



# 2024 Tennessee State Infrastructure Report (January 1, 2024 – December 31, 2024)

June 2025

This report reflects information for the portion of Tennessee within the PJM service territory.

## Planning

- Generation Portfolio Analysis
- Transmission Analysis
- Load Forecast

## Markets

- Market Analysis
- 2025/26 Base Residual Auction
- Net Energy Import/Export Trend

## Operations

- Generator Production
- Emissions Data

## In the Tennessee service territory:



### Interconnection Requests:

Tennessee has 100 MW of hybrid resource generation seeking interconnection in the PJM queue.



### Deactivations:

Tennessee had no generators deactivate or give a notice of deactivation in 2024.



### RTEP 2024:

Tennessee had no RTEP projects in 2024.

## In the Tennessee service territory:



### Load Forecast:

Tennessee's summer and winter peak load is projected to increase by 0.2% annually over the next ten years.



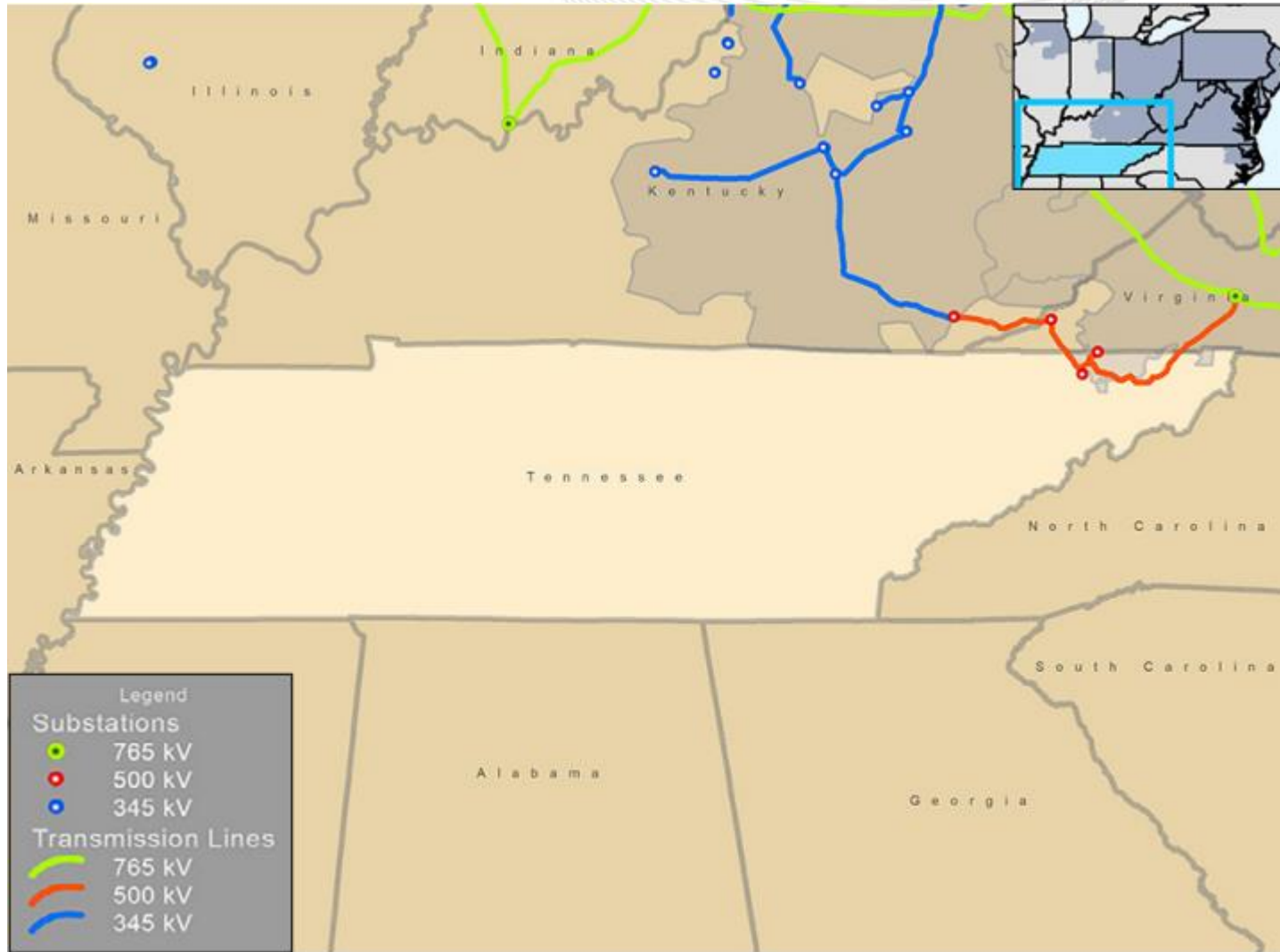
### Capacity Market:

Tennessee's service territory cleared at the RTO clearing price, \$269.92, for the 2026/2026 Base Residual Auction.



### Market Performance:

Tennessee's average hourly LMPs aligned with the PJM average hourly LMP.



The PJM service area in Tennessee is represented by the shaded portion of the map.

