

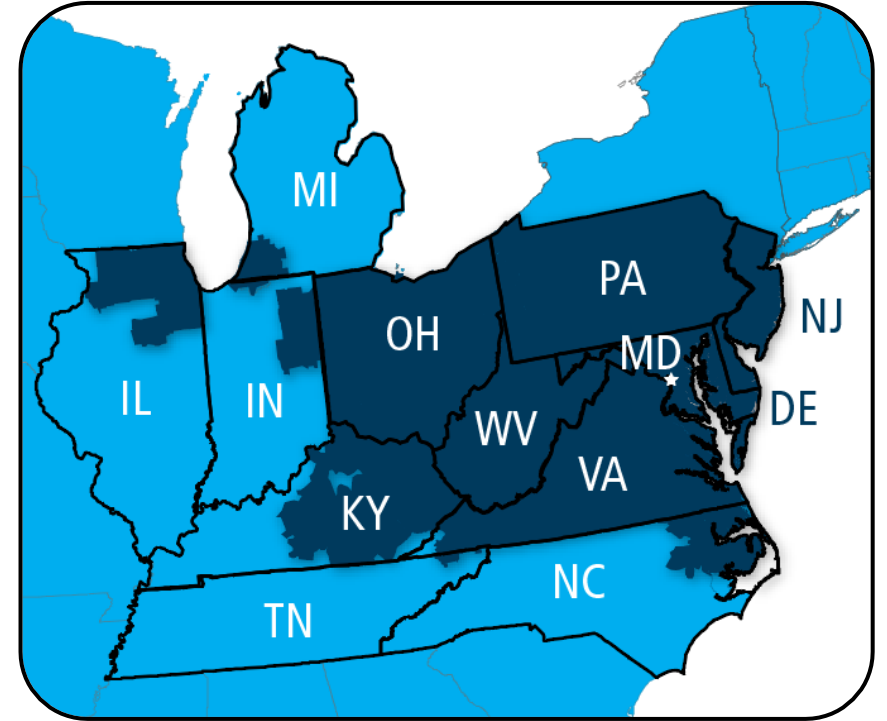


# 2024/25 Market Efficiency Cycle

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PJM Market Simulation  
Presented to ISAC  
March 25, 2024

The PJM Market Efficiency process simulates the electric market using production costing software to:

- Understand internal and interregional congestion
- Assess future market congestion
- Approve economic-based transmission upgrades



**Congestion** is a measure of the extent to which marginal generating units are dispatched to serve load due to transmission constraints. Congestion occurs when available, least-cost energy cannot be delivered due to transmission constraints. As a result, higher-cost units must be dispatched to meet load.

- **Market Efficiency Window**

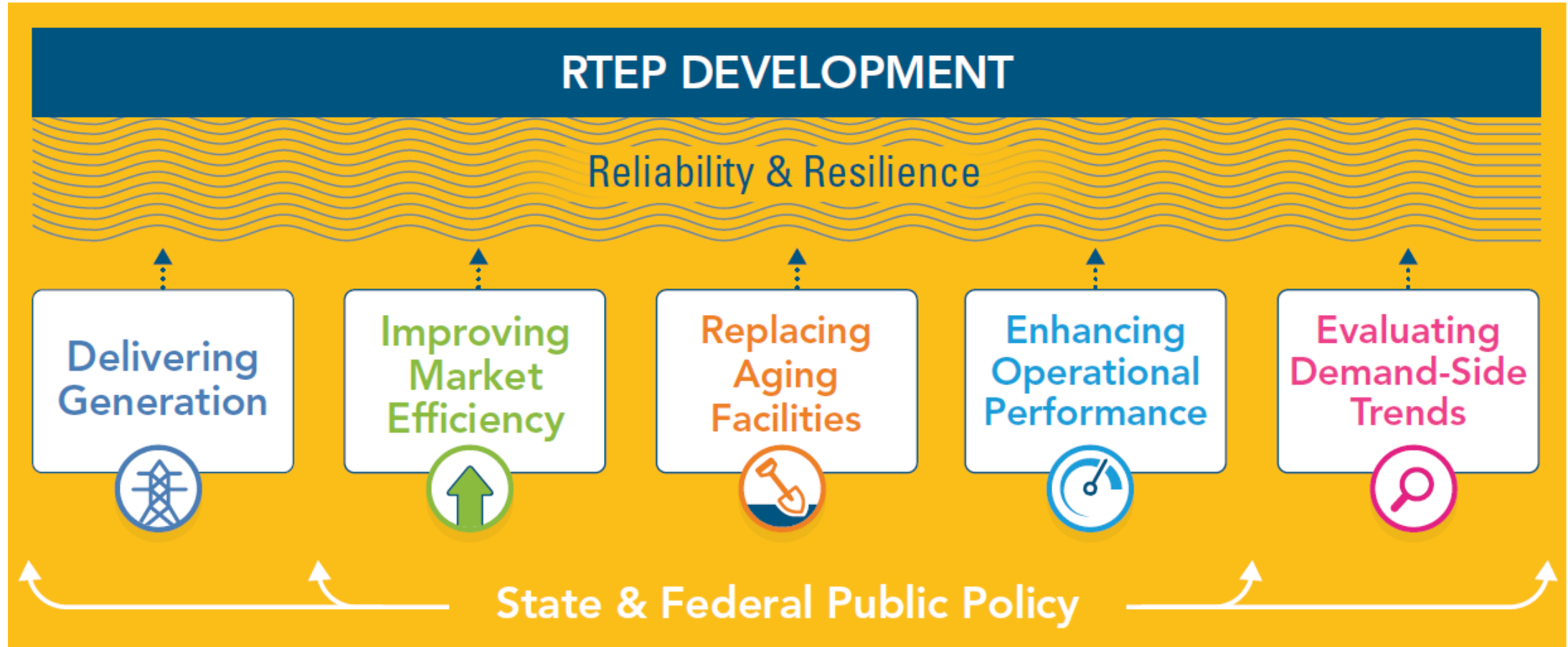
Identify new transmission projects that address target congestion drivers.

