Western Sub Regional RTEP:
AEP Supplemental Projects

July 19, 2024

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

AEP Transmission Zone M-3 Process
Heath, OH

Need Number: AEP-2024-OH037

Process Stage: Need Meeting SRRTEP-W - 07/19/2024

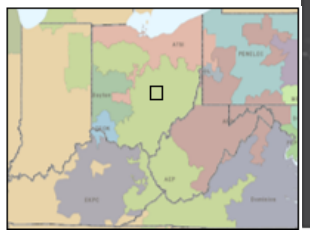
Project Driver: Customer Service

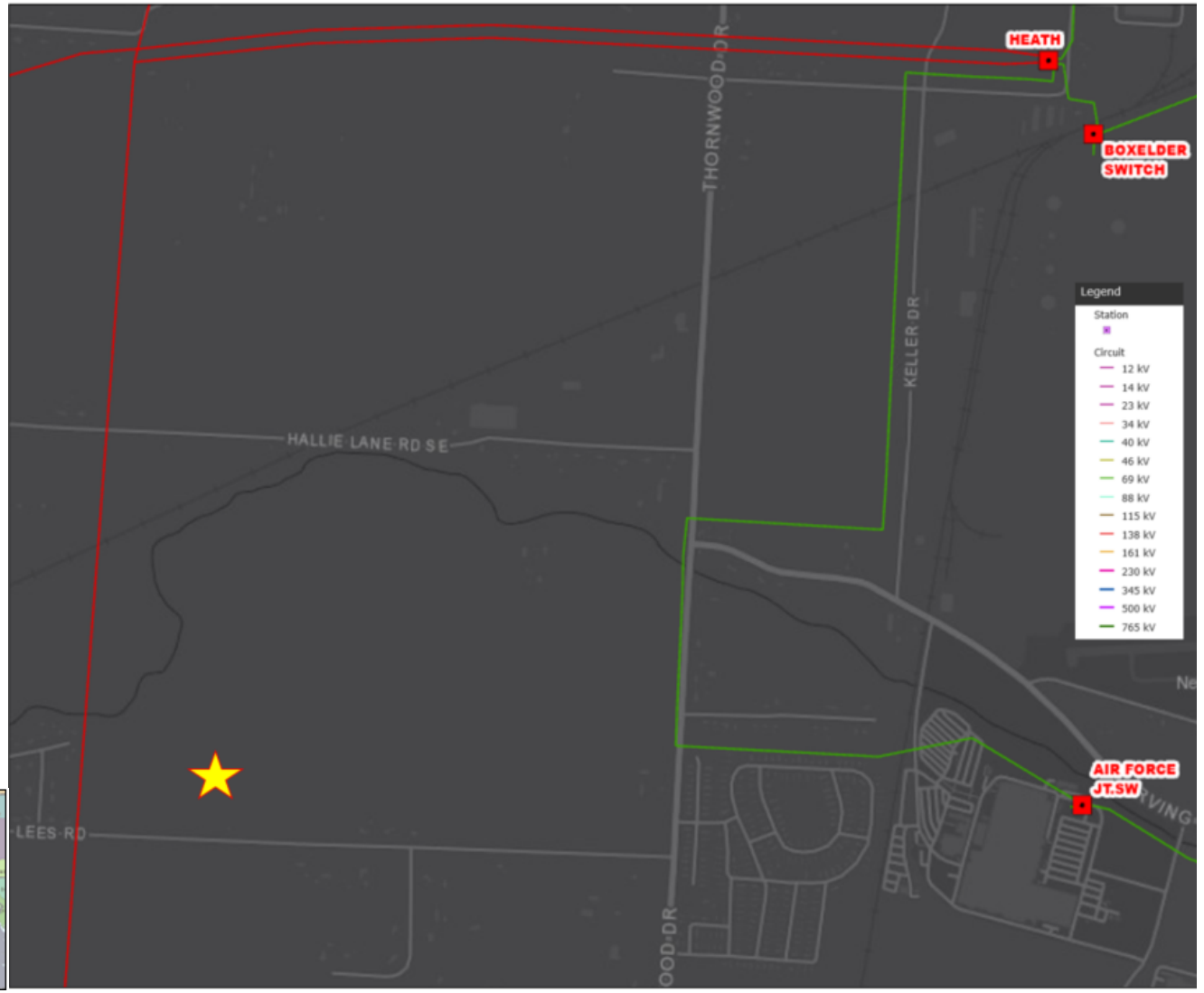
Specific Assumption References:

