

# New Supply and Demand Analysis in 2025

Market Monitoring Unit  
Advisory Committee  
December 5, 2025

Jane Wei



Monitoring Analytics

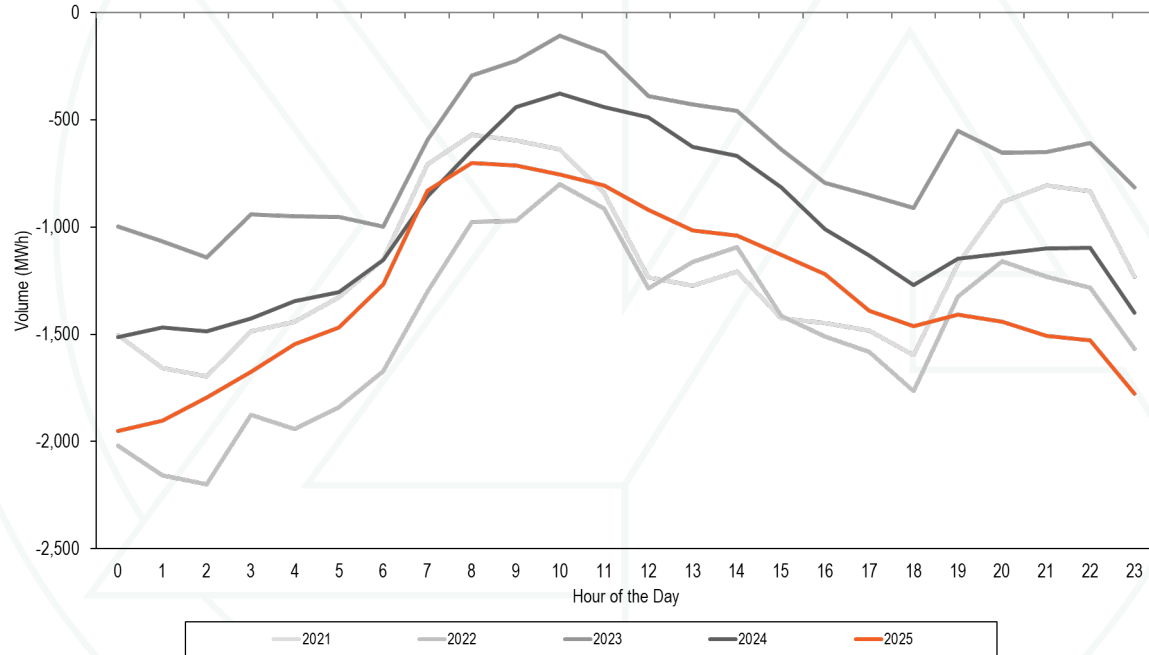
# DAY-AHEAD AND REAL-TIME PHYSICAL LOAD



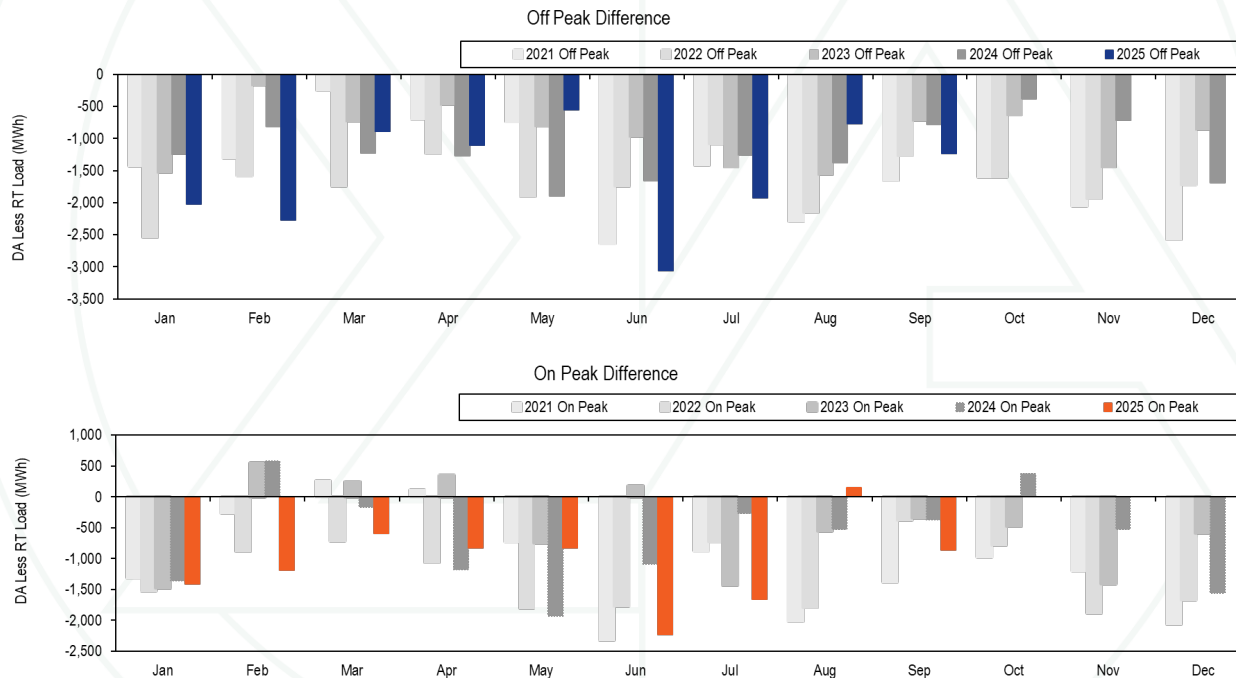
# Overview

- **The day-ahead physical load bid and real-time settlement physical load are not always equal.**
- **In general, the day-ahead physical load bid from the LSE is less than the real-time settlement physical load.**
- **The discrepancy varies throughout the day, from month to month, and from zone to zone.**
- **In 2025, we have added the analysis to SOM section 3.**

# Difference between day-ahead and real-time hourly average physical load by hour of the day January through September, 2021 through 2025



# Difference between day-ahead and real-time on peak and off peak hourly average physical load by month: 2021 through September 2025



# Difference between day-ahead and real-time on peak and off peak physical load by zone

Zone	2024 Jan-Sep				2025 Jan-Sep			
	Off Peak		On Peak		Off Peak		On Peak	
	Average DA-RT Difference	Average Percent of RT Load	Average DA-RT Difference	Average Percent of RT Load	Average DA-RT Difference	Average Percent of RT Load	Average DA-RT Difference	Average Percent of RT Load
