



# 2025 West Virginia State Infrastructure Report (January 1, 2025 – December 31, 2025)

June 2026

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- Generation Portfolio Analysis
- Transmission Analysis
- Load Forecast
- Large Load Adjustments

## Markets

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- Net Energy Import/Export Trend
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## In the West Virginia service territory:



### Existing Capacity:

- In West Virginia, coal represents approximately 87% of the total installed capacity while gas represents approximately 8%.
- In PJM, natural gas and coal are 48% and 20% of total installed capacity, respectively.



### Interconnection Requests:

PJM will update this report with a more detailed breakdown of interconnection requests after the Cycle 1 applications have all been reviewed and posted to PJM.com.



### Deactivations:

One small battery in West Virginia deactivated in 2025.



### RTEP 2025:

West Virginia's 2025 RTEP project total represents \$1.18 billion in investment.

## In the West Virginia service territory:



### Load Forecast:

West Virginia's summer peak load is projected to increase by 0.6% to 1.2% annually over the next ten years, while the winter peak is projected to increase by 0.5% to 1.3%, depending on the transmission zone.



### Capacity Market:

- The 2026/27 Base Residual Auction cleared at the \$329.17 price cap.
- The 2027/28 Base Residual Auction cleared at the \$333.44 price cap.



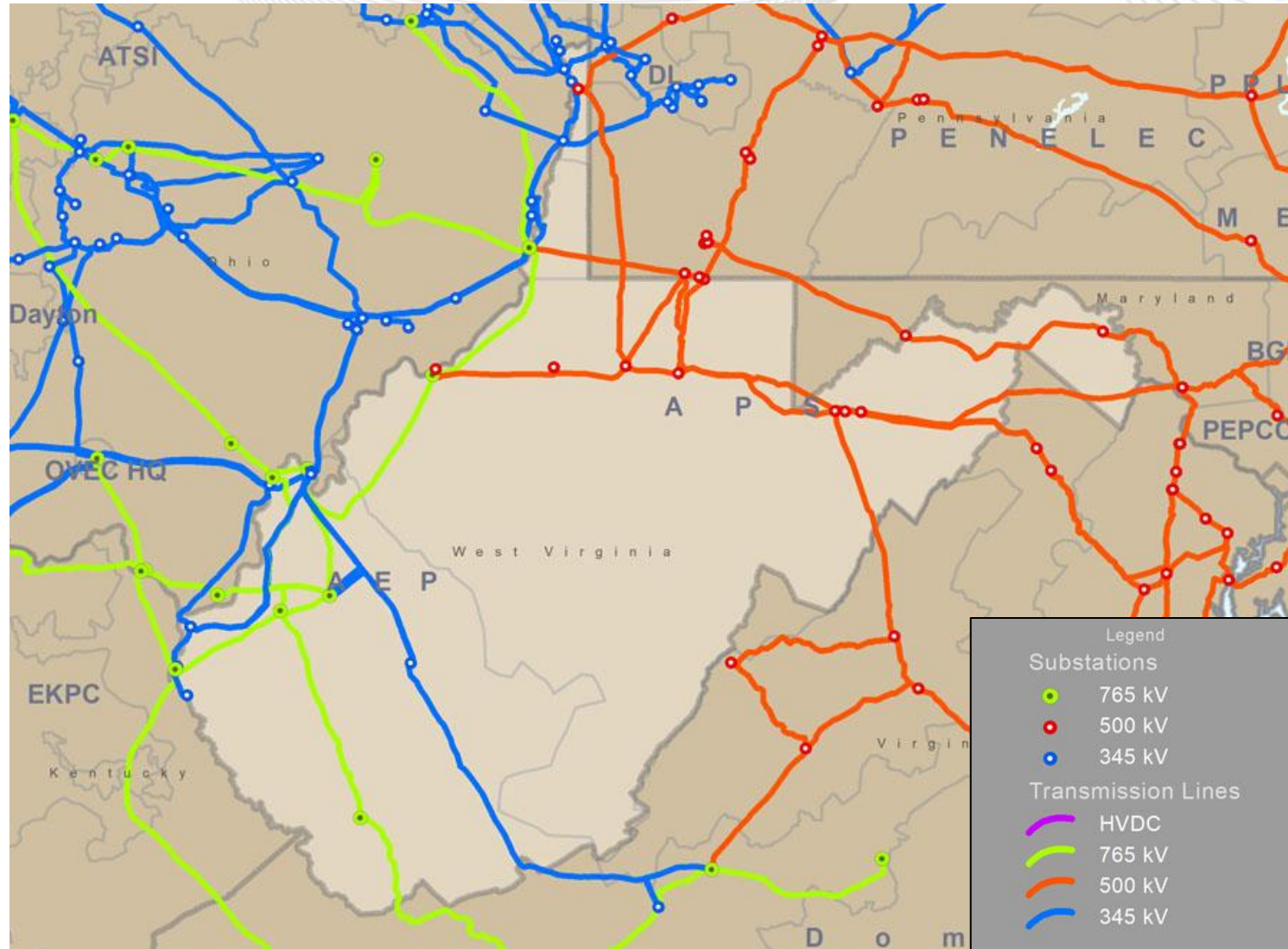
### Market Performance:

West Virginia's average hourly LMPs aligned with the PJM average hourly LMP.



### Emissions:

West Virginia's average CO<sub>2</sub> emissions decreased in 2025 compared to 2024 levels.