AEP Connection Requirements for the AEP Transmission System (AEP Assumptions Slide 12)

Problem Statement:

A customer has requested Transmission service at a site just Southwest of AEP's existing Heath station in Heath, OH. The customer has indicated an initial peak demand of 50 MW with an ultimate capacity of up to 300 MW at the site. Customer requested in-service date of 12/01/2025.





AEP Transmission Zone M-3 Process
West Hebron, OH

Need Number: AEP-2024-OH038

Process Stage: Need Meeting SRRTEP-W - 07/19/2024

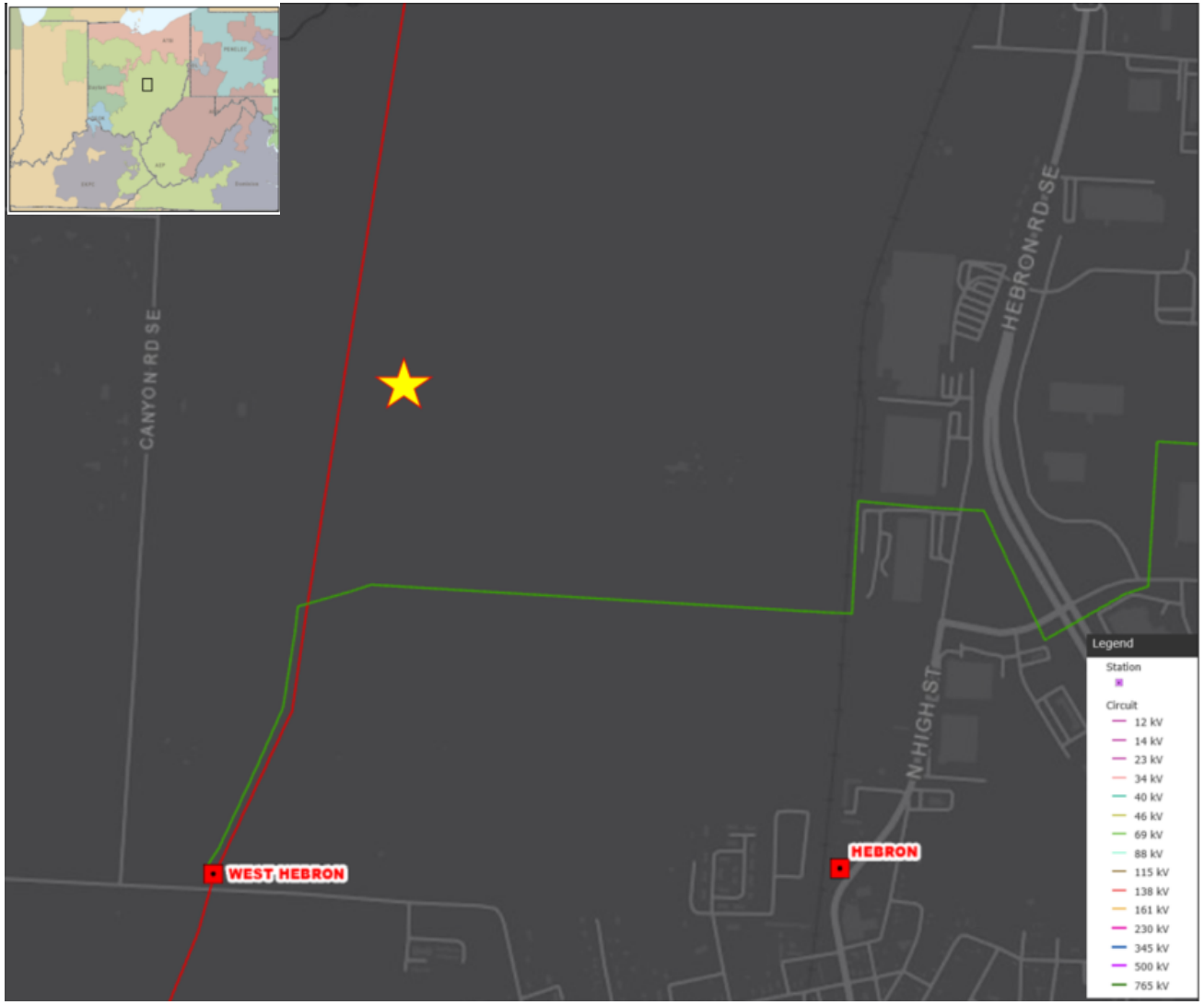
Project Driver: Customer Service

Specific Assumption References:

AEP Connection Requirements for the AEP Transmission System (AEP Assumptions Slide 12)

Problem Statement:

A customer has requested Transmission service at a site just North of AEP's existing West Hebron station in Hebron, OH. The customer has indicated an initial peak demand of 50 MW with an ultimate capacity of up to 300 MW at the site. Customer requested in-service date of 12/01/2025.



