

Transmission Expansion Advisory Committee Dayton Supplemental Projects

Feb 3rd, 2026

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 Change: The changes are highlighted in **red** below.

Need Number: Dayton-2025-007

Previously Presented: Need Meeting 07/08/2025

Process Stage: Need Meeting 02/03/2026

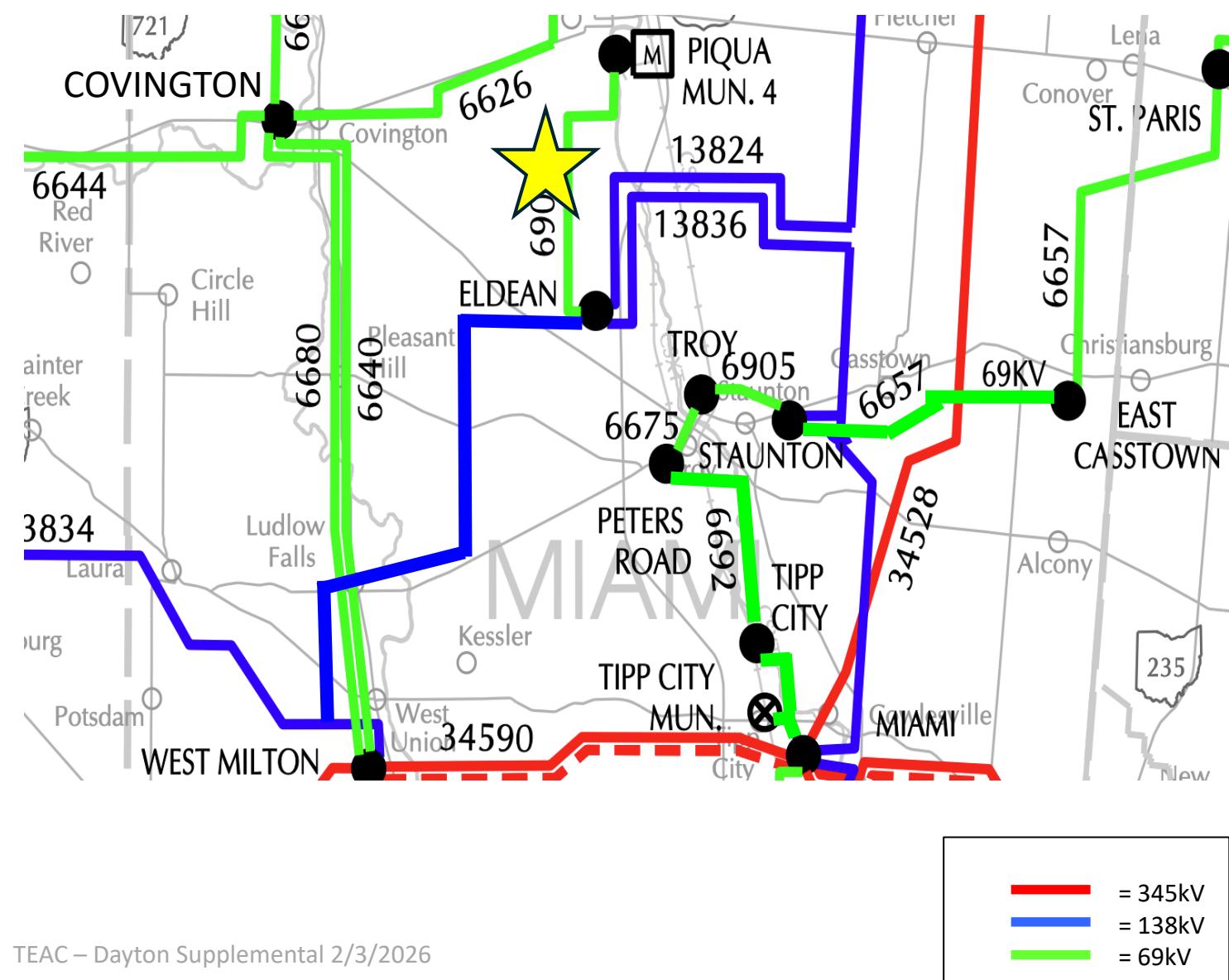
Project Driver: Customer Request

Specific Assumption Reference: Dayton Local Plan Assumptions

Problem Statement:

- AES Ohio has a customer request for service in the vicinity of its Eldean Substation in Piqua, OH.
- Total Data Center load request, associated timelines, & load totals