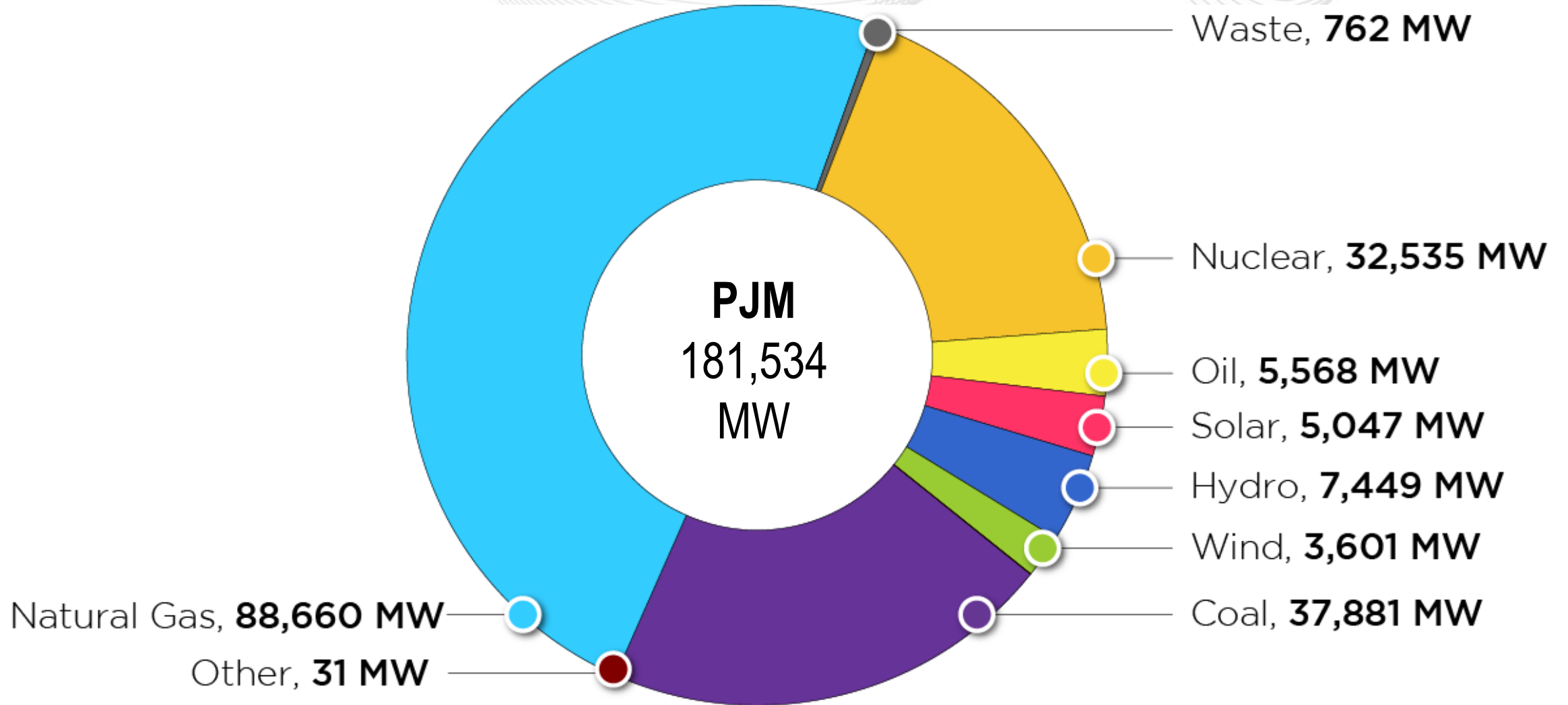
PJM operates transmission lines that extend beyond the service territory.

