

Western Sub Regional RTEP: AEP Supplemental Projects

February 13, 2026

Changes to the Existing Supplemental Projects

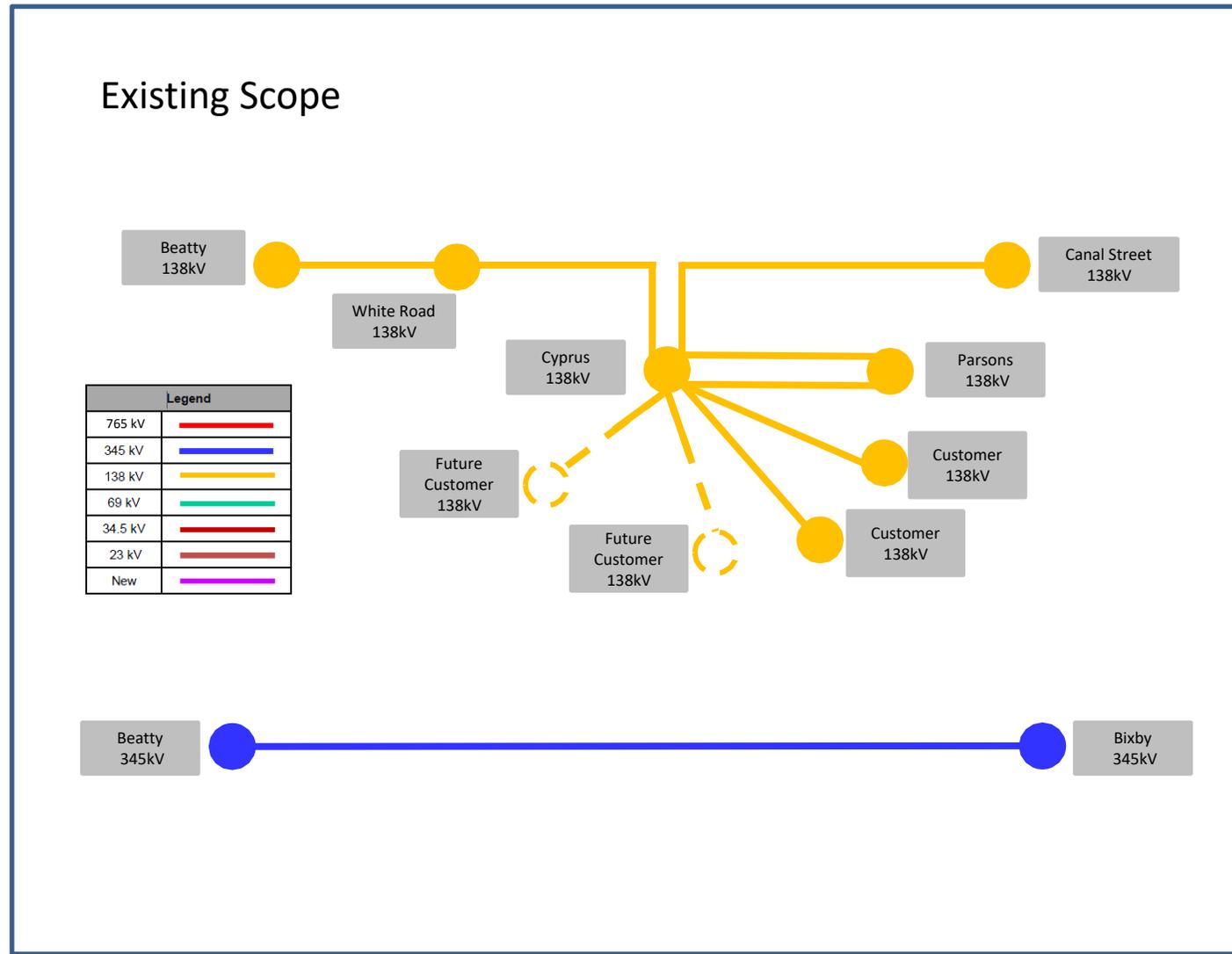
s3440.3: Posted in 2024 Local Plan. Need Number: AEP-2022-OH071. Need Meeting 10/14/2022. Solution Meetings 5/9/2023, 12/5/2023.