AEP Transmission Zone M-3 Process
Ormet, OH

Need Number: AEP-2024-OH040

Process Stage: Need Meeting SRRTEP-W - 07/19/2024

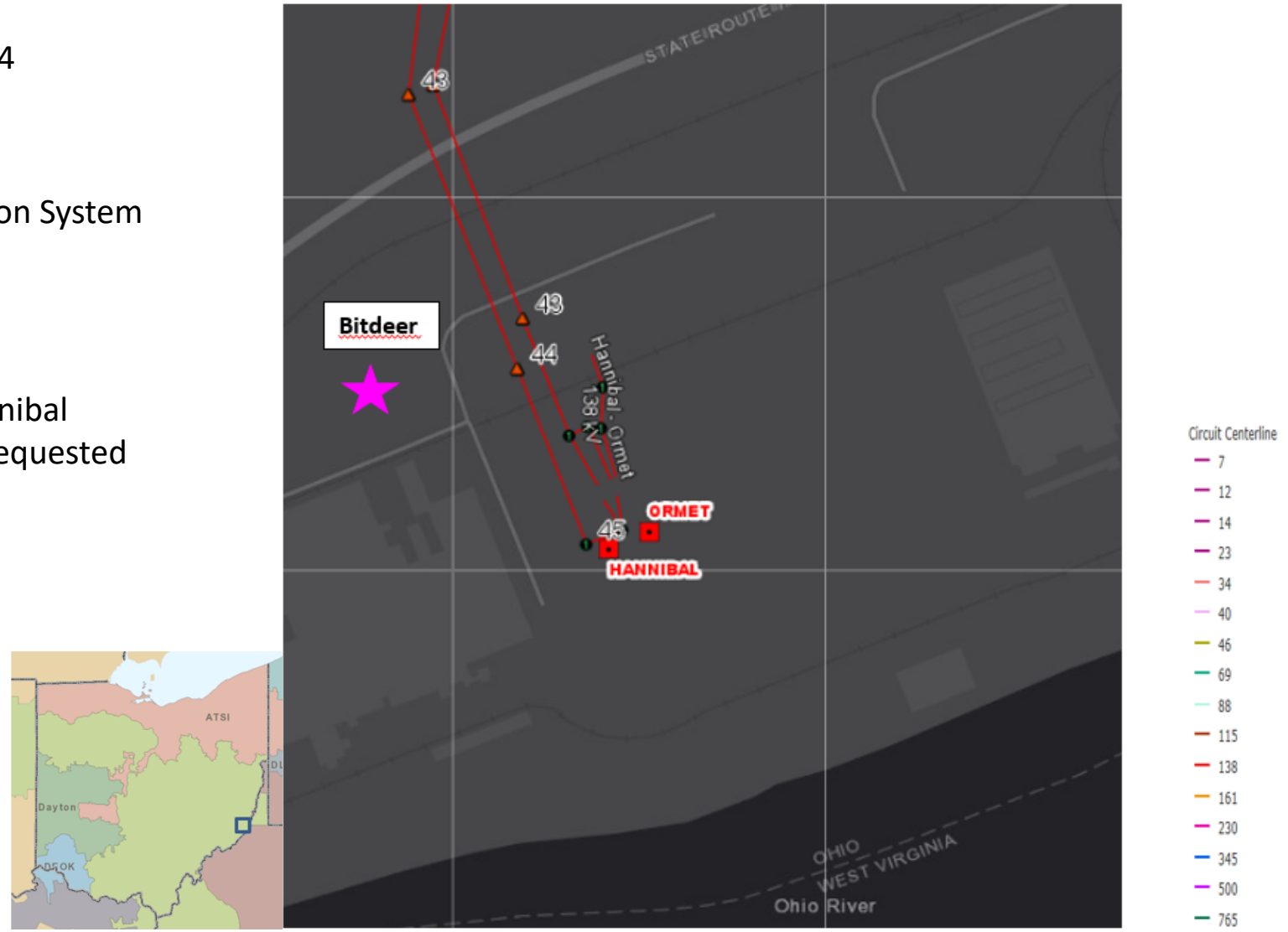
Project Driver: Customer Service

Specific Assumption References:

AEP Connection Requirements for the AEP Transmission System (AEP Assumptions Slide 12)

