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

June 2025

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

Table of Contents

Executive Summary

2024 Illinois State Infrastructure Report

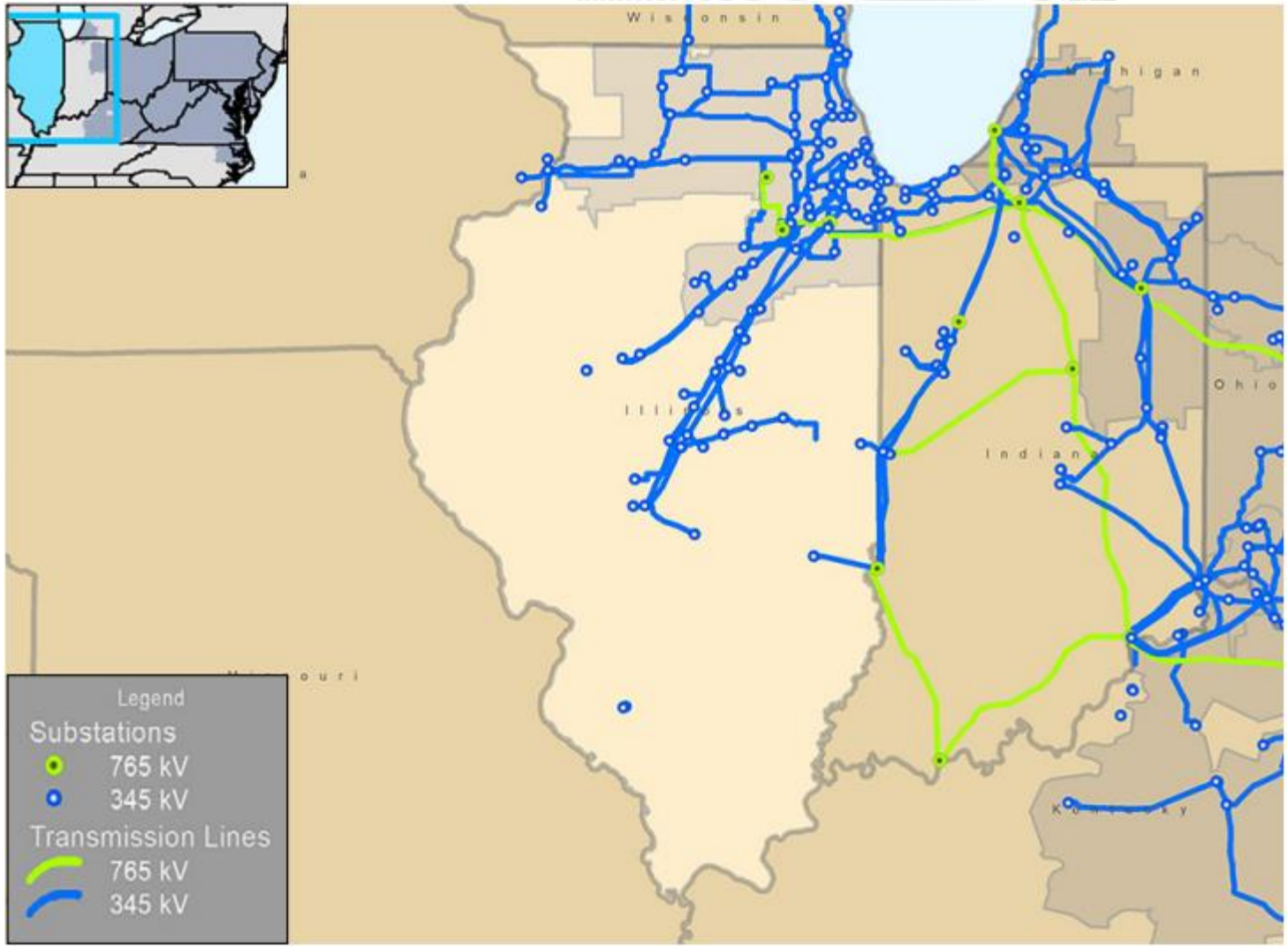
In the Illinois service territory:

Existing Capacity:	• In the Illinois portion of PJM, natural gas represents 45% of the total installed capacity while nuclear represents 39%. • In PJM, natural gas and coal are 49% and 21% of total installed capacity, while nuclear represents 18%.
Interconnection Requests:	• Solar represents 35% of new interconnection requests, storage represents 26%, and wind 18% of new requests.
Deactivations:	Illinois had 1,626.6 MW generation deactivate or provide notice of intent to deactivate in 2024.
RTEP 2024:	Illinois's 2024 RTEP project total represents approximately $1.533 billion in investment.

In the Illinois service territory:

Load Forecast:	Illinois's summer peak load is projected to increase by 1.6% annually over the next ten years, while the winter peak is projected to increase by 2.9% percent.
Capacity Market:	Illinois service territory cleared at the RTO clearing price, $269.92, for the 2026/2026 Delivery Year.
Market Performance:	Illinois's average hourly LMPs were lower than the PJM average hourly LMP.
Emissions:	Illinois's average CO_2 emissions increased slightly in 2024 compared to 2023 levels.

PJM Service Area in Illinois



The PJM service area in Illinois is the ComEd zone and is represented by the shaded portion of the Illinois state map.

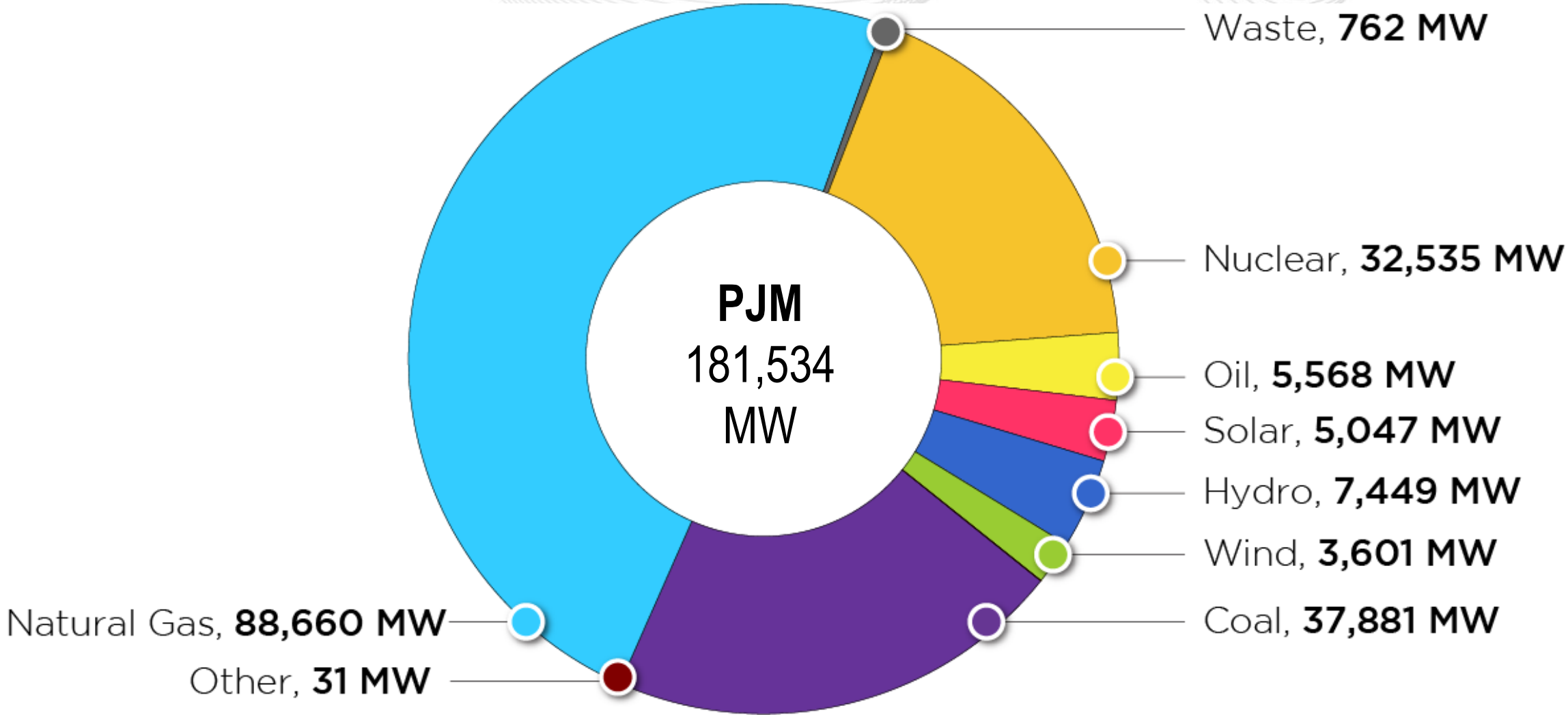
PJM operates transmission lines that extend beyond the service territory.