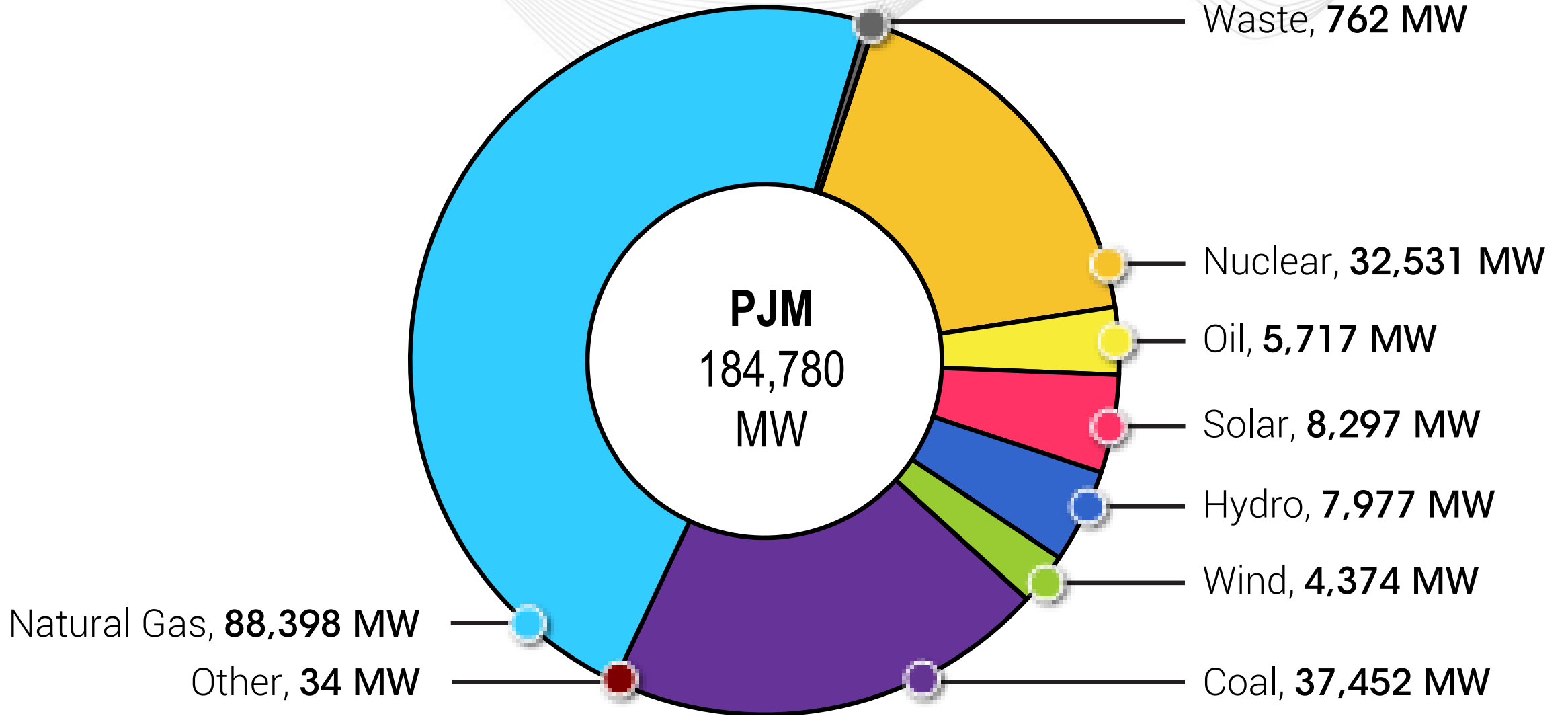


# Planning

## Generation Portfolio Analysis

# PJM Existing Installed Capacity Mix

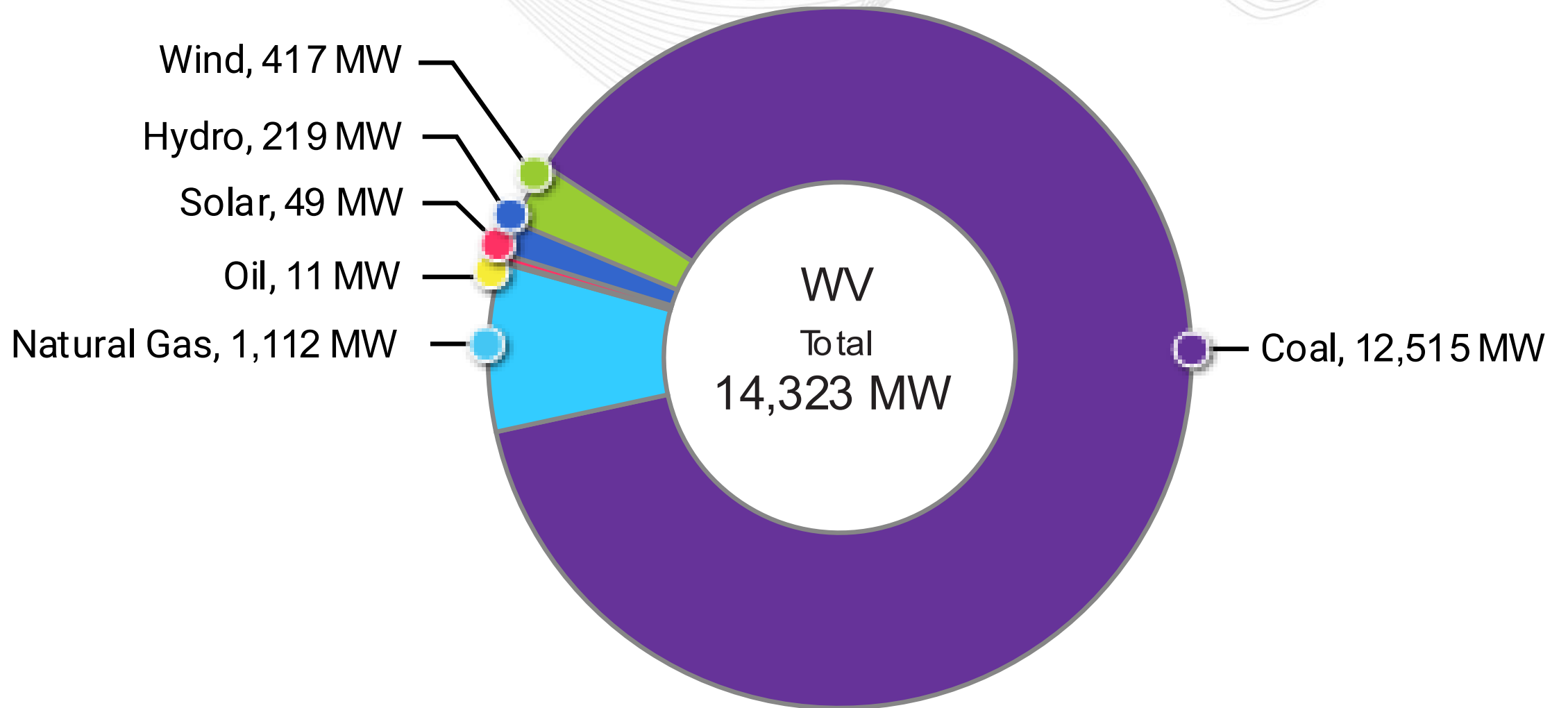
(CIRs – as of Dec. 31, 2025)



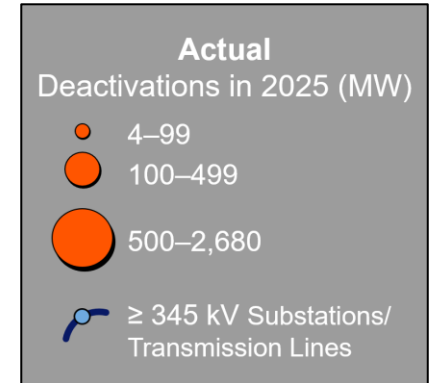


# West Virginia – Existing Installed Capacity (MW) by Fuel Type

(CIRs- as of Dec. 31, 2025)



PJM will update this report with a more detailed breakdown of interconnection requests after the Cycle 1 applications have all been reviewed and posted to PJM.com.



Unit	TO Zone	Fuel Type	Request Received to Deactivate	Actual or Projected Deactivation Date	Age (Years)	Capacity (MW)
Laurel Mountain Battery	AP	Battery	4/1/2025	7/1/2025	14	0

