



# 2025 Maryland and District of Columbia State Infrastructure Report (January 1, 2025 – December 31, 2025)

June 2026

## Planning

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

## Markets

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- 2026/27 Base Residual Auction
- 2027/28 Base Residual Auction

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- Net Energy Import/Export Trend
- Emissions Data

## In the Maryland & D.C. service territory:



### Existing Capacity:

- In Maryland, natural gas represents 49% of the total installed capacity while nuclear represents 16%.
- Across PJM, natural gas represents 48% of total installed capacity while nuclear represents 18%.



### 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:

Maryland had no generators deactivate or give a notice of deactivation in 2025.



### RTEP 2025:

Maryland and Washington, D.C.'s 2025 RTEP project total represents approximately \$774.81 million in investment.

### In the Maryland & D.C. service territory:



#### Load Forecast:

Maryland and Washington, D.C.'s summer peak load is projected to increase by 0%–8% percent annually over the next ten years, while the winter peak is projected to increase by 0.1%–8.7% percent, 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:

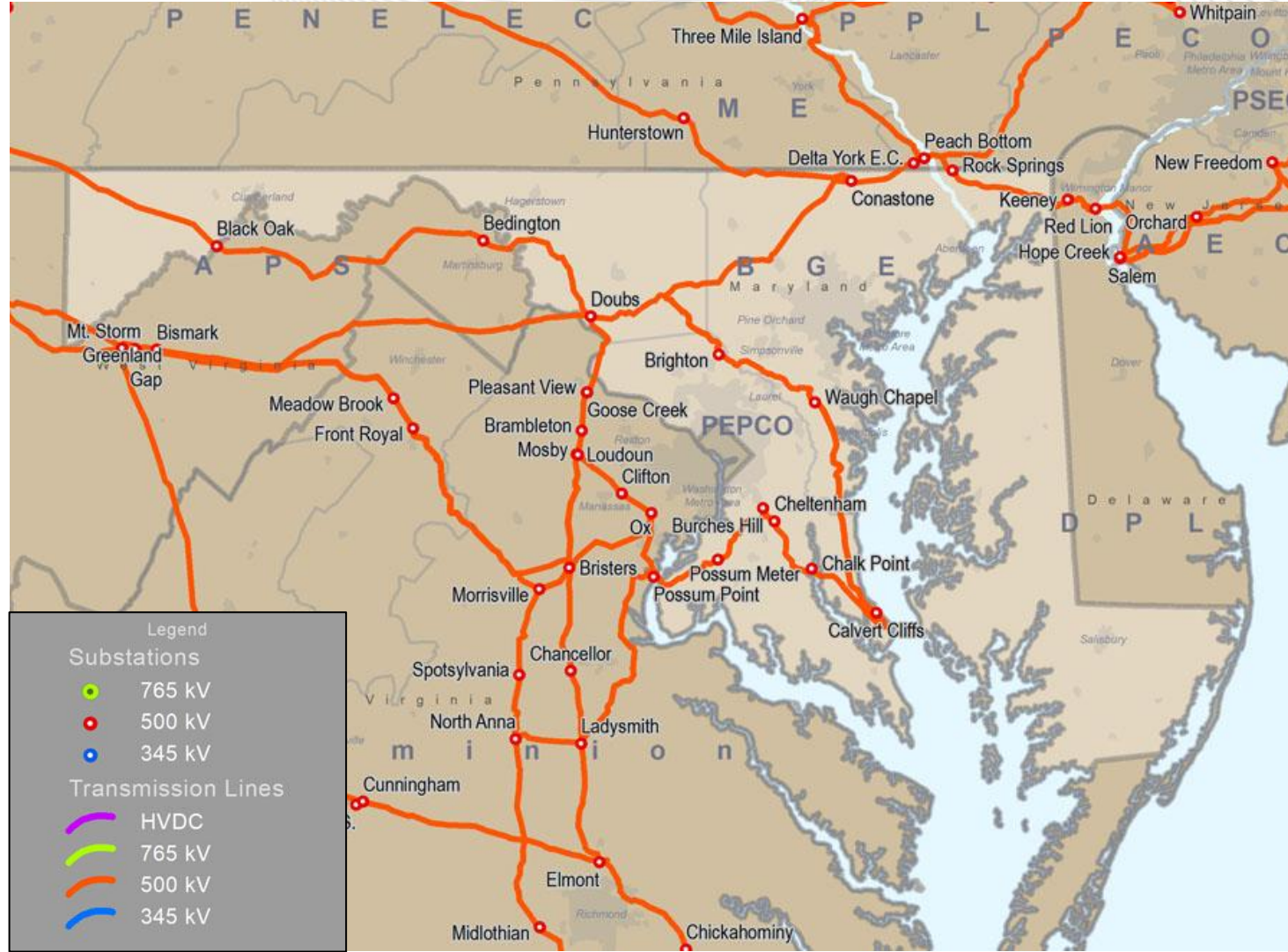
Maryland and Washington, D.C.'s average hourly LMPs were higher than the PJM average hourly LMP.



#### Emissions:

Maryland's average CO<sub>2</sub> emissions increased slightly in 2025 compared to 2024 levels.

