

# Market Monitor Report

MC

January 22, 2026

IMM



Monitoring Analytics

# CURRENT ISSUES



# CAPACITY MARKET



# IMM 2027/2028 BRA Report Part A

- **Analysis of the 2027/2028 RPM Base Residual Auction Part A. January 5, 2026.**
- **Focus on:**
  - **Impact of Agreement re maximum price**
  - **Impact of data center load**



# Increase in capacity market revenues due to the inclusion of the data center load in the peak load forecast by Delivery Year

	Above Embedded	All Data Center Load
2025/2026 Delivery Year	\$7,742,960,157	\$9,332,103,858
2026/2027 Delivery Year	\$7,271,197,971	\$7,271,197,971
2027/2028 Delivery Year	\$6,244,523,827	\$6,497,653,512
Total	\$21,258,681,955	\$23,100,955,341

# Reserve margin calculation: 2026/2027 RPM BRA and 2027/2028 RPM BRA

Reserve Margin Calculation			
	2026/2027 RPM BRA	2027/2028 RPM BRA	Formula
Forecast peak load ICAP (MW)	159,329.1	164,579.0	A
FRR peak load ICAP (MW)	12,633.9	12,201.9	B
PRD ICAP (MW)	115.0	115.0	C
Installed reserve margin (IRM)	19.1%	20.0%	D
Pool-Wide Accredited UCAP Factor	76.99%	77.17%	E
Forecast pool requirement (FPR)	0.9170	0.9260	$F=(1+D)*E$
Cleared UCAP (generation and DR)	134,205.3	134,478.1	G
Cleared ICAP (generation and DR)	174,315.2	174,262.1	$H=G/E$
RPM peak load ICAP (MW)	146,580.2	152,262.1	$J=A-B-C$
Reserve margin ICAP (MW)	27,735.0	22,000.0	$K=H-J$
Reserve margin (%)	18.9%	14.4%	$L=K/J$
Reserve cleared in excess of IRM ICAP (MW)	(261.8)	(8,452.4)	$M=K-D*J$
Reserve cleared in excess of IRM (%)	(0.2%)	(5.6%)	$N=M/J$
RPM peak load UCAP (MW)	112,852.1	117,500.7	$P=J*E$
RPM reliability requirement UCAP (MW)	134,414.0	140,994.7	$Q=J*F$
Reserve margin UCAP (MW)	21,353.2	16,977.4	$R=G-P$
Reserve cleared in excess of IRM UCAP (MW)	(208.7)	(6,516.6)	$S=G-Q$

# PJM Peak Load between 2009 and 2025

	Hour Ending		PJM Load (MWh)
	Date	(EPT)	
2009	Mon, August 10	17	123,900
2010	Tue, July 06	17	133,297
2011	Thu, July 21	17	154,095
2012	Tue, July 17	17	150,879
2013	Thu, July 18	17	153,790
2014	Tue, June 17	18	138,448
2015	Tue, July 28	17	140,266
2016	Thu, August 11	16	148,577
2017	Wed, July 19	18	142,387
2018	Tue, August 28	17	147,042
2019	Fri, July 19	18	148,228
2020	Mon, July 20	17	141,449
2021	Tue, August 24	17	145,563
2022	Wed, July 20	18	144,356
2023	Thu, July 27	18	144,215
2024	Tue, July 16	18	148,890
2025	Mon, June 23	18	156,256

# Forecasted Summer Peak Load for 2022 through 2027 as reported in the recent load forecast reports

Report	Forecasted Summer Peak Load (MW)					
	2022	2023	2024	2025	2026	2027
2022 Load Forecast	148,938	149,351	150,309	151,165	152,259	152,322
2023 Load Forecast		149,059	149,737	150,924	152,736	154,275
2024 Load Forecast			151,247	153,493	156,803	159,859
2025 Load Forecast				154,144	158,937	164,186