Reason For Change: The sag study conducted on the Beatty-Canal 138kV line identified the majority of the structures needing to be replaced in order to meet needed clearances to be able to operate at MOT. With those findings along with loadings forecasted to increase over the years, the scope has been updated to a rebuild of the Beatty-Canal 138kV line.

Selected Solution:

The following work is all direct connect facilities to physically connect demand to the grid.

- Cyprus 345/138 kV:** Cyprus is the station that was originally developed (s2526) to serve 675 MW of demand with room for 345 kV expansion based on LOA with the customer. Cut into the Beatty – Bixby 345 kV circuit and construct ~1.6 miles of double circuit line, utilizing 2-bundled ACSR Bittern 1272 conductor, SE rating 2278 MVA, to a new 345 kV ring bus at Cyprus station with (4) 5000 A, 63kA circuit breakers, (2) 345/138/34.5 kV, 675 MVA transformers, (12) 4000 A, 63kA, 138 kV circuit breakers, (1) 69.1 MVAR 138 kV Cap bank. Construct (2) 138 kV single circuit, ~0.4 miles, & (2) double circuit, ~0.9 miles, tie lines to the customers dead end structures utilizing ACSR Drake 795 (26/7) conductor SE 360 MVA. Modify the existing Cyprus 138kV Extension & Parsons 138kV circuits #1 & 2 structures to accommodate a fence relocation. Remote end relay upgrades are required at Beatty & Bixby 345 kV stations. Cost: **\$46.9 M (s3440.1)**
- Parsons 138 kV:** Install (1) 69.1 MVAR cap bank to resolve N-1-1 voltage issues. Cost: **\$2.0 M (s3440.2)**



s3440.3: Posted in 2024 Local Plan. Need Number: AEP-2022-OH071. Need Meeting 10/14/2022. Solution Meetings 5/9/2023, 12/5/2023.

Selected Solution (continue):

The following components are system reinforcements required to serve the load and meet applicable TPL-001, PJM, and AEP planning criteria:

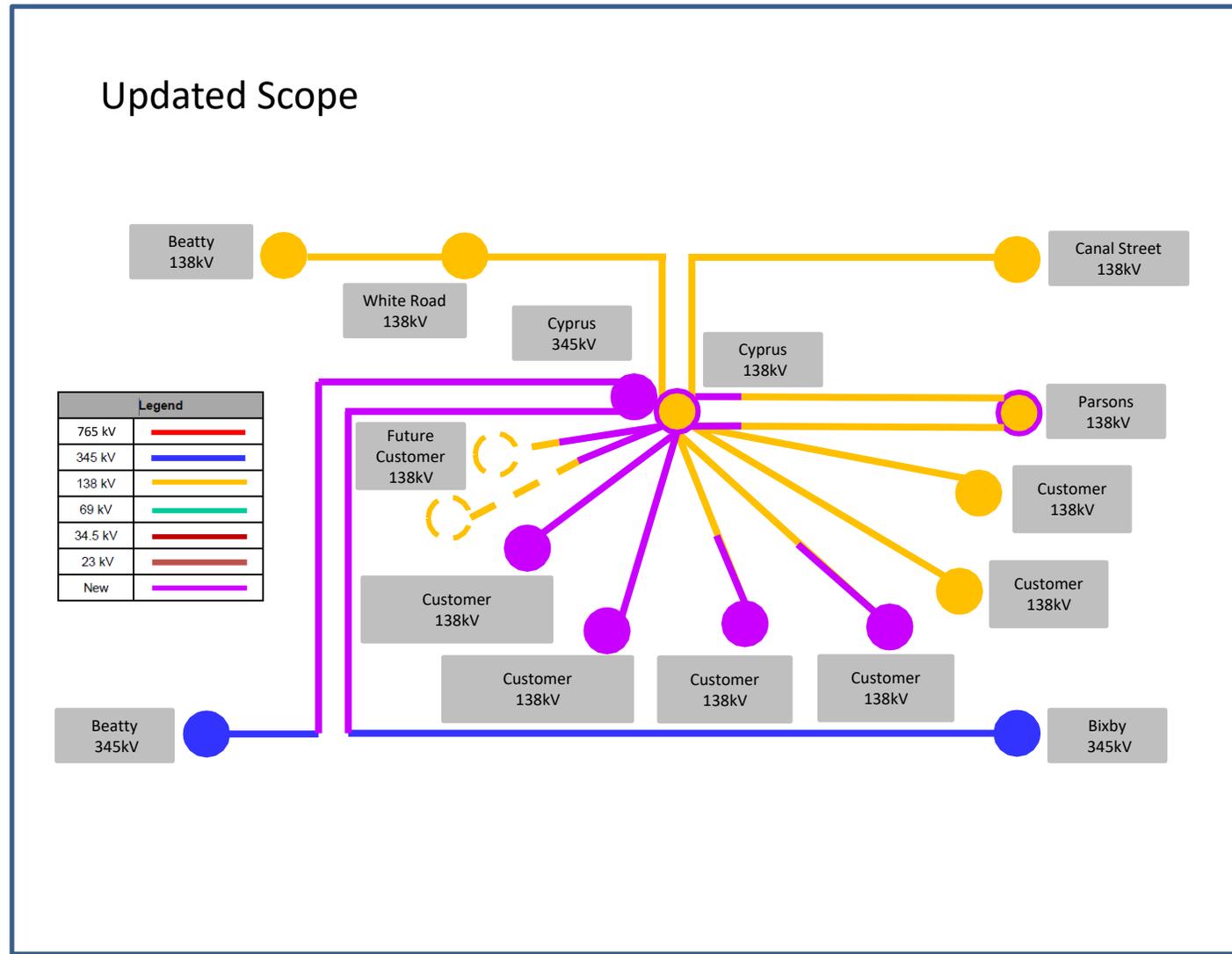
- Beatty – Canal 138 kV line Sag Re-rate-Rebuild:** The Beatty – Canal 138 kV line flagged as overloading under N-1-1 scenarios after the addition of the new load in Cyprus. The line will be flown to address sag issues that are limiting its current rating. It is anticipated that several structures will need to be replaced in order to raise the rating of the line. The sag study identified most of the structures along the line needing replaced. Thus, the line will be rebuilt using 795 ACSS Drake and 1033.5 ACSS Curlew to address the findings of the sag study as well as loading conditions that have continued to increase annually. Cost: ~~\$5.5 M~~ **25.4M(s3440.3)**
- Waverly Reactor 138 kV:** Install a 4% series reactor towards Rozelle at Waverly station to address a N-1-0 scenario related to the loss of a nearby 345 kV line. Cost: **\$3.0 M (s3440.4)**
- Saint Clair Avenue Reactor 138 kV:** Adjust tap settings on reactors towards Mound and Clinton stations to 3%. Cost: **\$0.0 M (s3440.5)**
- Marion Station:** Replace switch and line riser at Marion station towards Obetz to address loading concern under certain N-1-1 scenario related to customer interconnections in the area. **\$0.1M (s3440.6)**