# PJM Service Area in Maryland/District of Columbia

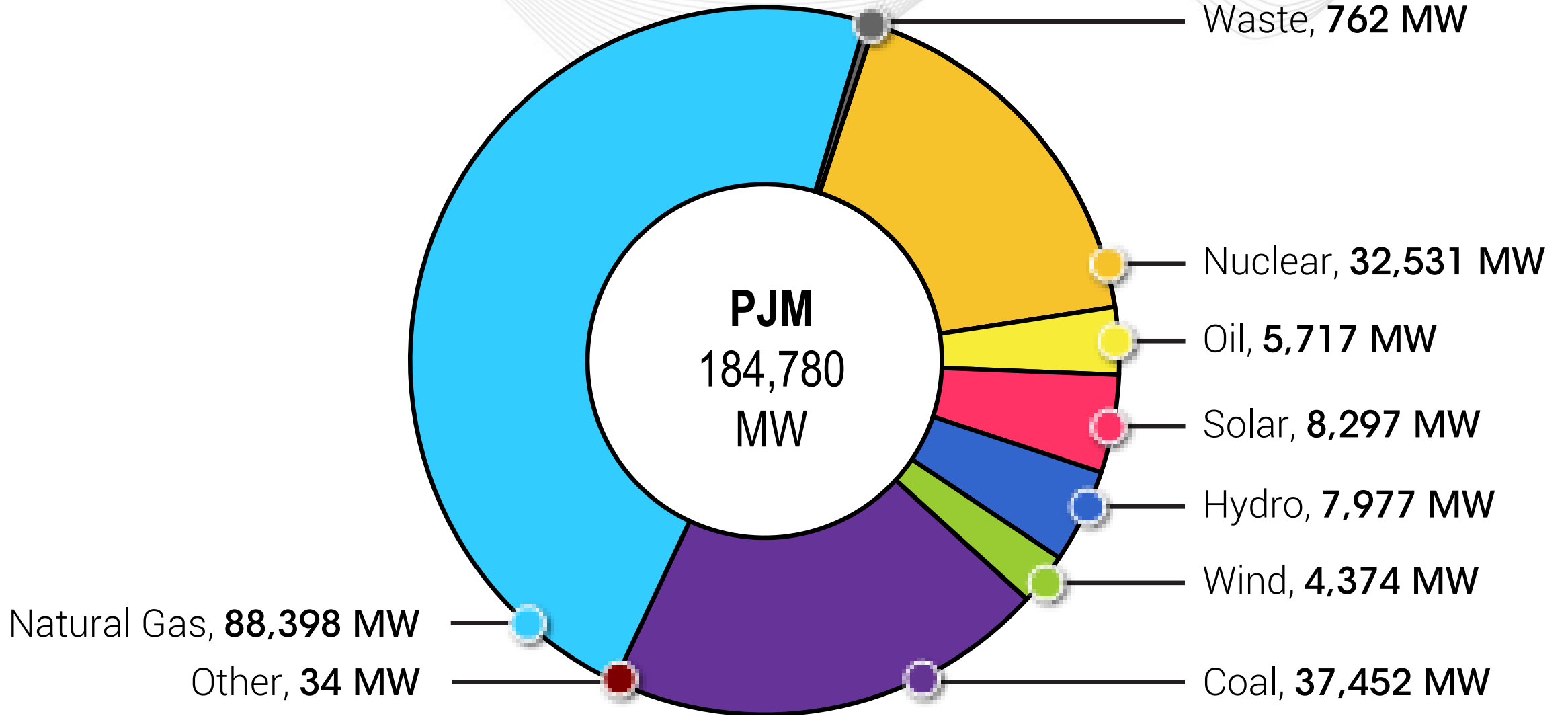


# Planning

## Generation Portfolio Analysis

# PJM Existing Installed Capacity Mix

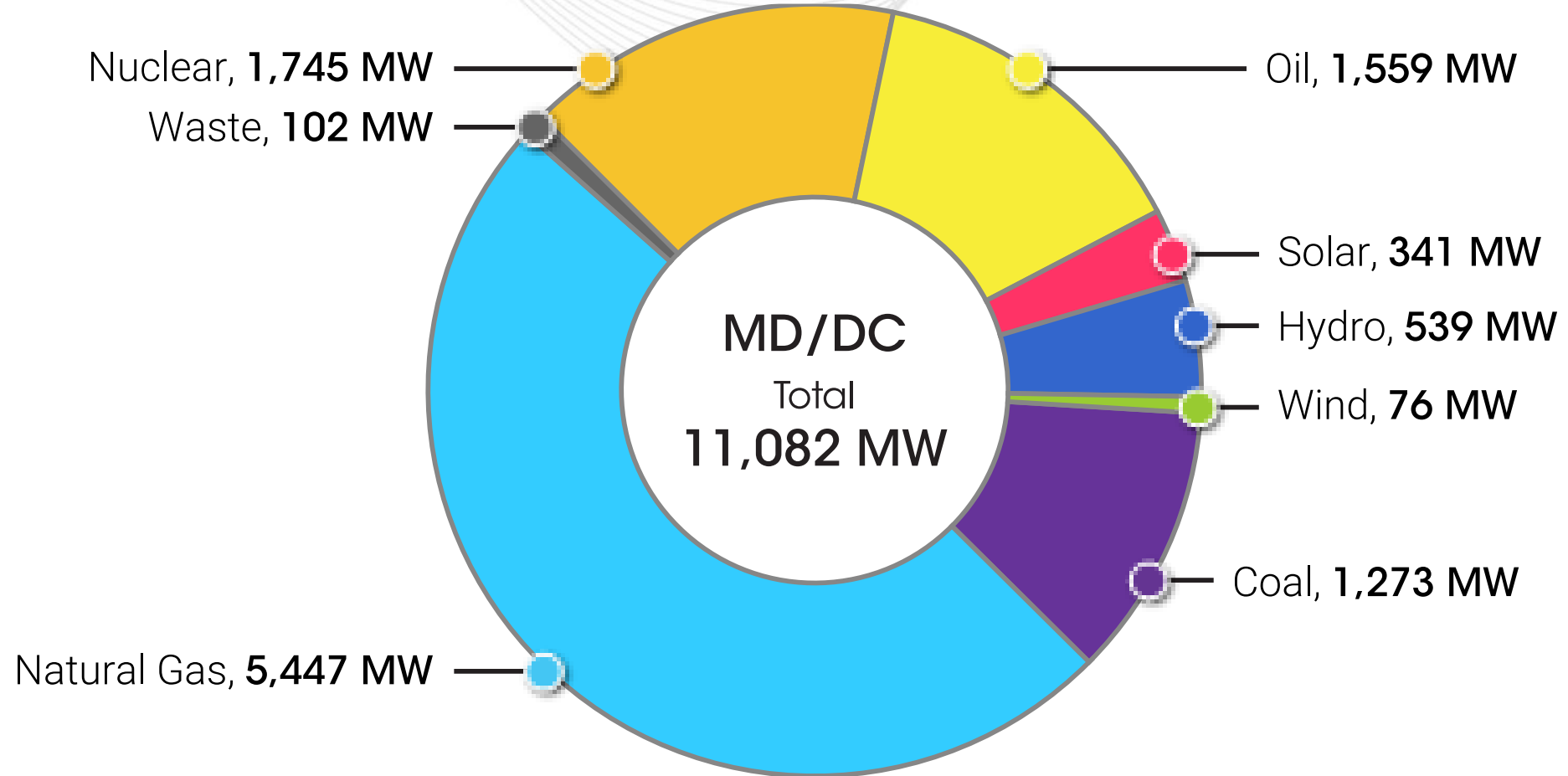
(CIRs – as of Dec. 31, 2025)





# Maryland/DC – 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.



# Maryland – 2025 Generator Deactivations

Maryland had no generators deactivate or give a notice of deactivation in 2025.

# Planning

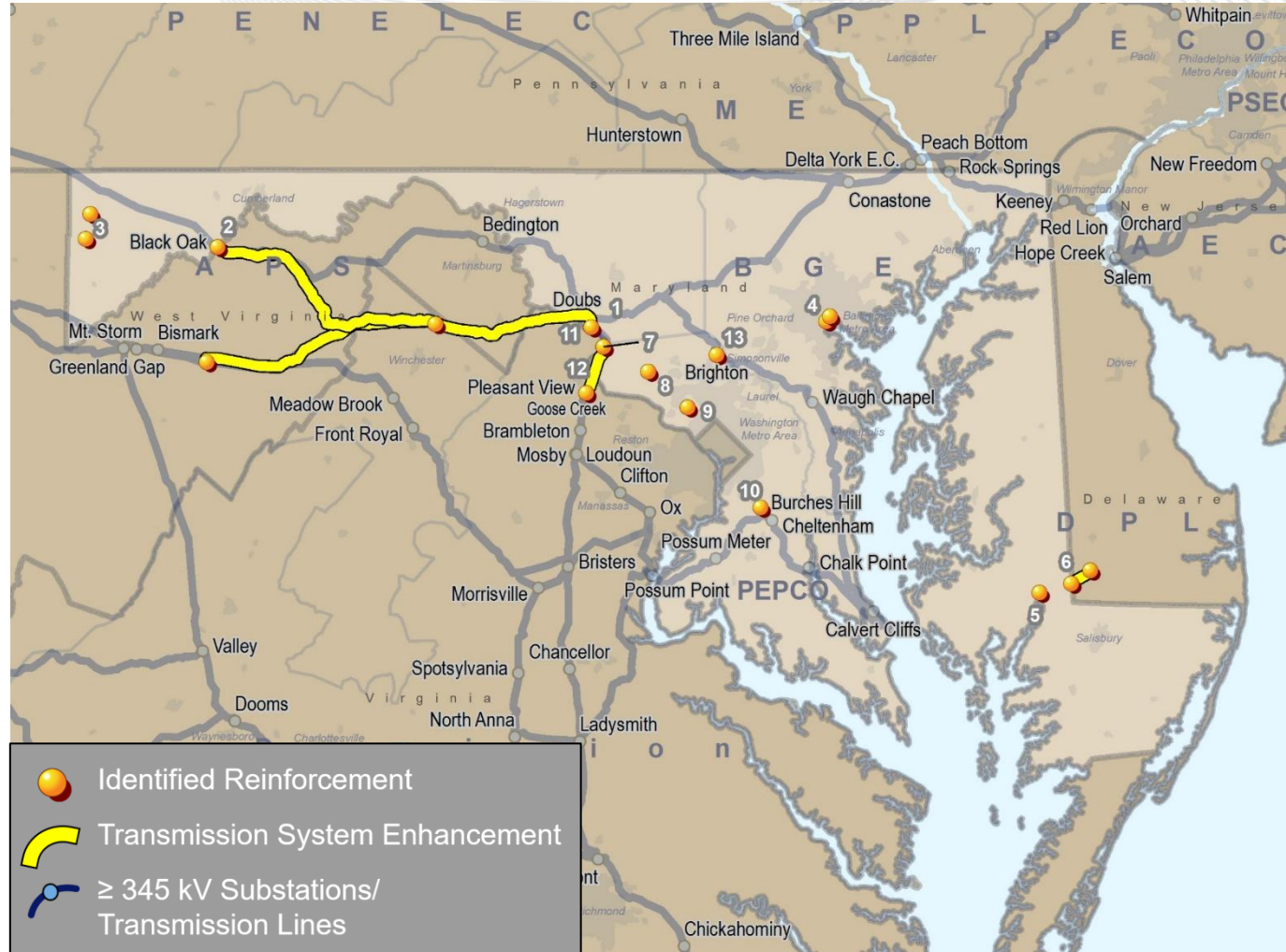
## Transmission Infrastructure Analysis

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>.