AECO	16.99	1.8%	44.29	4.2%	(8.22)	(0.1%)	10.16	2.3%
AEP	(109.20)	(0.8%)	(81.44)	(0.5%)	(48.63)	(0.2%)	(11.11)	0.0%
APS	(93.39)	(1.7%)	(8.72)	(0.1%)	(70.30)	(1.1%)	1.52	0.2%
ATSI	(110.02)	(1.4%)	42.02	0.7%	(41.47)	(0.3%)	50.52	0.8%
BGE	(140.25)	(4.2%)	(149.69)	(3.8%)	(135.72)	(3.8%)	(141.70)	(3.3%)
COMED	7.72	0.3%	17.77	0.4%	(29.43)	(0.1%)	(56.16)	(0.2%)
DAY	(13.32)	(0.4%)	(7.73)	(0.1%)	(19.40)	(0.8%)	(14.16)	(0.4%)
DOM	(431.64)	(3.3%)	(447.02)	(3.0%)	(745.43)	(5.2%)	(793.17)	(5.0%)
DPL	(34.17)	(1.7%)	(27.54)	(1.0%)	(41.63)	(2.0%)	(36.49)	(1.3%)
DUQ	9.48	0.7%	28.14	1.7%	6.71	0.8%	38.24	2.8%
EKPC/DEOK	(46.52)	(0.9%)	(25.67)	(0.4%)	(32.76)	(0.6%)	13.91	0.3%
JCPL	(40.13)	(1.4%)	50.50	3.1%	(44.18)	(1.5%)	17.25	1.7%
METED	9.96	0.9%	26.12	1.6%	15.14	1.3%	26.30	1.7%
PECO	(28.69)	(0.5%)	(29.31)	(0.3%)	(27.61)	(0.4%)	(6.59)	0.1%
PENELEC	(7.48)	(0.3%)	9.79	0.6%	(3.60)	0.1%	12.51	0.9%
PEPCO	(114.28)	(3.9%)	(117.52)	(3.3%)	(107.71)	(3.4%)	(94.98)	(2.4%)
PPL	33.72	1.0%	81.15	1.8%	(29.14)	(0.5%)	4.38	0.4%
PSEG	(173.35)	(3.6%)	(93.10)	(1.3%)	(142.36)	(2.9%)	(63.51)	(0.6%)
RECO	(5.37)	(3.8%)	(6.05)	(2.9%)	0.53	0.5%	1.41	1.2%