Total Estimated Transmission Cost: ~~\$57.5M~~ \$77.4M

Projected In-Service: 06/05/2027

Supplemental Project ID: s3440.1-.6

Project Status: Scoping



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: AEP-2023-IM003

Process Stage: Solution Meeting SRRTEP-W - 02/13/2026

Previously Presented: Need Meeting 01/20/2023

Supplemental Project Driver: Customer Need

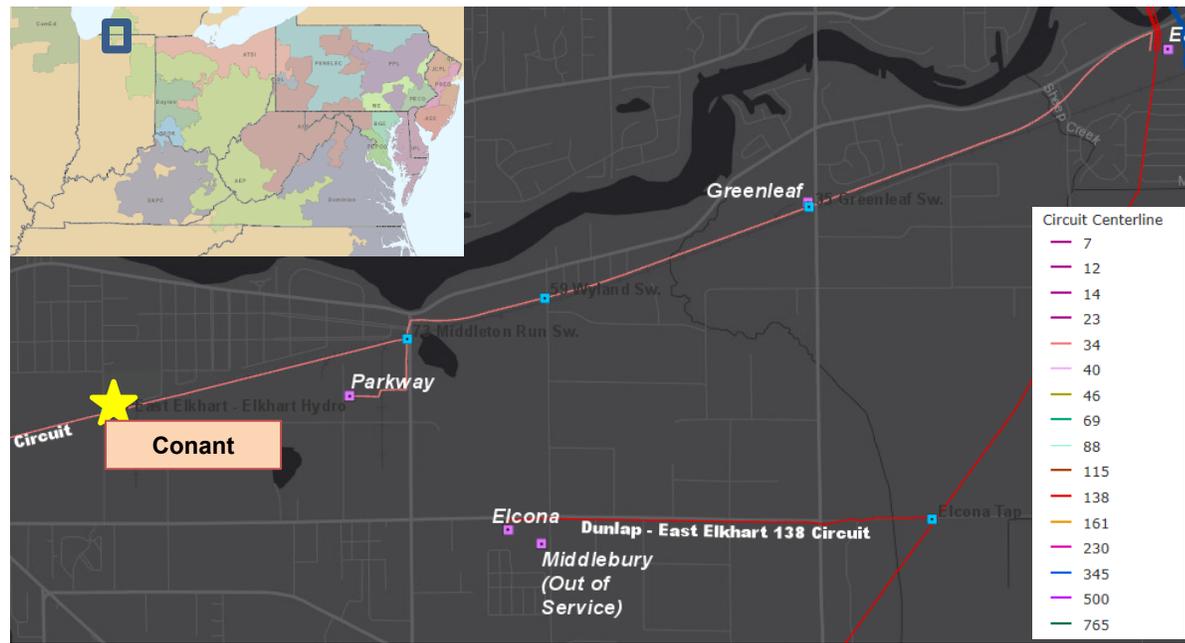
Specific Assumption Reference: AEP Guidelines for Transmission
Owner Identified Needs (AEP Assumptions Slide 13)

Problem Statement:

Conant 34.5kV Station:

Conant station is expected to achieve a loading of 29.8MVA by summer of 2024 due to recently announced block load additions, which is 114% of the transformer’s capacity.

Because of this, I&M Distribution has requested upgrades to the Conant delivery point.



Need Number: AEP-2023-IM005

Process Stage: Solution Meeting SRRTEP-W - 02/13/2026

Previously Presented: Need Meeting 02/17/2023

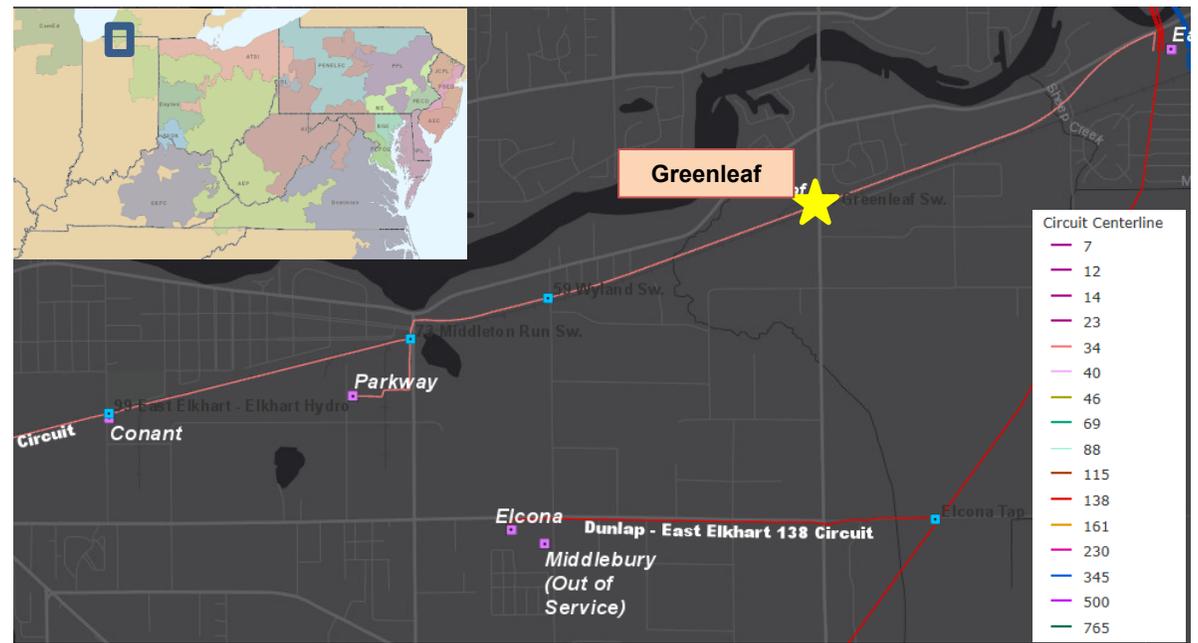
Supplemental Project Driver: Customer Need