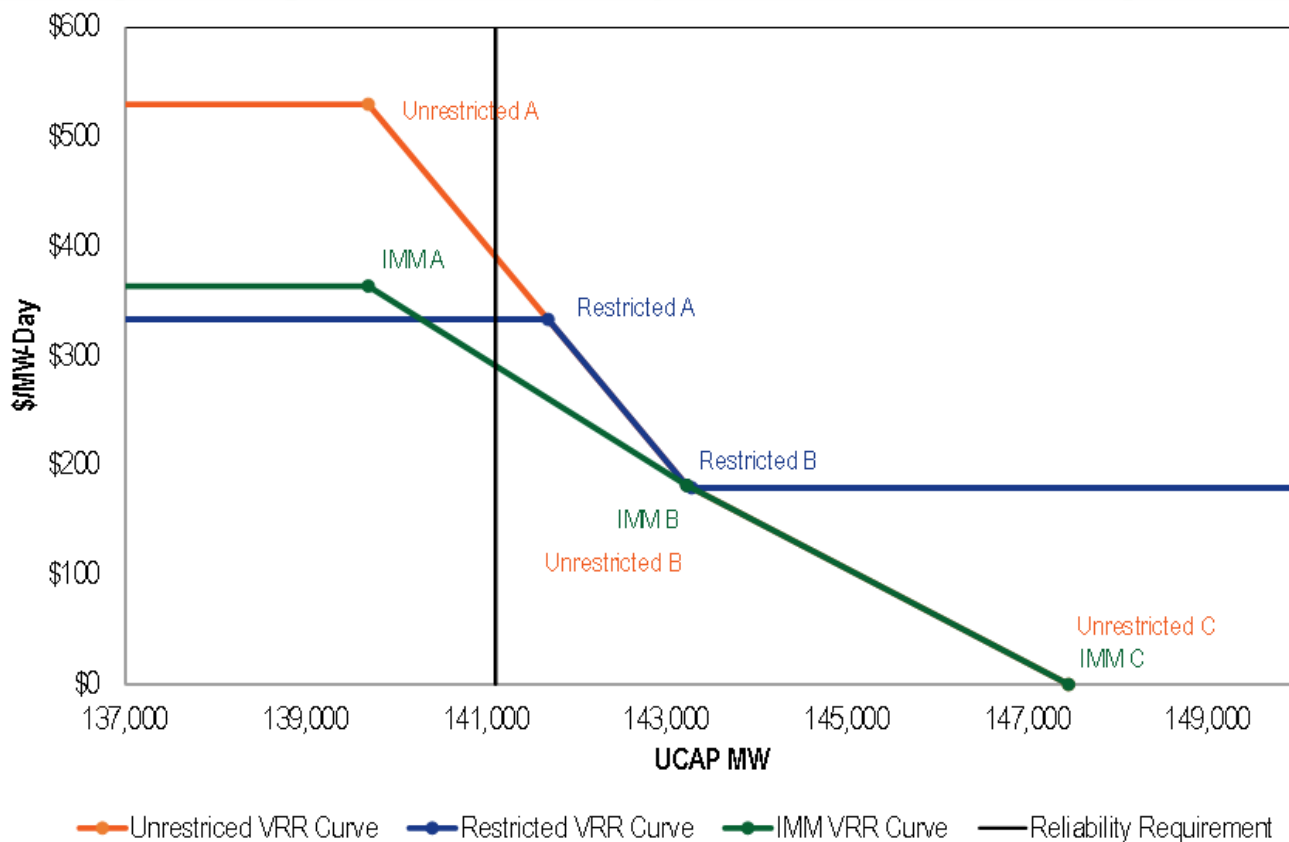
# Large load adjustments for 2022 through 2027 as reported in the recent load forecast reports

Report	Large Load (MW)					
	2022	2023	2024	2025	2026	2027
2022 Load Forecast (Adjustments)	897	1,643	2,344	3,061	3,885	4,166
2023 Load Forecast (Adjustments Above Embedded)		2,231	3,393	4,654	6,594	8,300
2024 Load Forecast (Adjustments Above Embedded)			2,664	4,673	7,557	10,064
2025 Load Forecast (Adjustments Above Embedded)				3,591	8,453	13,668