# Difference between day ahead and real-time physical load by zone: January through September, 2021 through 2025

Zone	2021 Jan-Sep		2022 Jan-Sep		2023 Jan-Sep		2024 Jan-Sep		2025 Jan-Sep	
	Average DA-RT Difference	Average Percent of RT Load	Average DA-RT Difference	Average Percent of RT Load	Average DA-RT Difference	Average Percent of RT Load	Average DA-RT Difference	Average Percent of RT Load	Average DA-RT Difference	Average Percent of RT Load
AECO	(40.02)	(2.2%)	(41.73)	(2.2%)	9.39	1.3%	29.75	2.9%	0.36	1.0%
AEP	(98.79)	(0.7%)	(134.42)	(1.0%)	(73.93)	(0.4%)	(96.23)	(0.7%)	(31.13)	(0.1%)
APS	(54.33)	(0.9%)	(97.87)	(1.7%)	(109.05)	(1.9%)	(53.83)	(0.9%)	(36.80)	(0.5%)
ATSI	(15.12)	0.1%	(101.32)	(1.2%)	16.05	0.4%	(38.98)	(0.4%)	1.44	0.2%
BGE	(147.61)	(3.9%)	(93.35)	(2.6%)	(80.01)	(2.3%)	(144.66)	(4.0%)	(138.51)	(3.6%)
COMED	(20.41)	0.2%	(53.20)	(0.3%)	144.35	1.5%	12.41	0.3%	(41.90)	(0.2%)
DAY	(1.20)	0.2%	(37.57)	(1.7%)	20.59	1.3%	(10.71)	(0.3%)	(16.96)	(0.6%)
DOM	(506.75)	(4.2%)	(601.12)	(4.8%)	(626.85)	(4.9%)	(438.82)	(3.2%)	(767.70)	(5.1%)
DPL	(49.14)	(2.1%)	(65.47)	(3.0%)	(29.24)	(1.3%)	(31.07)	(1.4%)	(39.23)	(1.6%)
DUQ	4.69	0.5%	(90.70)	(5.7%)	24.98	1.8%	18.20	1.1%	21.42	1.7%
EKPC/DEOK	(46.49)	(0.8%)	(76.47)	(1.6%)	(42.19)	(0.8%)	(36.78)	(0.7%)	(10.99)	(0.2%)
JCPL	(35.47)	(0.5%)	(39.26)	(0.7%)	16.34	1.2%	2.22	0.7%	(15.52)	(0.0%)
METED	(19.17)	(0.7%)	(62.02)	(3.1%)	17.85	1.2%	17.51	1.2%	20.34	1.5%
PECO	(39.69)	(0.4%)	83.77	2.1%	50.05	1.5%	(28.98)	(0.4%)	(17.80)	(0.2%)
PENELEC	9.41	0.5%	10.90	0.6%	33.71	1.9%	0.59	0.1%	3.92	0.5%
PEPCO	(18.32)	(0.2%)	(20.31)	(0.6%)	(38.30)	(1.0%)	(115.80)	(3.6%)	(101.77)	(2.9%)
PPL	(46.75)	(0.8%)	32.06	0.9%	64.64	1.6%	55.88	1.4%	(13.50)	(0.1%)
PSEG	(43.63)	(0.7%)	(57.58)	(0.8%)	(59.41)	(1.1%)	(135.86)	(2.5%)	(105.58)	(1.8%)
RECO	6.47	4.3%	(1.53)	(0.9%)	(0.60)	0.3%	(5.69)	(3.4%)	0.94	0.8%

