



Reliability Analysis Update PJM West

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Sub Regional RTEP Committee – PJM
West

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2024 RTEP

Recommended Solution

Baseline Reliability Projects

AMPT Transmission Zone: Baseline Miami Transformer

Process Stage: Recommended Solution

Criteria: TO 715 Criteria Violation

Assumption Reference: 2024 RTEP assumptions

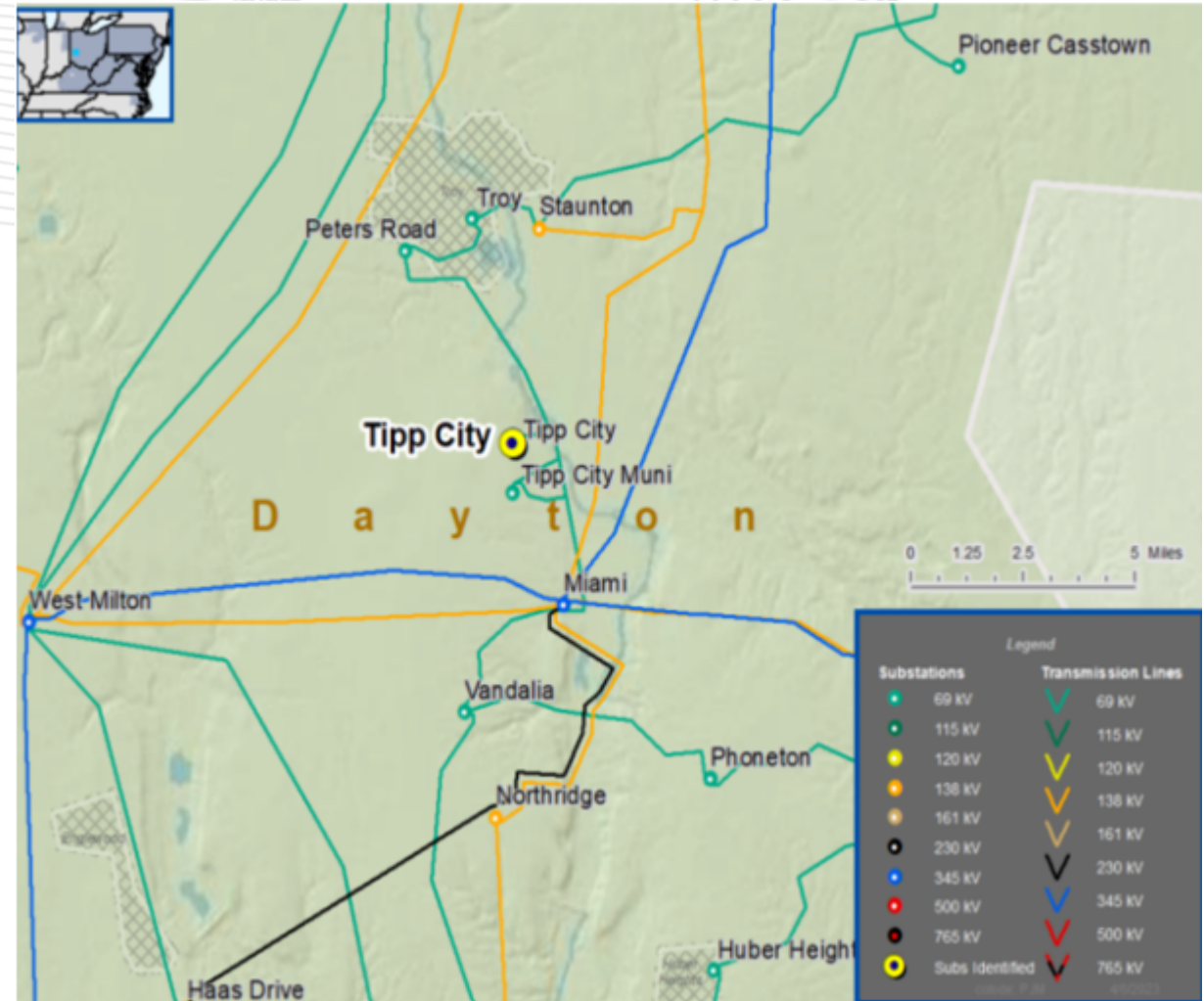
Model Used for Analysis: 2024 RTEP Summer base case

Proposal Window Exclusion: Below 200kV Exclusion

Problem Statement:

FG: 2024W1-AMPT-VM1, 2024W1-AMPT-VM2 & 2024W1-AMPT-VM3

In the 2029 RTEP Summer case, multiple buses in the AMPT 69 kV are observing low voltage for N-1-1 outages.