# Planning

## Generation Portfolio Analysis

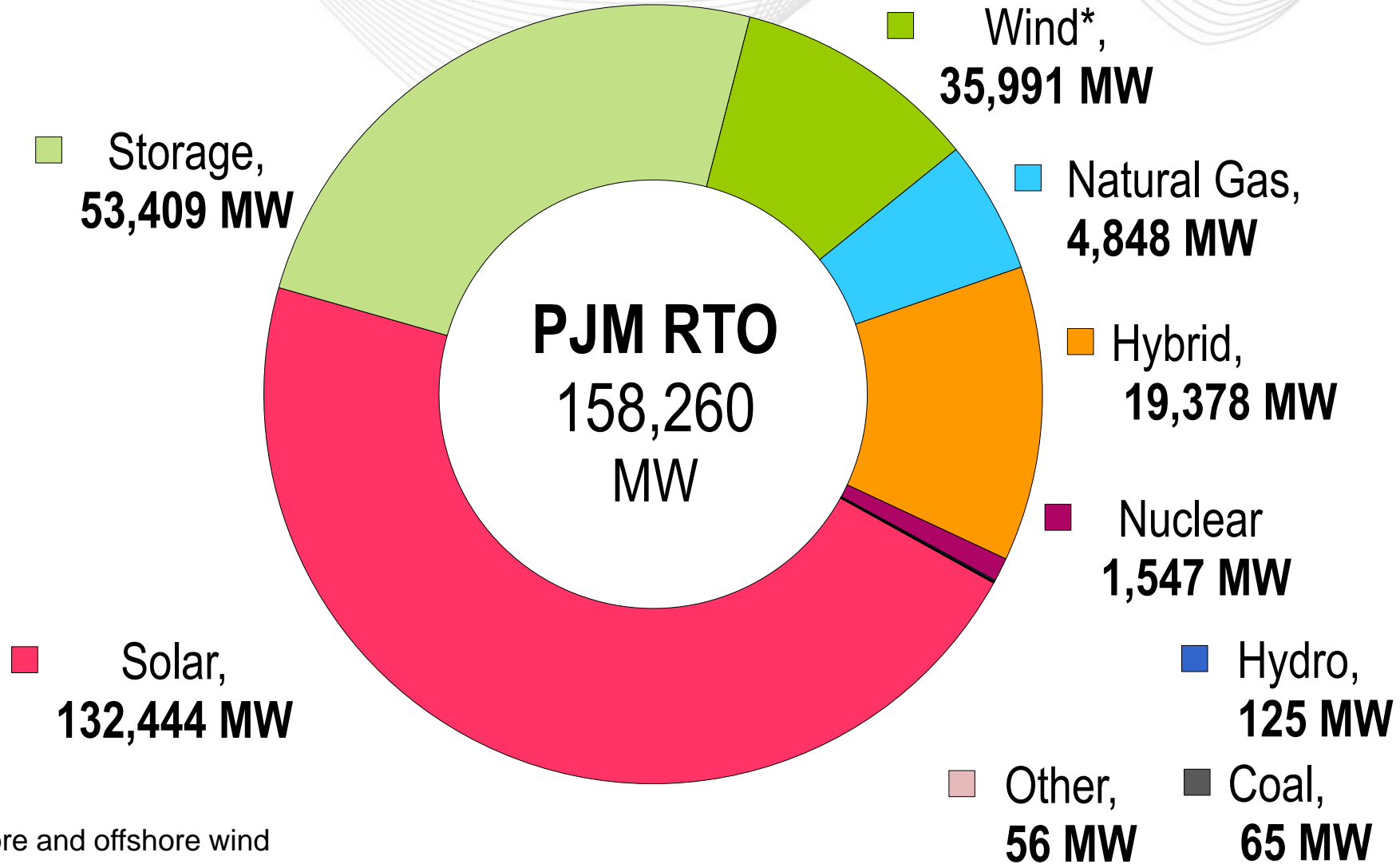
# PJM Existing Installed Capacity Mix

(CIRs – as of Dec. 31, 2024)



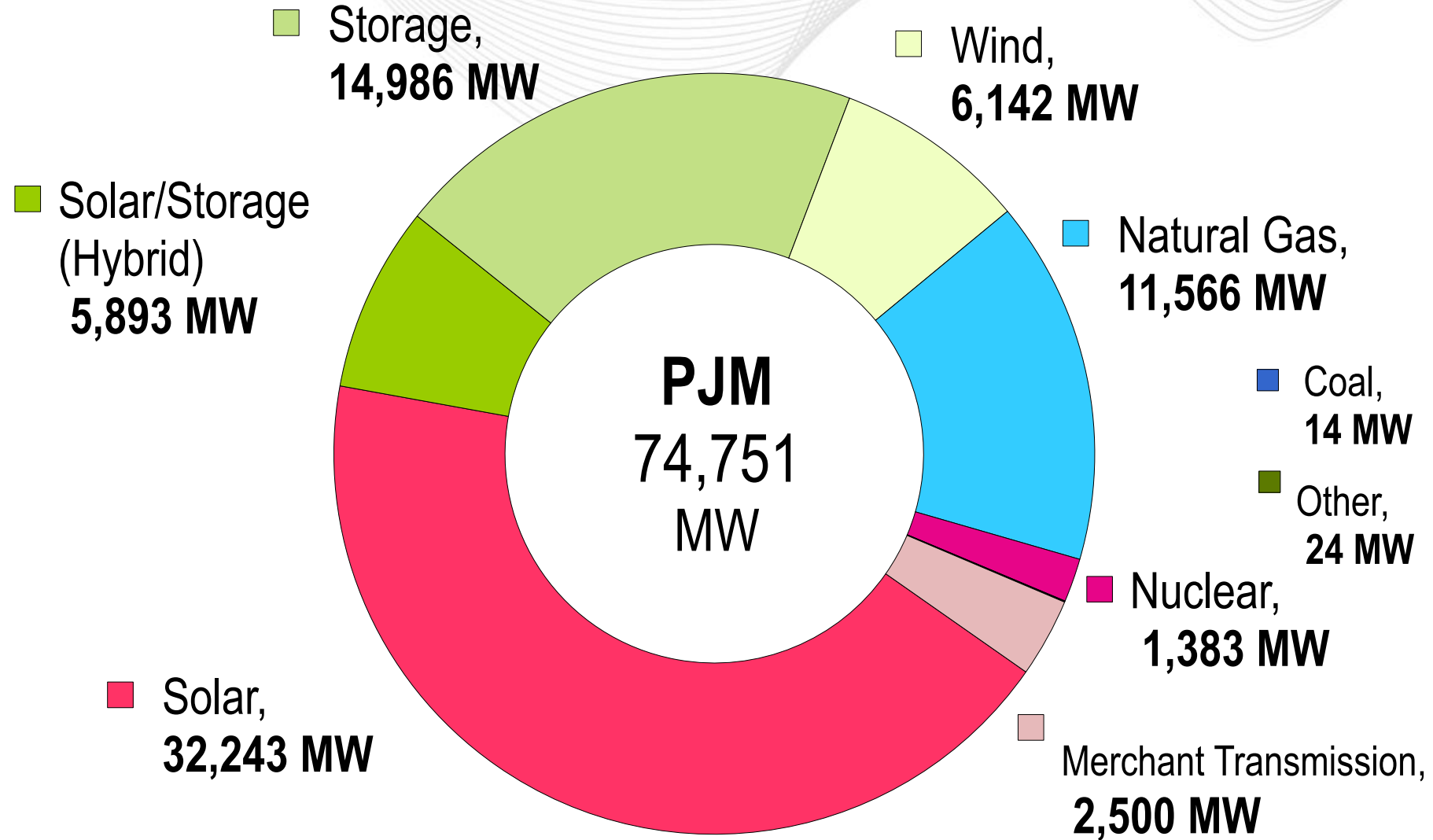
# PJM Queued Capacity (Nameplate) by Fuel Type

(All “Active” projects and projects with an interconnection agreement but not yet in service, as of May 7, 2025)