Requested In Service Date	Total Requested New Load
12/2027	45 MW
12/2028	205 MW
12/2029	440 MW
12/2030	600 MW
05/2029	365 MW
12/2029	600 MW
05/2030	870 MW
11/2031	1140 MW
05/2033	1400 MW



Need Number: Dayton-2026-001

Process Stage: Need Meeting 2/3/2026

Project Driver: Customer Request

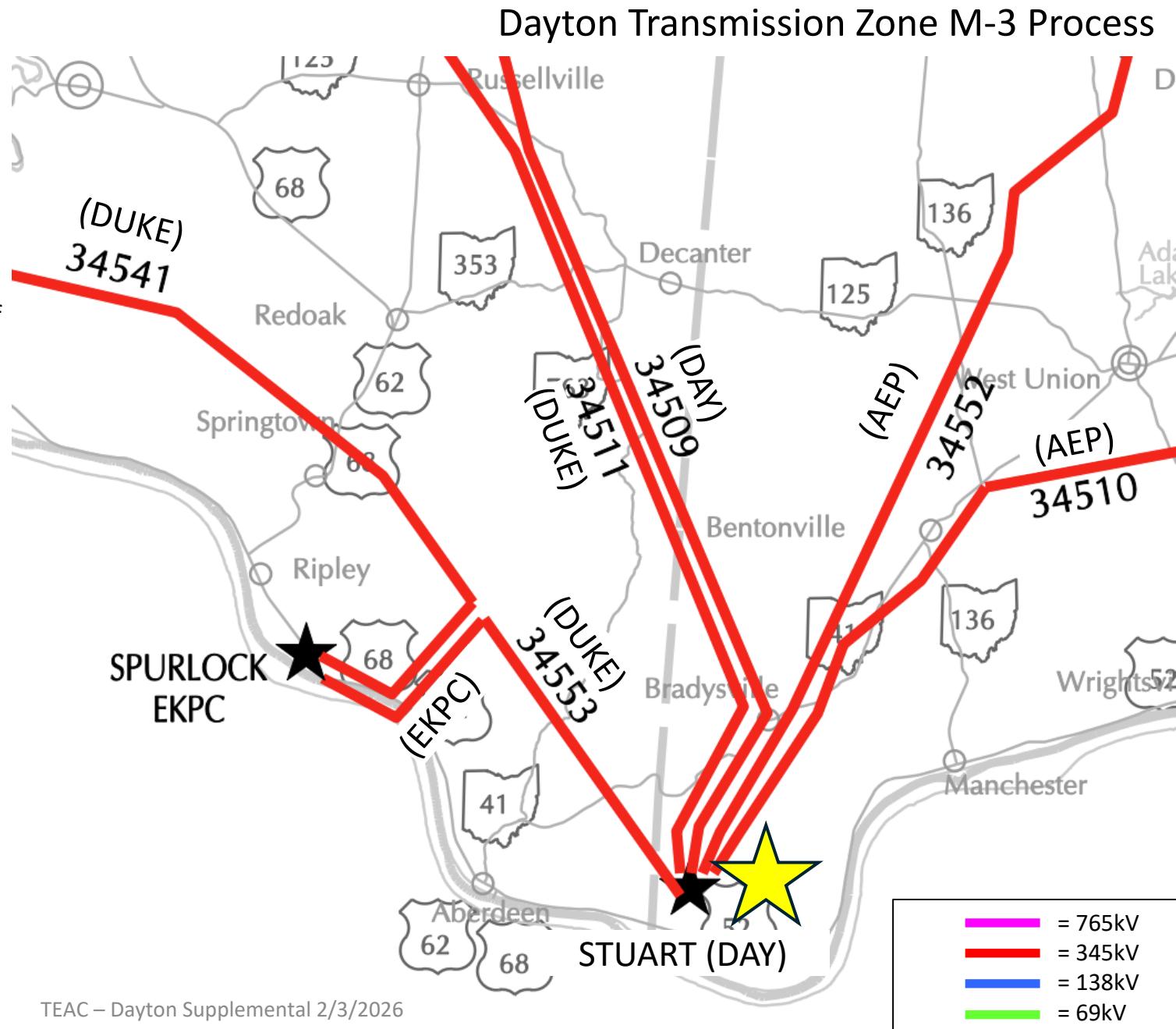
Specific Assumption Reference: Dayton Local Plan Assumptions

Problem Statement:

- AES Ohio has a customer request for service in the vicinity of its Stuart Substation in Adams County, OH.
- Total Data Center load request, associated timelines, & load totals

Requested In Service Date	Total Requested New Load
11/2028	100 MW
07/2029	400 MW
10/2030	700 MW
10/2031	1100 MW
03/2032	1300 MW

Model: 2024 RTEP Series, 2029 Summer Case



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: Dayton-2025-008

Previously Presented: Need Meeting 09/09/2025

Process Stage: Solution Meeting 02/03/2026

Project Driver: Customer Request

Specific Assumption Reference: Dayton Local Plan Assumptions

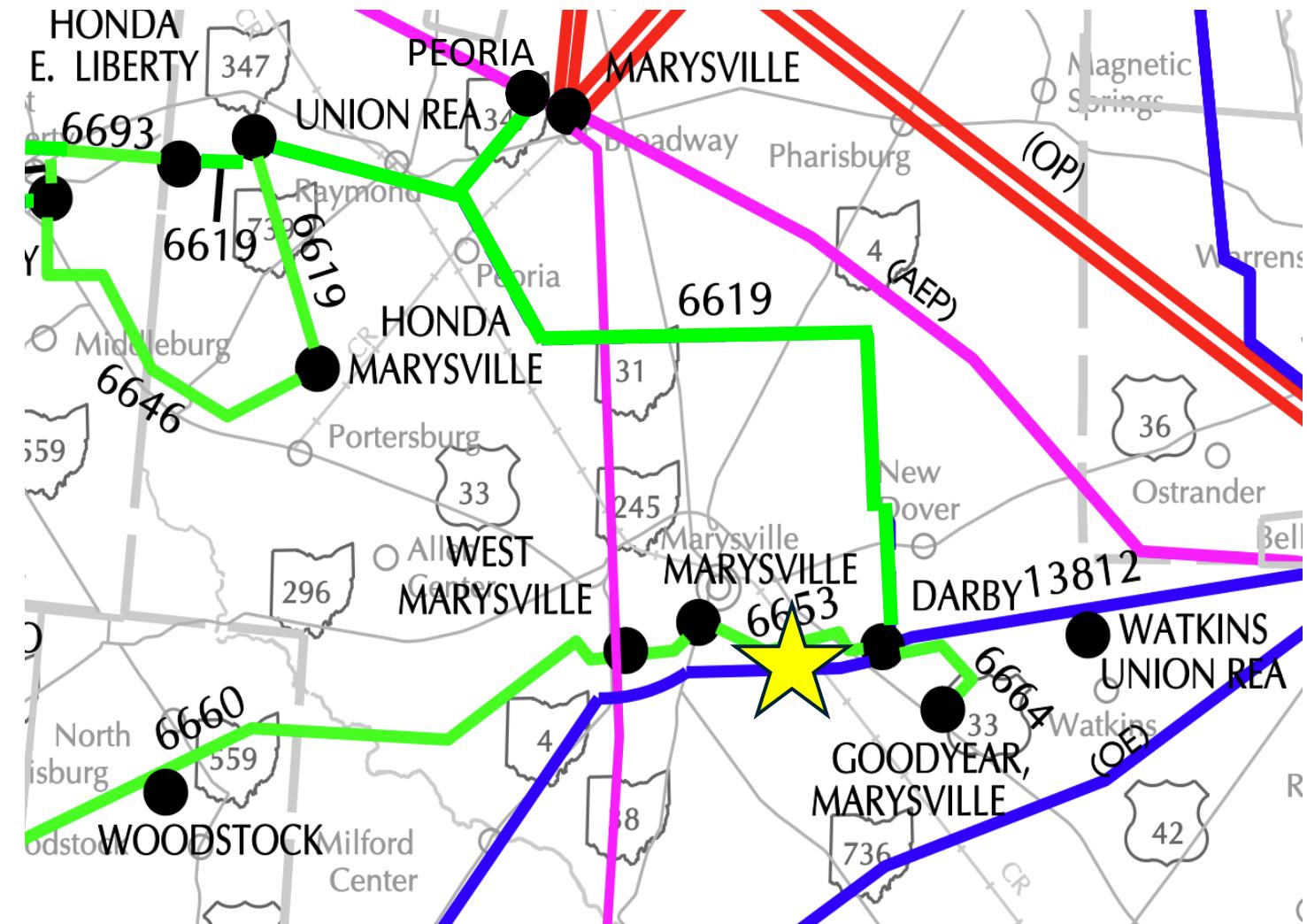
Problem Statement:

- AES Ohio has a customer request for service in the vicinity of its Darby Substation in Marysville, OH.
- Total MW load requests, associated timelines, & load totals

Requested In Service Date	Total Requested New Load
1/2029	800 MW

Model: 2024 RTEP Series, 2029 Summer Case

Dayton Transmission Zone M-3 Process



Need Number: Dayton-2025-008

Previously Presented: Need Meeting 09/09/2025

Process Stage: Solution Meeting 02/03/2026

Project Driver: Customer Request

Specific Assumption Reference: Dayton Local Plan Assumptions

Solution:

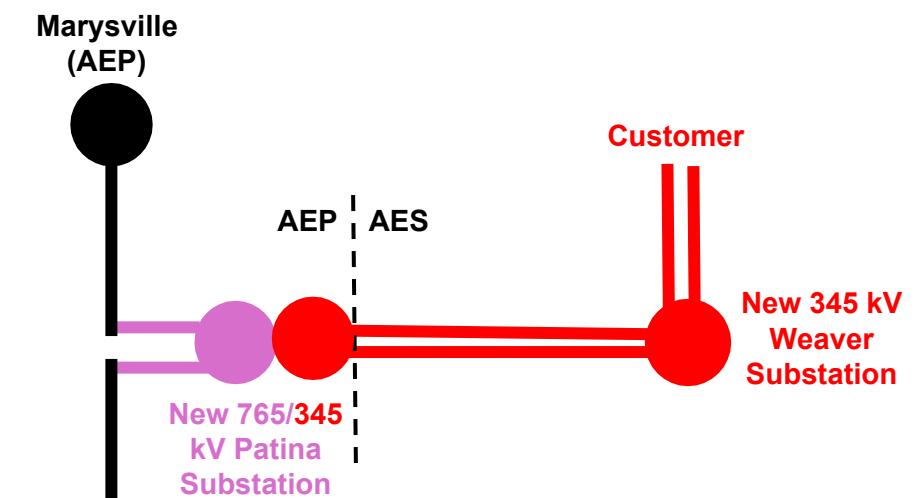
- Construct a new 765 kV/345 kV substation “Patina” with breaker-and-a-half configurations by cutting into the existing 765 kV transmission line between Marysville (AEP) and Flatlick (AEP) Substation. **Transformer Ratings:** 750MVA /Phase **Estimated Cost:** \$168M
- Construct a new 345 kV substation named “Weaver” with breaker-and-a-half configuration near the customer site. **Estimated Cost:** \$25M
- Construct two new approximately 5-mile single-circuit 345 kV transmission lines with 2-1024.5 ACAR 30/7 conductor from the Patina substation to Weaver substation. **New Expected Ratings:** SN:1263 MVA, SE:1561 MVA, WN:1750 MVA, WE:1954 MVA **Estimated Cost:** \$46M
- Extend two 345kV feeds from the new Weaver substation to the customer. **New Expected Ratings:** SN:1263 MVA, SE:1561 MVA, WN:1750 MVA, WE:1954 MVA **Estimated Cost:** \$7M

Estimated Cost: \$246M

Project In-Service Date: 05/01/2031

Project Status: Conceptual

Model: 2024 RTEP Series, 2029 Summer Case



Flatlick (AEP)