Planning

Generation Portfolio Analysis

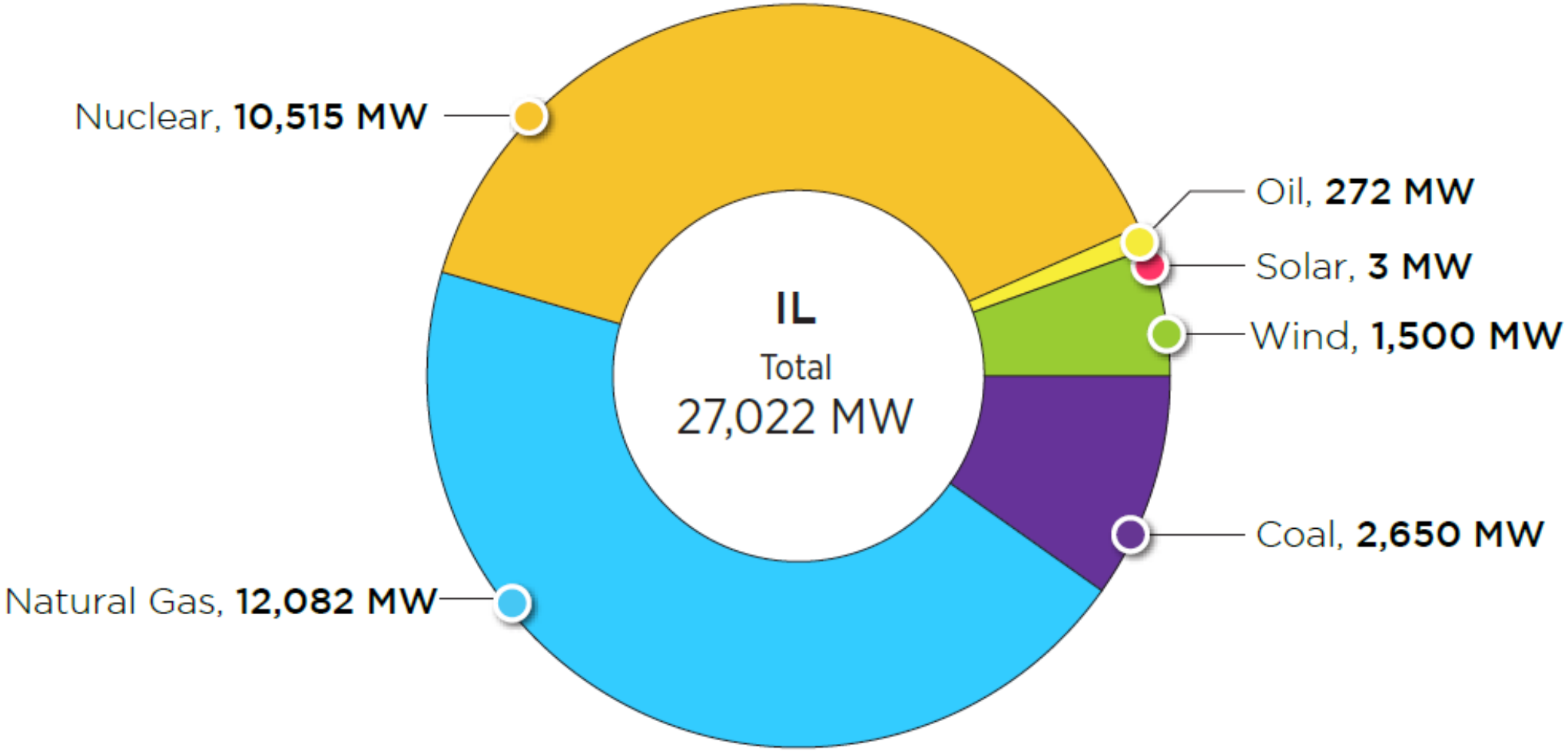
PJM Existing Installed Capacity Mix

(CIRs – as of Dec. 31, 2024)



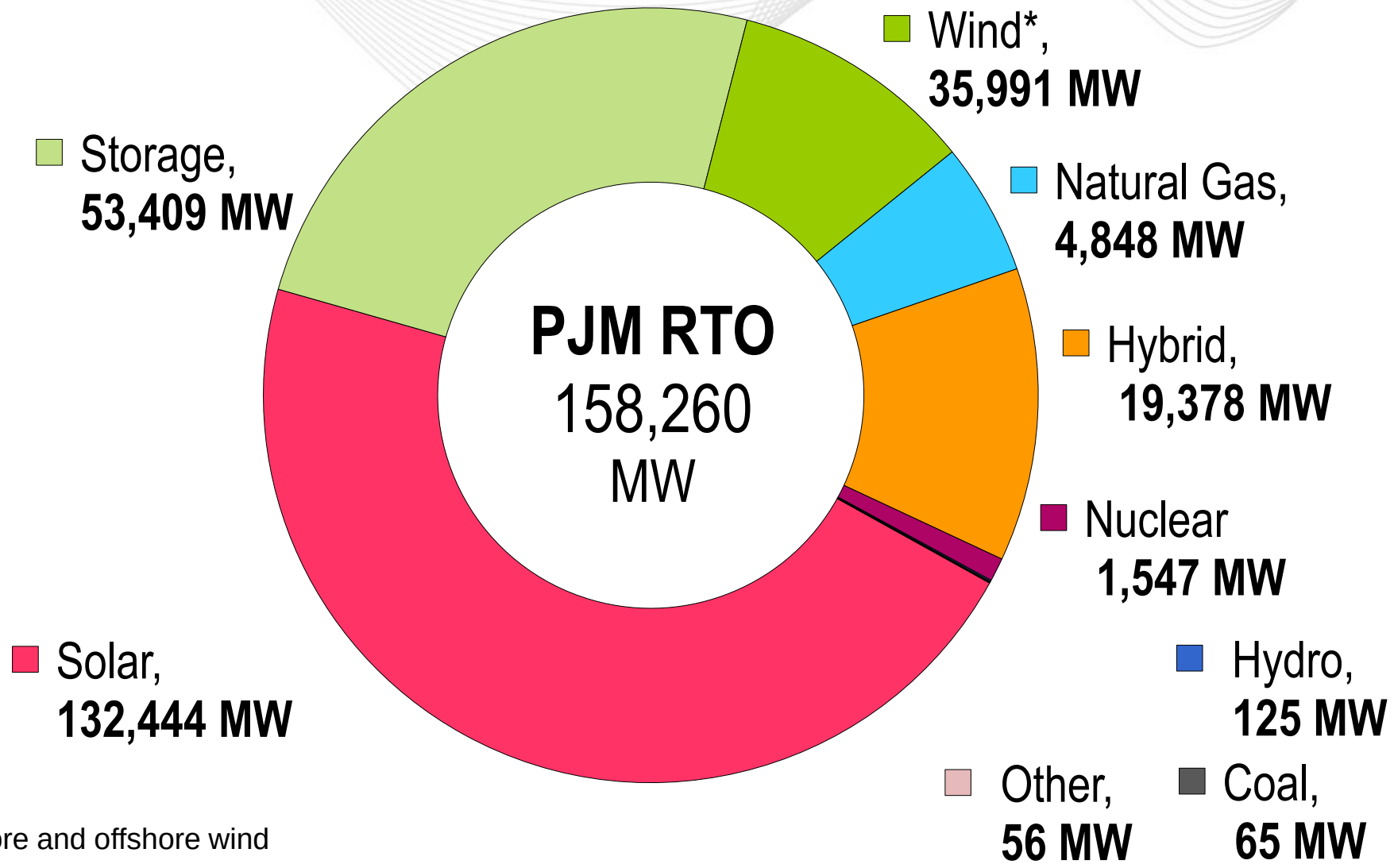
Illinois – Existing Installed Capacity (MW) by Fuel Type

(CIRs- as of Dec. 31, 2024)