# Embedded and above embedded data center load for 2025/2026 RPM BRA, 2026/2027 RPM BRA and 2027/2028 RPM BRA

	Above Embedded	Embedded and Above Embedded
2025/2026 RPM BRA (Based on 2024 Load Forecast)	4,654	7,927
2026/2027 RPM BRA (Based on 2025 Load Forecast)	7,892	11,993
2027/2028 RPM BRA (Based on 2025 Load Forecast)	13,018	17,071

# Comparison of VRR curves for RTO



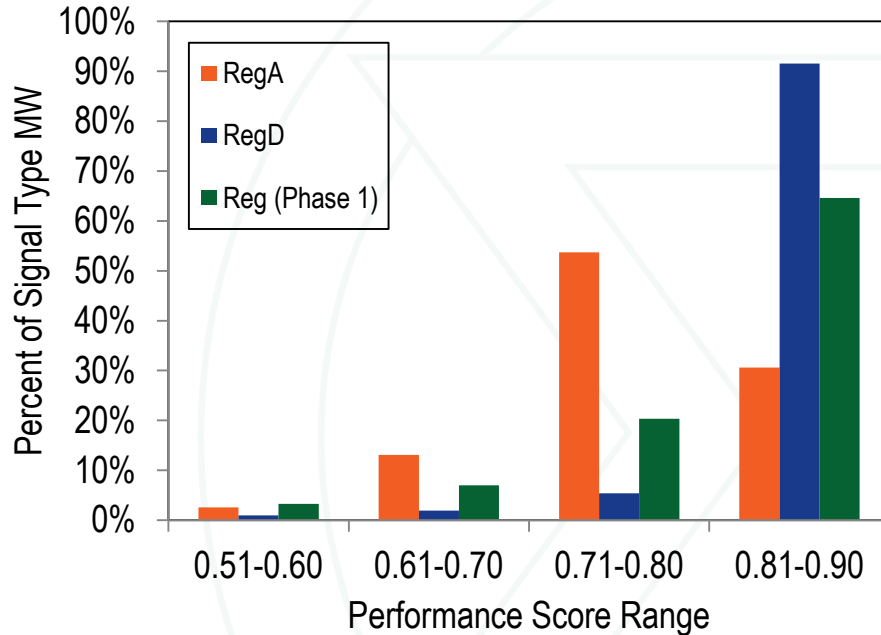
# REGULATION MARKET



# Regulation Market Redesign

- **Phase 1 went live on October 1, 2025, and included several substantial changes to the regulation market.**
  - **Replaced the RegA/RegD signals with a single signal and product; no longer a benefit factor to equate effective MW.**
  - **Performance score calculation simplified: removed the accuracy and delay components.**
  - **LOC calculation has been modified to account for ramp rate limitations of units.**
    - Tracks what each unit would have done in the energy market, based on their ramp capabilities.

# Regulation Performance Scores



- Phase 1 performance scores are based on a modified version of the previous design's precision score.
- Error calculation includes an assigned regulation term (AReg) in the denominator that favors larger units.