Problem Statement:

A customer has request new 138 kV service from Hannibal station. Their anticipated load is 266MW. They have requested service in 2026.



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

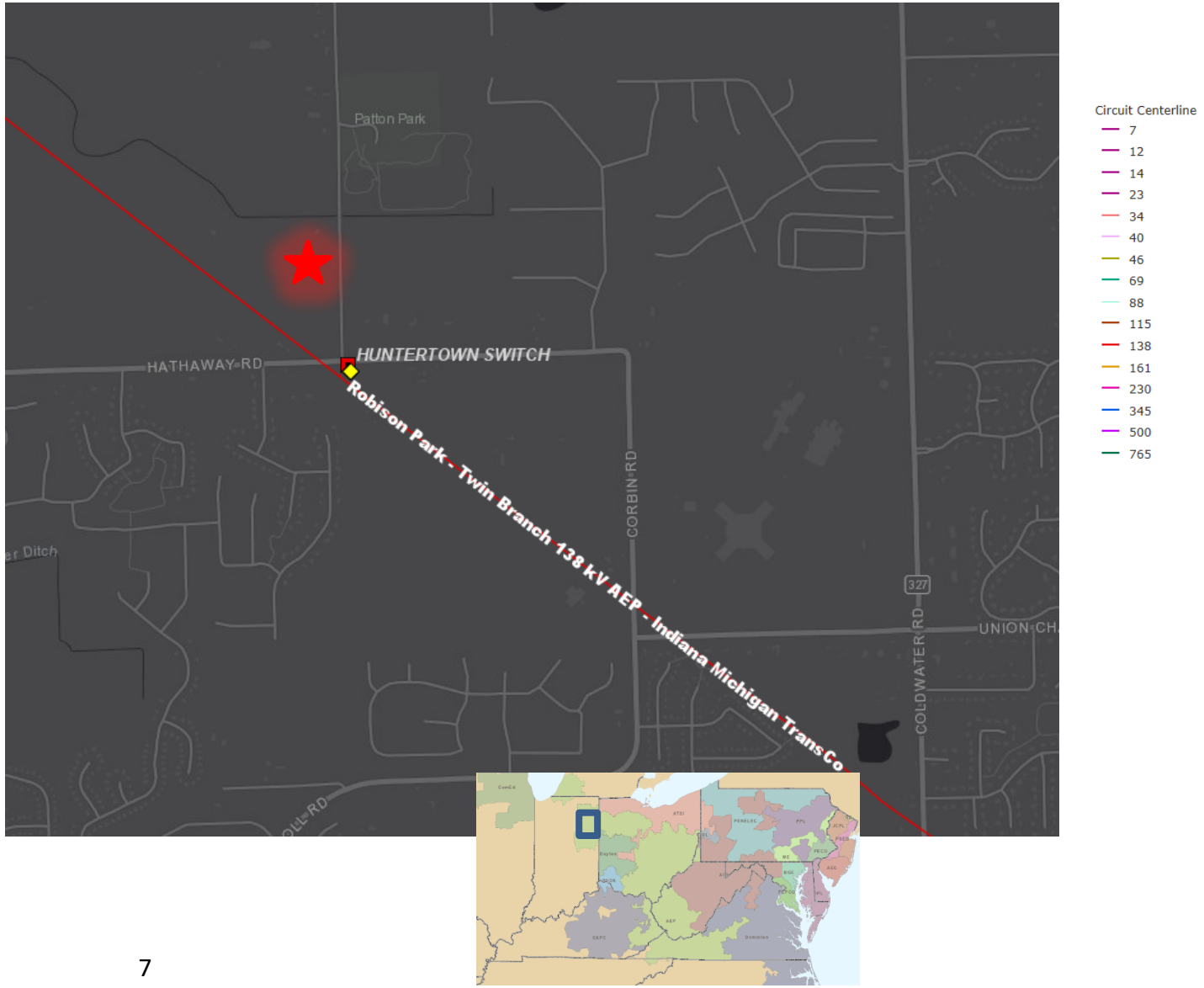
AEP Transmission Zone M-3 Process
Huntertown, Indiana