PJM Queued Capacity (Nameplate) by Fuel Type

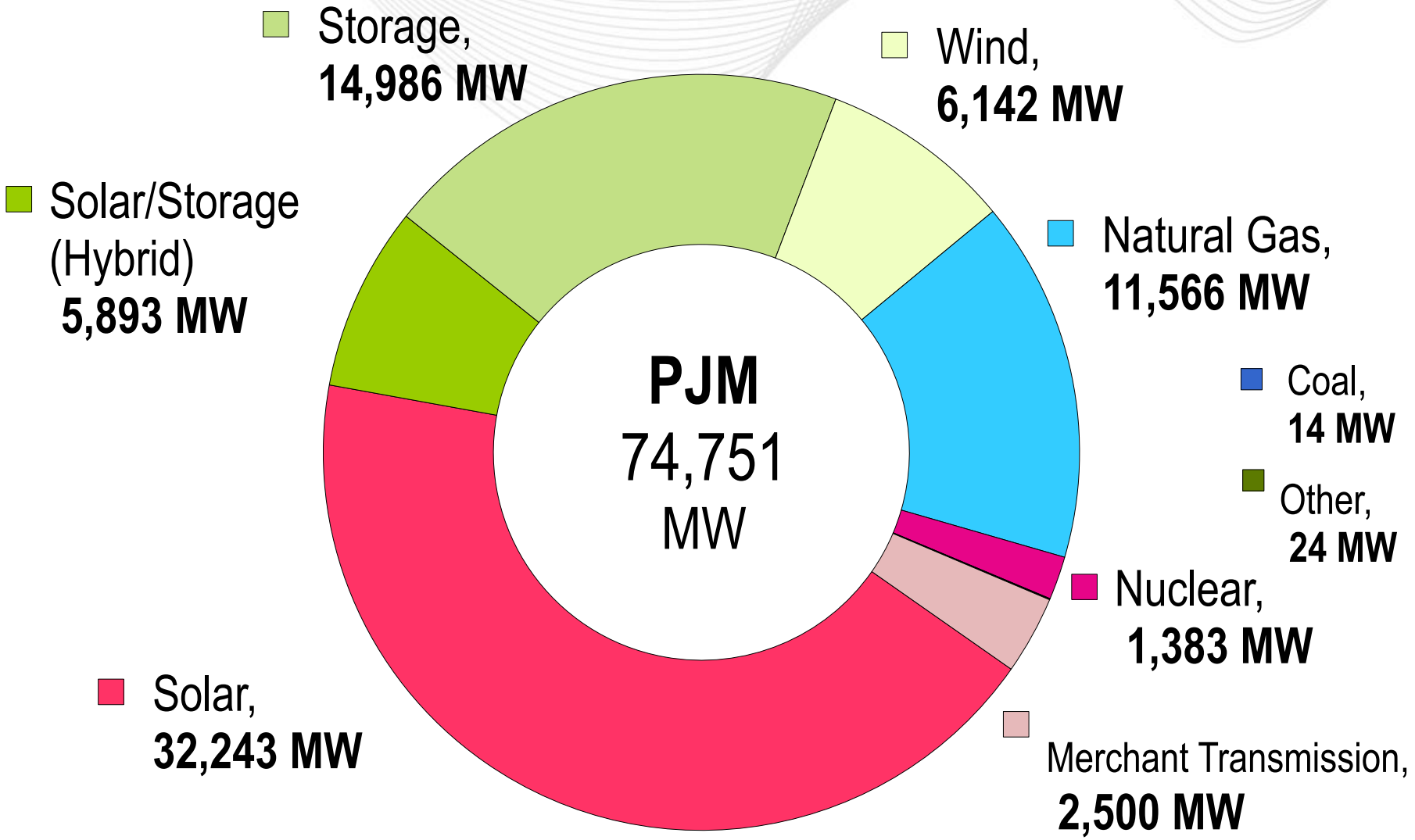
(All “Active” projects and projects with an interconnection agreement but not yet in service, as of May 7, 2025)



*Wind includes both onshore and offshore wind

PJM Interconnection Queue Transition

Projects remaining in Transition Cycle 1 and Transition Cycle 2, including projects selected through the Reliability Resource Initiative (June 2025)



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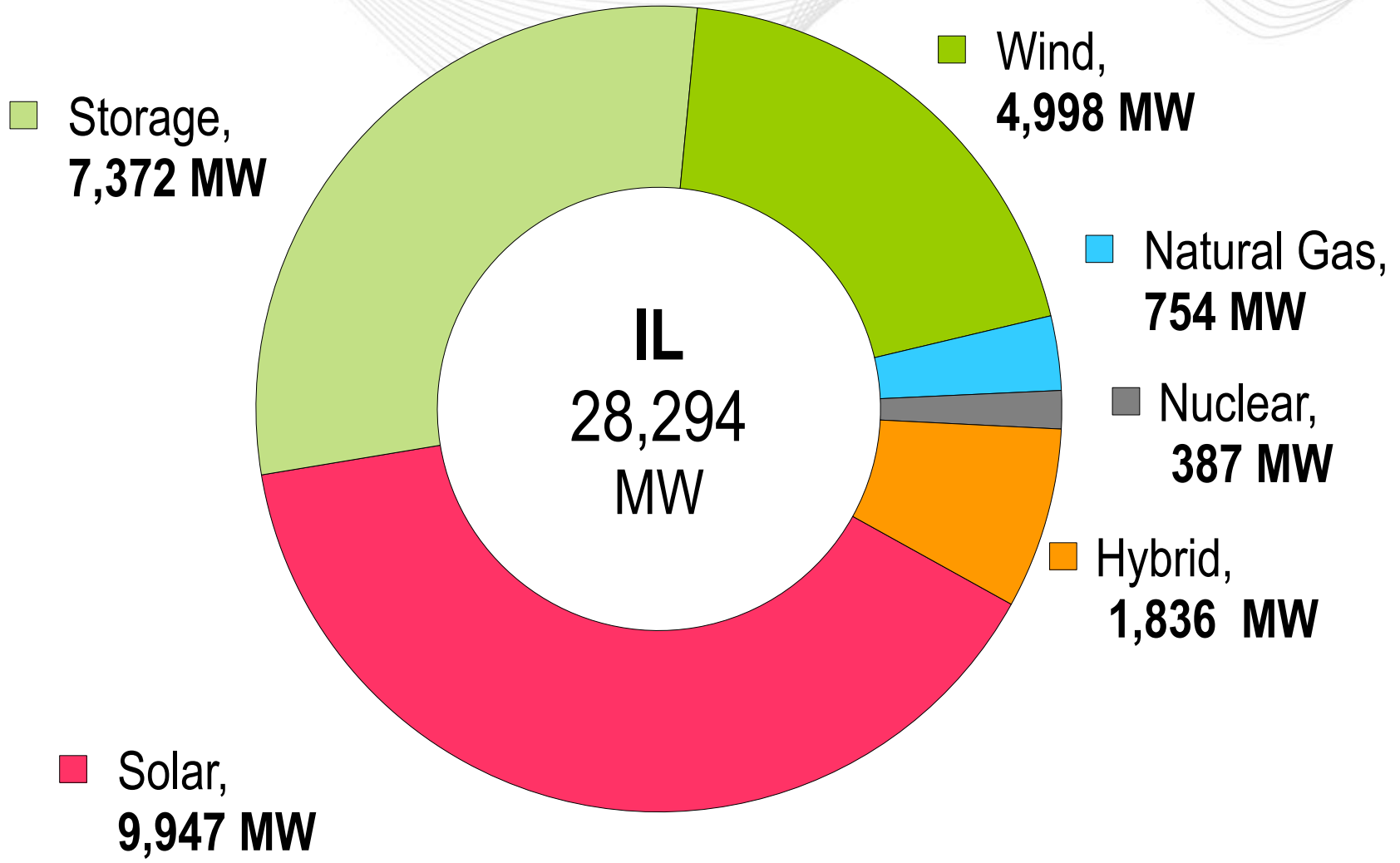
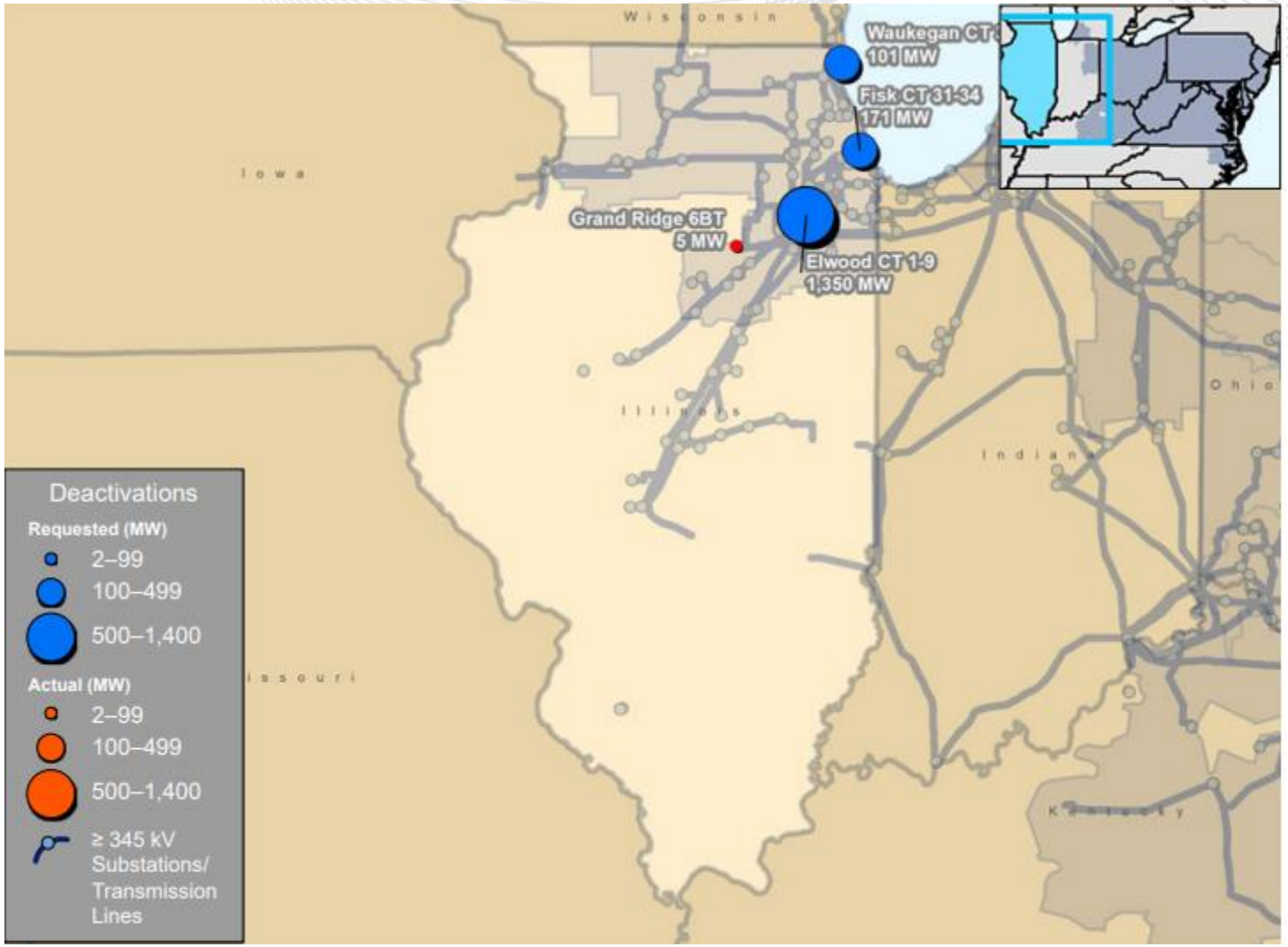