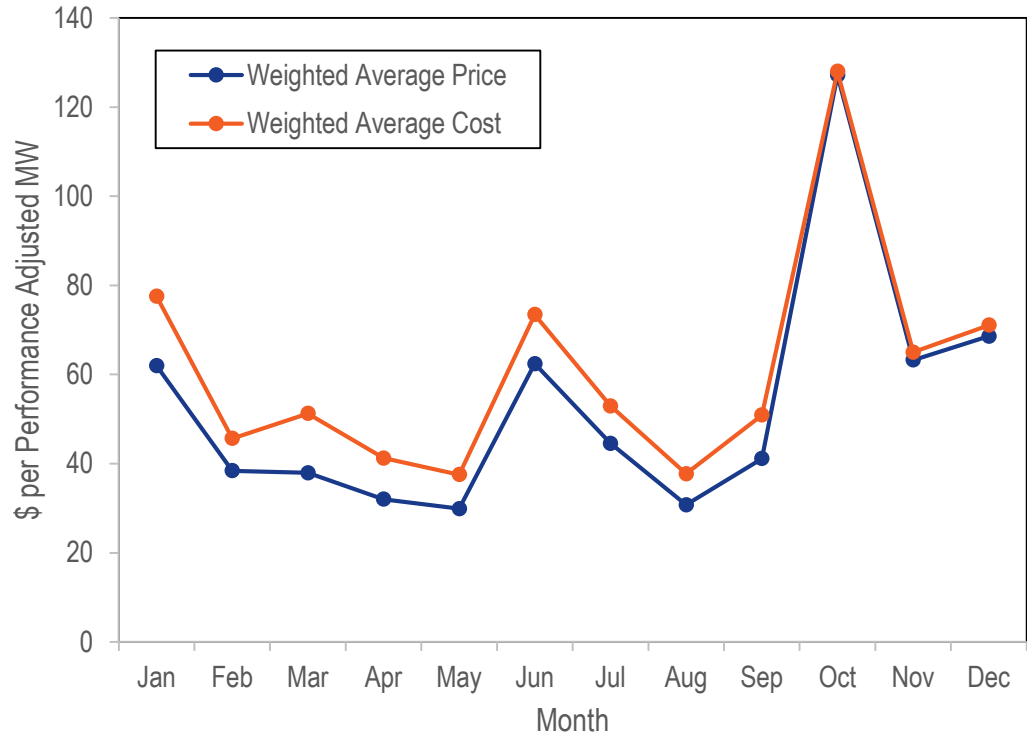
Month	Signal	Unit Type	Precision Score Range			
			61-70	71-80	81-90	91-100
Jan-Sep	RegA	Battery	7.3%	15.8%	26.8%	31.7%
		CT	9.2%	10.5%	16.2%	16.1%
		Diesel	4.0%	15.7%	26.4%	48.8%
		DSR	8.1%	7.7%	18.9%	23.2%
		Hydro	9.2%	13.7%	27.2%	30.4%
		Steam	10.1%	12.2%	15.0%	13.7%
	RegD	Battery	3.3%	9.1%	29.8%	52.7%
		CT	8.3%	19.8%	8.4%	4.1%
		Diesel	18.6%	33.7%	18.4%	10.9%
		DSR	3.3%	8.4%	26.4%	50.4%
		Hydro	-	-	-	-
		Steam	-	-	-	-
Oct-Dec	Reg (Phase 1)	Battery	1.3%	2.0%	4.9%	89.0%
		CT	3.2%	8.8%	36.9%	45.7%
		Diesel	0.4%	1.6%	21.5%	75.8%
		DSR	2.6%	3.2%	5.0%	82.3%
		Hydro	2.6%	7.3%	31.6%	56.0%
		Steam	4.6%	9.8%	24.6%	54.8%

$$Error = Avg \text{ of } Abs \left| \frac{Abs(Response_{10sec} - Signal_{10sec})}{0.5 * IntervalSignal_{AvgAbs} + 0.5 * AReg} \right|$$