Specific Assumption Reference: AEP Guidelines for Transmission Owner Identified Needs (AEP Assumptions Slide 13)

Problem Statement:

Greenleaf 34.5kV Station:

Greenleaf station is expected to achieve a loading of 22.95 MVA by summer of 2024 due to recently announced block load additions, which is 100.4% of the transformer's capacity. Because of this, I&M Distribution has requested upgrades to the Greenleaf delivery point.



AEP Transmission Zone M-3 Process

Greenleaf, IN/Conant, IN/Elkhart Hydro, IN/Osolo, IN /Dunlap, IN/East Elkhart, IN/Wyland SS, IN /Middleton Run SS, IN/Middlebury, IN/Parkway, IN

Need number(s): AEP-2023-IM003, AEP-2023-IM005

Process Stage: Solution Meeting SRRTEP-W - 02/13/2026

Proposed Solution:

Greenleaf 69kV Station: Rebuild the station as an in/out station and operate at 69kV. Install 2 69/12kV distribution transformers and associated distribution equipment. Install a 69kV bus tie breaker. Install a 28.7 MVAR capacitor bank.. Estimated Cost: \$5.578 M

Conant 69kV Station: Rebuild the station as an in/out station and operate at 69kV. Install 2 69/12kV distribution transformers and associated distribution equipment. Install a 69kV bus tie breaker.. Estimated Cost: \$4.642 M

Elkhart Hydro 69kV Station: Convert 34.5kV equipment to 69kV operation.. Estimated Cost: \$0.785 M