Illinois – 2024 Generator Deactivations



Illinois – 2024 Generator Deactivations

Unit	TO Zone	Fuel Type	Request Received to Deactivate	Actual or Projected Deactivation Date	Age (Years)	Capacity (MW)
Grand Ridge 6 BT	ComEd	Storage	6/28/2024	10/1/2024	12	4.5
Fisk CT 31		Oil	7/23/2024	6/1/2026	56	49.1
Fisk CT 32						50.8
Fisk CT 33						47.9
Fisk CT 34						22.9
Waukegan CT 32	ComEd	Oil	7/23/2024	6/1/2026	56	48.9
Waukegan CT 31						52.5
Elwood CT 9	ComEd	Natural Gas	5/29/2024	6/1/2025	25	150
Elwood CT 8						150
Elwood CT 7						150
Elwood CT 6						150
Elwood CT 5						150
Elwood CT 4						150
Elwood CT 3						150
Elwood CT 2						150
Elwood CT 1						150

Planning

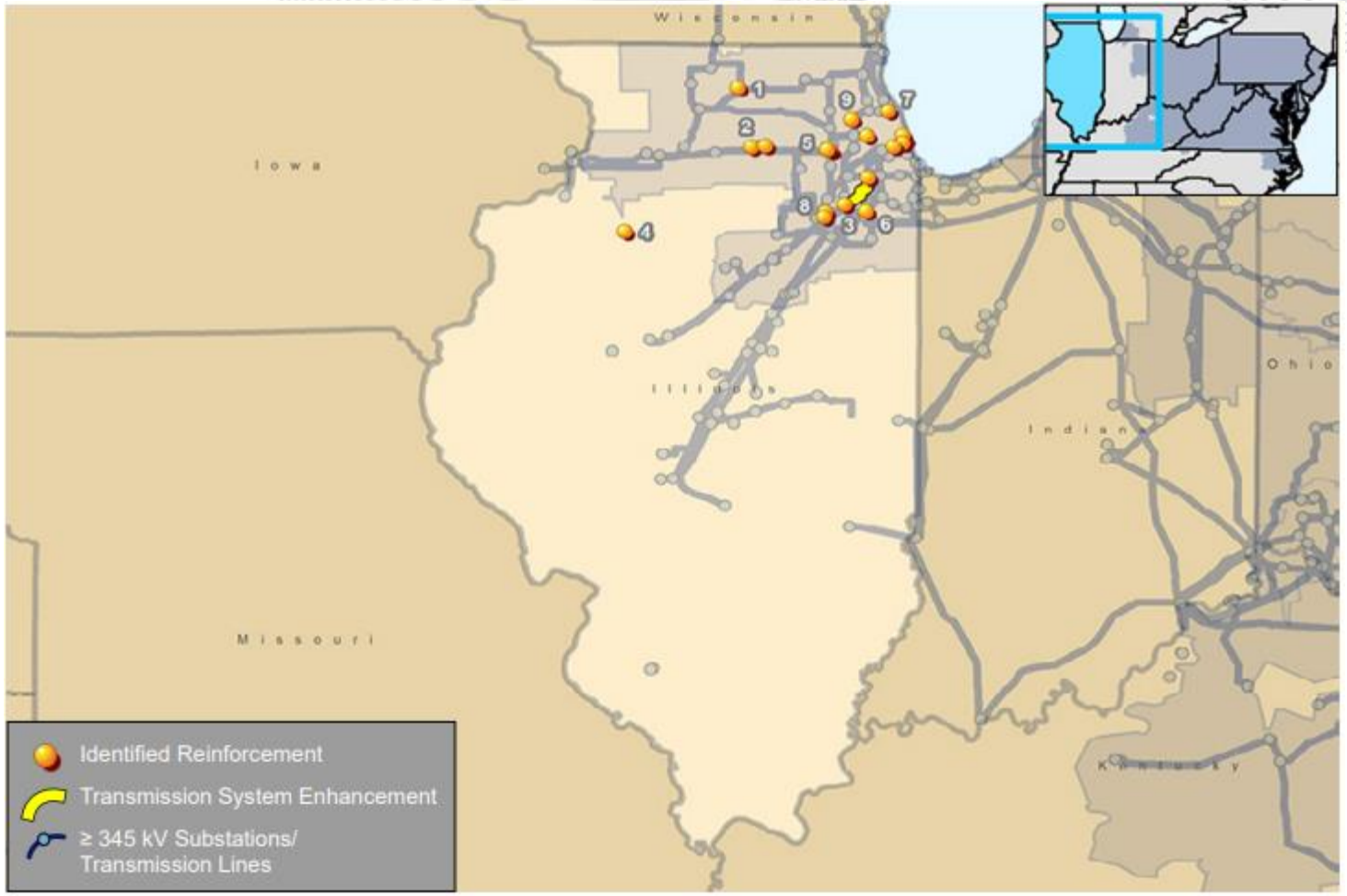
Transmission Infrastructure Analysis

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.