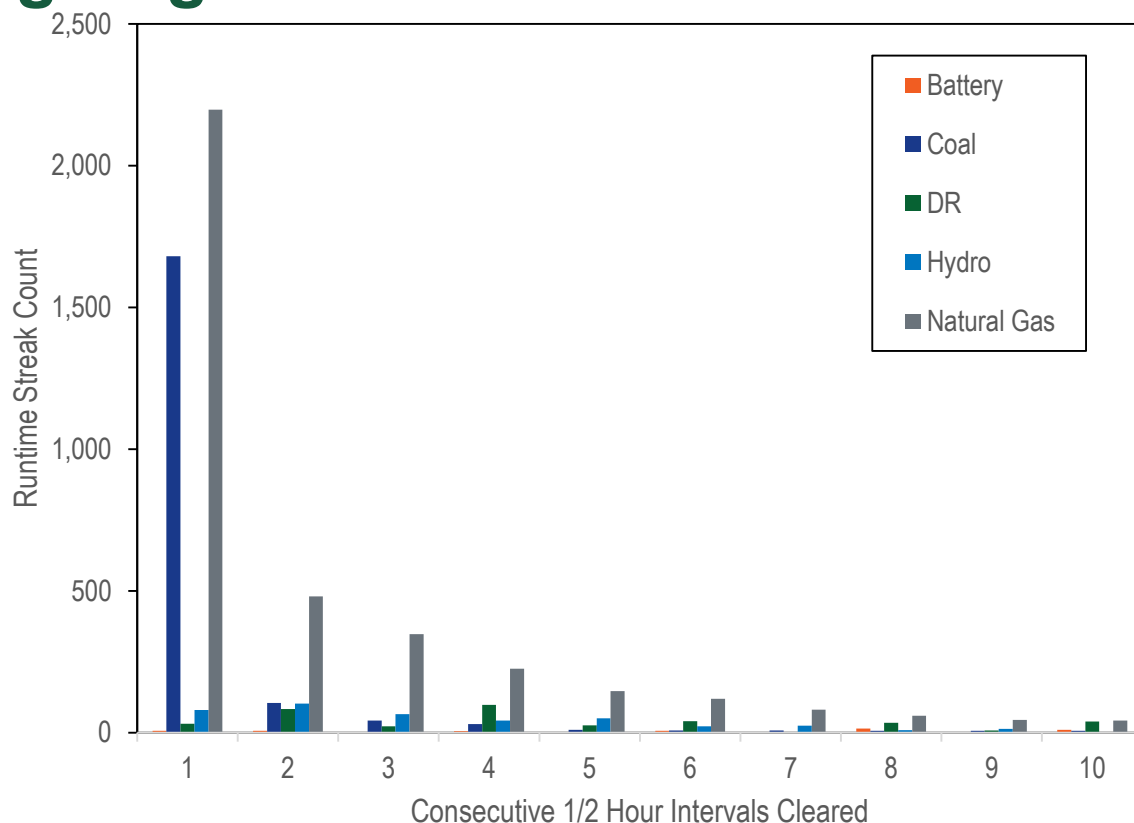
# Regulation Price and Cost

- Price and cost were expected to increase due to inclusion of LOC inclusion in clearing prices.
- Due to an error in the clearing engine, there was a significant increase in the price and cost of regulation at the launch of phase 1.