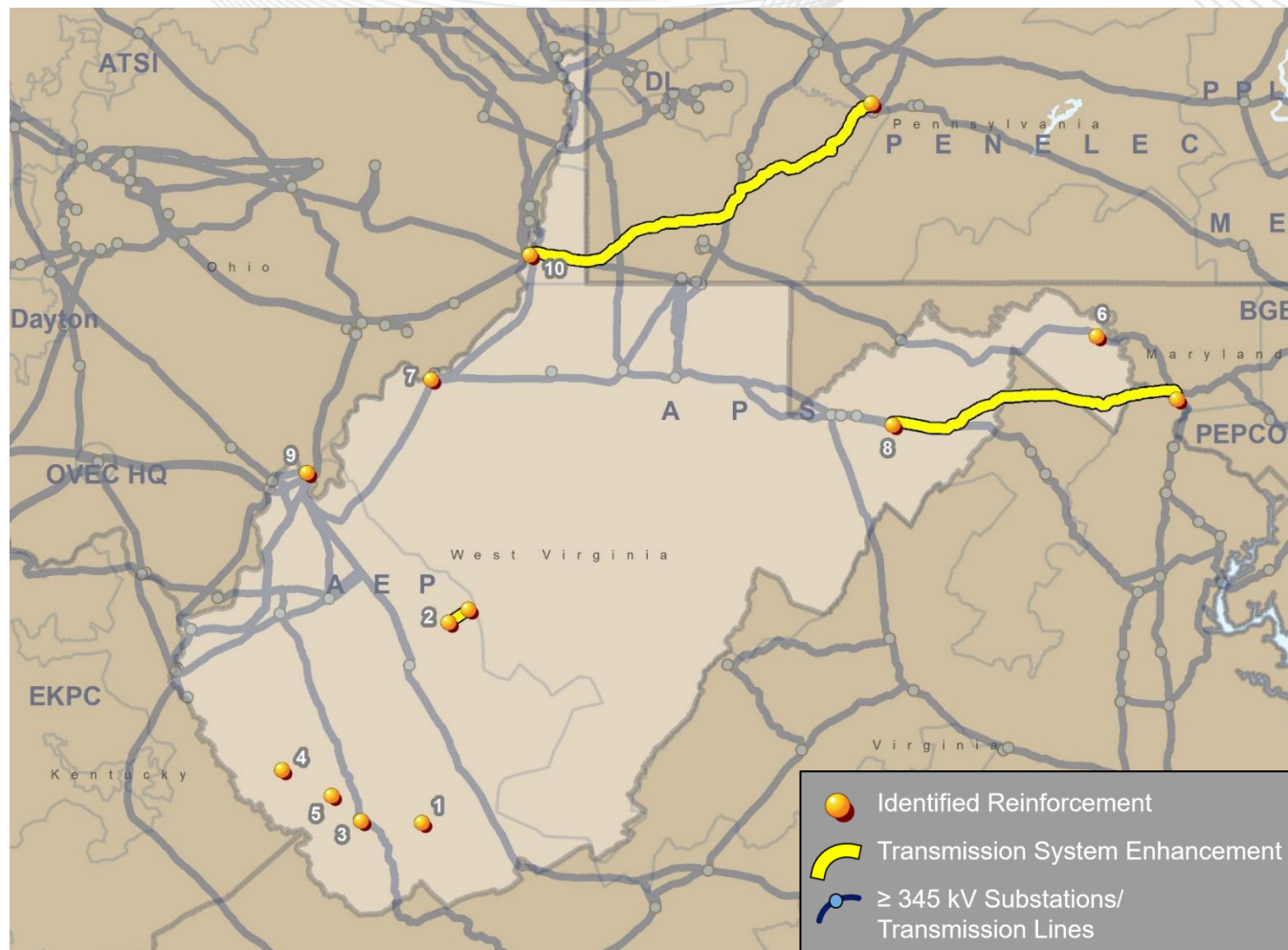
# Planning

## Transmission Infrastructure Analysis

For reporting purposes, the 2025 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 2025 Annual RTEP Report are not indicative of each project's cost allocation.

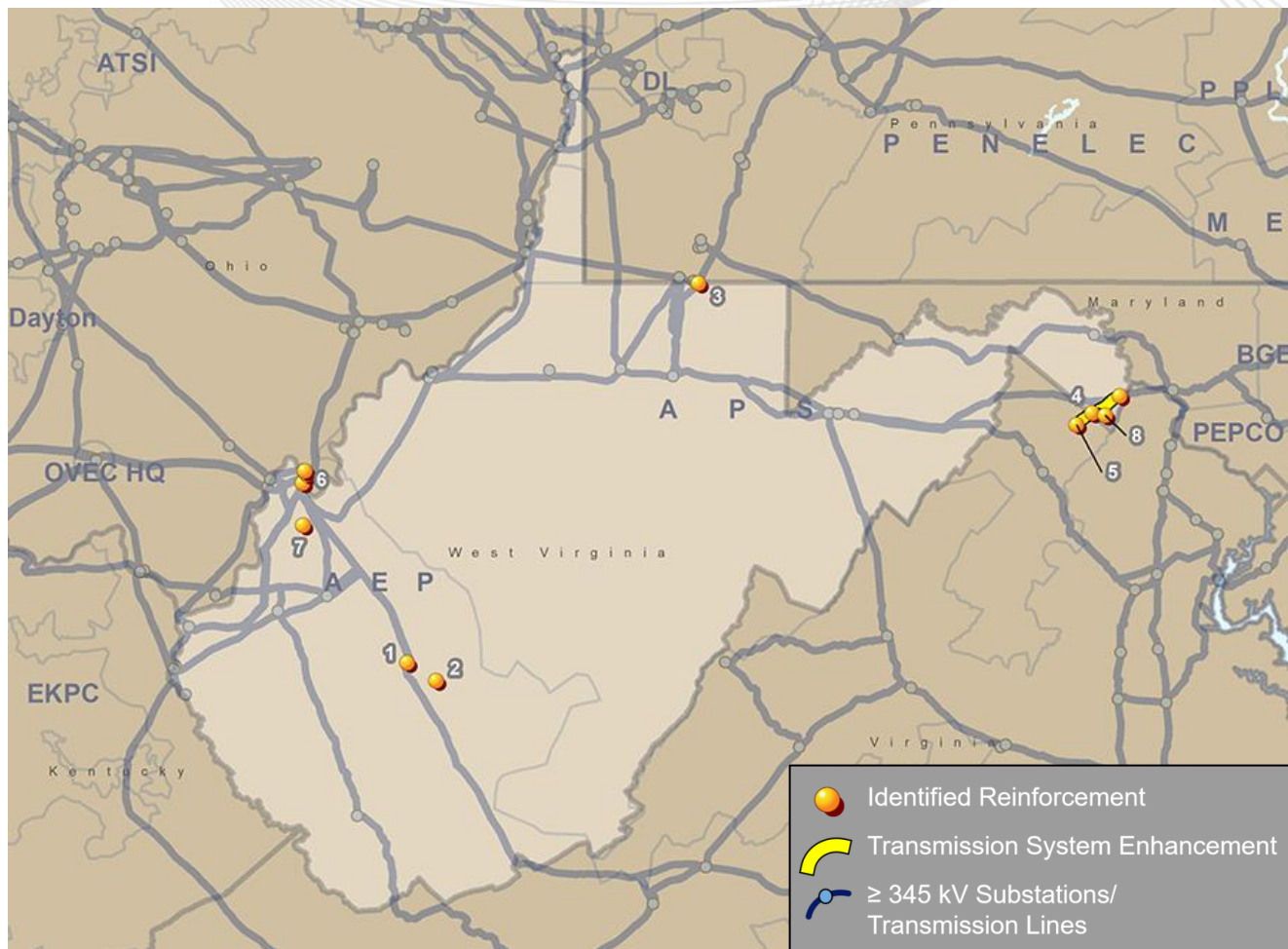
For a detailed list of each project shown on a state's project map, please see that state's section in the **2025 Annual RTEP Report** on PJM.com: <https://www.pjm.com/-/media/DotCom/library/reports-notices/2025-rtep/2025-rtep-report.pdf>

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>.