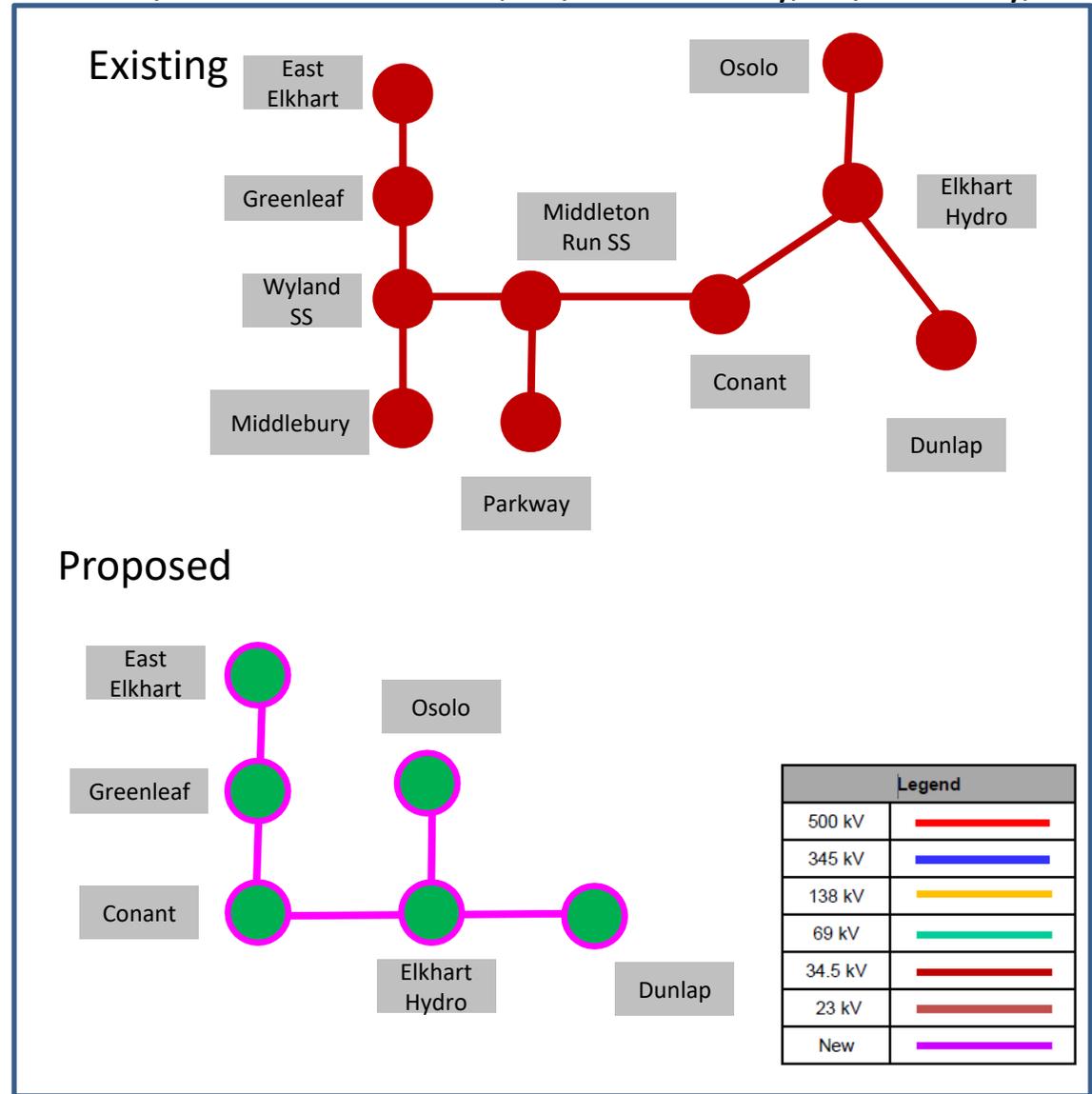
Osolo 69kV Station: Install 69kV bus and convert CB B to 69kV operation. Relocate CB C to Dunlap station.. Estimated Cost: \$1.03 M

Dunlap 69kV Station: Convert 34.5kV equipment to 69kV operation. Install the relocated CB C from Osolo to the low side of Transformer #2. Estimated Cost: \$1.435 M

East Elkhart 69kV Station: Convert 34.5kV equipment to 69kV operation.. Estimated Cost: \$0.466 M

East Elkhart - Elkhart Hydro 69kV: Convert the East Elkhart - Elkhart Hydro line to 69kV operation.. Estimated Cost: \$2.048 M

Elkhart Hydro - Dunlap 69kV: Convert the Elkhart Hydro - Dunlap line to 69kV operation.. Estimated Cost: \$0.799 M



AEP Transmission Zone M-3 Process

Greenleaf, IN/Conant, IN/Elkhart Hydro, IN/Osolo, IN /Dunlap, IN/East Elkhart, IN/Wyland SS, IN /Middleton Run SS, IN/Middlebury, IN/Parkway, IN

Need number(s): AEP-2023-IM003, AEP-2023-IM005
Process Stage: Solution Meeting SRRTEP-W - 02/13/2026

Proposed Solution (continue):

- Elkhart Hydro - Osolo 69kV:** Convert the Elkhart Hydro - Osolo line to 69kV operation.. Estimated Cost: \$1.329 M
- Wyland Switch 34.5kV Removal:** Remove Wyland SS 34.5kV. Estimated Cost: \$0.414 M
- Middleton Run Switch 34.5kV Removal:** Remove Middleton Run SS 34.5kV. Estimated Cost: \$1.055 M
- Middlebury Tap 34.5kV Removal:** Removal Middlebury Tap 34.5kV. Estimated Cost: \$0.378 M
- Parkway Tap 34.5kV Removal:** Remove Parkway Tap 34.5kV. Estimated Cost: \$0.689 M