- Weighted average price increased 202% in October compared to the average price in the first three quarters of 2025.
- Weighted average cost (price and shoulder LOC) in October increased 146% relative to the average cost from the first three quarters of 2025.



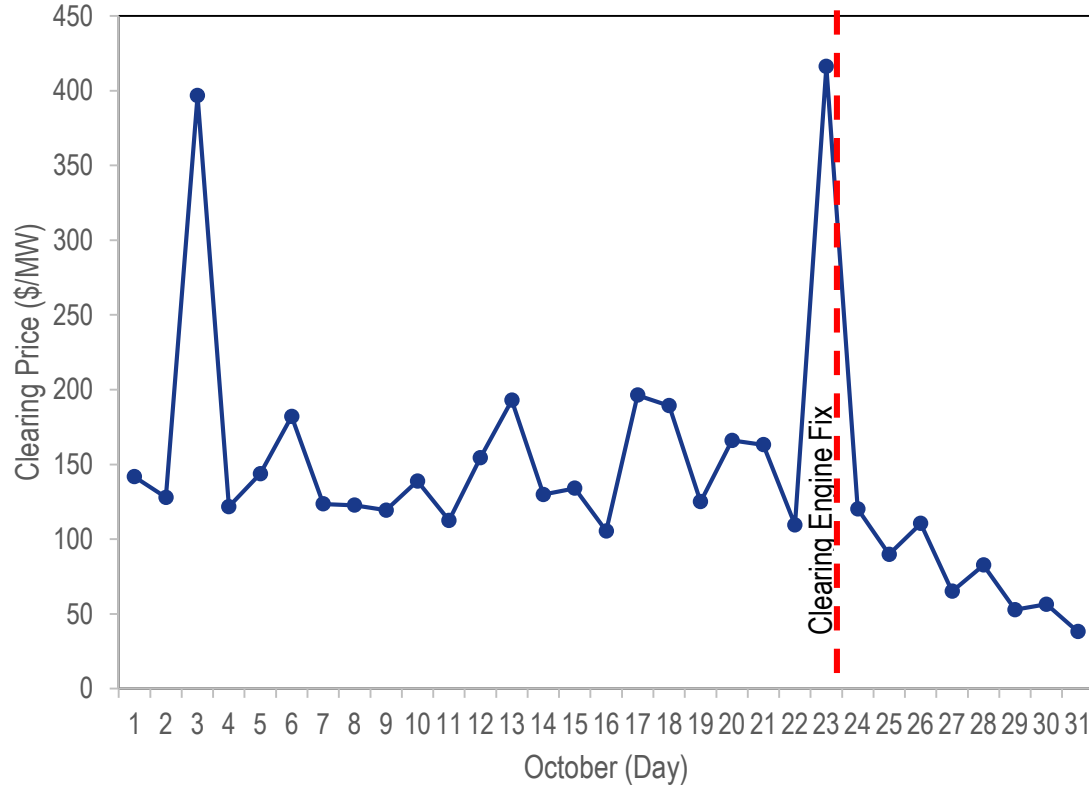
# Phase 1 Clearing Engine Error: October 1-23