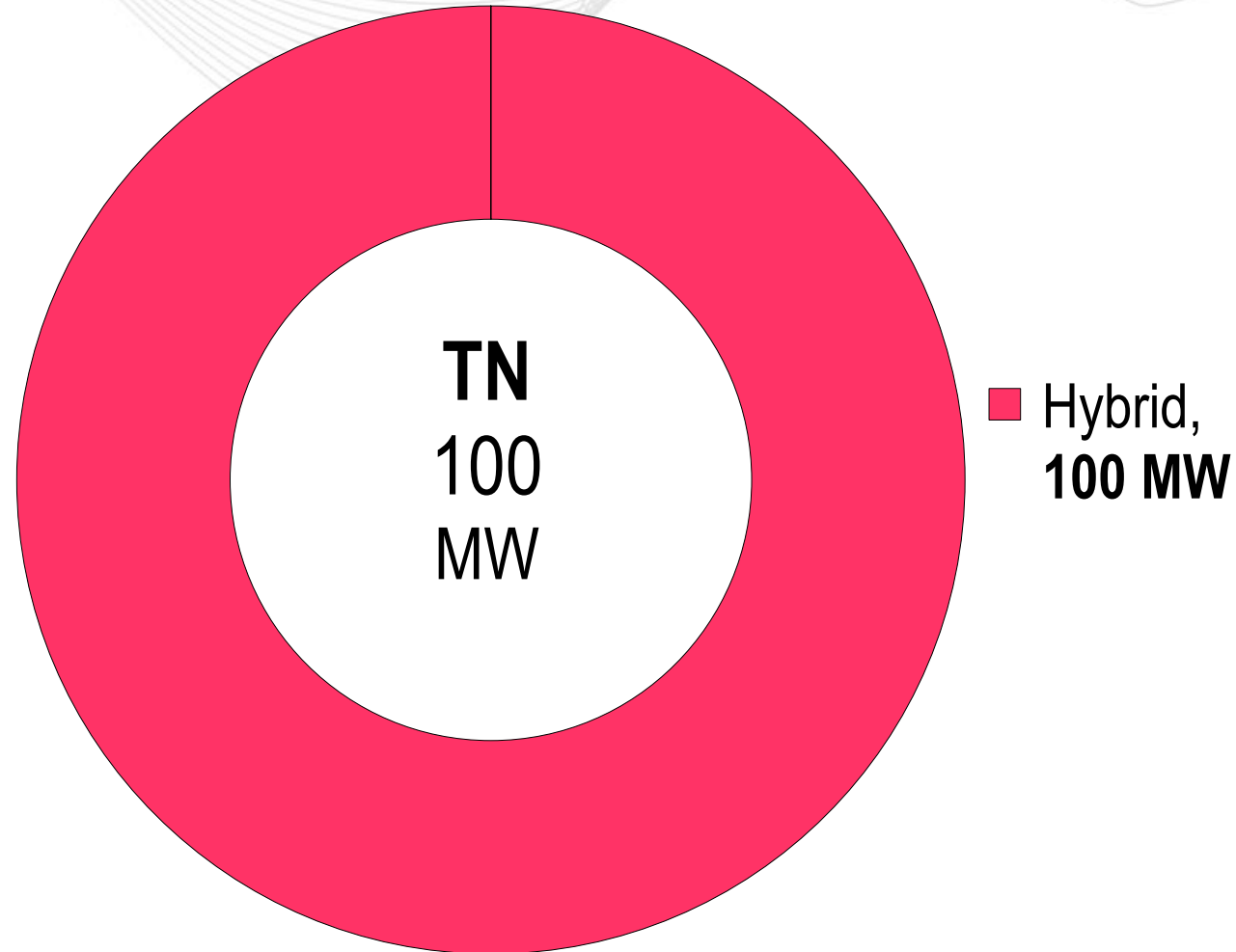
\*Wind includes both onshore and offshore wind





# Tennessee Queued Capacity (Nameplate) by Fuel Type

(All “Active” projects and projects with an interconnection agreement but not yet in service, as of May 7, 2025)



# Tennessee – 2024 Generator Deactivations

Tennessee had no generators deactivate or give a notice of deactivation in 2024.

# Planning

## Transmission Infrastructure Analysis

For reporting purposes, the 2024 state infrastructure reports provide maps displaying all baseline, network, and supplemental projects for the respective state. The reports also include aggregated project costs for each type of project within each state. The costs listed in the state infrastructure reports and 2024 Annual RTEP Report are not indicative of each project's cost allocation.

For a detailed list of each project shown on a state's project map, please see that state's section in the **2024 Annual RTEP Report** on PJM.com: <https://www.pjm.com/-/media/DotCom/library/reports-notices/2024-rtep/2024-rtep-report.pdf>

The complete list of all RTEP projects in PJM, including those from prior years, can be found at the **RTEP Upgrades & Status – Transmission Construction Status** page on PJM.com: <https://www.pjm.com/planning/m/project-construction>.

Tennessee had no baseline projects in 2024.

Note: Baseline upgrades are those that resolve a system reliability criteria violation. Baseline projects listed in the annual RTEP report reflect project costs within a specific location and are not indicative of the project's cost allocation.

Tennessee had no network projects in 2024.

Note: Network projects are new or upgraded facilities required primarily to eliminate reliability criteria violations caused by proposed generation, merchant transmission or long-term firm transmission service requests, as well as certain direct connection facilities required to interconnect proposed generation projects. The costs of network projects are borne by the interconnection customer.

Tennessee had no supplemental projects in 2024.