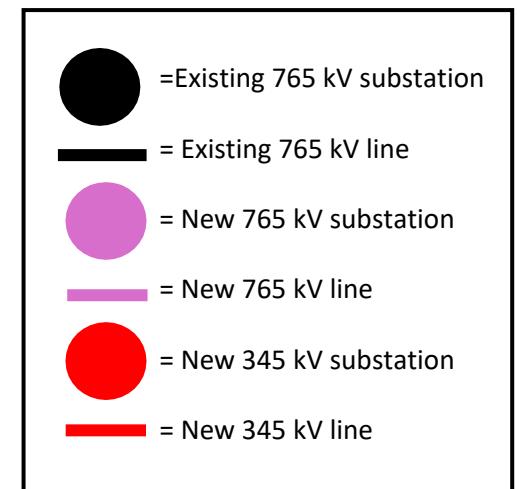
New 765/345 kV Patina Substation

AEP

AES

Customer

New 345 kV Weaver Substation



Dayton Transmission Zone M-3 Process

Need Number: Dayton-2025-009

Previously Presented: Need Meeting 10/08/2025

Process Stage: Solution Meeting 02/03/2026

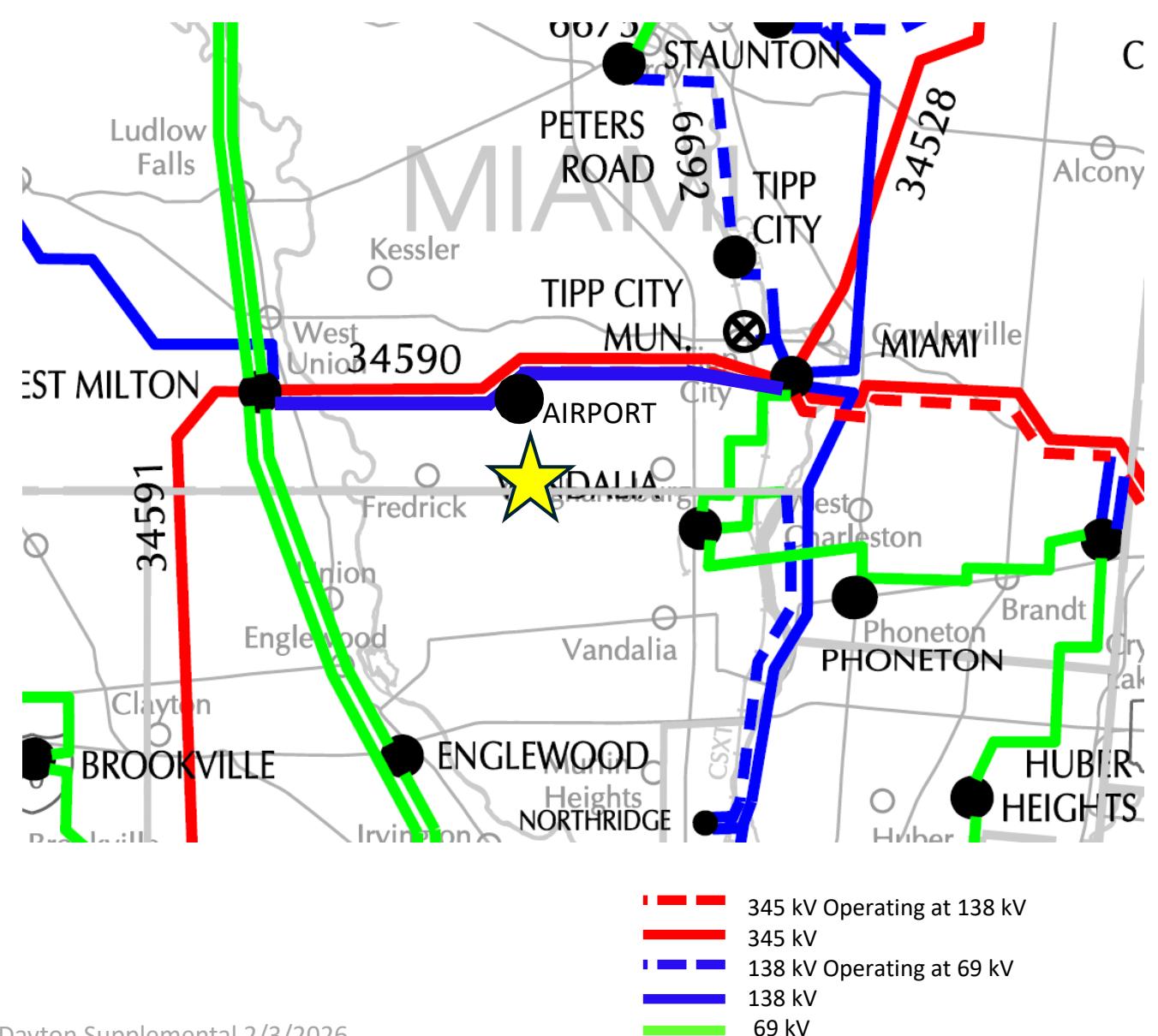
Project Driver: Customer Request

Specific Assumption Reference: Dayton Local Plan Assumptions

Problem Statement:

- AES Ohio has a customer request for service in the vicinity of its Airport Substation in Tipp City, OH.
- Total MW load requests, associated timelines, & load totals.