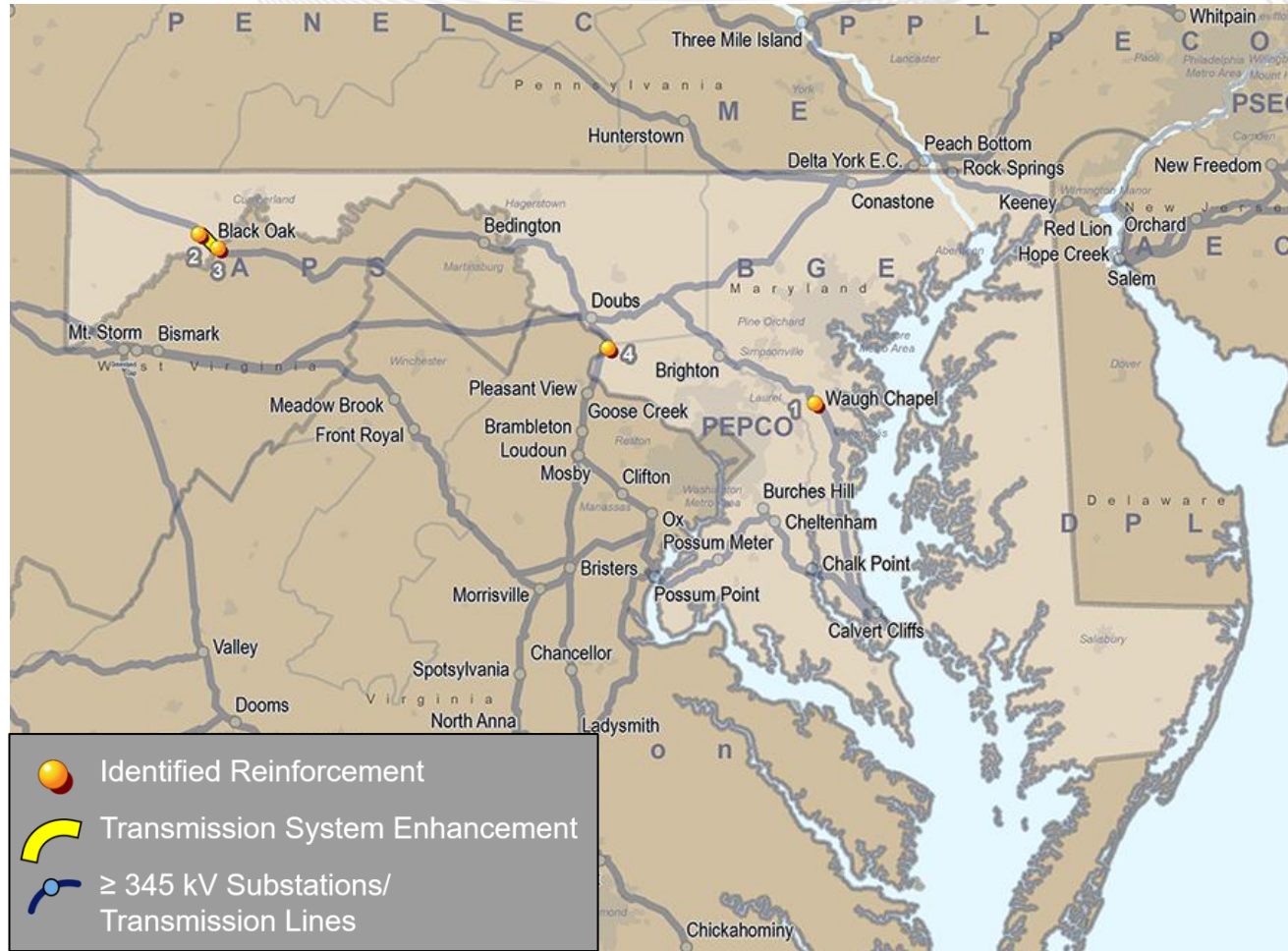
# Maryland/District of Columbia – RTEP Baseline Projects



The 2025 RTEP has \$655.57 million in baseline projects located in MD/DC.

**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.

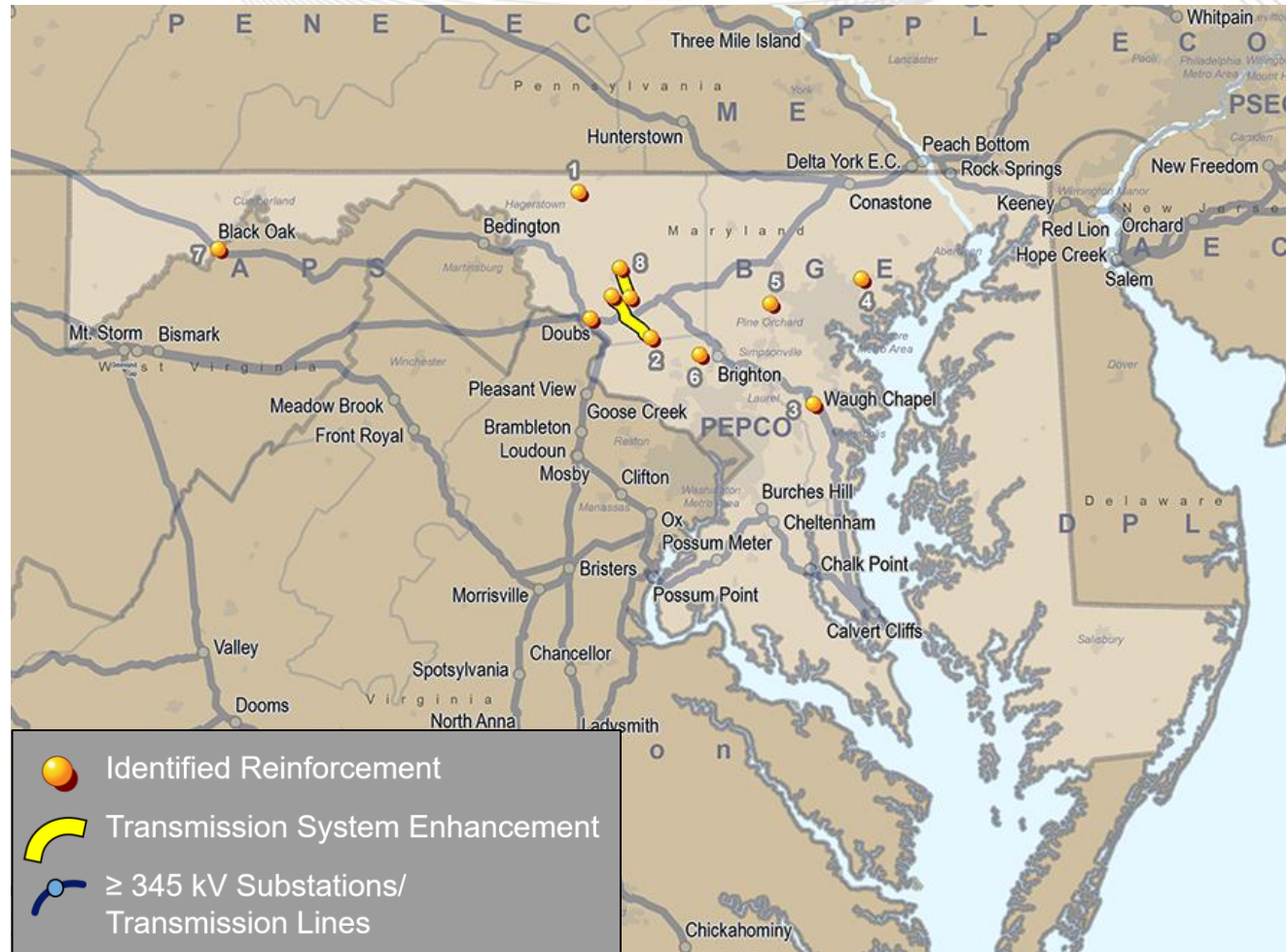
# Maryland/District of Columbia – RTEP Network Projects



The 2025 RTEP has \$25.26 million in network projects located in MD/DC.