# SOLAR AND WIND





# Overview

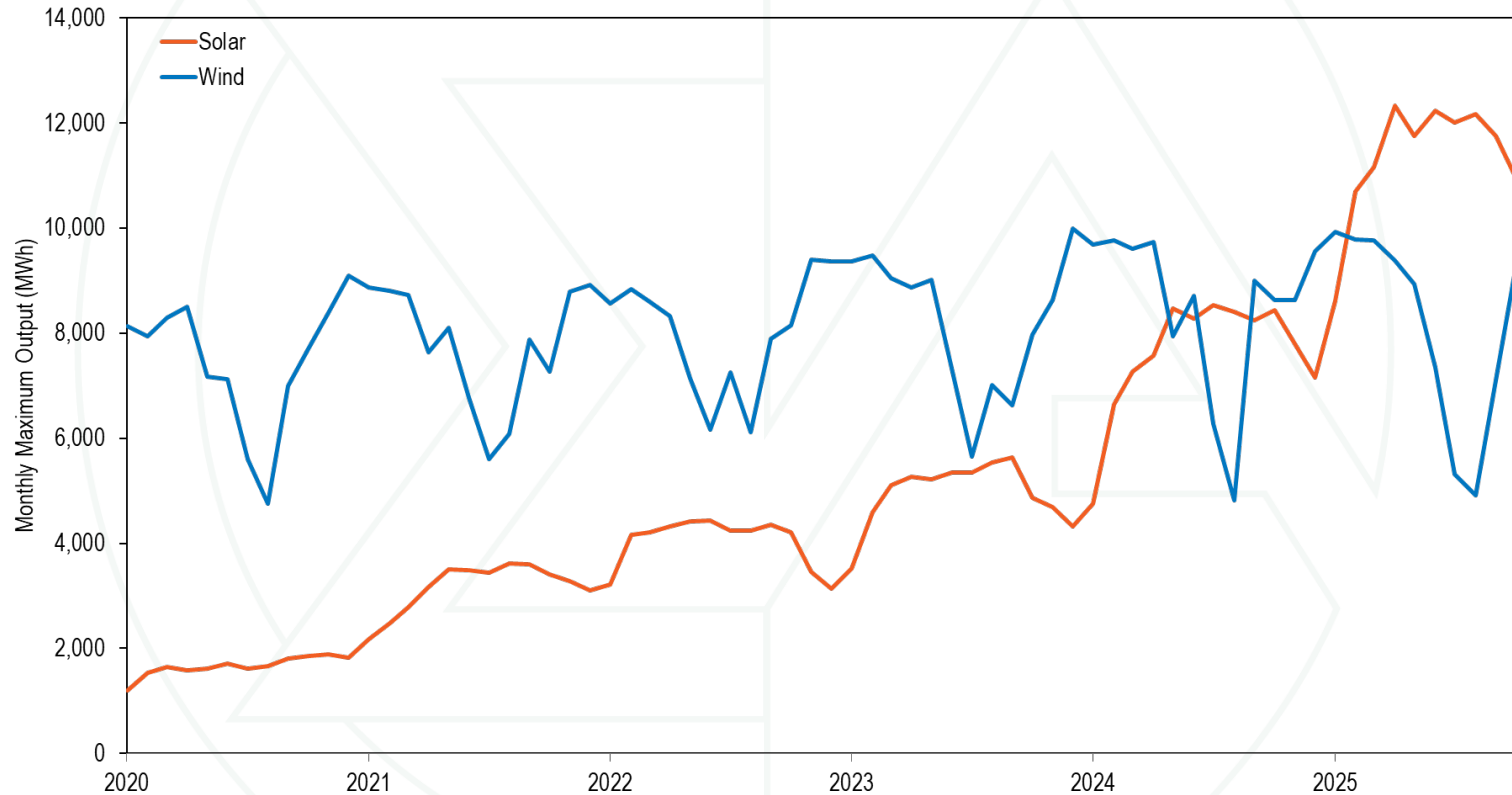
- **Solar generation has increased dramatically since 2020.**
- **Solar output's share of total generation in PJM increased from 0.4% to 3.1% in less than six years.**
- **The rapidly growing output of wind and solar generation is changing the shape of the PJM net load.**
- **In 2025, we have added the analysis to MC webinar and expanding our analysis of net load.**