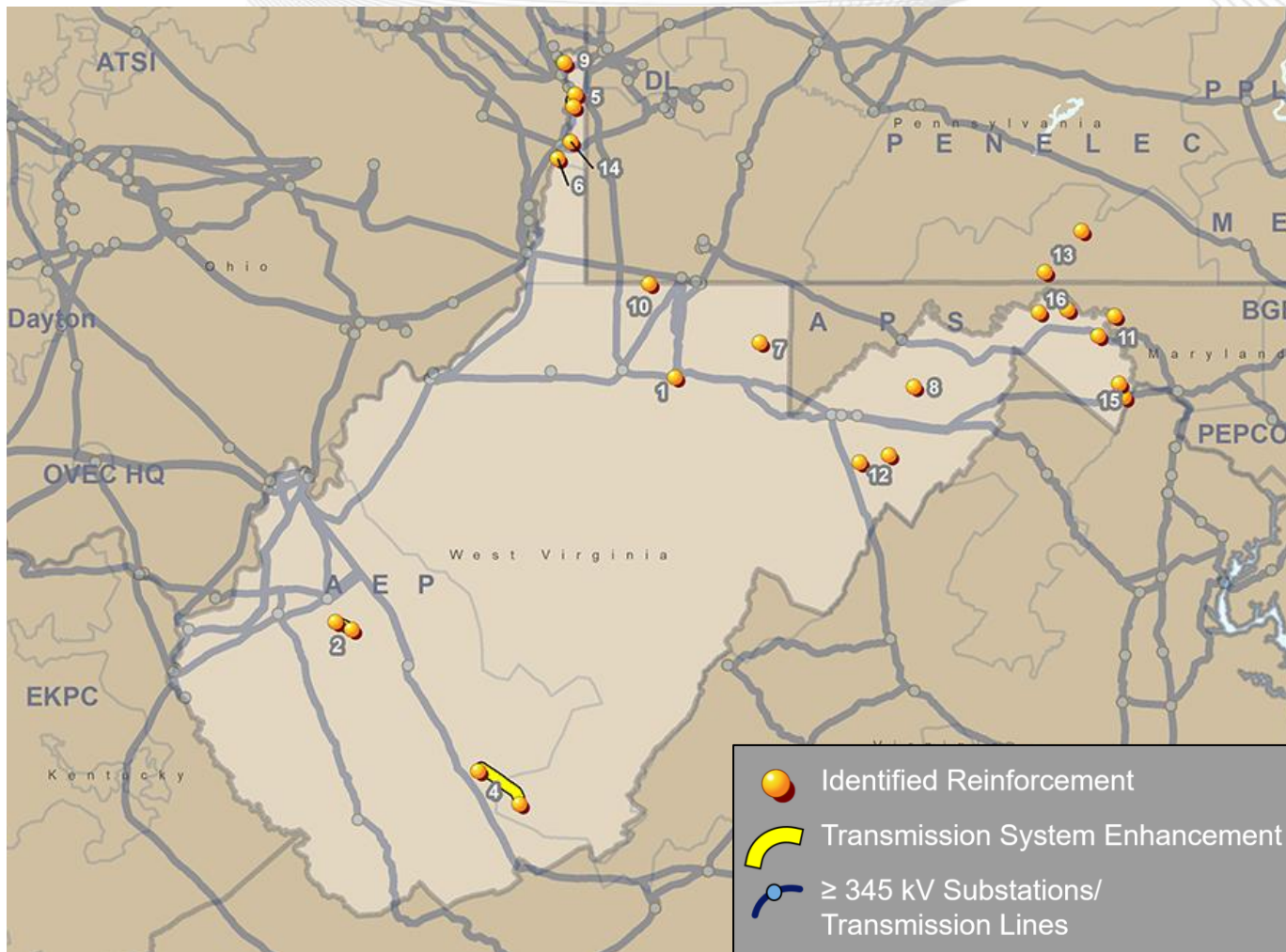
The 2025 RTEP has \$971.78 million in baseline projects located in West Virginia.

**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.



The 2025 RTEP has \$29.27 million in network projects located in West Virginia.