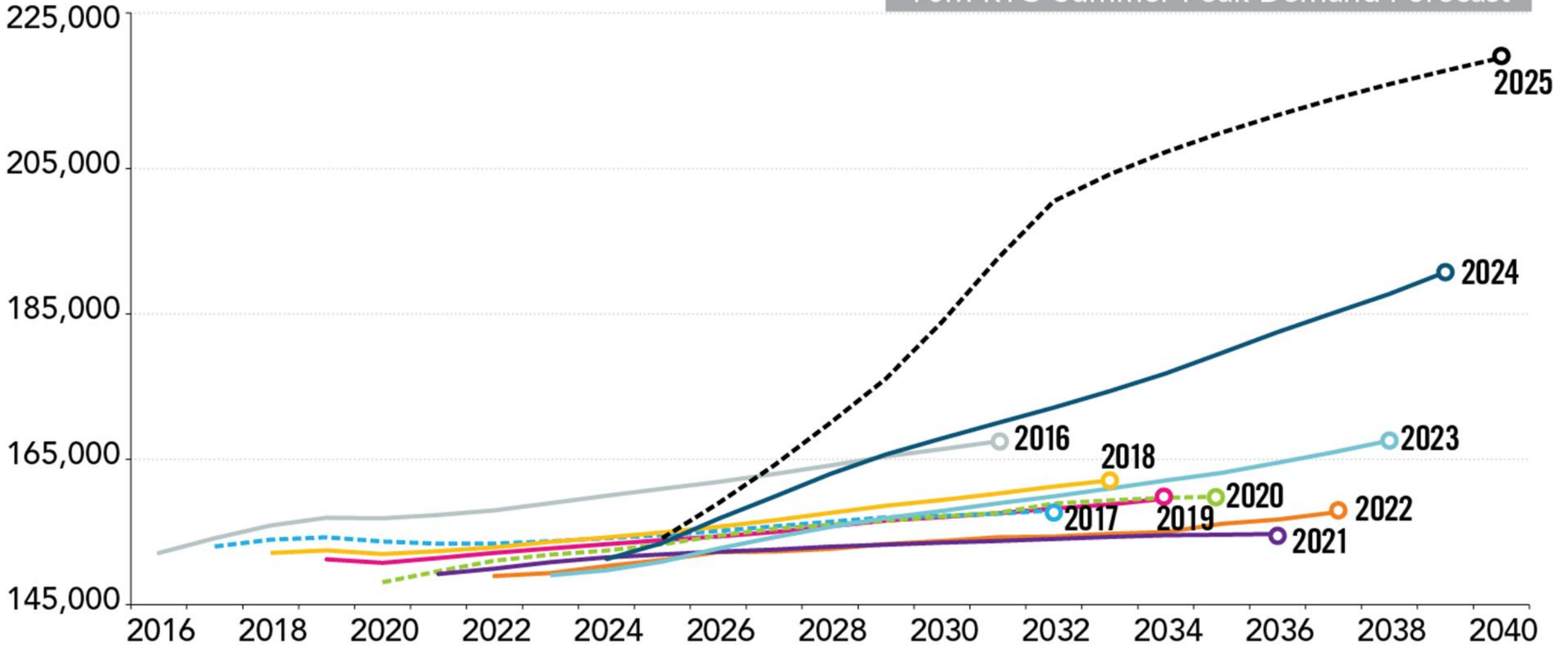
Note: Supplemental projects are transmission expansions or enhancements that are not required for compliance with PJM criteria and are not state public policy projects according to the PJM Operating Agreement. These projects are used as inputs to RTEP models, but are not required for reliability, economic efficiency or operational performance criteria, as determined by PJM.