**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.

# Maryland/District of Columbia – TO Supplemental Projects

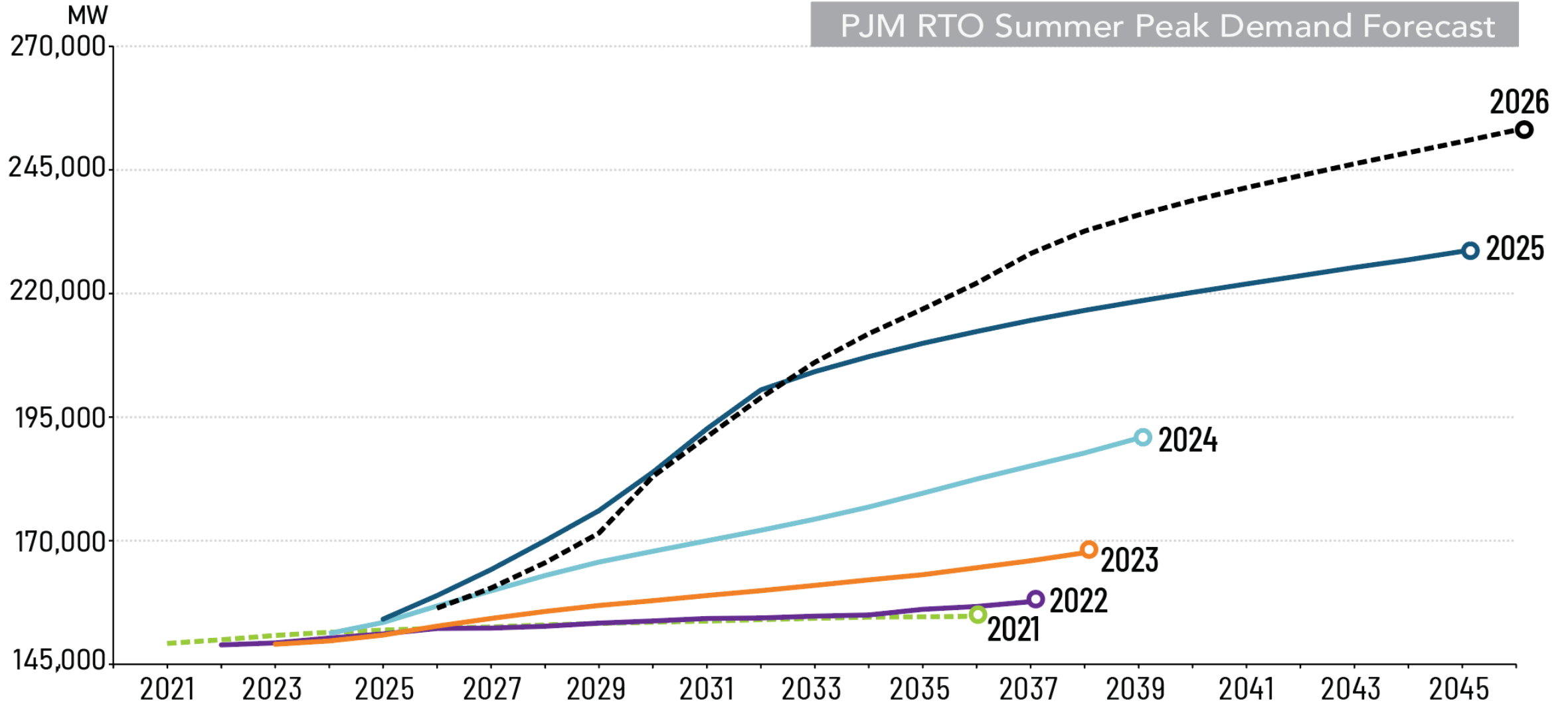


The 2025 RTEP has \$93.98 million in baseline projects located in MD/DC.

**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.

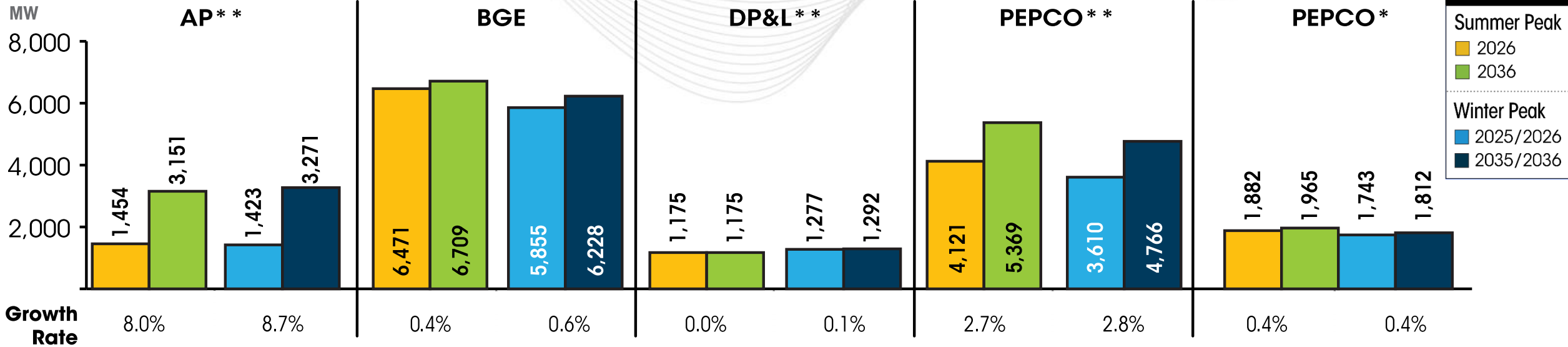
# Planning

## Load Forecast



## Maryland

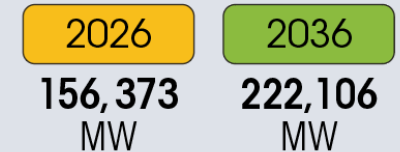
## District of Columbia



\*\*Serves load outside MD; \*serves load outside D.C.

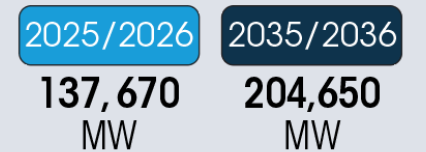
The summer and winter peak megawatt values reflect the estimated amount of forecast load to be served by each transmission owner in the noted state/district. Estimated amounts were calculated based on the average share of each transmission owner's real-time summer and winter peak load in those areas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

### PJM RTO Summer Peak



Growth Rate 3.6%

### PJM RTO Winter Peak



Growth Rate 4.0%



# Maryland / D.C. – Summer Peak Large Load Adjustments

(PJM 2026 Load Forecast)