Requested In Service Date	Total Requested New Load
03/2028	20 MW
03/2029	160 MW
03/2030	300 MW



Need Number: Dayton-2025-009

Previously Presented: Need Meeting 10/08/2025

Process Stage: Solution Meeting 02/03/2026

Project Driver: Customer Request

Specific Assumption Reference: Dayton Local Plan Assumptions

Solution:

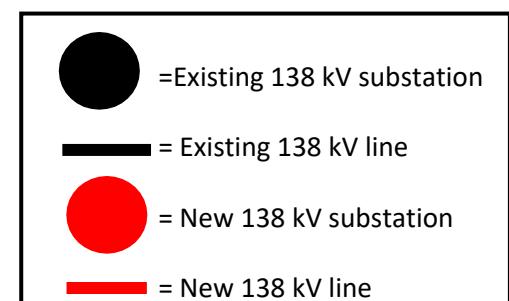
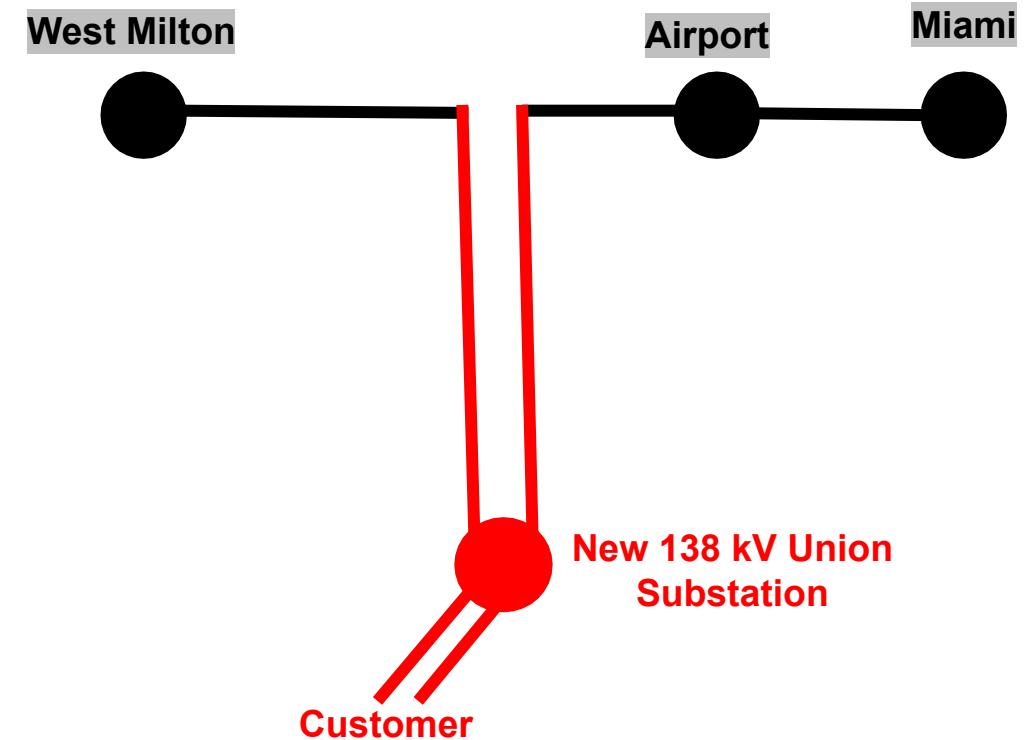
- Construct a new 138kV substation “Union” near the customer site with a breaker-and-a-half configuration by cutting into the existing 13807 from West Milton to Airport Substation. Install two 30.6 MVAR capacitor banks at the Union substation. **New Expected Ratings:** SN:478 MVA, SE:478 MVA, WN:478 MVA, WE:478 MVA **Estimated Cost:** \$14.4M
- Extend two 138kV feeds from the new Union substation to the customer. **New Expected Ratings:** SN:478 MVA, SE:478 MVA, WN:478 MVA, WE:478 MVA **Estimated Cost:** \$2M
- Remote end work at West Milton and Airport 138 kV substations. **Estimated Cost:** \$9.4M

Estimated Cost: \$25.8M

Project In-Service Date: 12/31/2029

Project Status: Conceptual

Model: 2024 RTEP Series, 2029 Summer Case



Appendix

High Level M-3 Meeting Schedule

Assumptions	Activity	Timing
	Posting of TO Assumptions Meeting information	20 days before Assumptions Meeting
Needs	Activity	Timing
	TOs and Stakeholders Post Needs Meeting slides	10 days before Needs Meeting
Solutions	Activity	Timing
	TOs and Stakeholders Post Solutions Meeting slides	10 days before 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
	Activity	Timing
	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

1/23/2026 – V1 posted to PJM.com