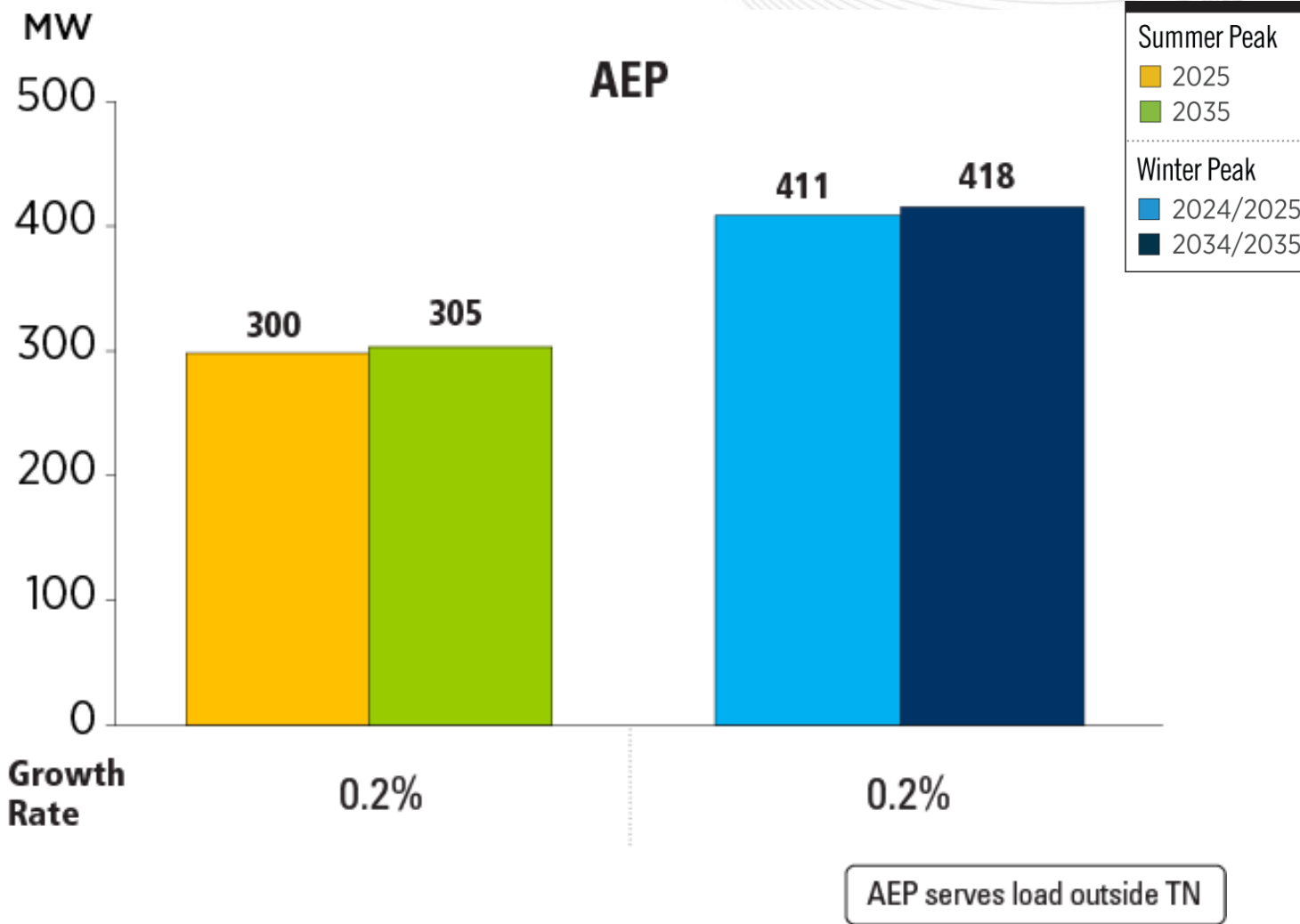


# Planning Load Forecast

Load (MW)

PJM RTO Summer Peak Demand Forecast





## PJM RTO Summer Peak

2025

154,144  
MW

2035

209,923  
MW

Growth Rate 3.1%

## PJM RTO Winter Peak

2024/2025

136,127  
MW

2034/2035

198,175  
MW

Growth Rate 3.8%

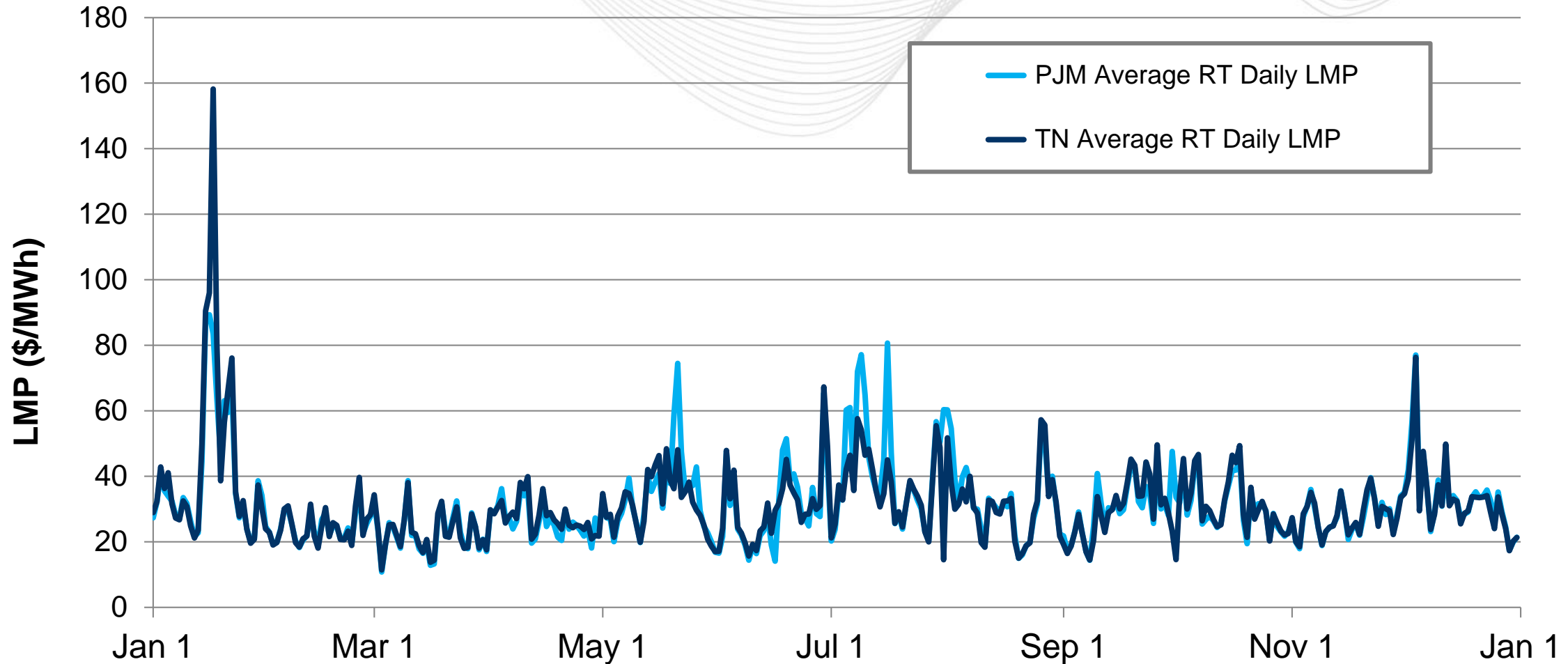
The summer and winter peak megawatt values reflect the estimated amount of forecast load to be served by each transmission owner in the noted state/district. Estimated amounts were calculated based on the average share of each transmission owner's real-time summer and winter peak load in those areas over the past five years.