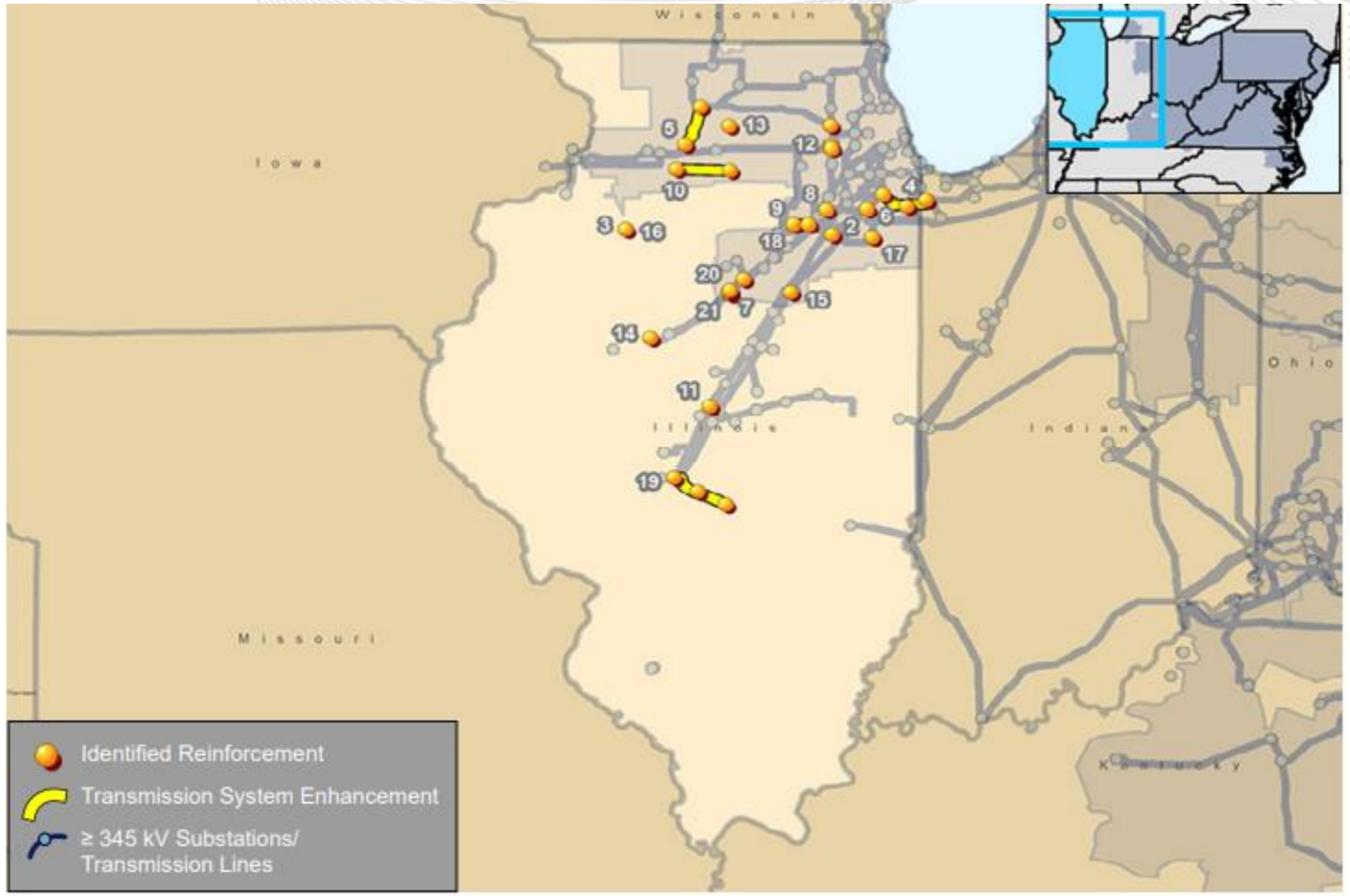
Illinois Baseline Projects



The 2024 RTEP has $134.23 million in baseline projects located in Illinois.

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.

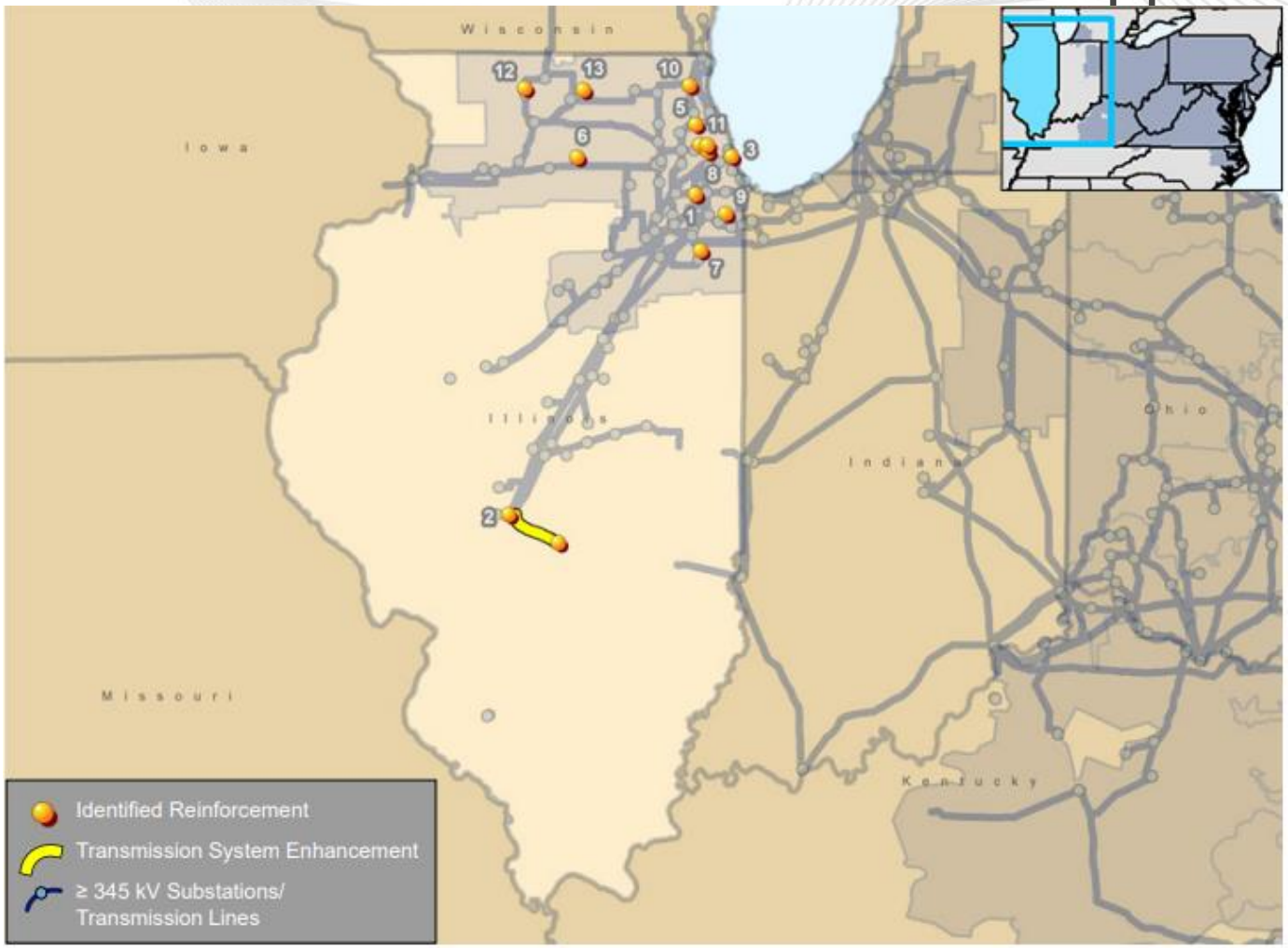
Illinois Network Projects



The 2024 RTEP has $577.88 million in network projects located in Illinois.

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.

Illinois Supplemental Projects

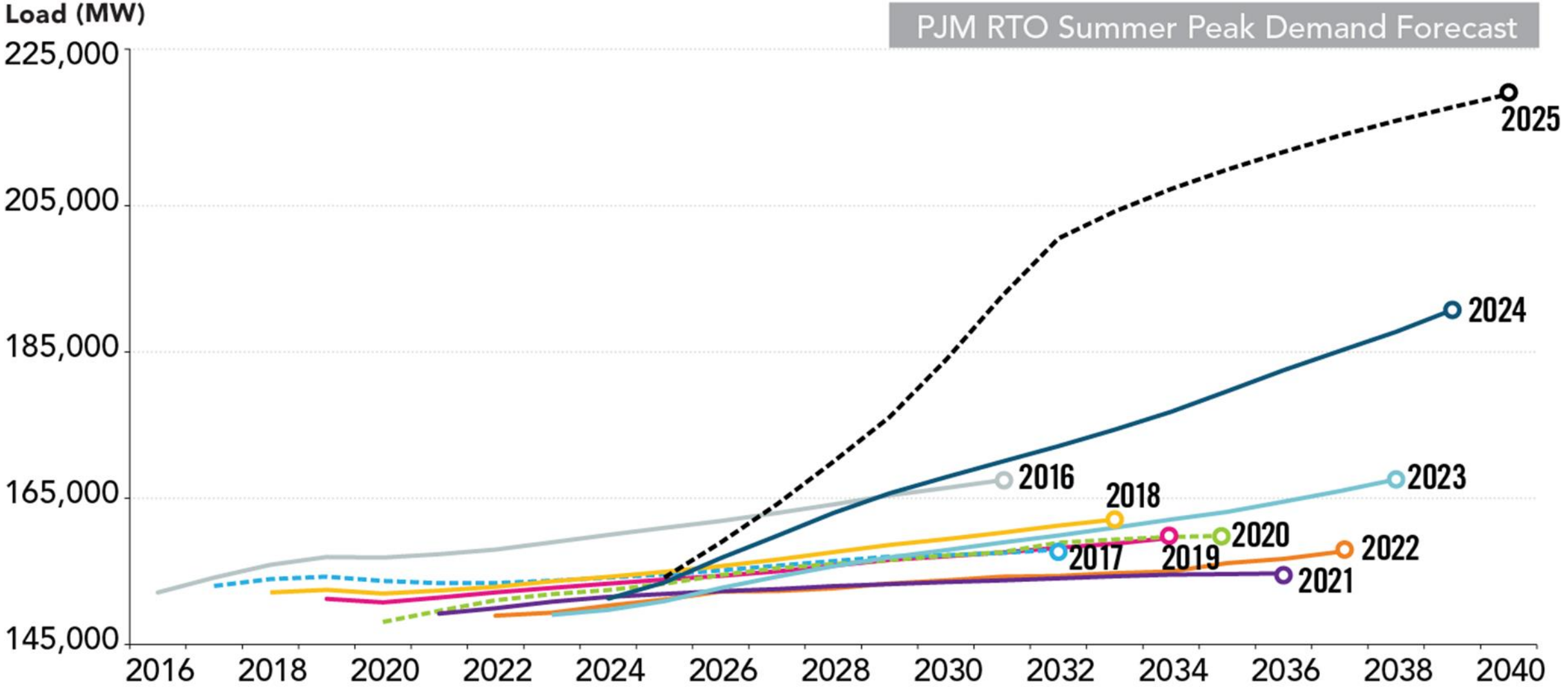


The 2024 RTEP has $820.90 million in supplemental projects located in Illinois.