# Annual Maximum Hourly Solar and Wind Output

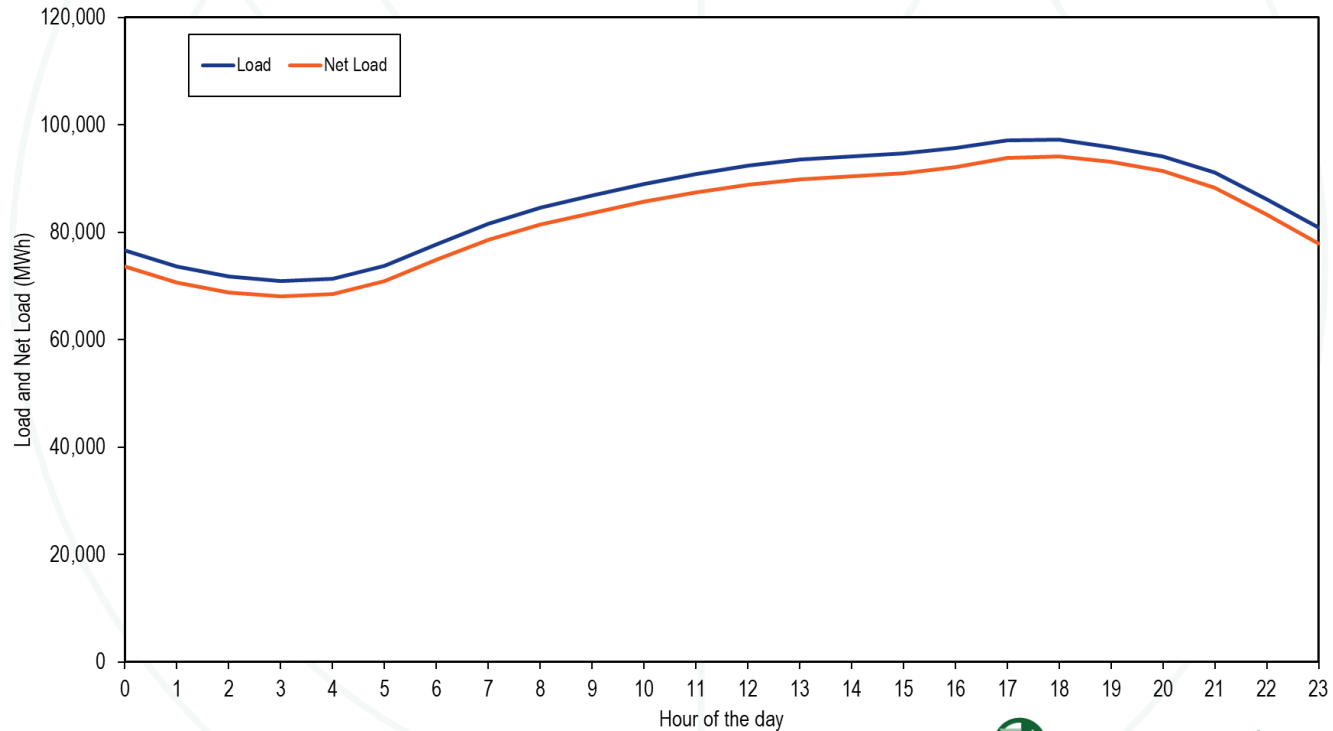
Year	Solar Maximum Hourly Output			Solar Percent of All Generation For The Year	Wind Maximum Hourly Output			Wind Percent of All Generation For The Year
	Maximum Hourly MWh	Change	Percent Change		Maximum Hourly MWh	Change	Percent Change	
2020	1,879			0.4%	9,095			3.3%
2021	3,617	1,739	92.5%	0.9%	8,911	(184)	(2.0%)	3.3%
2022	4,429	812	22.4%	1.1%	9,402	491	5.5%	3.8%
2023	5,630	1,201	27.1%	1.4%	9,993	592	6.3%	3.5%
2024	8,532	2,901	51.5%	2.1%	9,768	(226)	(2.3%)	3.7%
2025	12,325	3,794	44.5%	3.1%	9,929	161	1.7%	3.5%