# Markets

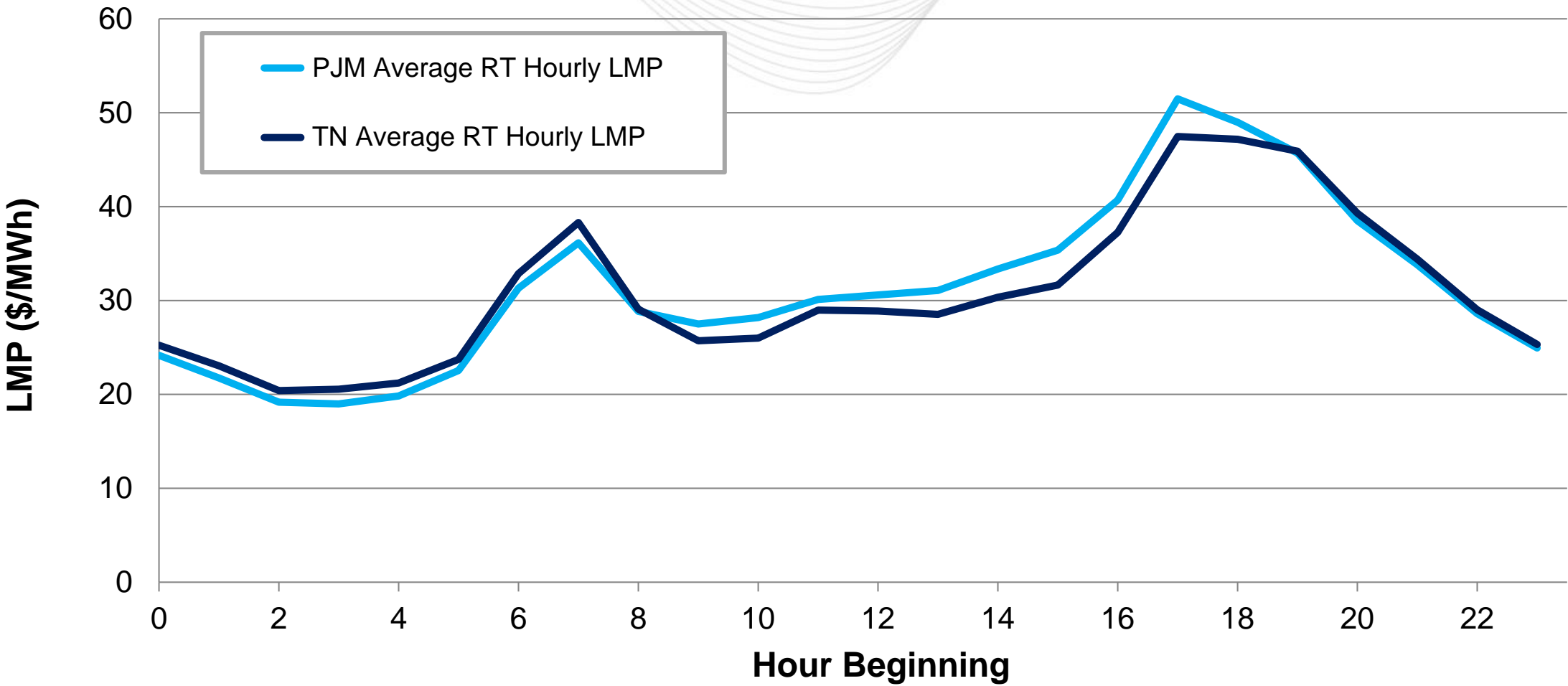
## Market Analysis

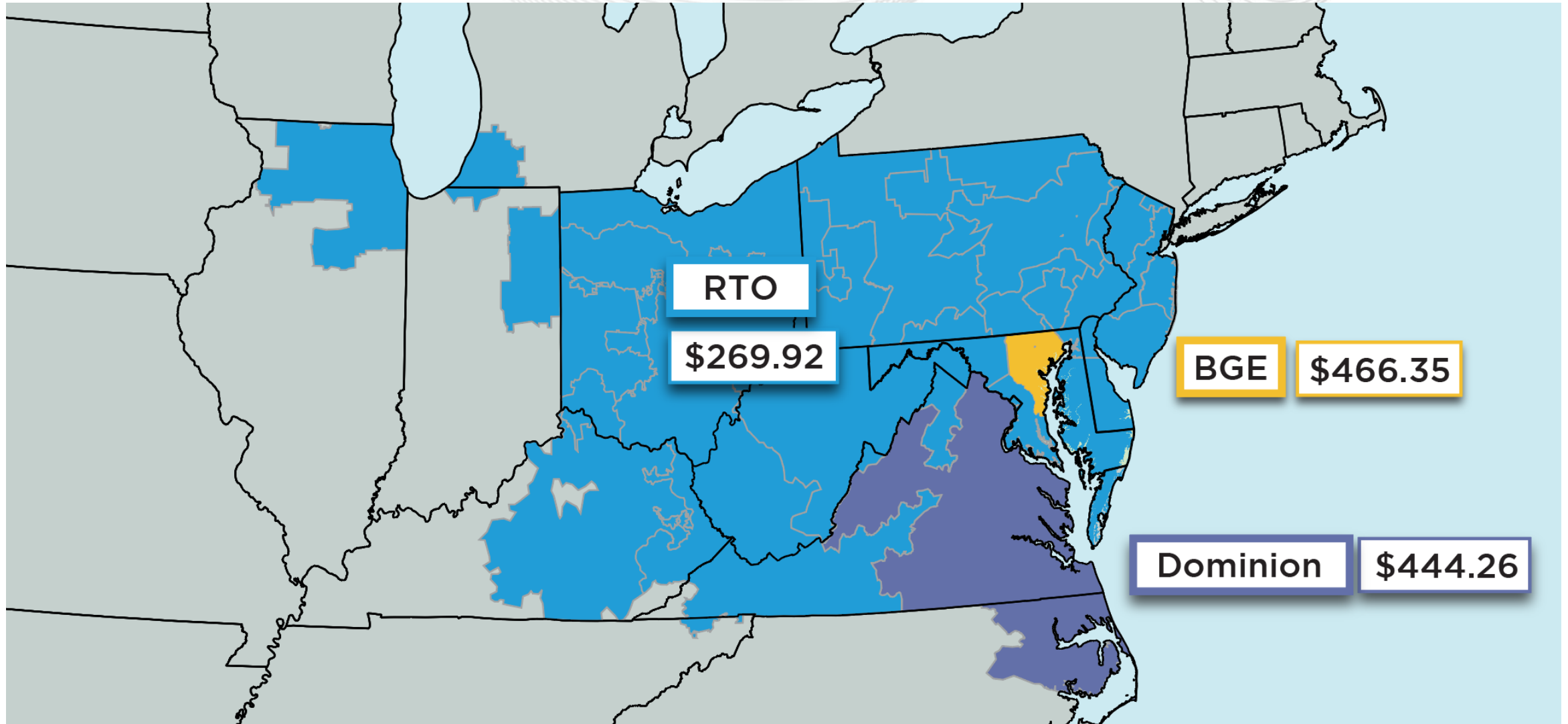
# Tennessee – Average Daily LMP

(Jan. 1, 2024 – Dec. 31, 2024)



Tennessee's average hourly LMPs were generally consistent with the PJM average hourly LMP.







# 2025/2026 BRA Final Clearing Prices and MW Quantities

(Unforced Capacity)

LDA	Offered MW*	Cleared MW**	Clearing Price
DOM	20,100.2	20,049.6	\$444.26
BGE	612.9	606.9	\$466.35
RTO	137,152.1	135,684.0	\$269.92

\* Offered MW values include Annual, Summer-Period, and Winter-Period Capacity Performance sell offers.

\*\* Cleared MW values include Annual and matched Seasonal Capacity Performance sell offers within the LDA.