- Figure shows continuous runtimes for each unit type from October 1-23.
- PJM clearing engine assumed ramp rate used to provide regulation was not available for the next clearing interval.
- Coal and natural gas units were frequently eliminated from the market solution after one half hour interval.
- Error resulted in a reduction in supply that inflated prices in October.





# October 2025 Daily Weighted Average Prices



- **Fix for the clearing engine was implemented on October 23, 2025.**
  - From Oct. 1-23, daily weighted average prices averaged \$166.
  - From Oct. 24-31, daily weighted average prices averaged \$77.

# 2025 Weighted Average Price and Cost

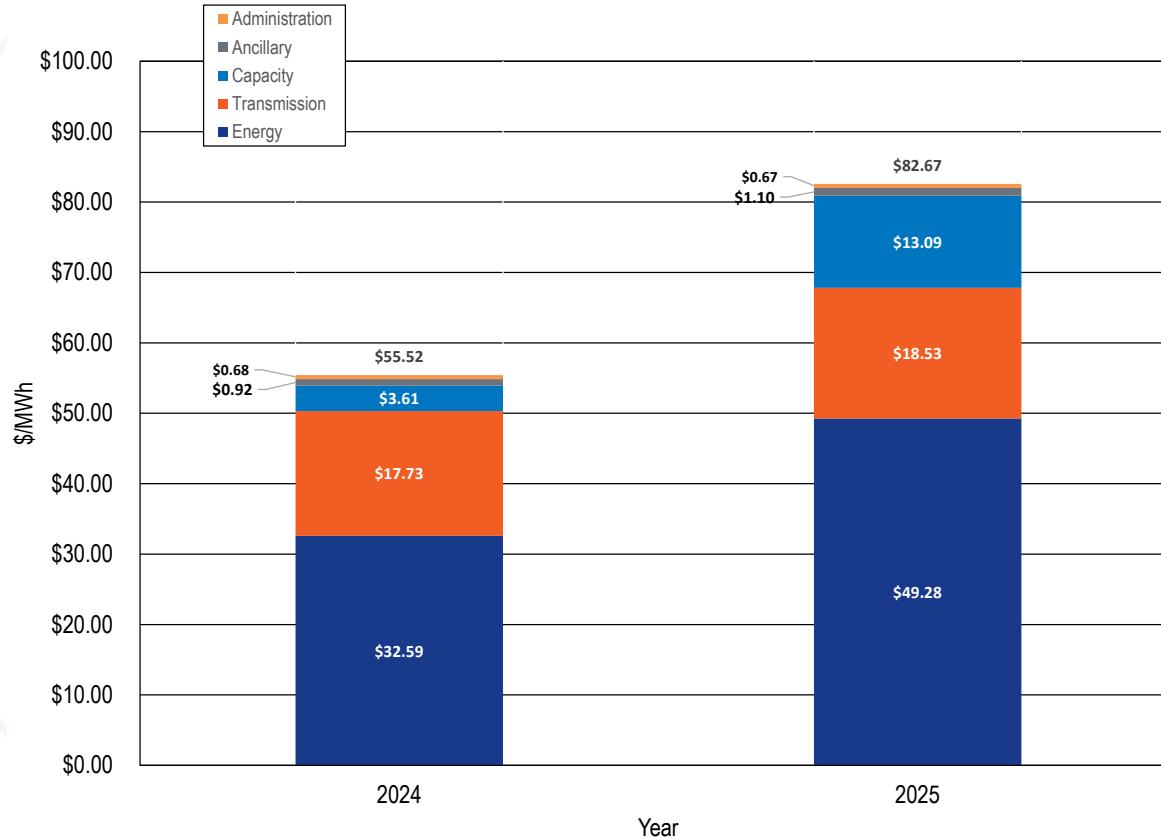
Month	Performance Adjusted MW	Total Regulation Credits (\$)	Weighted Average Price (\$/MW)	Weighted Average Cost (\$/MW)	Price Percent of Cost
Jan	405,434.3	31,451,421	61.99	77.57	79.9%
Feb	357,640.4	16,335,357	38.41	45.68	84.1%
Mar	376,469.6	19,303,608	37.93	51.28	74.0%
Apr	367,193.0	15,142,726	32.02	41.24	77.6%
May	383,116.9	14,388,435	29.91	37.56	79.6%
Jun	404,541.1	29,706,971	62.43	73.43	85.0%
Jul	420,570.5	22,269,279	44.56	52.95	84.1%
Aug	406,661.9	15,348,773	30.77	37.74	81.5%
Sep	367,465.3	18,702,046	41.13	50.89	80.8%
Oct	472,430.6	60,069,077	127.15	127.99	99.3%
Nov	484,604.8	30,657,288	63.26	65.02	97.3%
Dec	465,183.7	31,910,381	68.60	71.09	96.5%