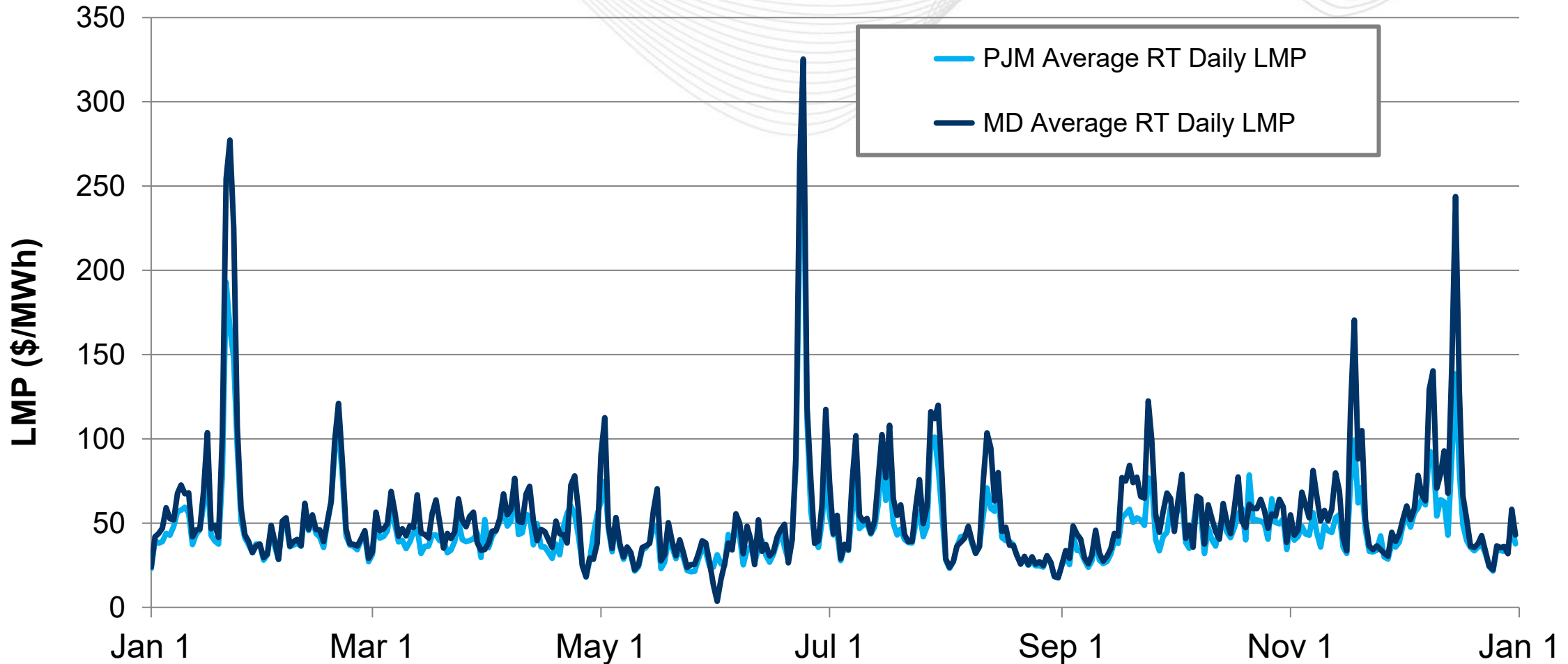
	Zone	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
MD	AP	165	276	319	590	966	1,186	1,249	1,432	1,801	1,800
	BGE	18	25	43	110	176	243	307	355	355	355
	DP&L	-	-	-	-	-	-	-	-	-	-
	PEPCO	-	-	-	-	142	229	437	642	799	946
DC	PEPCO	-	-	-	-	-	-	-	-	-	-
<b>MD TOTAL (MW)</b>		183	301	362	700	1,284	1,658	1,993	2,429	2,955	3,101
<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
MD	AP	1,798	1,799	1,798	1,798	1,798	1,949	1,949	1,949	1,950	1,950
	BGE	355	354	354	354	354	354	354	354	354	354
	DP&L	-	-	-	-	-	-	-	-	-	-
	PEPCO	1,064	1,064	1,064	1,064	1,064	1,064	1,064	1,064	1,064	1,064
DC	PEPCO	-	-	-	-	-	-	-	-	-	-
<b>MD TOTAL (MW)</b>		3,217	3,217	3,216	3,216	3,216	3,367	3,367	3,367	3,368	3,368
<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

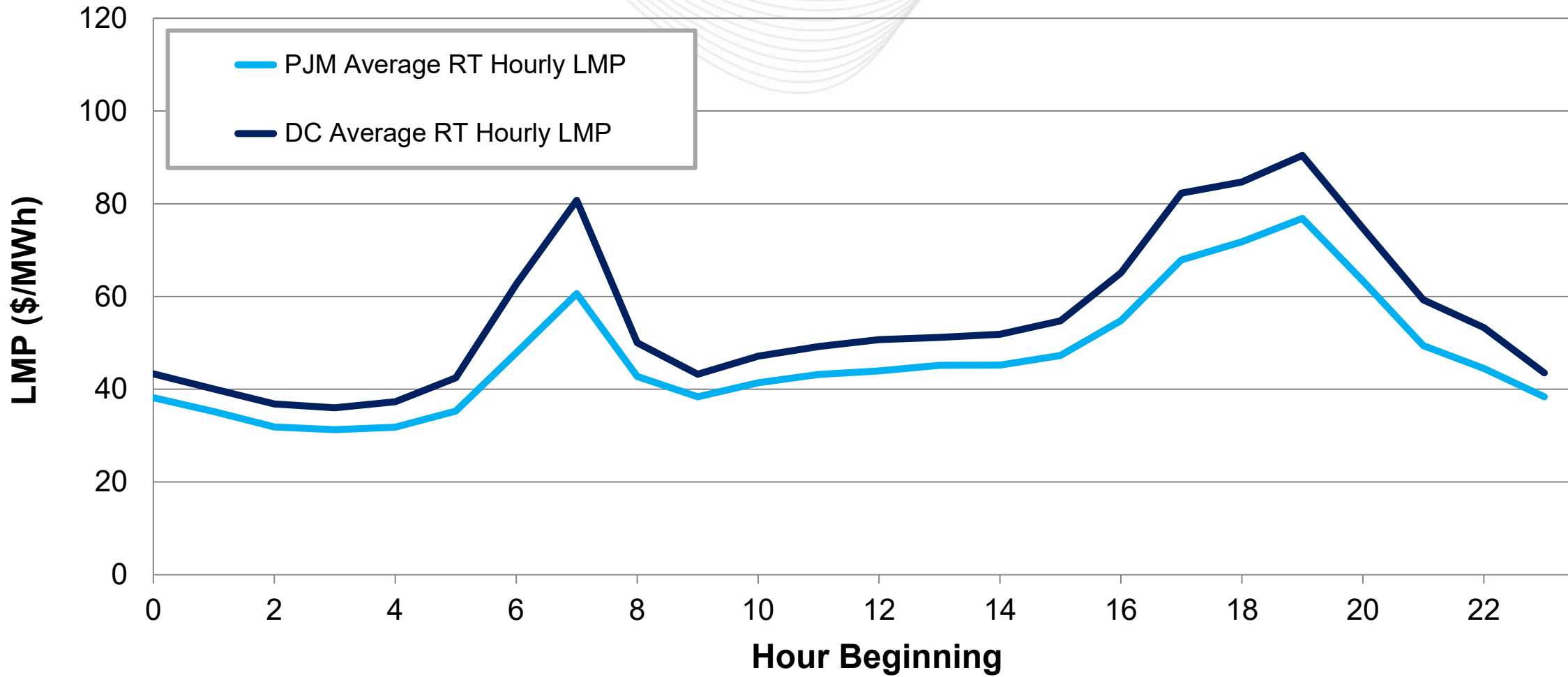
**Note:** The listed total reflects both existing (2025) and forecasted large load adjustments. It does not include large loads that may exist but have not been submitted to PJM’s load forecasting process as a large load adjustment.

# Markets

## Market Analysis

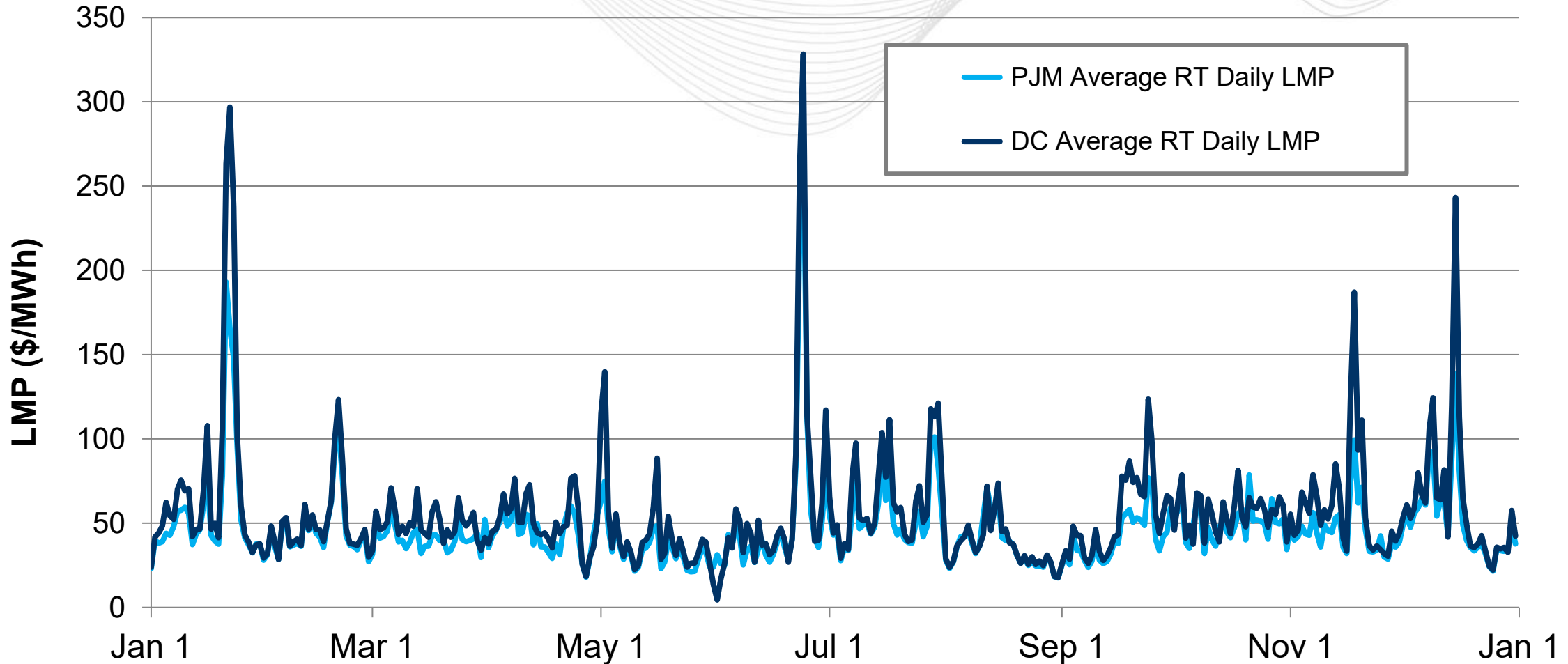


Maryland's average hourly LMPs were higher than the PJM average hourly LMP.