Need Number: AEP-2023-IM022
Process Stage: Solution Meeting SRRTEP-W - 07/19/2024
Previously Presented: Needs Meeting: 11/17/2023
Supplemental Project Driver: Customer Need

Specific Assumption Reference: AEP Interconnection Guidelines (AEP Assumptions Slide 12)
Model: 2027 RTEP

Problem Statement:
NEREMC has requested a new delivery point for a peak load of 6MW in Huntertown, Indiana.

Requested ISD: 03/31/2025



AEP Transmission Zone M-3 Process
Hathaway Switch, IN

Need Number: AEP-2023-IM022

Process Stage: Solutions Meeting 5/17/2024

Proposed Solution:

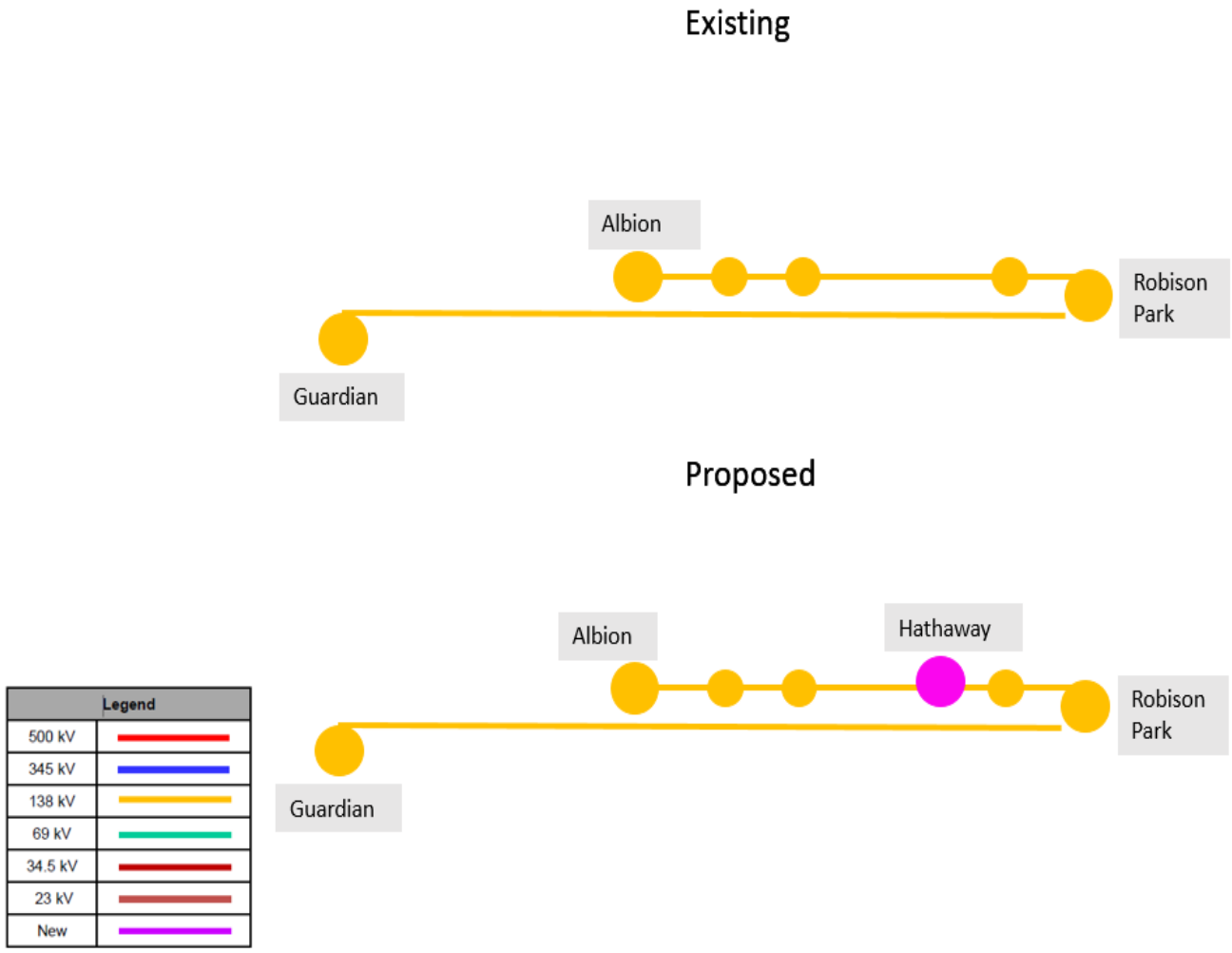
Hathaway Switch Install: Install a 3-way switch, with SCADA, on Albion-Robison Park 138kV circuit. From the new switch, install a ~0.01 mile 138kV line radial to customer station at 138kV. Low-side metering will be installed in the customer owned station. Estimated Cost: $3.2 M

