

Reliability Analysis Update

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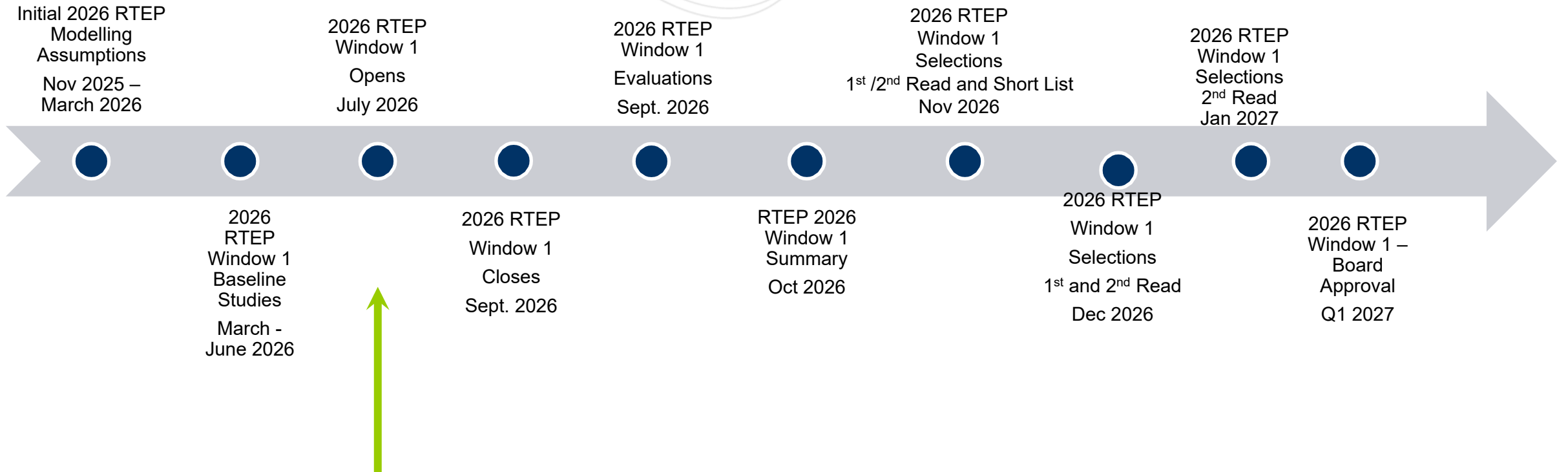
Transmission Expansion Advisory Committee

July 7, 2026

Disclaimer: While materials are current at the time of publishing, applicable requirements may change. PJM Governing Documents control.

2026 RTEP Window 1 Update

2026 RTEP Window 1 – Timeline



- Target Open Date: 7/20/2026
- Target Close Date: 9/21/2026
- PJM 5-year analysis:
 - Except for ComEd, address smaller, regional needs within zones that are not Bulk-Transfer related.
- PJM 8-year analysis/models:
 - CapEx Scenarios analysis and 8-year base models will provide insight to resource developers and new loads; and illustrate policy impacts on regional needs expected out of the CapEx scenarios.
 - The 2034 RTEP models are the first set of RTEP models applying CapEx in PJM. They will be mainly used (except for ComEd) for understanding CapEx models, generation/load trends and associated impacts on regional needs.
 - The 8-year analysis will be used to provide additional planning insights and will inform the evaluation of potential right-sizing opportunities for ComEd.

Baseline Scope / Cost Changes

Process Stage: Cost Change

Criteria: Light Load Baseline Voltage

Assumption Reference: 2028 RTEP assumption

Model Used for Analysis: 2028 RTEP Summer case

Proposal Window Exclusion: No

Problem Statement: High voltage issue on multiple stations around Waldwick vicinity for several contingencies.

Recommended Solution:

Replace existing 230kV 50MVAR fixed shunt reactor with a 230kV 150MVAR variable shunt reactor. **(B3794.1) Estimated Cost: \$13.6M-\$21.9M**

Replace existing 345kV 100MVAR fixed shunt reactor with a 345kV 150MVAR variable shunt reactor. **(B3794.2) Estimated Cost: \$16.0M-\$23.5M**

Estimated Total Cost: \$29.6M-\$45.4M

Reason for Cost Increase:

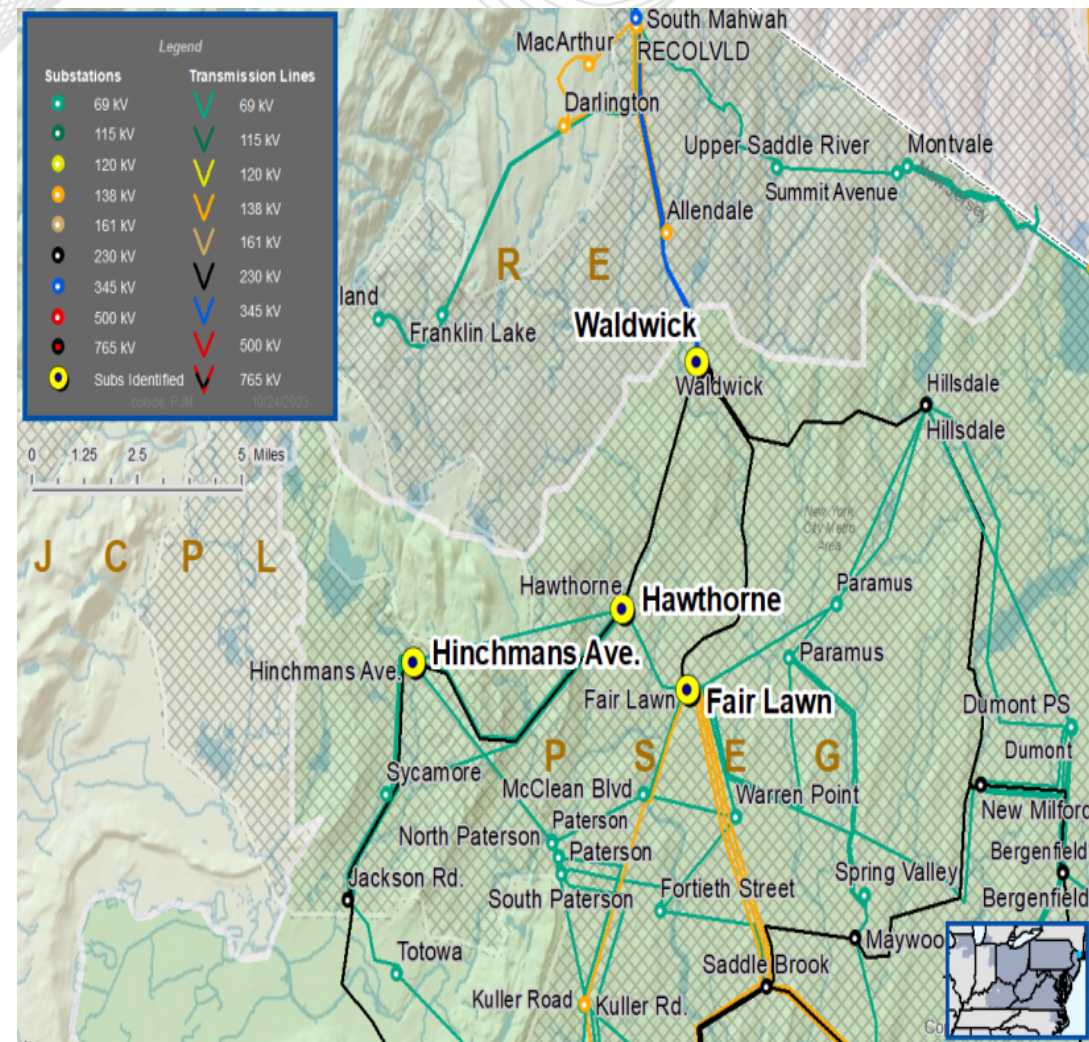
- Equipment costs have increased since the project was proposed and approved. Tariffs have added to equipment costs as well.
- A recent uptick of reactor failures has resulted in PSE&G modifying its standards for switching methods for reactors going forward. New reactor breakers with “point on wave” switching capability provide a safer and more reliable method to switch the reactors while helping to preserve the lifespan of the reactors. The original scope did not include replacement of reactor breakers.