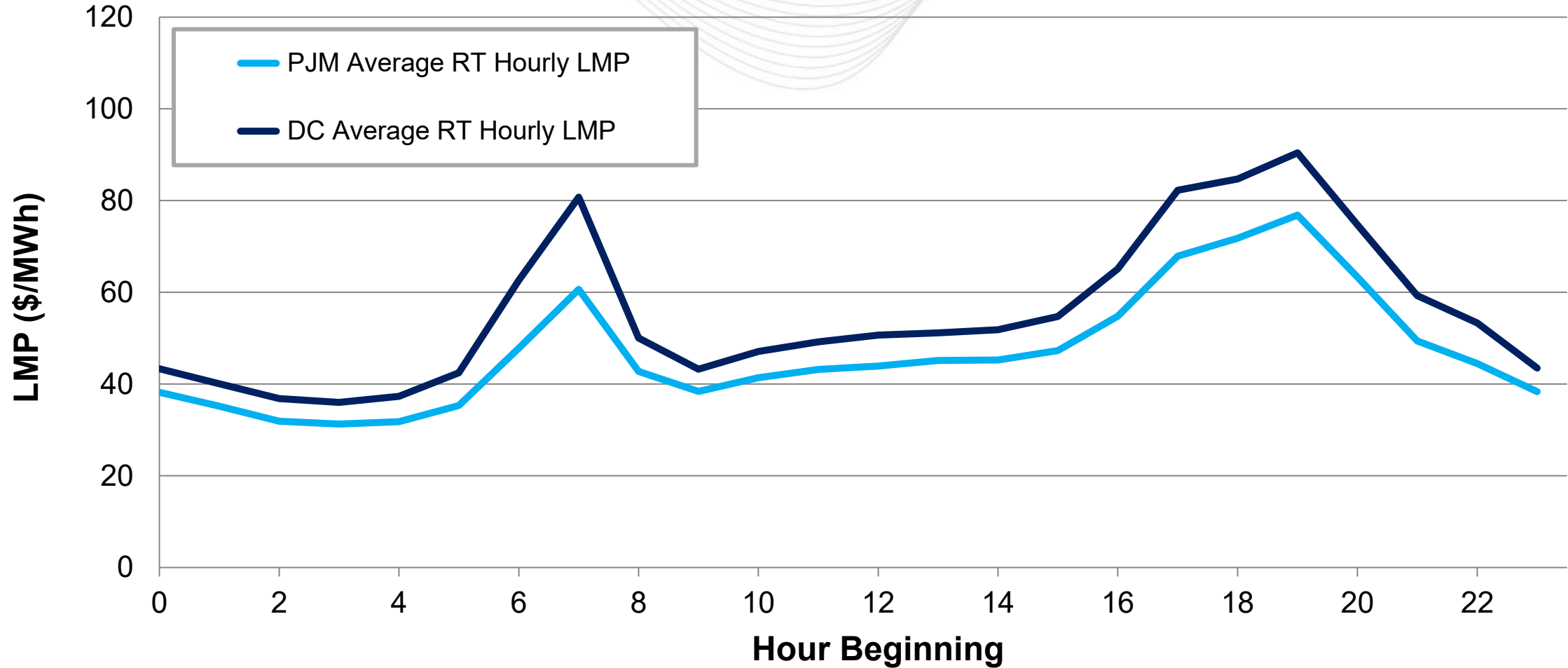


# Washington, D.C. – Average Daily LMP

(Jan. 1, 2025 – Dec. 31, 2025)

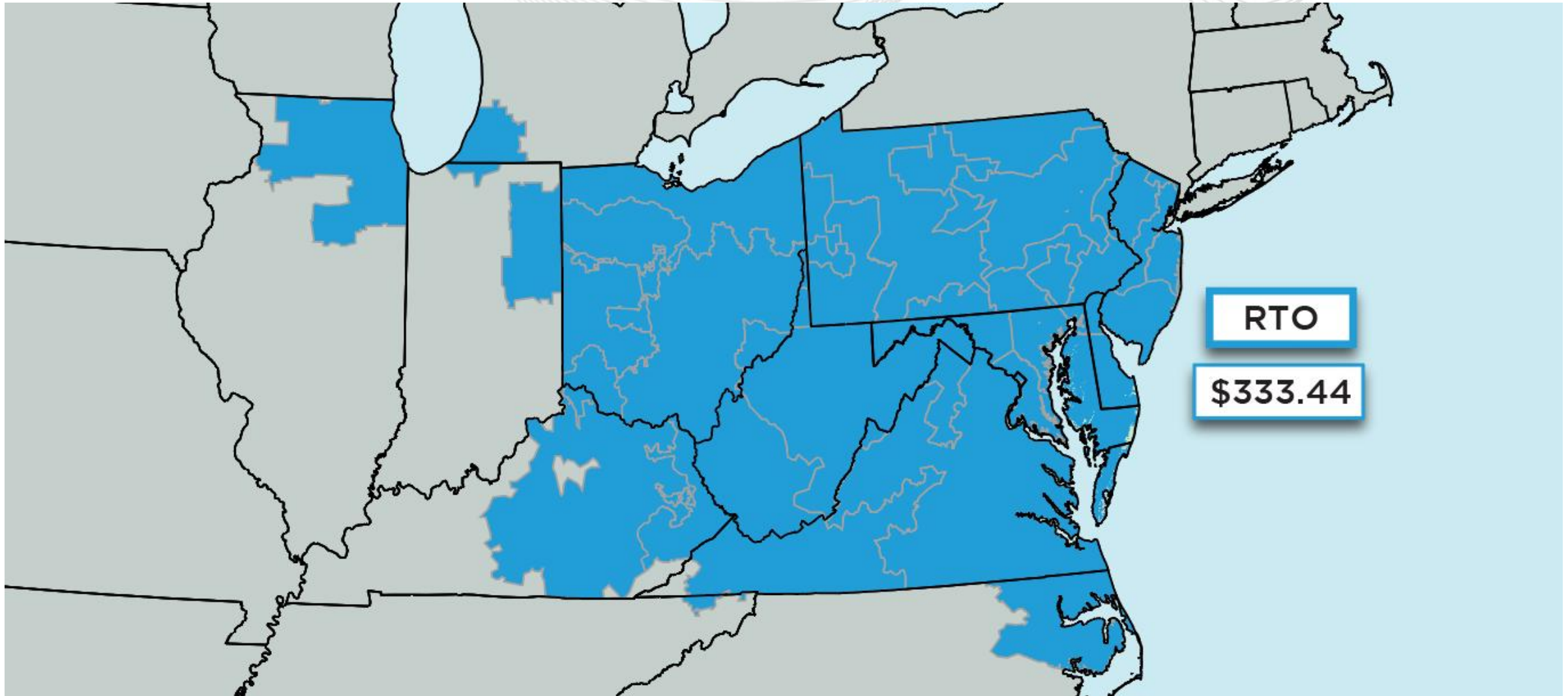


Washington, D.C's average hourly LMPs were higher than the PJM average hourly LMP.