AMPT/Dayton Transmission Zone: Baseline Miami Transformer

Recommended Solution: Add one additional breaker, a 2nd 138/69kV transformer, replace five 69kV breakers & four 138kV breakers at the Miami substation. (Converted from part of the S3351.2) (b3918.1)

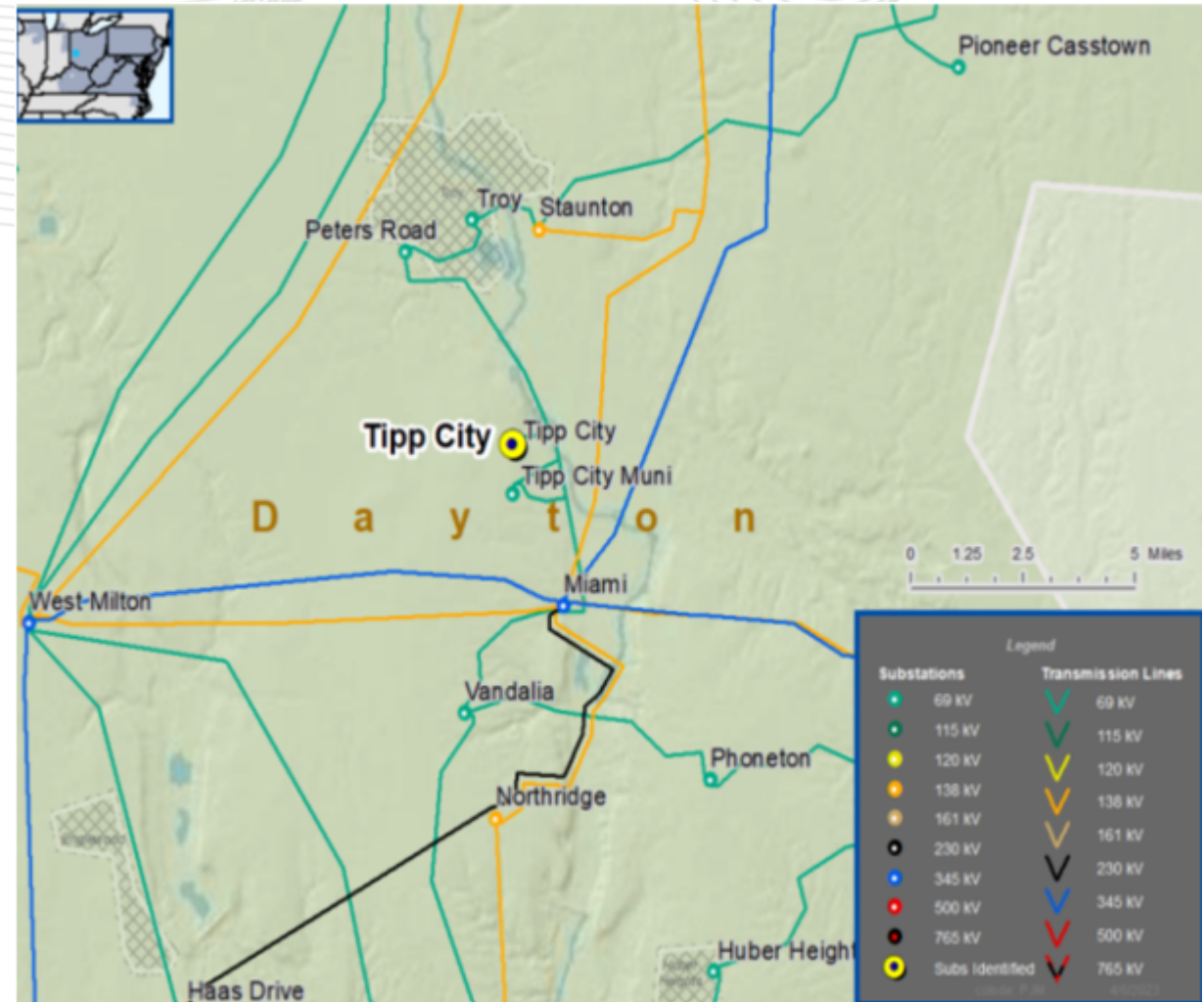
A component of S3351.2 has the same scope as the proposed solution, therefore the component will be converted to baseline, as shown in the proposed solution.