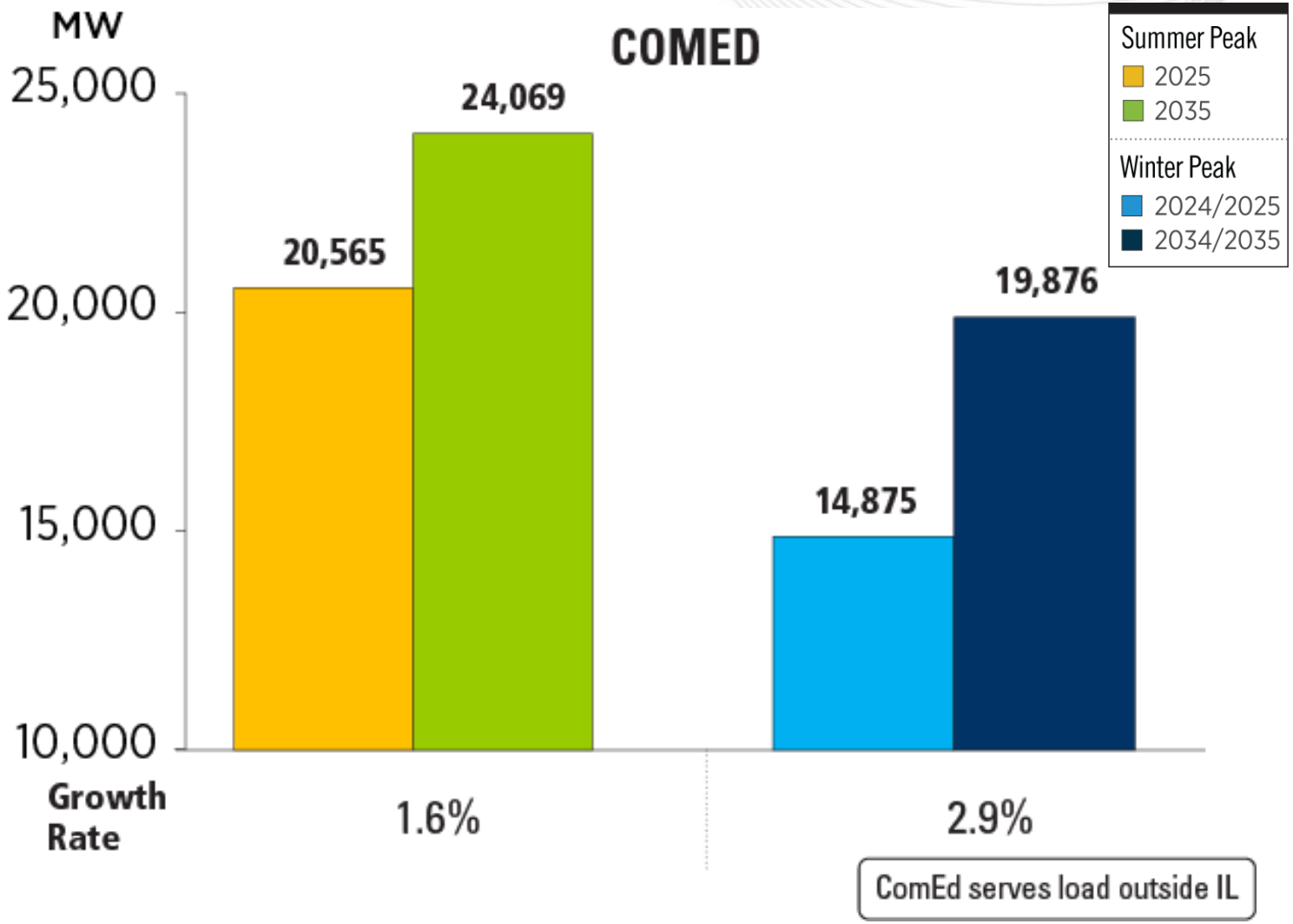
Note: Supplemental projects are transmission expansions or enhancements that are not required for compliance with PJM criteria and are not state public policy projects according to the PJM Operating Agreement. These projects are used as inputs to RTEP models, but are not required for reliability, economic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

Planning
Load Forecast

PJM Electricity Demand Growth



Illinois – 2025 Load Forecast Report



PJM RTO Summer Peak		PJM RTO Winter Peak	
2025	2035	2024/2025	2034/2035
154,144 MW	209,923 MW	136,127 MW	198,175 MW
Growth Rate 3.1%		Growth Rate 3.8%	

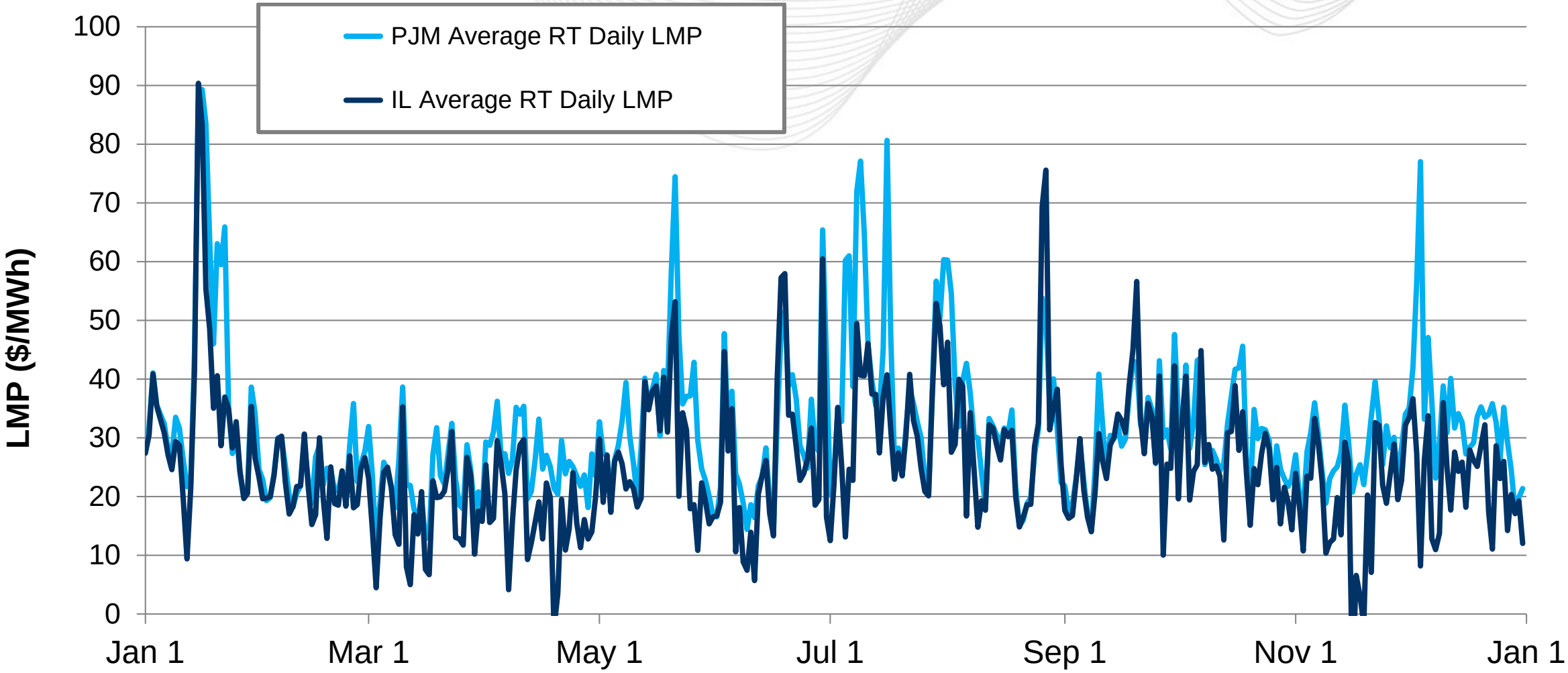
The summer and winter peak megawatt values reflect the estimated amount of forecast load to be served by each transmission owner in the noted state/district. Estimated amounts were calculated based on the average share of each transmission owner's real-time summer and winter peak load in those areas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

Markets

Market Analysis

Illinois – Average Daily LMP

(Jan. 1, 2024 – Dec. 31, 2024)