# 2027/28 Base Residual Auction Clearing Prices (\$/MW-Day)





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

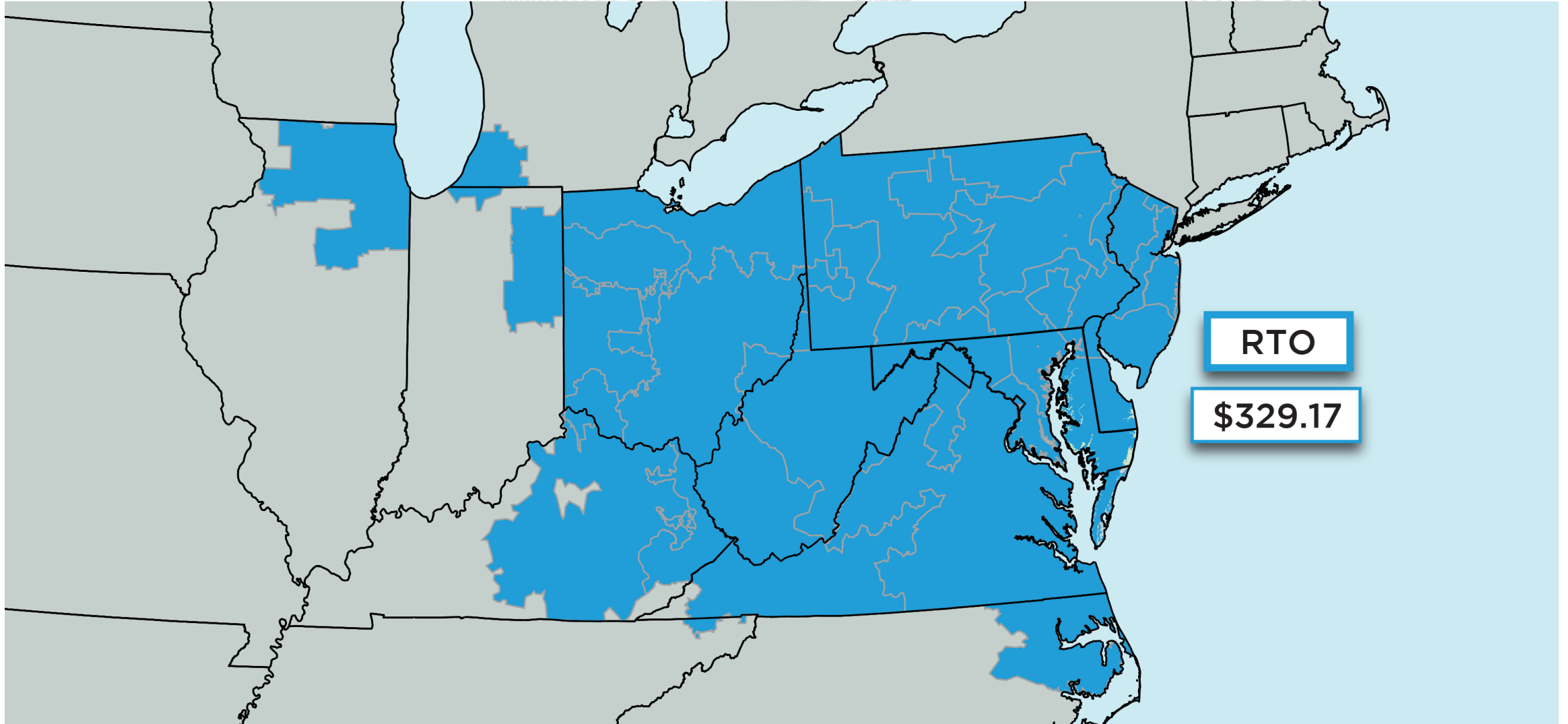
## CAPACITY PERFORMANCE

*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

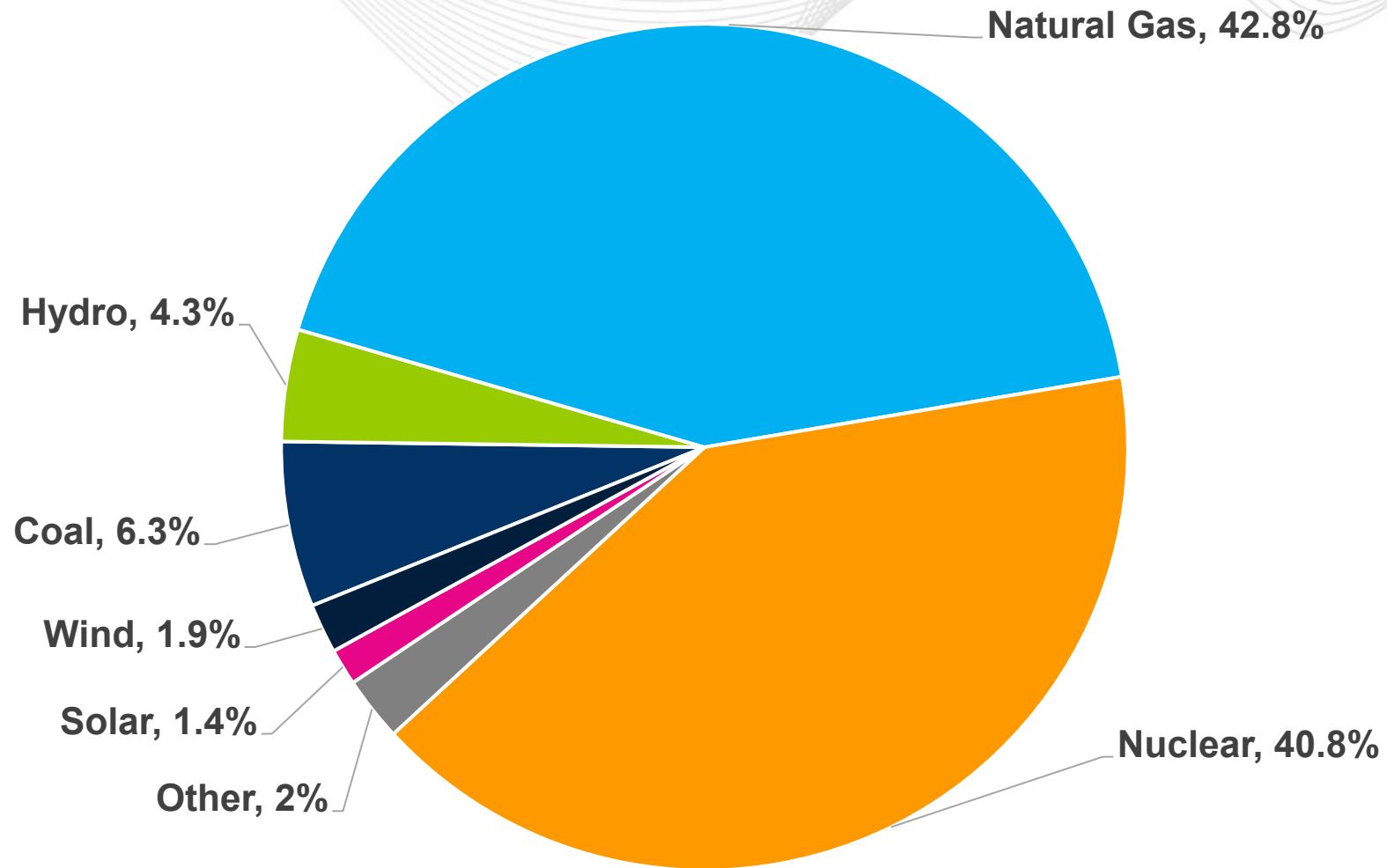
## CAPACITY PERFORMANCE

*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

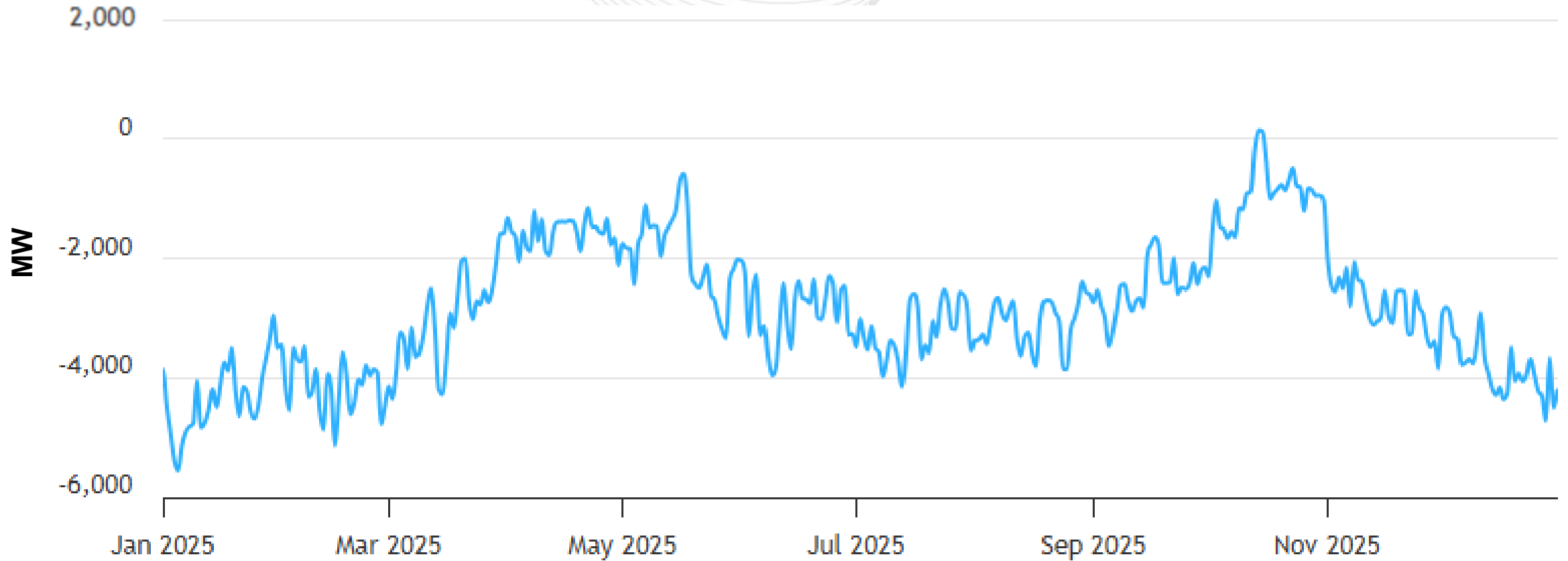
# Maryland – 2025 Generator Production



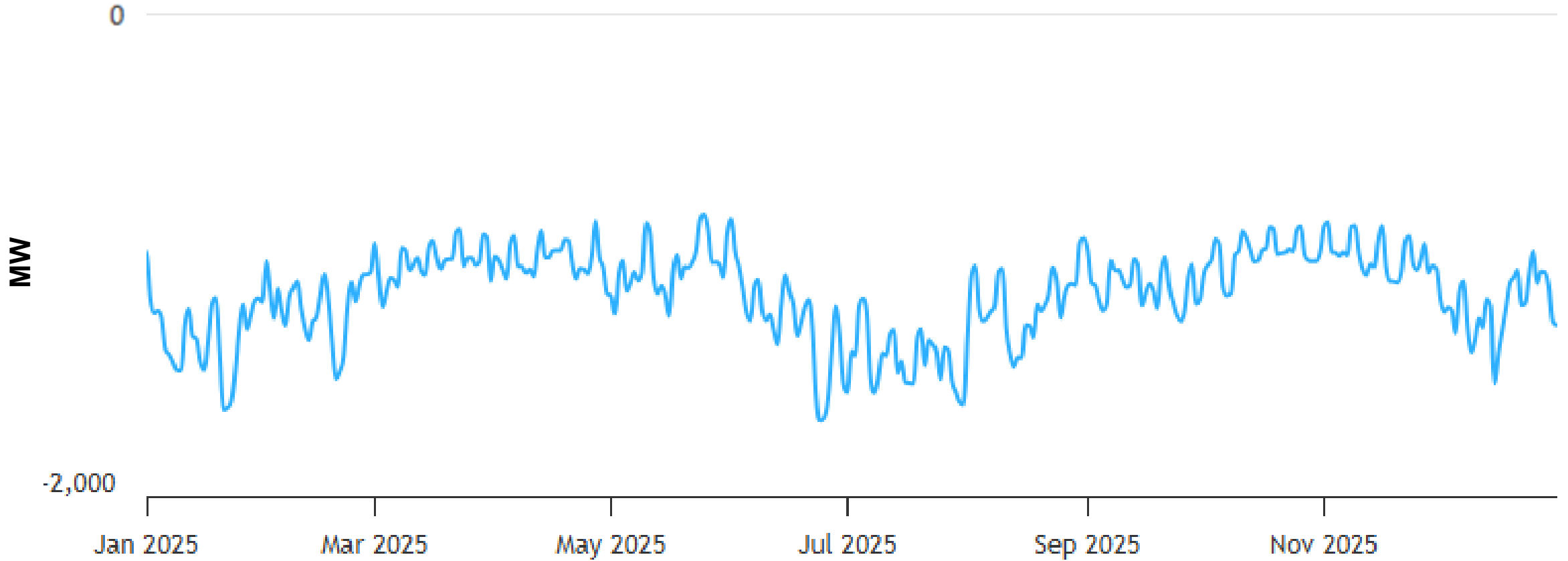