Estimated Cost: \$12M

Required in-service date: 6/1/2029

Projected in-service date: 6/30/2028

Previously Presented: 12/13/2024





Dayton Transmission Zone: Baseline Rockford-Roller Creek 69kV Reconductor

Process Stage: Recommended Solution

Criteria: Baseline Load Growth Deliverability & Reliability

Assumption Reference: 2024 RTEP assumptions

Model Used for Analysis: 2029 RTEP Light Load

Proposal Window Exclusion: Below 200 kV Exclusion

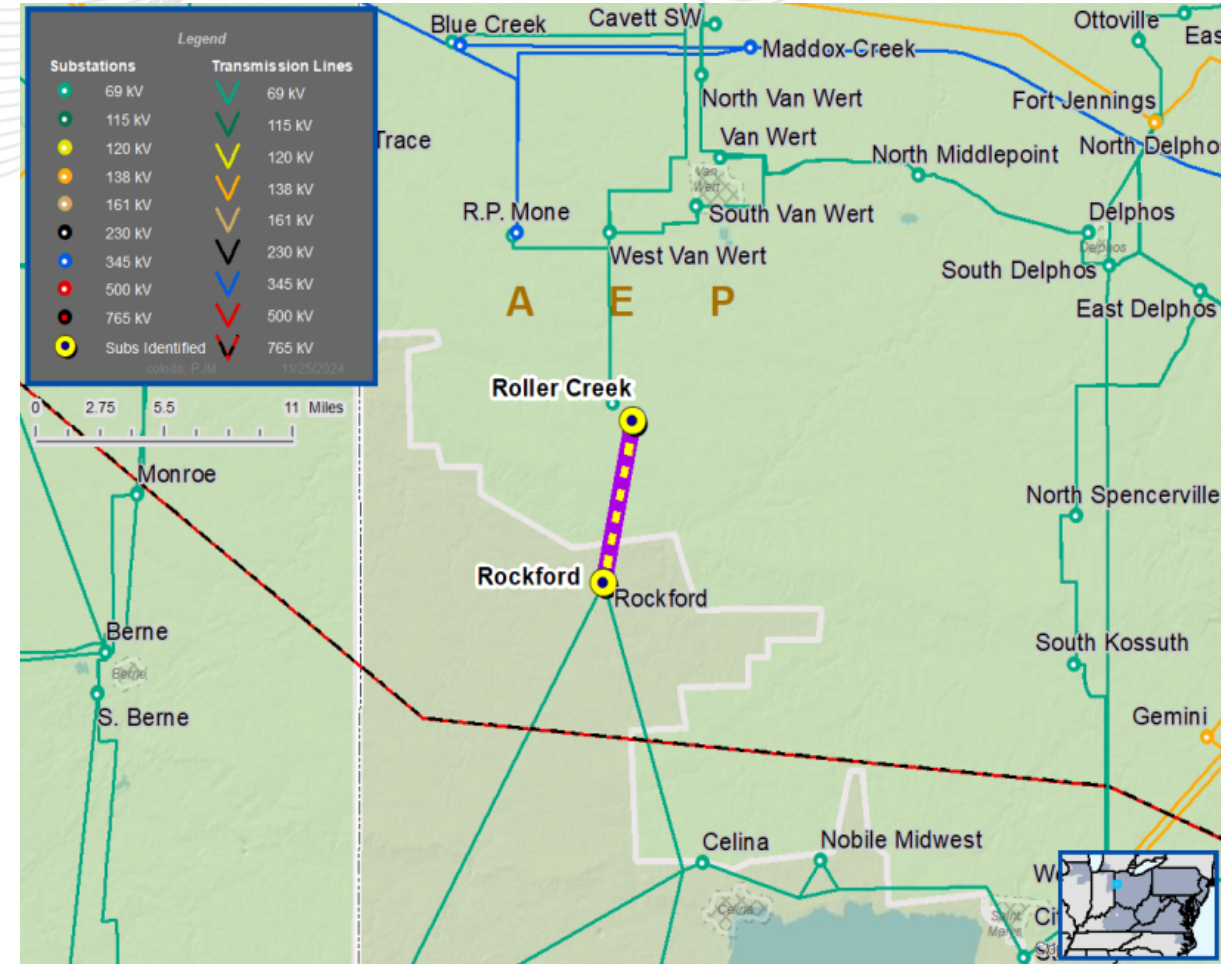
Problem Statement:

FG: 2024-W1-GD-LL16, 2024-W1-GD-LL17, 2024-W1-GD-LL18, 2024-W1-GD-LL19, 2024-W1-GD-LL20, 2024-W1-GD-LL21, 2024-W1-GD-LL22, 2024-W1-GD-LL23, 2024-W1-GD-LL24, 2024-W1-GD-LL26, 2024-W1-GD-LL28, 2024-W1-GD-LL34, 2024-W1-GD-LL7

N-1, N-2, and multi-contingency in light load conditions cause overload on the 69 kV line Rockford to Roller Creek line in Gen Deliv study.