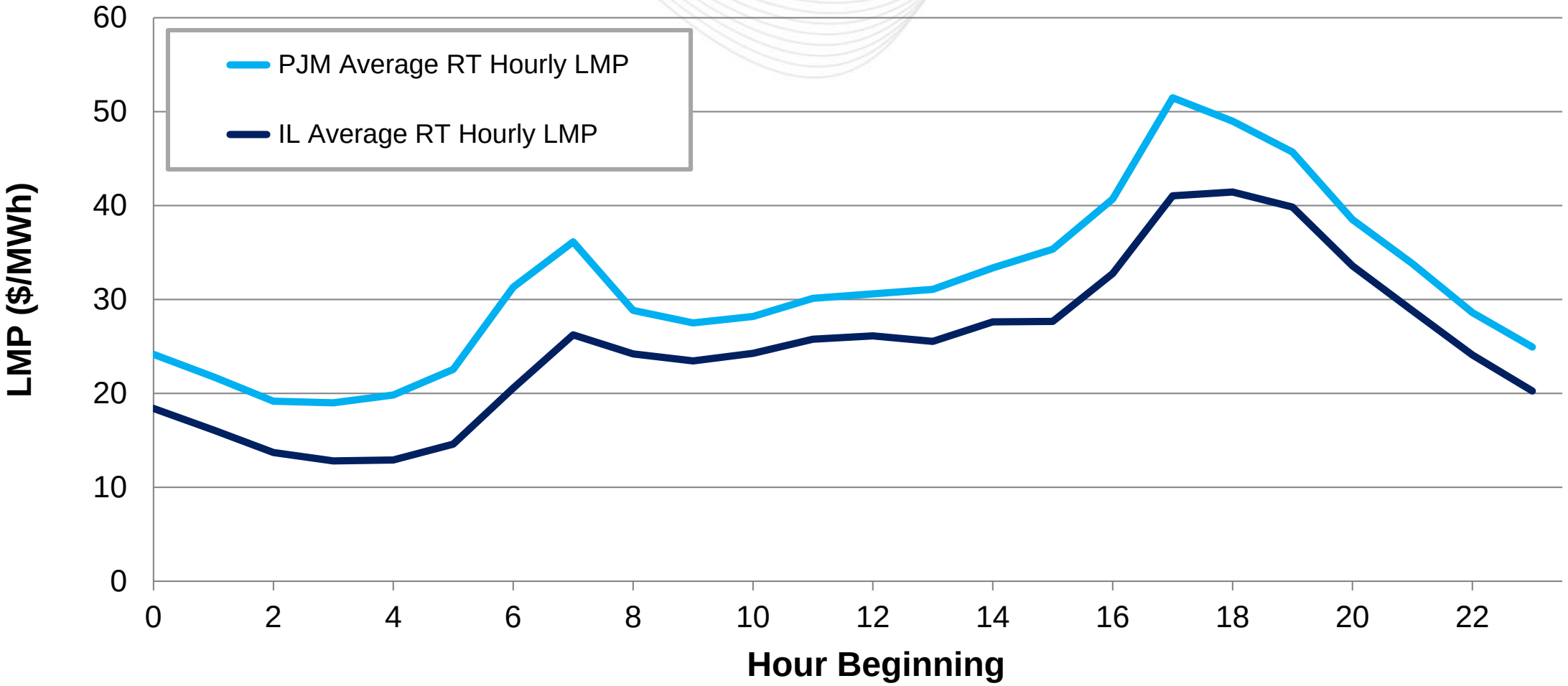


Note: Illinois had negative average LMPs on April 19, Nov. 16 and Nov. 19.

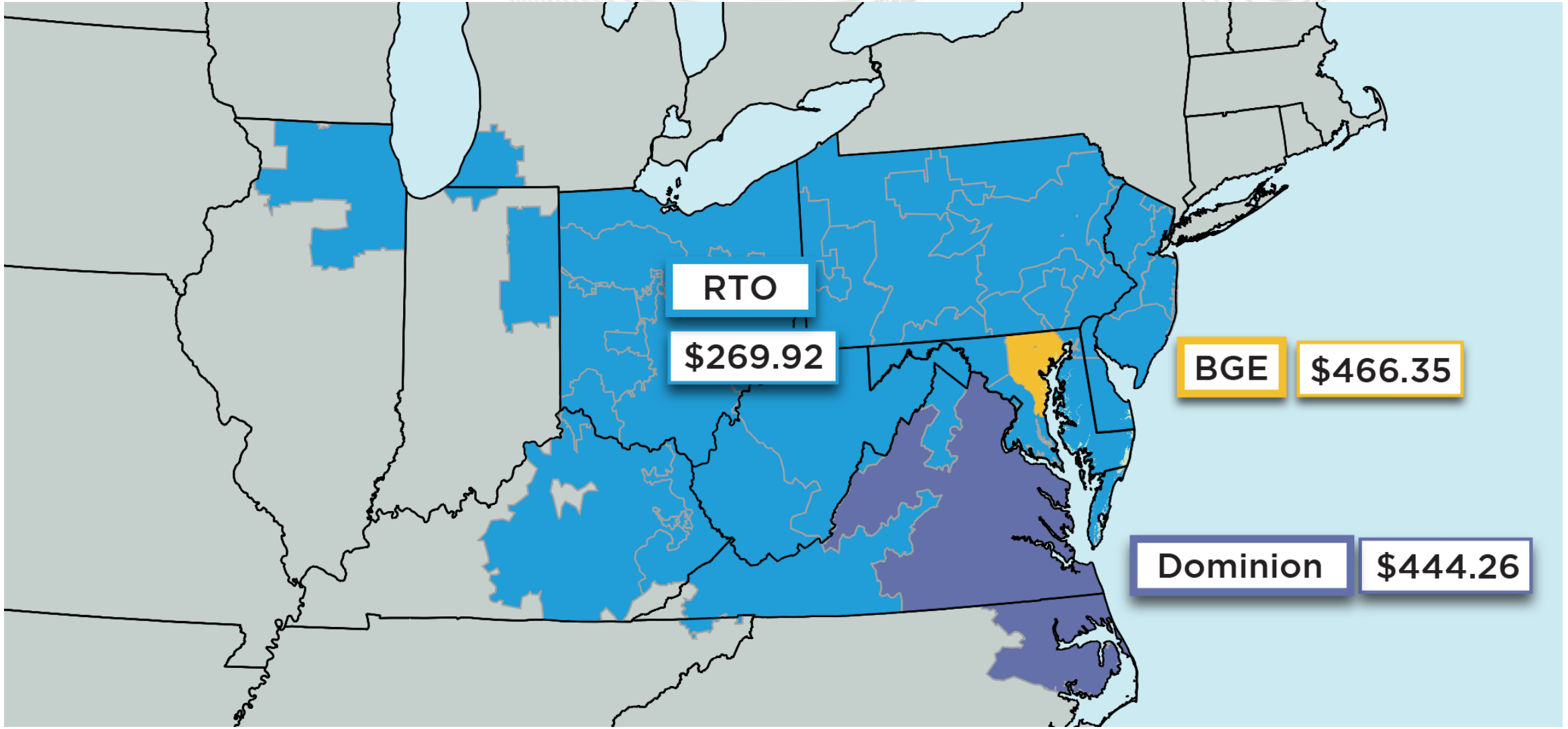
Illinois – Average Hourly LMP

(Jan. 1, 2024 – Dec. 31, 2024)

Illinois's average hourly LMPs were lower than the PJM average hourly LMP.



2025/26 Base Residual Auction Clearing Prices ($/MW-Day)



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

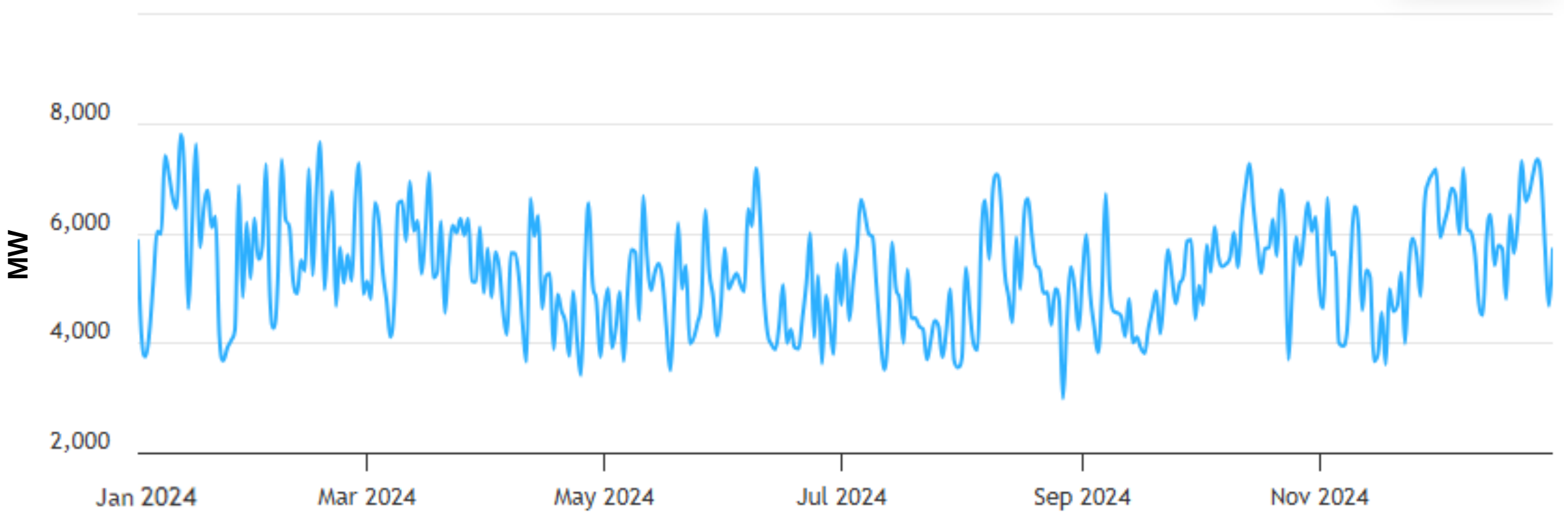
CAPACITY PERFORMANCE

Cleared MW (UCAP)