*Locational Price Adder is with respect to the immediate parent LDA*



# 2025/2026 Cleared MW (UCAP) by Resource Type

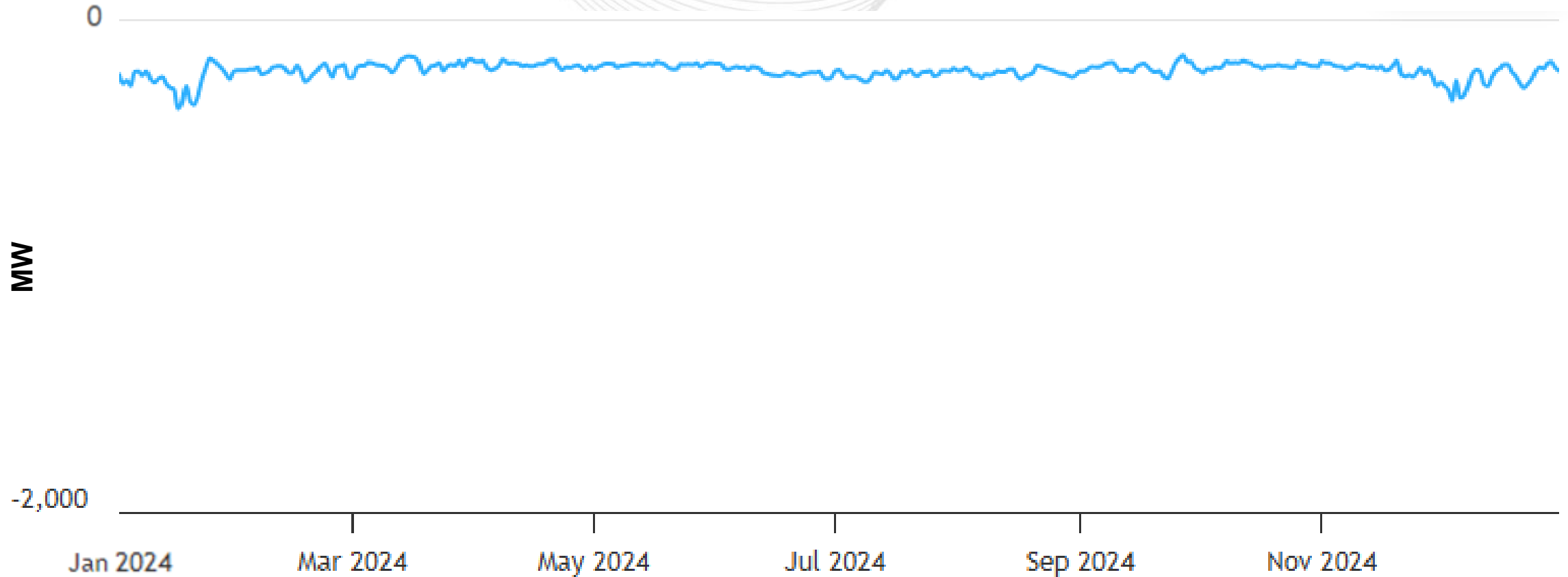
## CAPACITY PERFORMANCE

*Cleared MW (UCAP)*

Resource Type	ANNUAL	SUMMER	WINTER
<b>Generation</b>	128,114.5	45.0	448.0
<b>DR</b>	5,942.4	122.3	-
<b>EE</b>	1,179.1	280.7	-
<b>PRD</b>	210.2	-	-
<b>Total (MW)</b>	<b>135,446.2</b>	<b>448.0</b>	<b>448.0</b>

# Tennessee – Net Energy Import/Export Trend

(Jan. 2024 – Dec. 2024)



This chart reflects the portion of Tennessee that PJM operates. Positive values represent exports and negative values represent imports.

# Operations

CO<sub>2</sub> lbs/MWh

SO<sub>2</sub> and NO<sub>x</sub> lbs/MWh