Alternatives

- None

Required In-Service: 6/1/2028

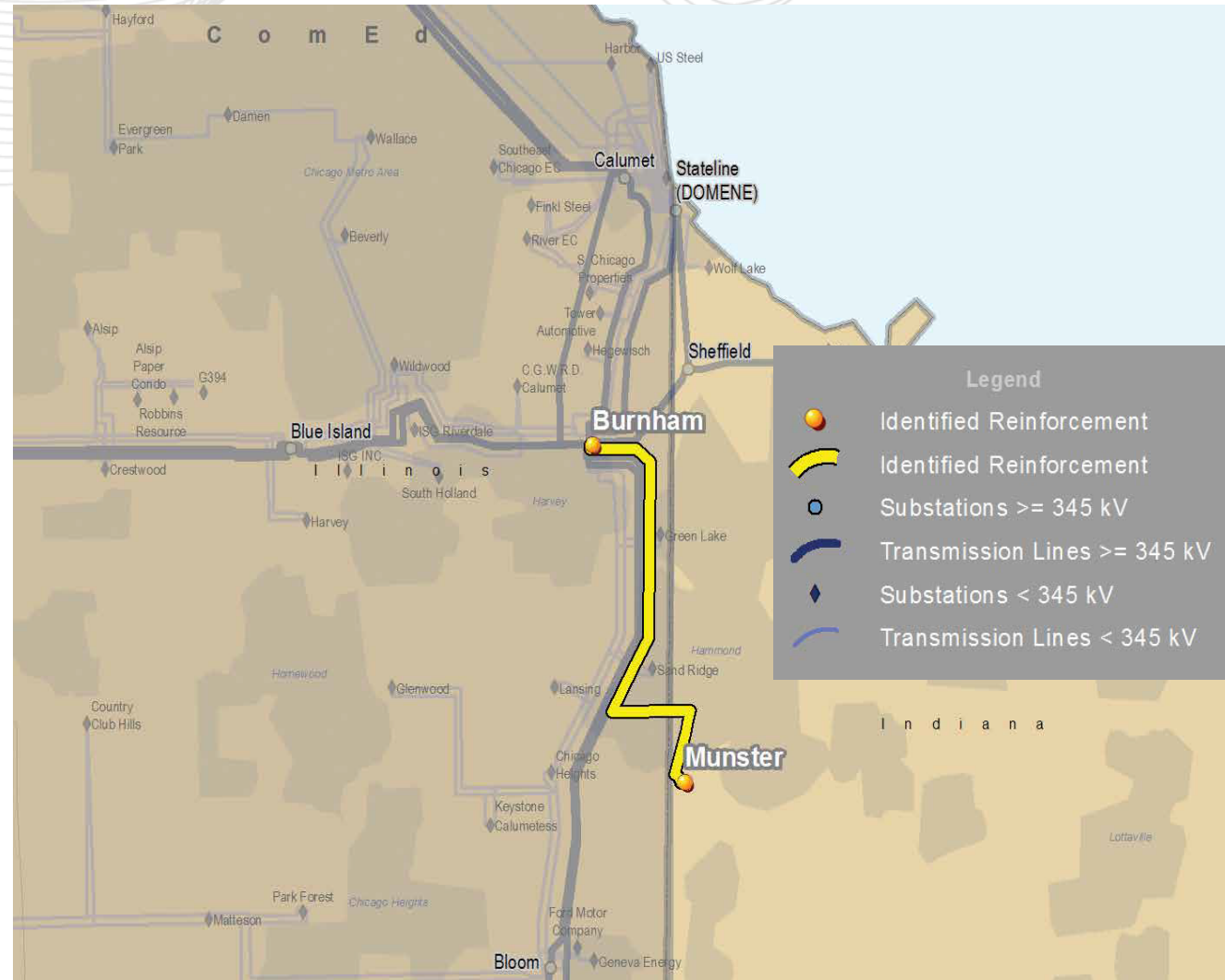
Projected In-service: 6/1/2028



Approved Targeted Market Efficiency Project (TMEP) b2971: Burnham – Munster 345kV (ComEd-NIPS)

TMEP b2971 Project Description:

- *Scope:* Reconfigure Munster as ring bus (NIPSCO)
- *Previous Rating:* 1195/1195 MVA
- *Upgraded Rating:* 1201/1441 MVA
- *Required ISD:* 6/1/2020
- *Actual ISD:* 12/18/2019
- *TMEP Cost Estimate:* \$7M
- *TMEP Benefit:* \$32M
- *Actual Cost:* \$6.2M
- *Interregional Cost Split:* 88% PJM / 12% MISO



Rationale for Scope Change:

TMEP b2971 project to reconfigure Munster 345 kV as a ring bus that was assigned to NIPSCO was previously presented to TEAC on November 9, 2017, and approved by the PJM Board in December 2017.