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

Illinois – Net Energy Import/Export Trend

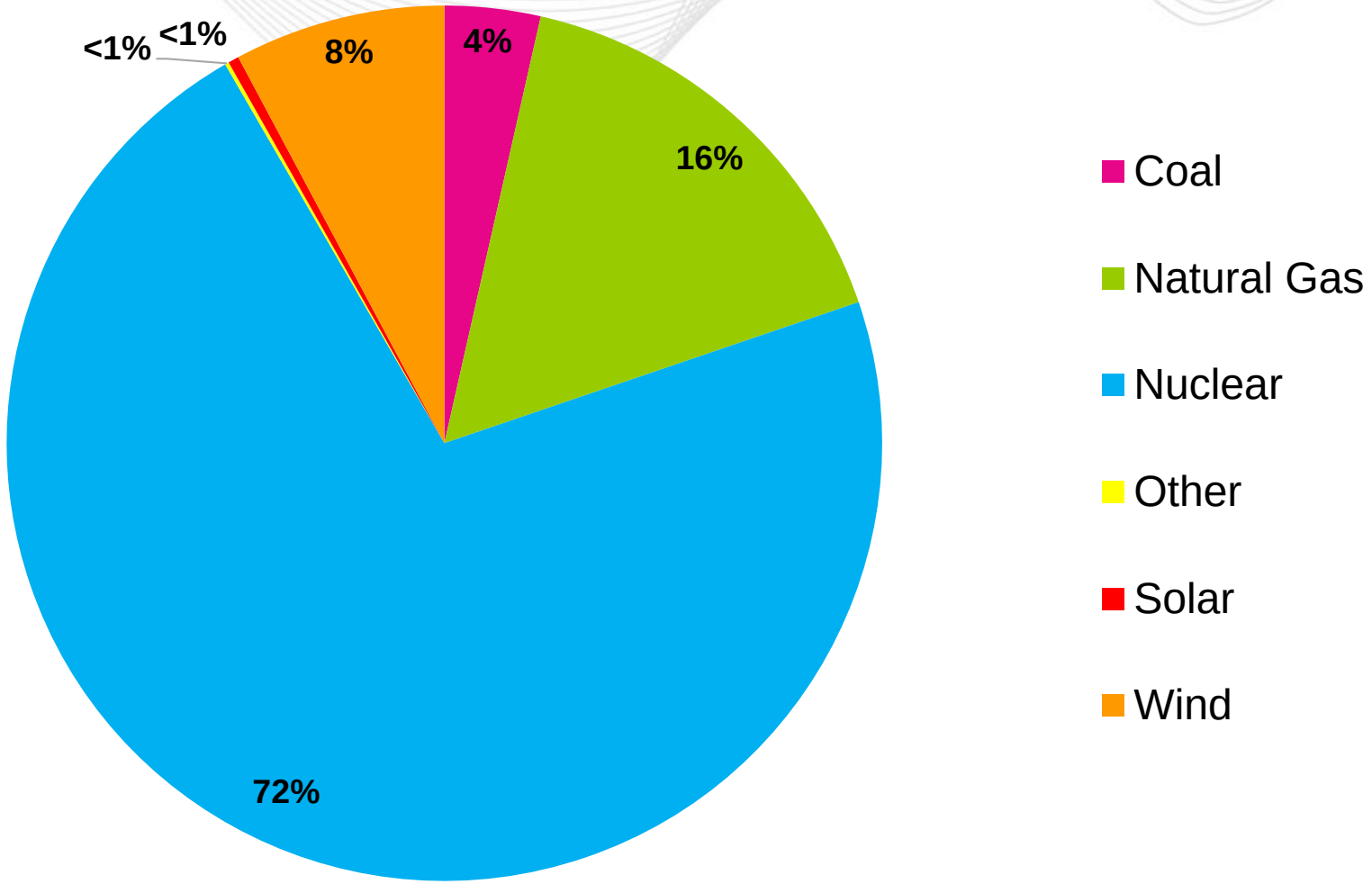
(Jan. 2024 – Dec. 2024)



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

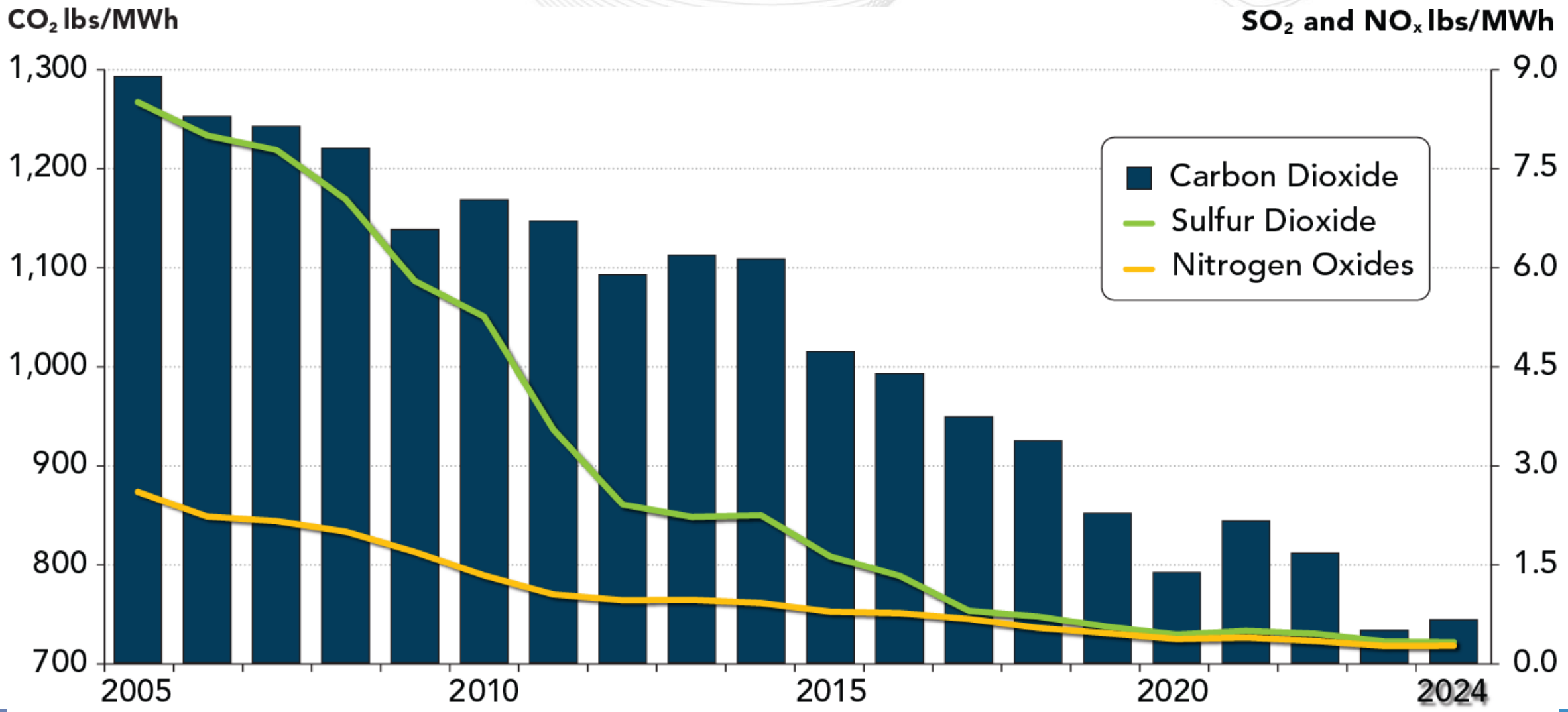
Operations

Illinois – 2024 Generator Production



The data in this chart comes from EIA Form 923 (2024) and represents only generators within the PJM portion of Illinois.

PJM System Average Emission Rates



Illinois – Average Emissions (lbs/MWh)

(Feb. 2025)