The data in this chart comes from EIA Form 923 (2025).

# Maryland – Net Energy Import/Export Trend

(Jan. 2025 – Dec. 2025)

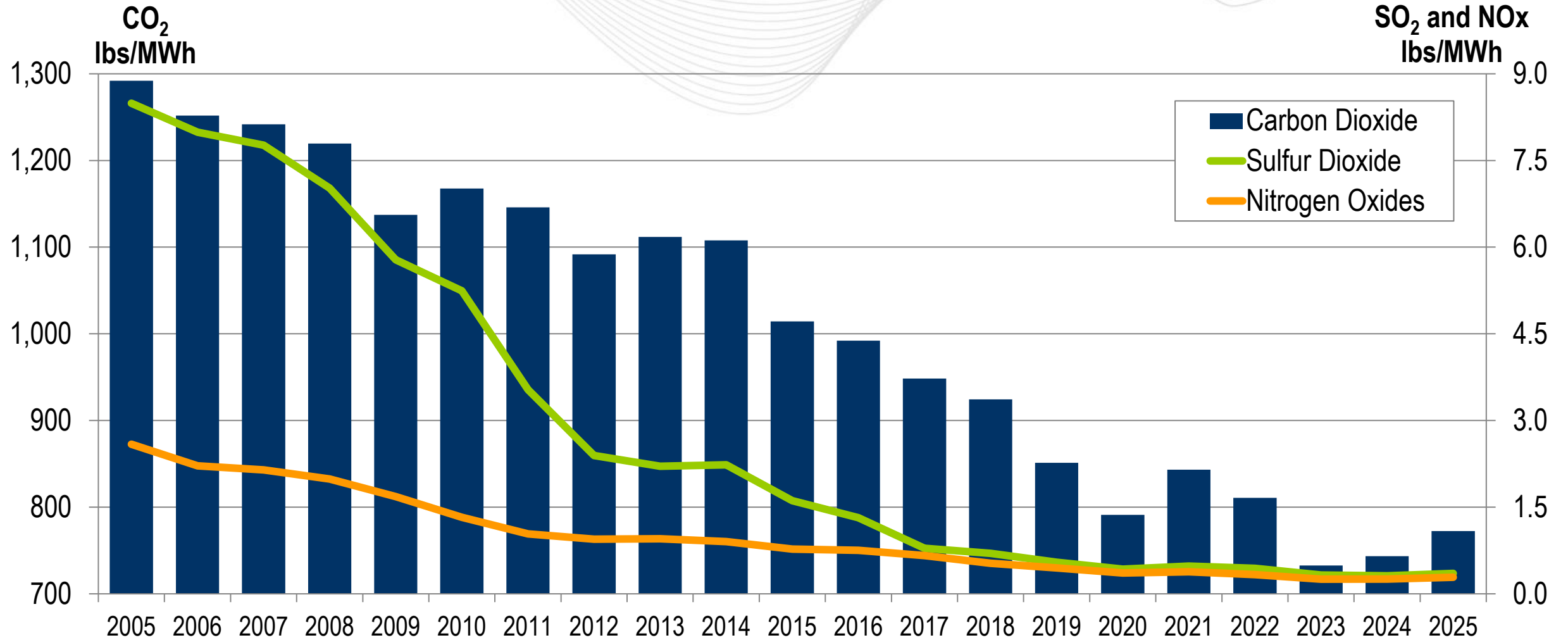


**Note:** Positive values represent exports and negative values represent imports.



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# PJM System Average Emission Rates





# Maryland – Average Emissions (lbs/MWh)

(Feb. 2026)

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

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