Transmission Cost Estimate: $3.2 M

Alternatives Considered: There are several interconnections on this 138kV double circuit. An alternate to this project, and related Hatch Project (AEP-2023-IM024), would be to combine these requests and install a station with breakers, or automatic sectionalizing switches, to serve both delivery points. For this alternate, the outage history, total load lost for an outage, and miles of line exposure were considered. Due to the smaller load sizes, and the outage performance of the line, it was determined that the push button switches would be sufficient for both customer requests. Both customer requests are ~3 miles of 138kV apart. It is more cost effective to handle these requests separately, than to install greenfield lines to combine them together. Estimated cost: $15M

Projected In-Service: 06/19/2025

Project Status: Scoping



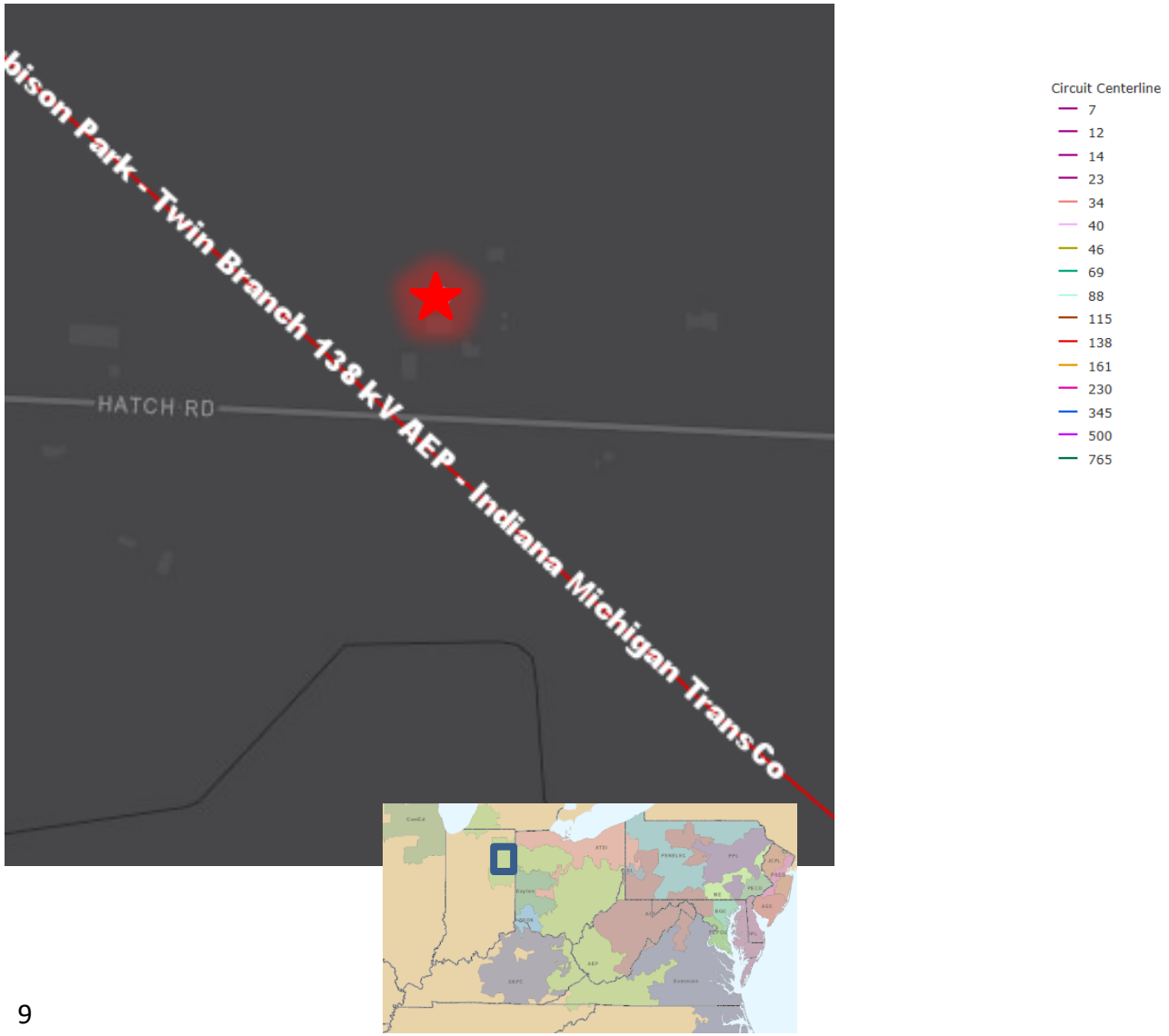
AEP Transmission Zone M-3 Process
Huntertown, Indiana

Need Number: AEP-2023-IM024
Process Stage: Solution Meeting SRRTEP-W - 07/19/2024
Previously Presented: Needs Meeting: 11/17/2023
Supplemental Project Driver: Customer Need

Specific Assumption Reference: AEP Interconnection Guidelines (AEP Assumptions Slide 12)
Model: 2027 RTEP

Problem Statement:
NEREMC has requested a new delivery point for a peak load of 6MW in Huntertown, Indiana.

Requested ISD: 03/31/2027



AEP Transmission Zone M-3 Process
Hathaway Switch, IN

Need Number: AEP-2023-IM024

Process Stage: Solutions Meeting 7/19/2024

Proposed Solution:

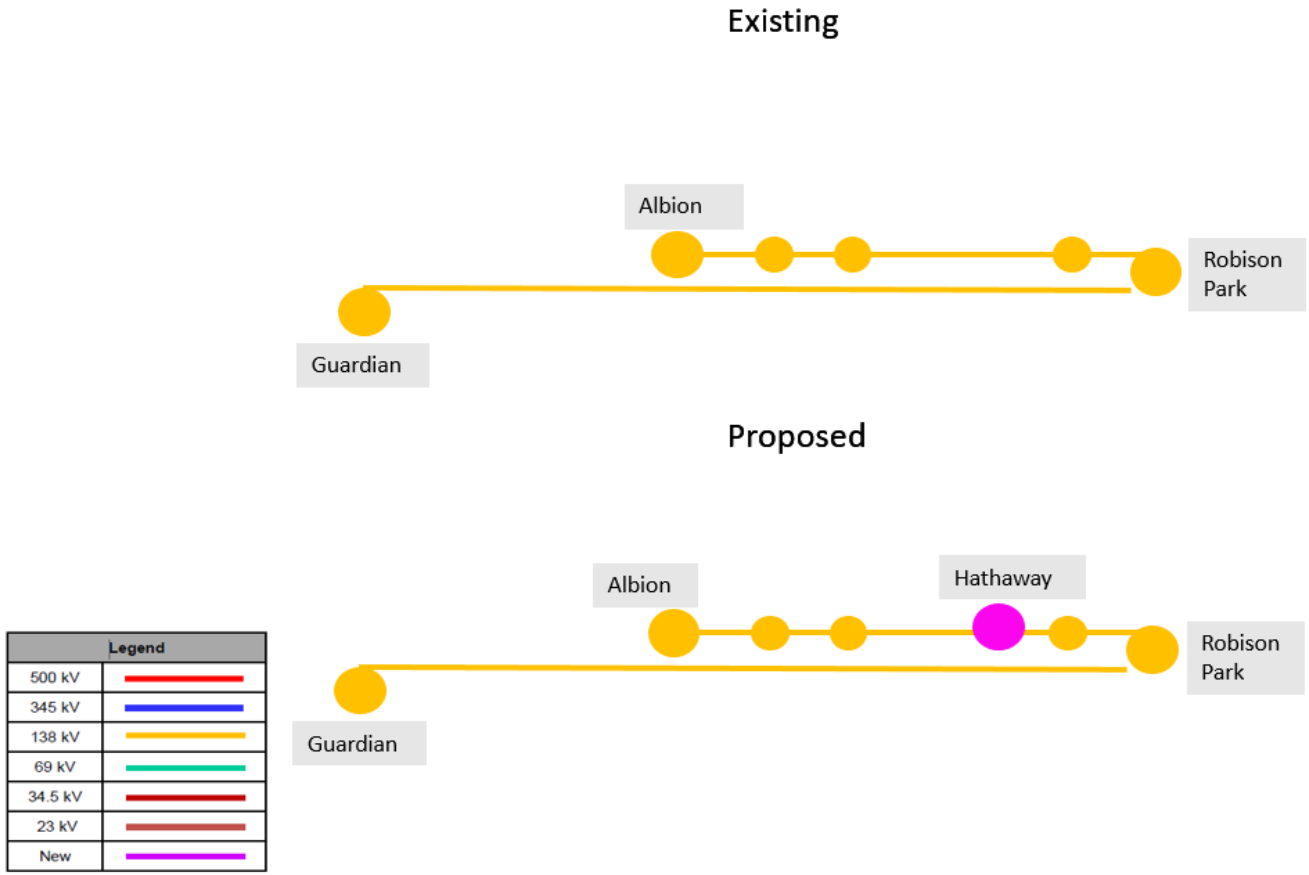
Hatch 138 kV Switch Install: Install a 3-way switch, with SCADA, on Albion- Robison Park 138kV circuit. From the new switch install a ~0.2 mile 138kV line radial to customer delivery 138kV. Low-side metering will be installed in the customer owned station. Estimated Cost: $4.5 M

Transmission Cost Estimate: $4.5 M

Alternatives Considered: There are several interconnections on this 138kV double circuit. An alternate to this project, and related Hathaway Project (AEP-2024-IM022), would be to combine these requests and install a station with breakers, or automatic sectionalizing switches, to serve both delivery points. For this alternate, the outage history, total load lost for an outage, and miles of line exposure were considered. Due to the smaller load sizes, and the outage performance of the line, it was determined that the push button switches would be sufficient for both customer requests. Both customer requests are ~3 miles of 138kV apart. It is more cost effective to handle these requests separately, than to install greenfield lines to combine them together. Estimated Cost: $15M

Projected In-Service: 03/31/2027

Project Status: Scoping



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

7/9/2024– V1 – Original version posted to pjm.com