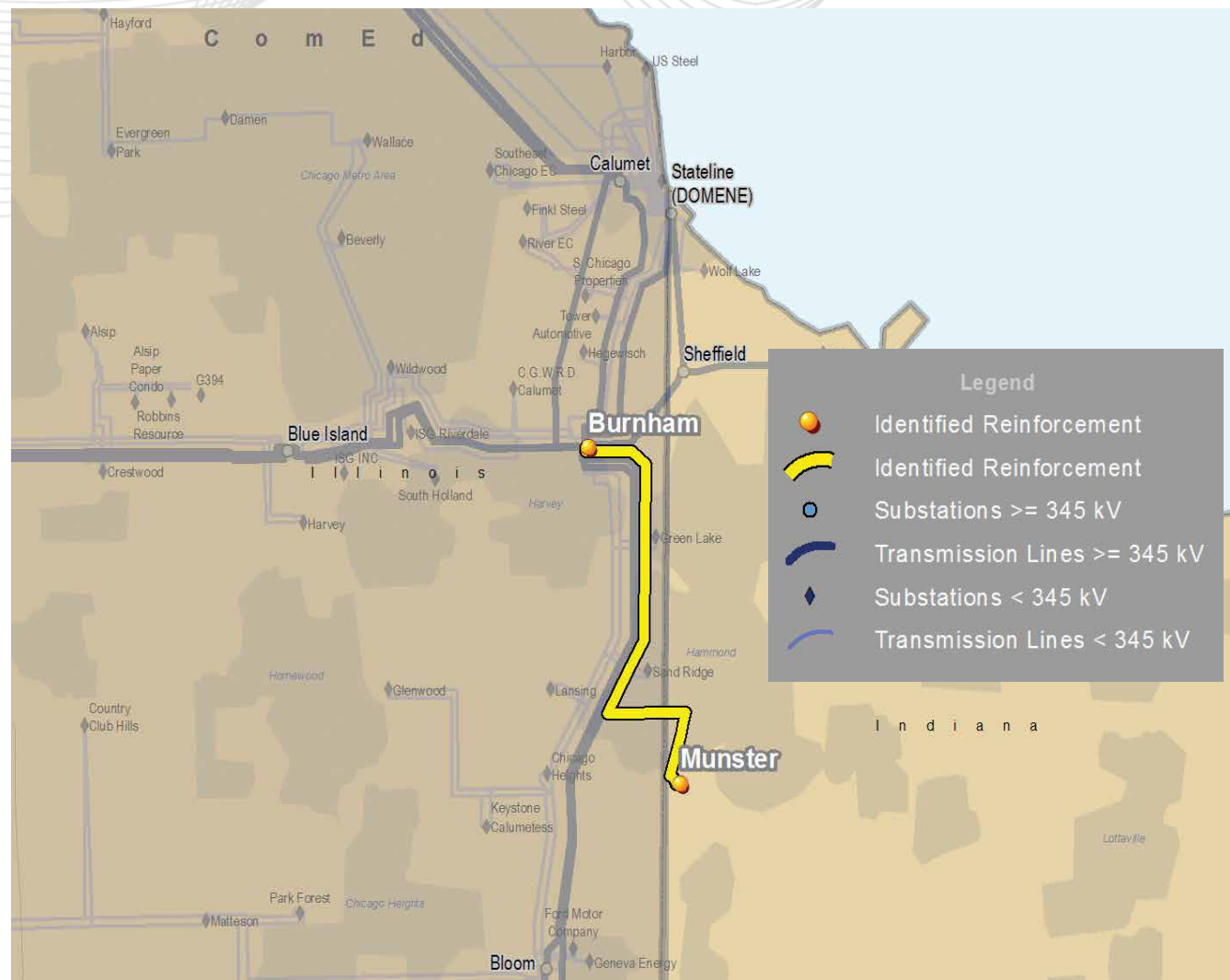
PJM previously identified that a portion of the scope of the b2971 project would include sag mitigation on the ComEd portion of the line from Burnham to Munster, as a sub-project b2971.1 with a cost estimate of \$500,000. However, the b2971.1 project was not presented to TEAC or submitted for approval by the PJM Board, although it was still assigned to ComEd for completion as part of the b2971 project being performed by NIPSCO.

Ultimately, the b2971.1 sag mitigation sub-project was completed and placed in-service by ComEd on November 4, 2019, while the parent project b2971 was completed and placed in-service by NIPSCO on December 18, 2019.

This scope change is being presented to the TEAC to formally introduce the scope change and to request approval by the PJM Board in July 2026 to ensure the appropriate cost allocation for this portion of the b2971 project.

TMEP b2971.1 Project Description (Scope Change):

- *Scope:* Perform sag mitigation on the Burnham-Munster 345 kV circuit
- *Required ISD:* 6/1/2020
- *Actual ISD:* 11/4/2019
- *TMEP Cost Estimate:* \$500,000
- *Actual Cost:* \$500,000
- *Interregional Cost Split:* 88% PJM / 12% MISO



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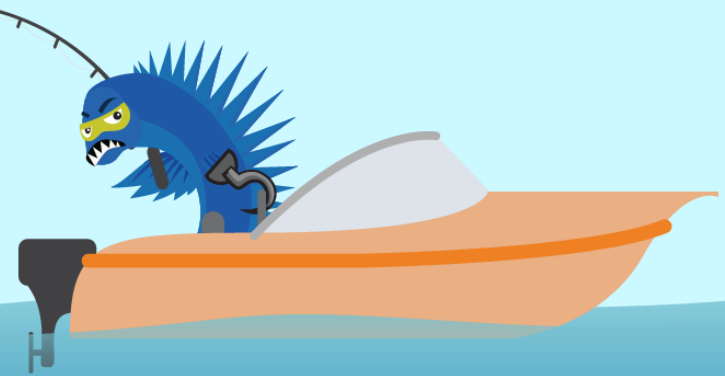
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Version No.	Date	Description
1	7/1/2026	Initial slides posted

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