existing Marathon switch, the ring bus was required to be constructed to replace the switch.



# Questions?



# 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

3/\*\*/2024– V1 – Original version posted to pjm.com