**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.

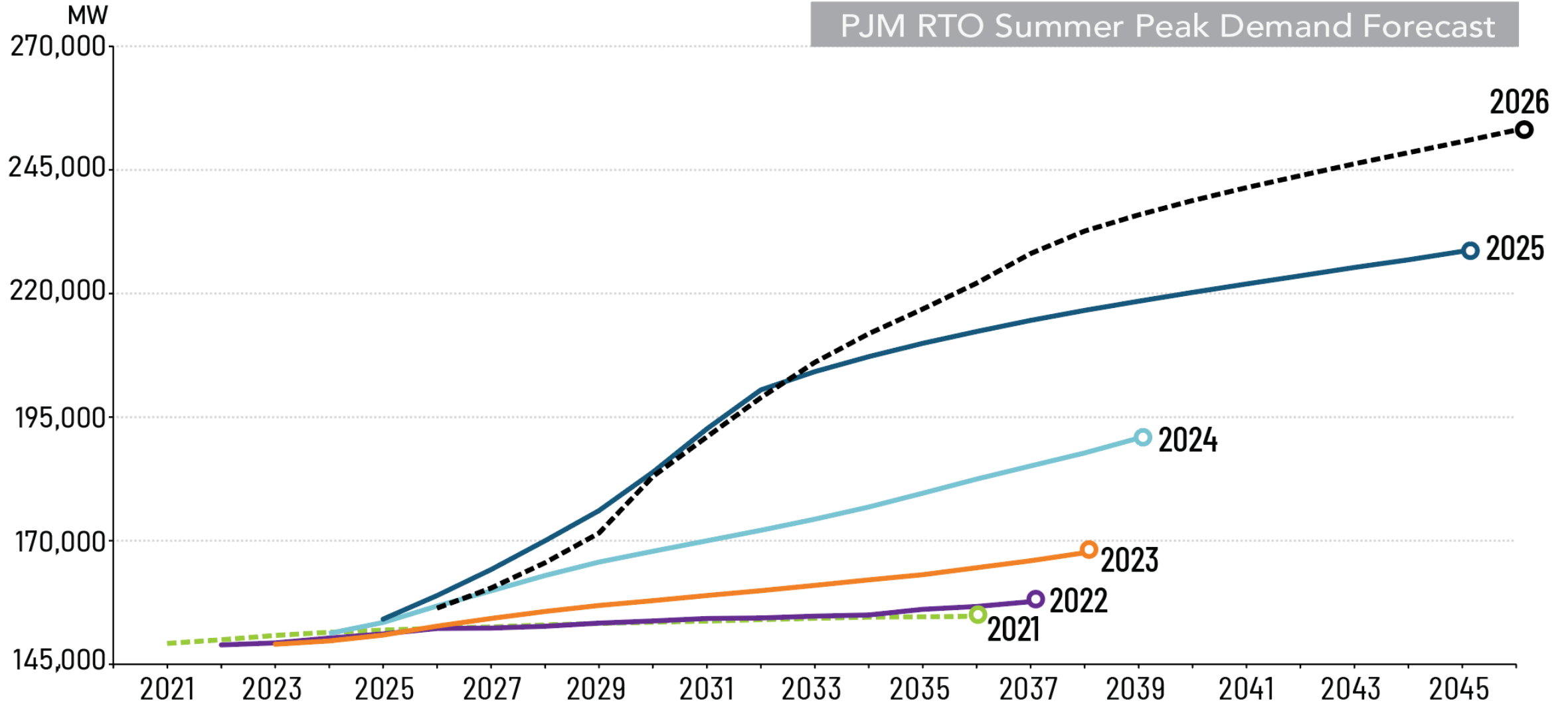


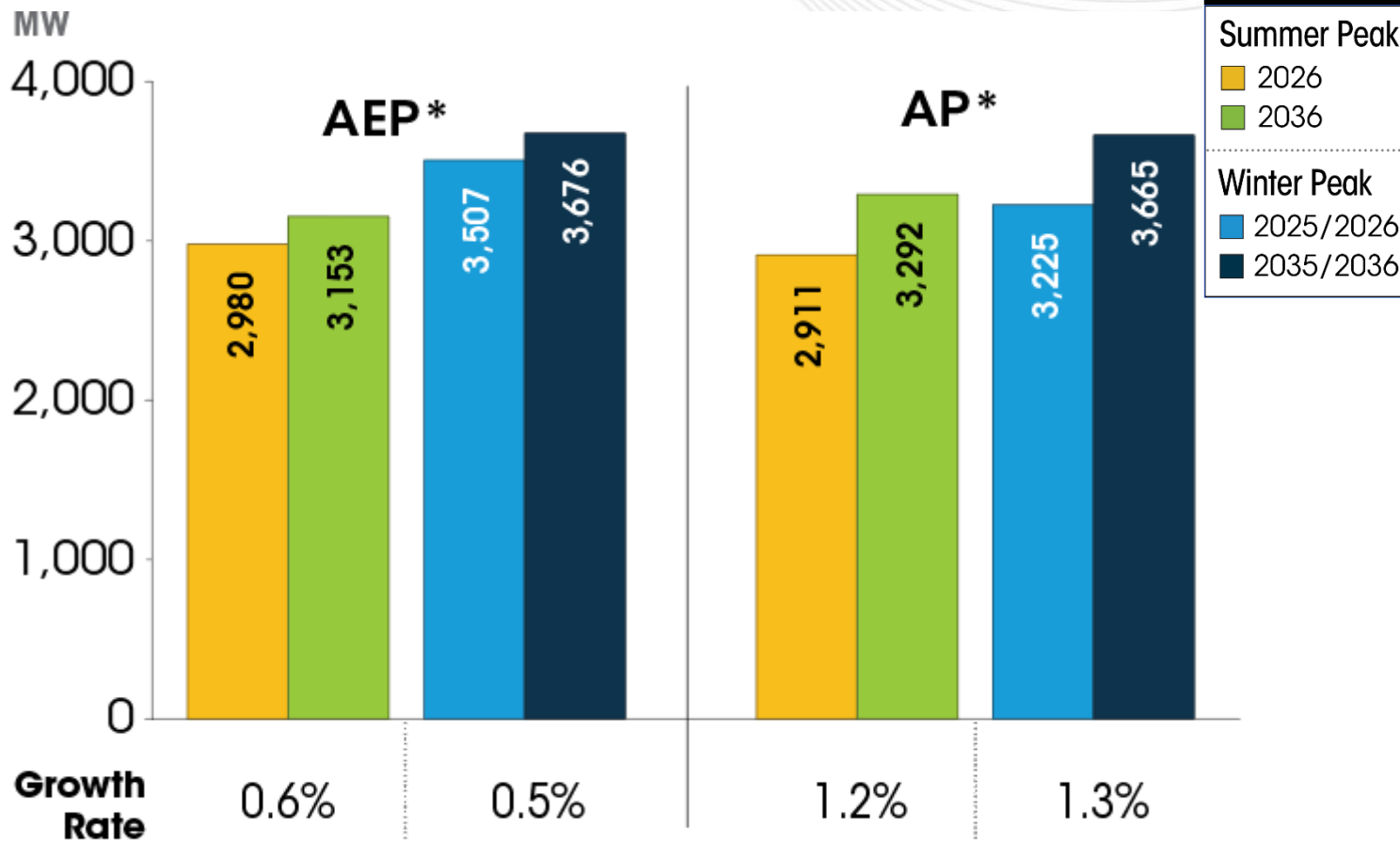
The 2025 RTEP has \$183.09 million in supplemental projects located in West Virginia.

**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





\*Serves load outside WV

PJM RTO Summer Peak		PJM RTO Winter Peak	
2026	2036	2025/2026	2035/2036
156,373 MW	222,106 MW	137,670 MW	204,650 MW
Growth Rate 3.6%		Growth Rate 4.0%	

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.



# West Virginia – Summer Peak Large Load Adjustments

(PJM 2026 Load Forecast)

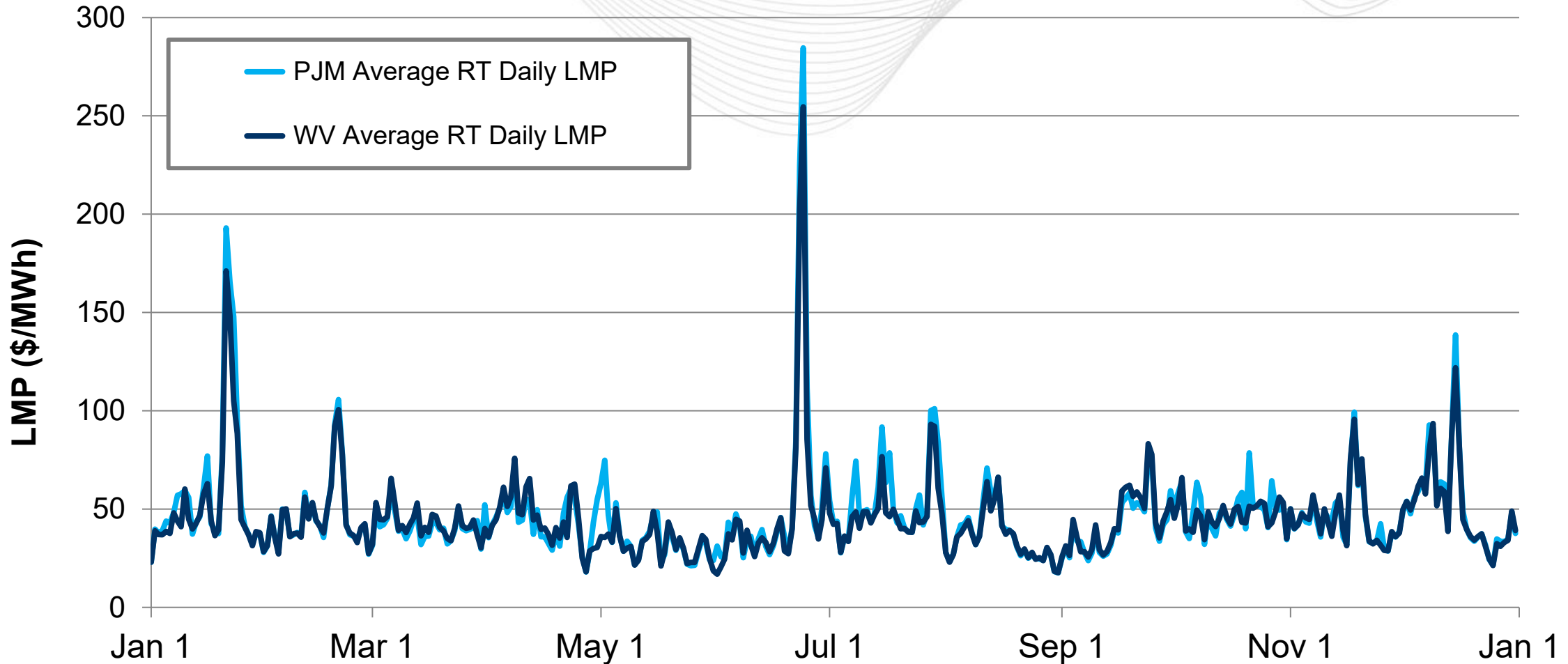
	Zone	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
WV	AEP	-	-	-	-	-	-	-	-	-	-
	APS	-	-	-	-	60	111	213	238	238	238
<b>WV TOTAL (MW)</b>		-	-	-	-	60	111	213	238	238	238
<b>PJM TOTAL (MW)</b>		11,479	15,866	21,290	27,371	38,815	46,648	53,958	60,267	65,050	68,977