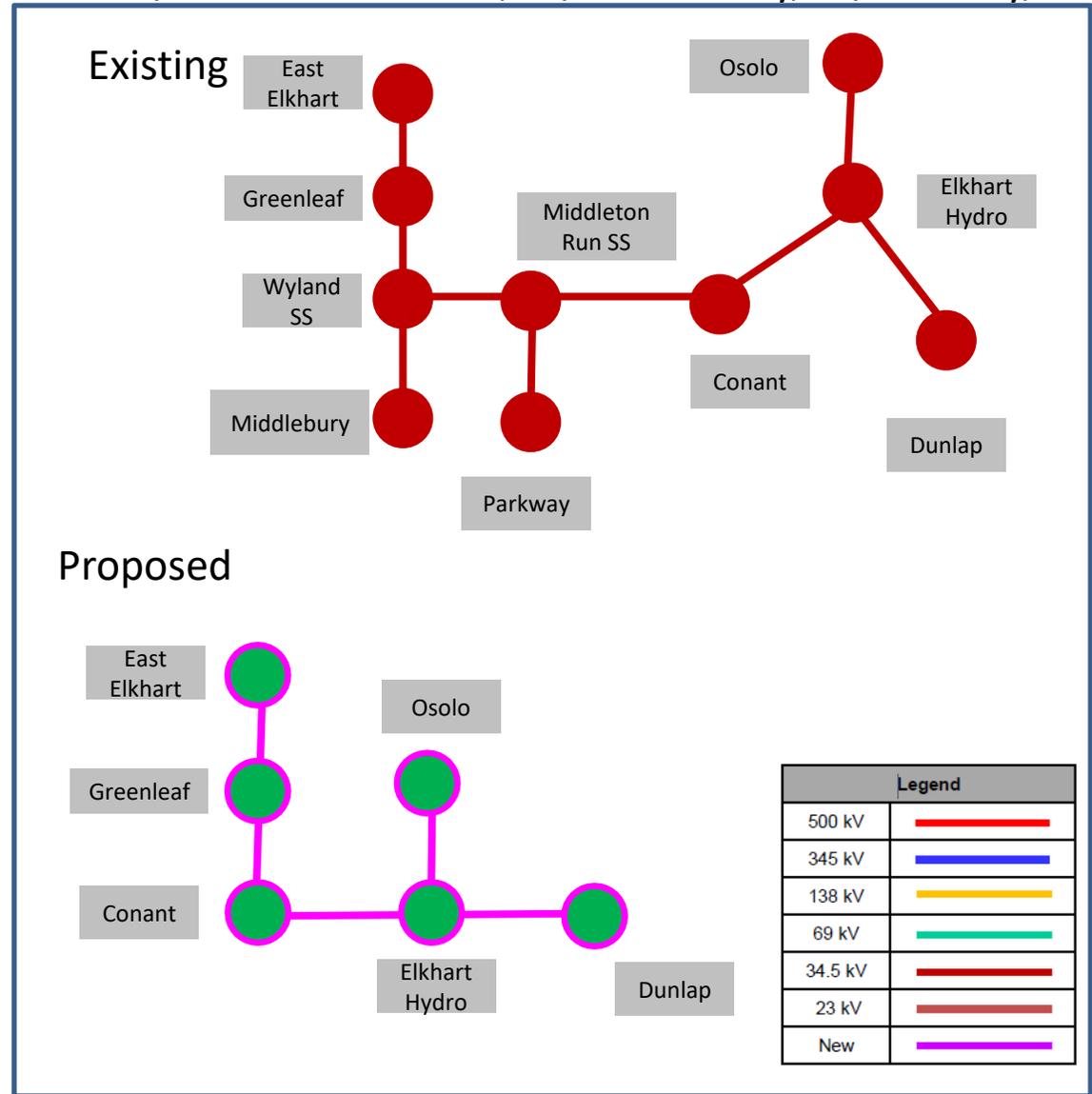
Transmission Cost Estimate: \$20.647 M

Alternatives Considered:

Build additional Distribution stations to help offload existing transformers. Considering the lines are already constructed to 69 kV capability, additional stations are not required. Estimated cost: \$25M

Projected In-Service: 09/01/2028

Project Status: Scoping



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

02/03/2026– V1 – Original version posted to pjm.com