- **Re-evaluation Analysis**

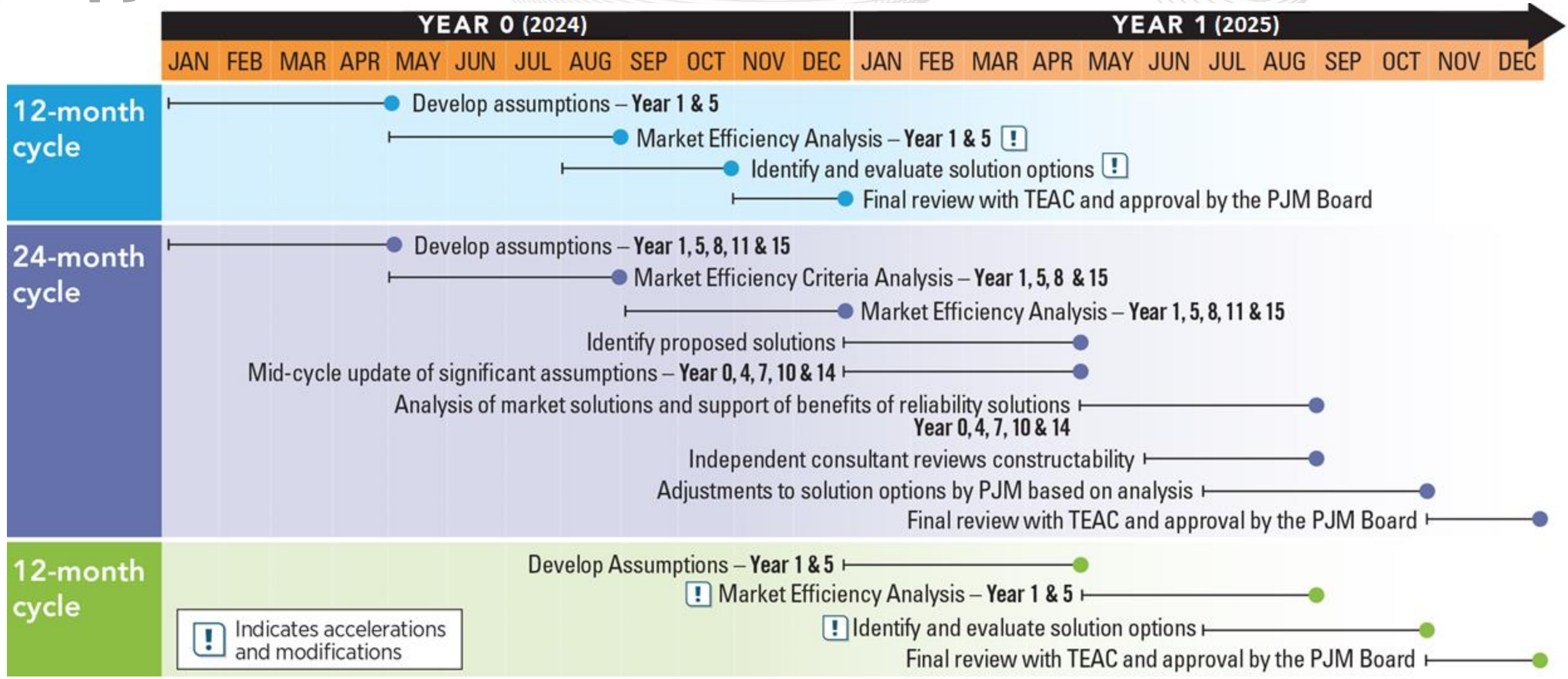
Review cost and benefits of economic-based transmission projects included in the RTEP to assure that they continue to be cost beneficial.

- **Acceleration Analysis**

Determine which reliability-based transmission projects, if any, have an economic benefit if accelerated or modified.