	Zone	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
WV	AEP	-	-	-	-	-	-	-	-	-	-
	APS	238	238	238	238	238	238	238	238	238	238
<b>WV TOTAL (MW)</b>		238	238	238	238	238	238	238	238	238	238
<b>PJM TOTAL (MW)</b>		72,608	77,029	79,982	81,527	82,656	83,609	84,416	85,128	85,818	86,511

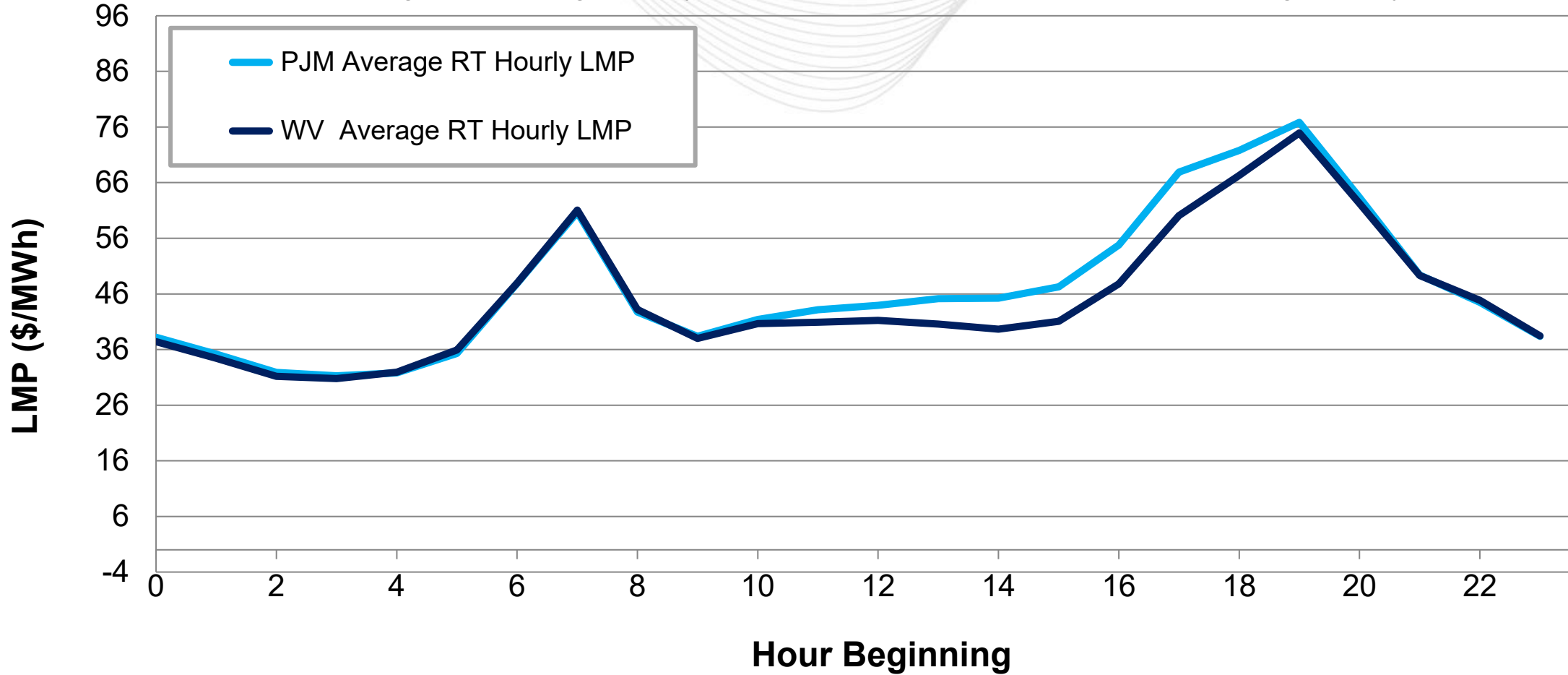
**Note:** The listed total reflects both existing (2025) and forecasted large load adjustments. It does not include large loads that may exist but have not been submitted to PJM's load forecasting process as a large load adjustment.

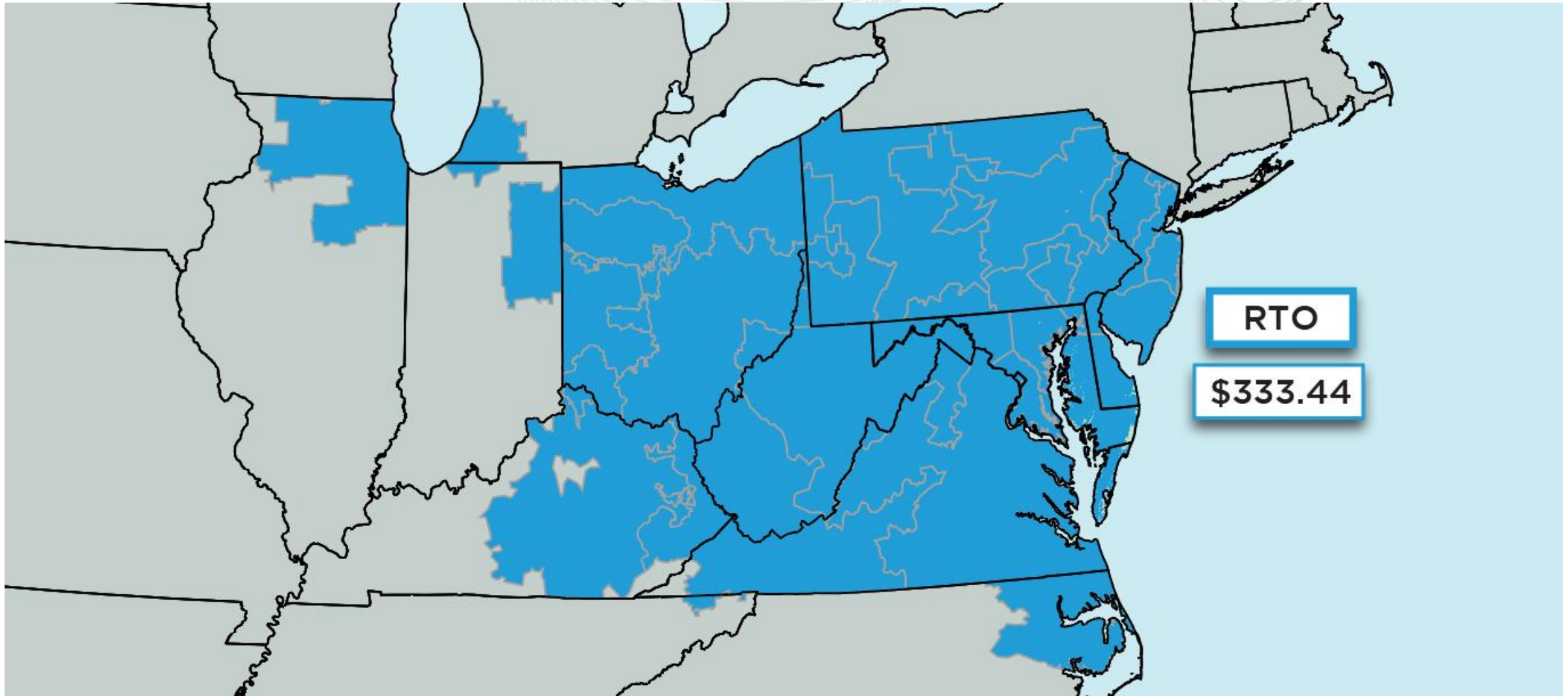
# Markets

## Market Analysis



West Virginia's average hourly LMPs were consistent with the PJM average hourly LMP.