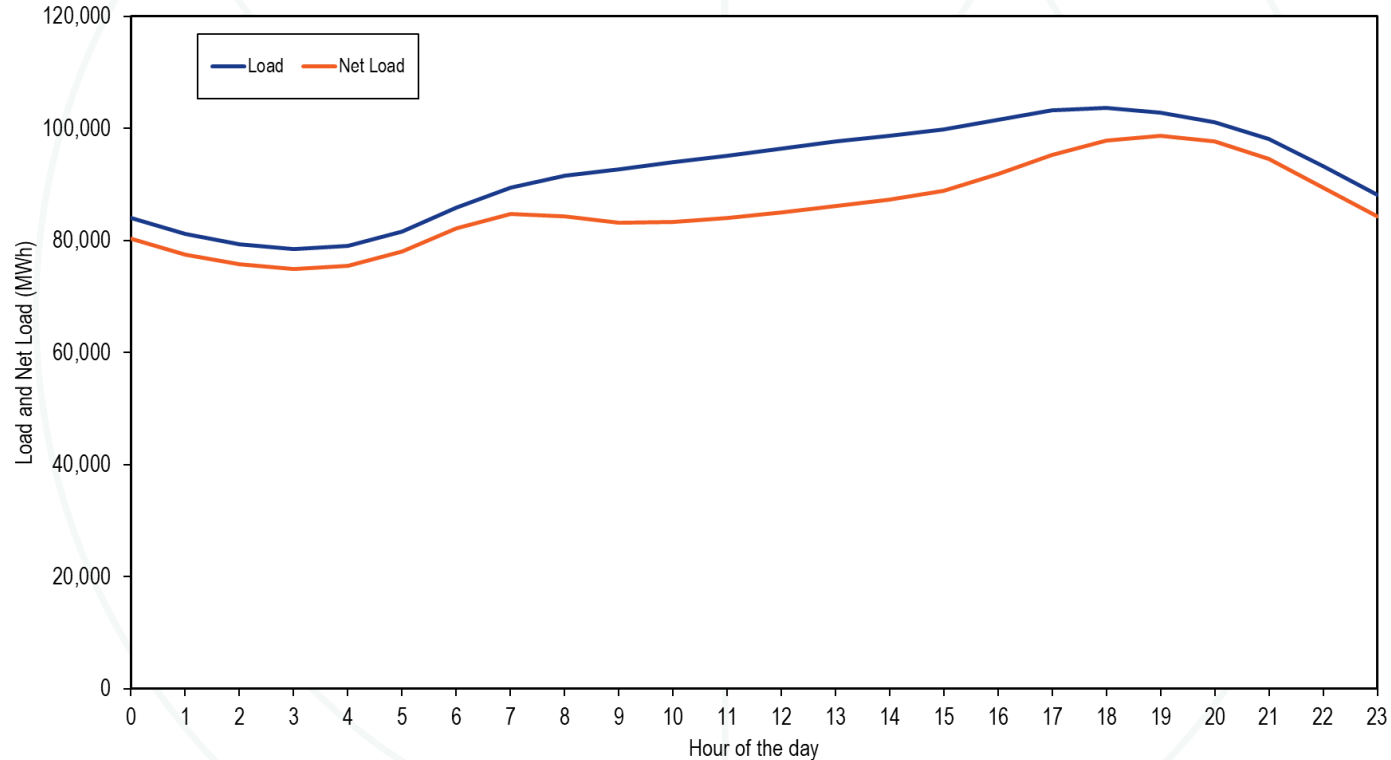
# Maximum Solar and Wind Hourly Output by Month



# Load and Net Load by hour of the day January through September, 2020



# Load and Net Load by hour of the day January through September, 2025



# Additional Analysis

- **IMM is open to suggestions for additional analysis**



**Monitoring Analytics, LLC**

**2621 Van Buren Avenue**

**Suite 160**

**Eagleville, PA**

**19403**

**(610) 271-8050**

**[MA@monitoringanalytics.com](mailto:MA@monitoringanalytics.com)**

**[www.MonitoringAnalytics.com](http://www.MonitoringAnalytics.com)**