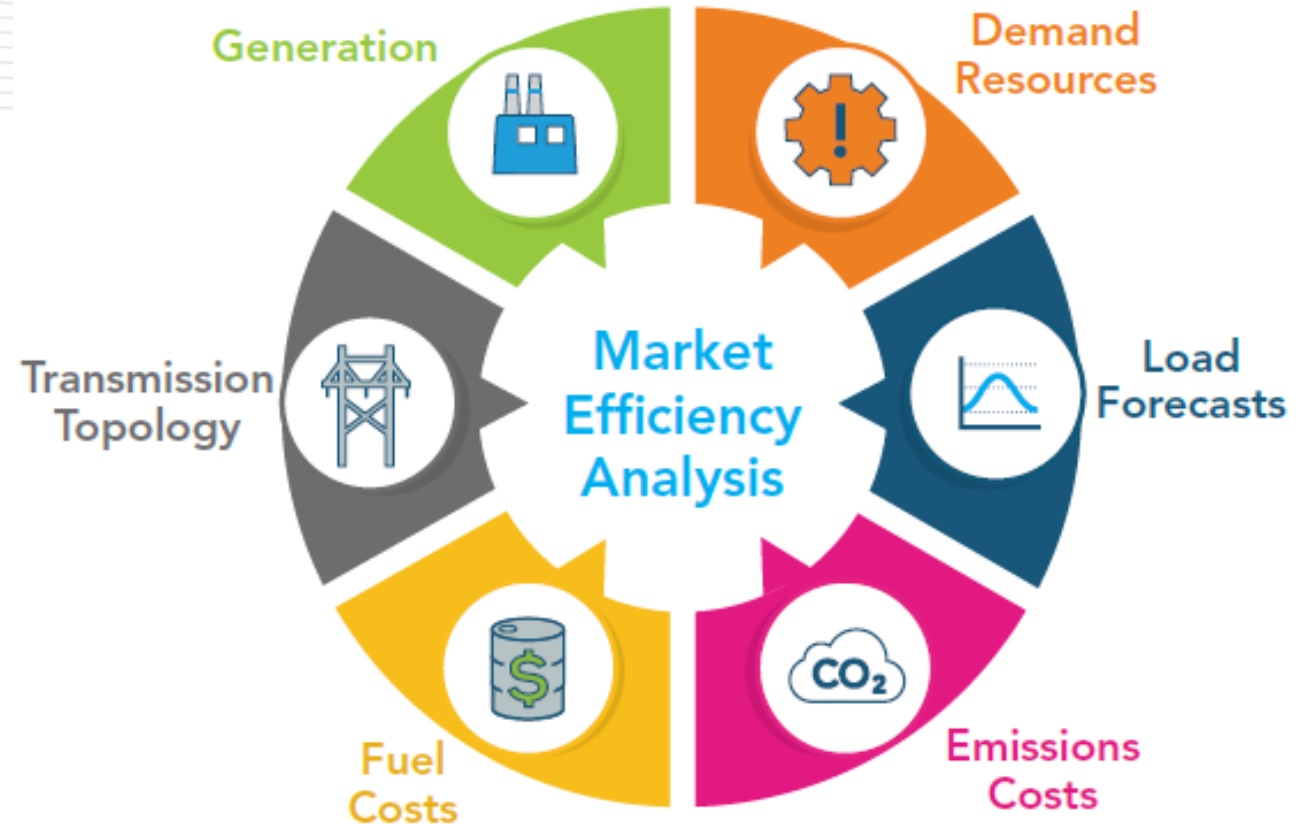
Data Source: PJM, 2021 Regional Transmission Expansion Plan (RTEP), Figure 1.2: System Enhancement Drivers





## Highlights

- Will utilize the 2024 PJM Load Forecast
- The transmission topology is based on the 2028 RTEP powerflow. This includes RTEP upgrades from NJ SAA 1.0 and 2022 RTEP Window 3.
- The generation expansion plan includes units from PJM's interconnection queue with executed Interconnection Agreements *or* Interim Interconnection Agreements.



Step	Tentative Target Date
Develop Base Case Assumptions	May 2024
Post Preliminary Base Case	July 2024
Stakeholders Feedback	September 2024
Identify Congestion Drivers	September – November 2024
Post Final Base Case and Target Congestion Drivers	January 2025
Long Term Proposal Window	January - May 2025
Analysis of Proposed Solutions	May – September 2025
TEAC Reviews and Board Approval	October - December 2025

- PJM is performing various studies for individual states to provide them information on how they wish to proceed.
- PJM plans to perform sensitivity studies on the near-term RTEP, later in the year. Additional changes to the RTEP case may be made to facilitate this effort which will be discussed with the stakeholders prior to commencing any analysis that will result in identification of potential violations to the stakeholders.
- PJM will be also conducting a proactive generation deactivation study that will account for state policy, plant age and overall risk.
- PJM continues to work with multiple states surrounding discussions regarding possible use of provisions in the Operating Agreement associated with the State Agreement Approach, under section 1.5.9 of the Operating Agreement.
- PJM will commence the 2024 RTEP with assumptions similar to those used in past years unless otherwise communicated to the stakeholders.

*Presented at February 6, 2024 TEAC Meeting*



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