Existing Facility Rating:

Branch 69 kV	Existing Facility Ratings SN/SE/WN/WE (MVA)
Rockford-Roller Creek	45/53/61/66



Rebuild and reconductor Dayton owned 7.7 miles of Rockford – Roller Creek 69 kV line with the standard 1351 AAC conductor from Rockford substation to the POI (**B3904.1**).

Preliminary Facility Rating:

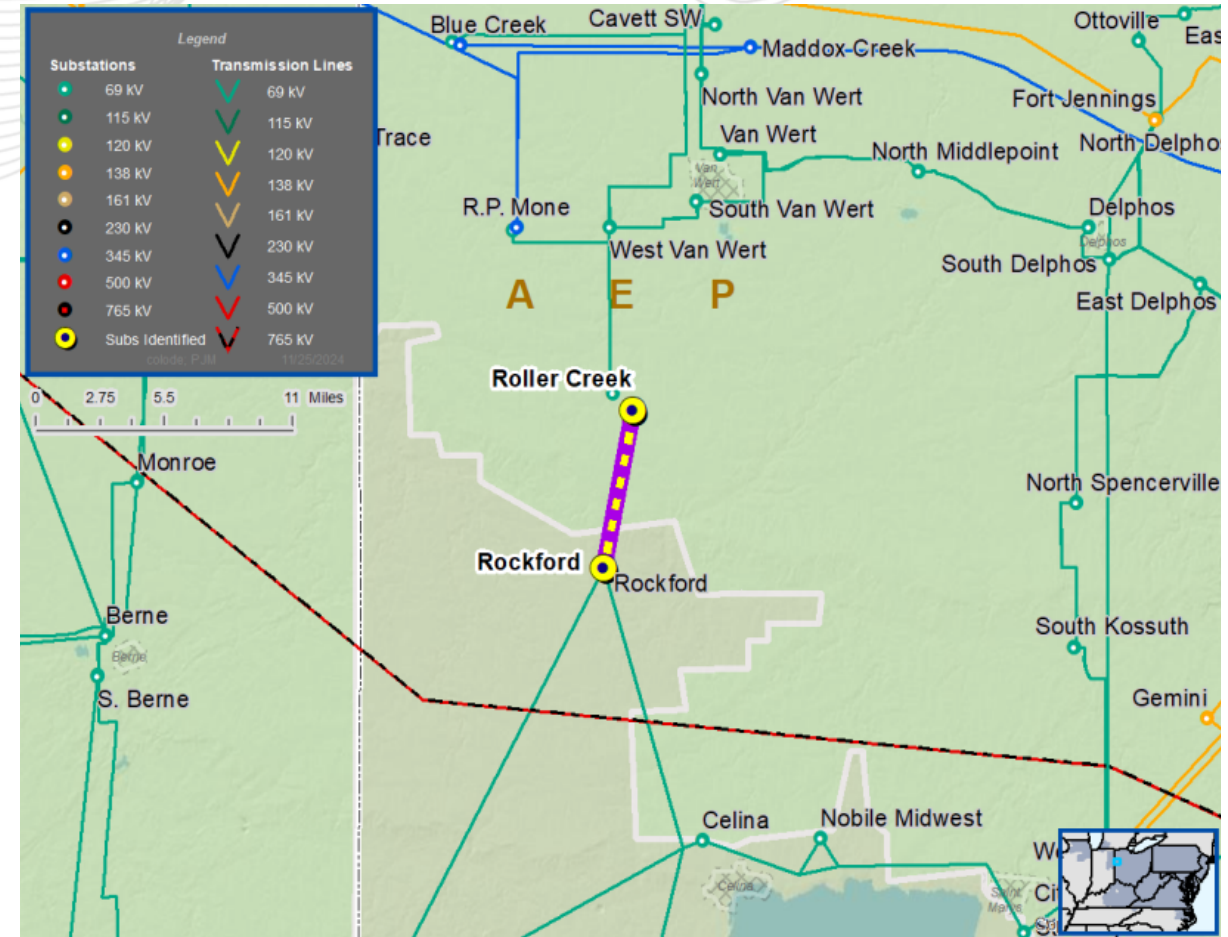
Branch 69 kV	Preliminary Facility Ratings SN/SE/WN/WE (MVA)
Rockford-Roller Creek	151/187/209/234

Estimated Cost: \$25.00M

Required In Service Date: 04/15/2029

Project In Service Date: 06/01/2029

Previously Presented: First Read 12/13/2024



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