# 2027/28 Cleared MW (UCAP) by Resource Type

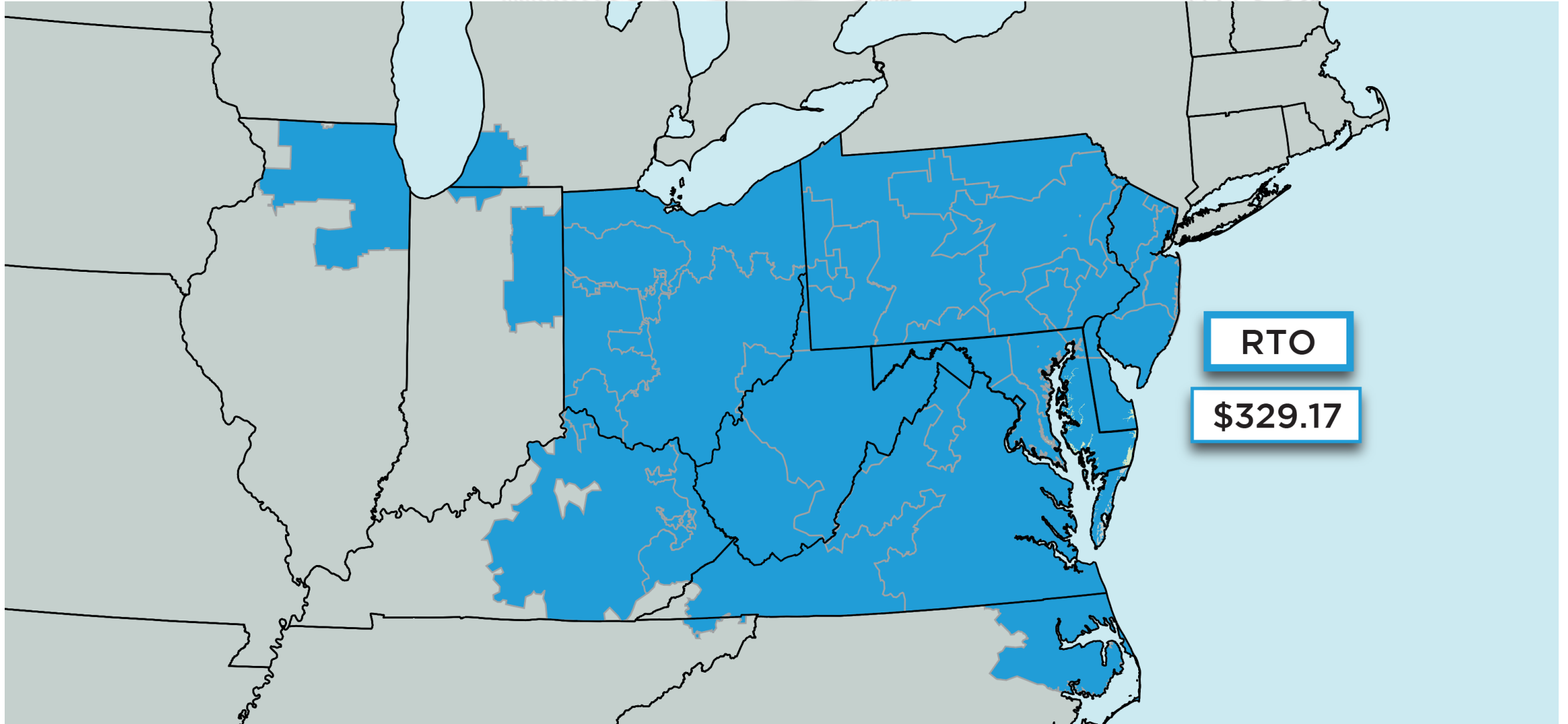
## CAPACITY PERFORMANCE

*Cleared MW (UCAP)*

Resource Type	ANNUAL	SUMMER	WINTER
<b>Generation</b>	127,179.5	-	268.6
<b>DR</b>	7,030.0	268.6	-
<b>PRD</b>	106.5	-	-
<b>Total (MW)</b>	<b>134,316.0</b>	<b>268.6</b>	<b>268.6</b>



# 2026/27 Base Residual Auction Clearing Prices (\$/MW-Day)





# 2026/27 Cleared MW (UCAP) by Resource Type

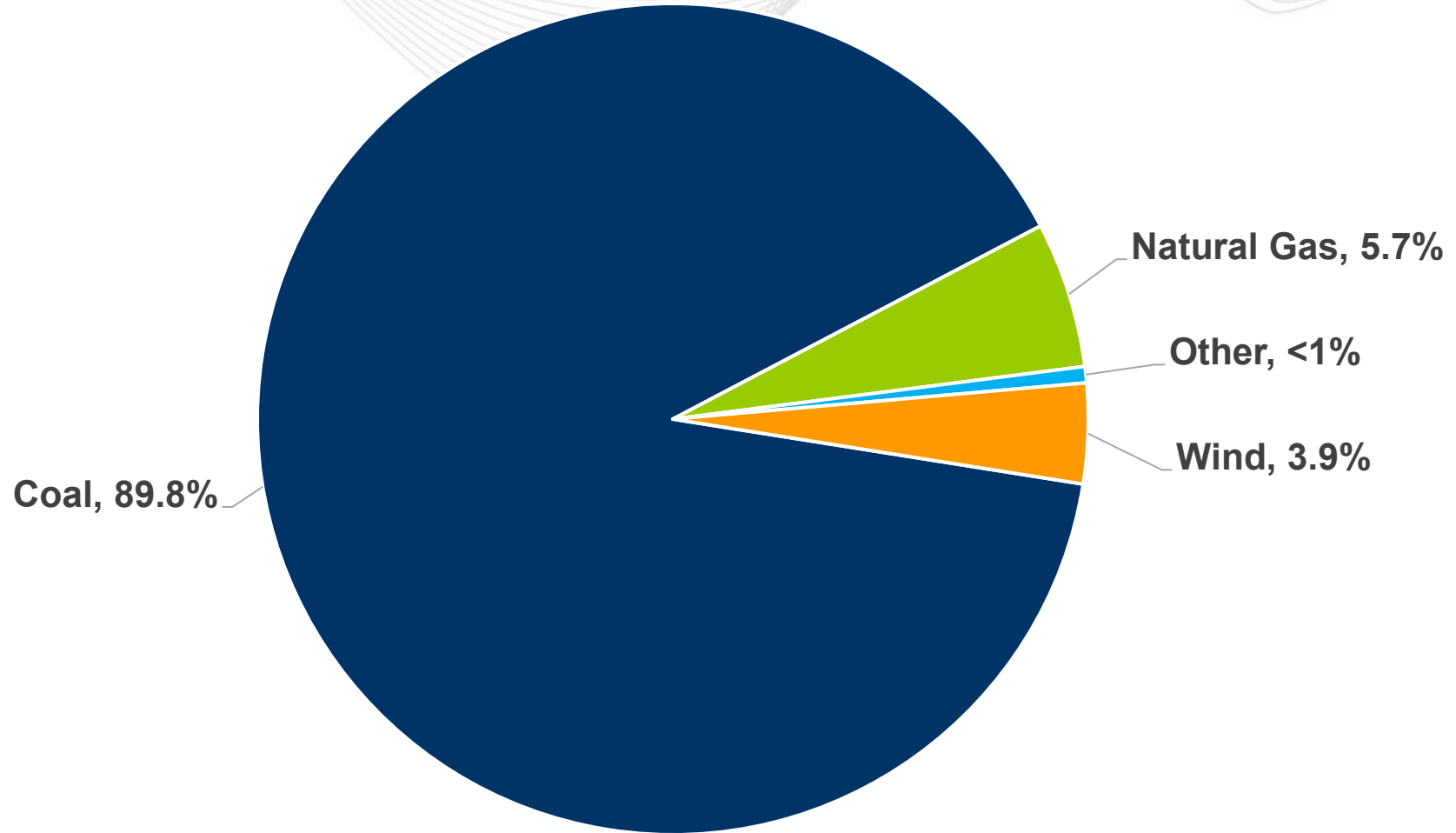
## CAPACITY PERFORMANCE

*Cleared MW (UCAP)*

Resource Type	ANNUAL	SUMMER	WINTER
<b>Generation</b>	128,674.7	-	170.8
<b>DR</b>	5,359.8	170.8	-
<b>PRD</b>	105.5	-	-
<b>Total (MW)</b>	<b>134,140.0</b>	<b>170.8</b>	<b>170.8</b>

# Operations

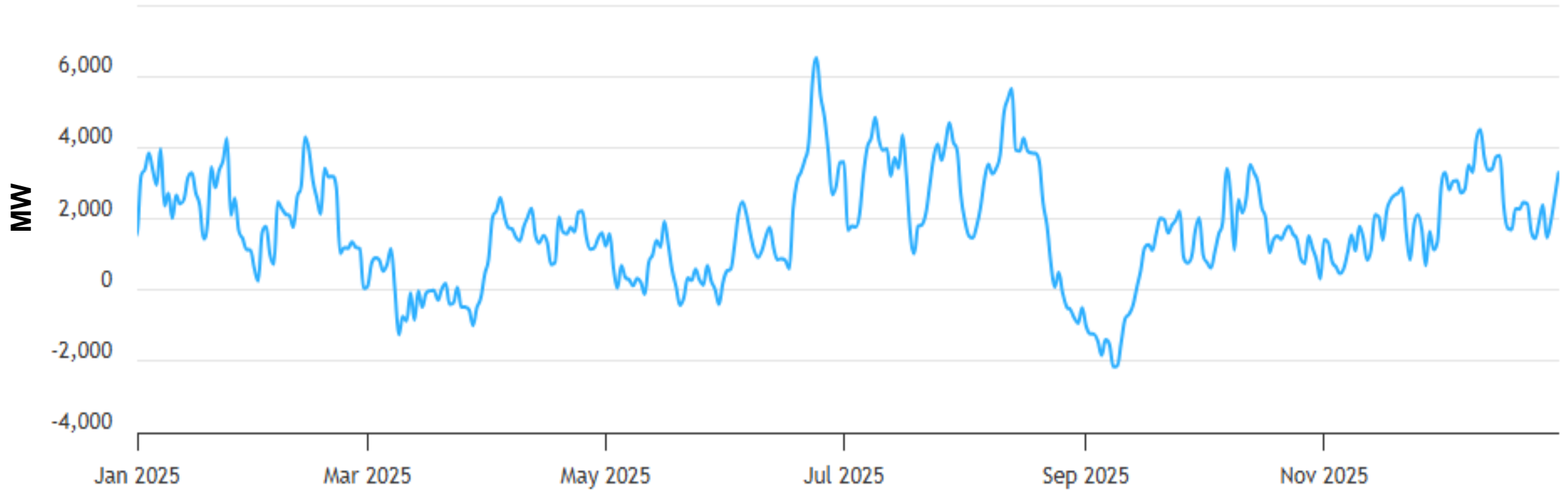
# West Virginia – 2025 Generator Production



The data in this chart comes from EIA Form 923 (2025).

# West Virginia – Net Energy Import/Export Trend

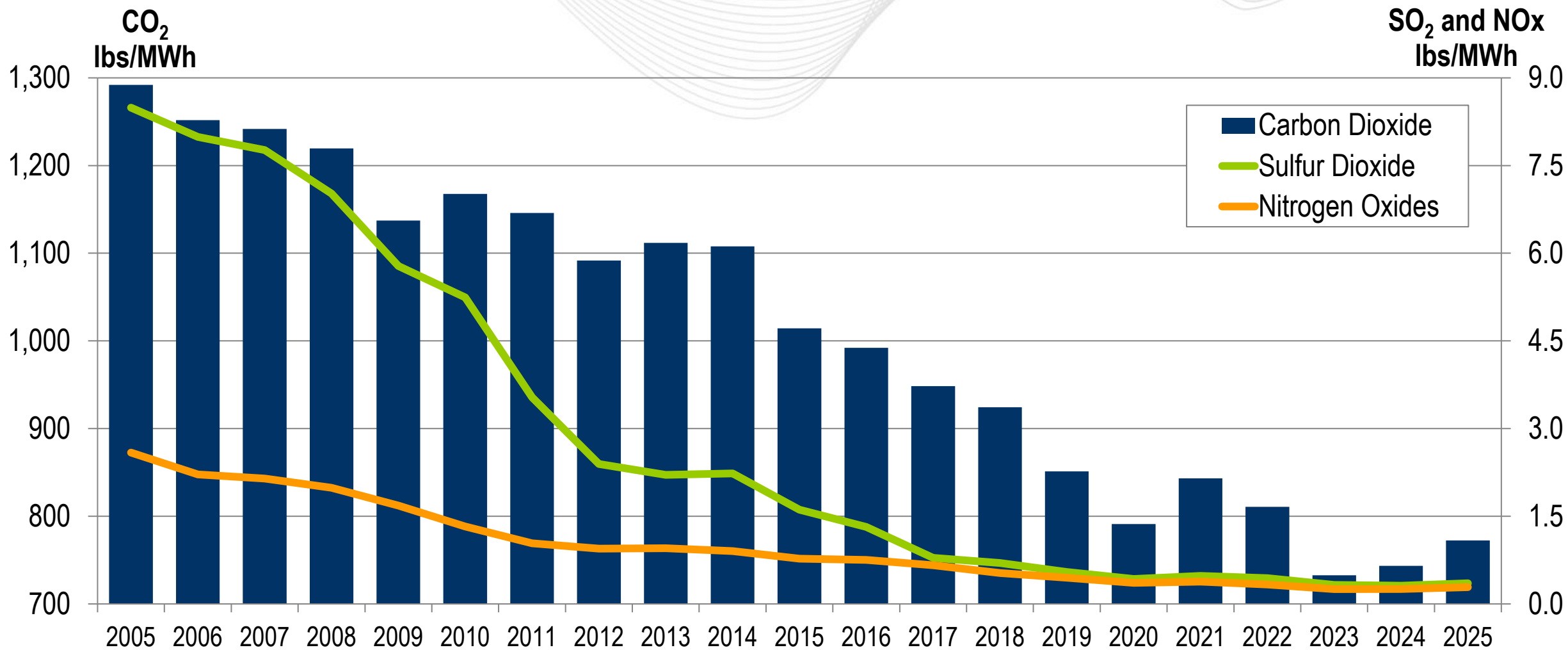
(Jan. 2025 – Dec. 2025)



**Note:** Positive values represent exports and negative values represent imports.



# PJM System Average Emission Rates





# West Virginia – Average Emissions (lbs/MWh)

(Feb. 2026)

**CO<sub>2</sub>**  
(lbs/MWh)

**SO<sub>2</sub> and NO<sub>x</sub>**  
(lbs/MWh)