- **Average regulation credits increased over Q1-Q3 2025 average:**
- **196% in October.**
- **51% in November.**
- **57% in December.**

# YEAR TO YEAR UPDATE



# Total Cost of Wholesale Power



# Total Cost of Wholesale Power – 2024/2025

Category	2024 \$/MWh	2024 (\$ Millions)	2024 Percent of Total	2025 \$/MWh	2025 (\$ Millions)	2025 Percent of Total	Percent Change
<b>Energy</b>	\$32.59	\$25,553	58.7%	\$49.28	\$39,959	59.6%	51.2%
Day Ahead Energy	\$33.43	\$26,215	60.2%	\$50.16	\$40,673	60.7%	50.0%
Balancing Energy	\$0.57	\$444	1.0%	\$1.02	\$824	1.2%	79.6%
ARR Credits	(\$1.24)	(\$970)	(2.2%)	(\$1.59)	(\$1,287)	(1.9%)	28.3%
Self Scheduled FTR Credits	(\$0.52)	(\$410)	(0.9%)	(\$1.31)	(\$1,061)	(1.6%)	150.0%
Balancing Congestion	\$0.39	\$304	0.7%	\$0.58	\$469	0.7%	49.2%
Emergency Energy	\$0.00	\$0	0.0%	\$0.01	\$6	0.0%	0.0%
Inadvertent Energy	\$0.01	\$9	0.0%	(\$0.01)	(\$10)	(0.0%)	(200.3%)
Load Response - Energy	\$0.01	\$11	0.0%	\$0.03	\$26	0.0%	116.9%
Emergency Load Response	\$0.00	\$0	0.0%	\$0.08	\$61	0.1%	0.0%
Energy Uplift (Operating Reserves)	\$0.34	\$268	0.6%	\$0.94	\$764	1.1%	175.7%
Marginal Loss Surplus Allocation	(\$0.45)	(\$357)	(0.8%)	(\$0.73)	(\$592)	(0.9%)	60.5%
Market to Market Payments	\$0.05	\$38	0.1%	\$0.11	\$86	0.1%	117.5%
<b>Capacity</b>	\$3.61	\$2,834	6.5%	\$13.09	\$10,616	15.8%	262.3%
Capacity (Capacity Market and FRR)	\$3.56	\$2,791	6.4%	\$12.94	\$10,490	15.6%	263.4%
Capacity Part V (RMR)	\$0.04	\$34	0.1%	\$0.13	\$108	0.2%	207.4%
Load Response - Capacity	\$0.01	\$8	0.0%	\$0.02	\$18	0.0%	116.8%
<b>Transmission</b>	\$17.73	\$13,900	31.9%	\$18.53	\$15,024	22.4%	4.5%
Transmission Service Charges	\$15.04	\$11,797	27.1%	\$15.73	\$12,753	19.0%	4.5%
Transmission Enhancement Cost Recovery	\$2.59	\$2,032	4.7%	\$2.71	\$2,194	3.3%	4.4%
Transmission Owner (Schedule 1A)	\$0.09	\$72	0.2%	\$0.09	\$77	0.1%	3.1%
Transmission Seams Elimination Cost Assignment (SECA)	\$0.00	\$0	0.0%	\$0.00	\$0	0.0%	0.0%
Transmission Facility Charges	\$0.00	\$0	0.0%	\$0.00	\$0	0.0%	0.0%
<b>Ancillary</b>	\$0.92	\$721	1.7%	\$1.10	\$894	1.3%	20.0%
Reactive	\$0.48	\$377	0.9%	\$0.44	\$358	0.5%	(8.2%)
Regulation	\$0.23	\$182	0.4%	\$0.38	\$309	0.5%	64.0%
Black Start	\$0.09	\$74	0.2%	\$0.06	\$51	0.1%	(33.3%)
Synchronized Reserves	\$0.10	\$75	0.2%	\$0.19	\$151	0.2%	95.9%
Secondary Reserves	\$0.00	\$2	0.0%	\$0.01	\$8	0.0%	266.4%
Non-Synchronized Reserves	\$0.01	\$10	0.0%	\$0.02	\$16	0.0%	53.1%
Day Ahead Scheduling Reserve (DASR)	\$0.00	\$0	0.0%	\$0.00	\$0	0.0%	0.0%
<b>Administration</b>	\$0.68	\$531	1.2%	\$0.67	\$546	0.8%	(0.6%)
PJM Administrative Fees	\$0.63	\$491	1.1%	\$0.62	\$505	0.8%	(0.5%)
NERC/RFC	\$0.04	\$34	0.1%	\$0.05	\$37	0.1%	3.9%
RTO Startup and Expansion	\$0.00	\$0	0.0%	\$0.00	\$0	0.0%	0.0%
Other	\$0.01	\$5	0.0%	\$0.00	\$4	0.0%	(36.2%)
<b>Total Price</b>	\$55.52	\$43,538	100.0%	\$82.67	\$67,039	100.0%	48.9%
<b>Total Day Ahead Load (GWh)</b>	775,838			800,515			3.2%
<b>Total Balancing Load (GWh)</b>	(8,344)			(10,378)			24.4%
<b>Total Real Time Load (GWh)</b>	784,182			810,894			3.4%
<b>Total Cost (\$ Billions)</b>	\$43.54			\$67.04			54.0%

# Total Cost of Wholesale Power – 2025 Monthly

- **Monthly cost of capacity exceeded monthly cost of transmission in June through December, 2025.**
- **First time that capacity costs have exceeded transmission costs since transmission costs first exceeded capacity costs in 2019.**
- **Result of higher capacity market prices for 2025/2026 Delivery Year.**

# Total Cost of Wholesale Power – 2025 Monthly

- **For the period from January through May:**
  - Energy costs averaged 64.4 percent of the monthly total.
  - Capacity costs averaged 5.4 percent of the monthly total.
  - Transmission costs averaged 27.6 percent of the monthly total.
- **For the period from June through December:**
  - Energy costs averaged 55.0 percent of the monthly total.
  - Capacity costs averaged 22.2 percent of the monthly total.
  - Transmission costs averaged 20.8 percent of the monthly total.

# Total Cost of Wholesale Power – 2025 Monthly

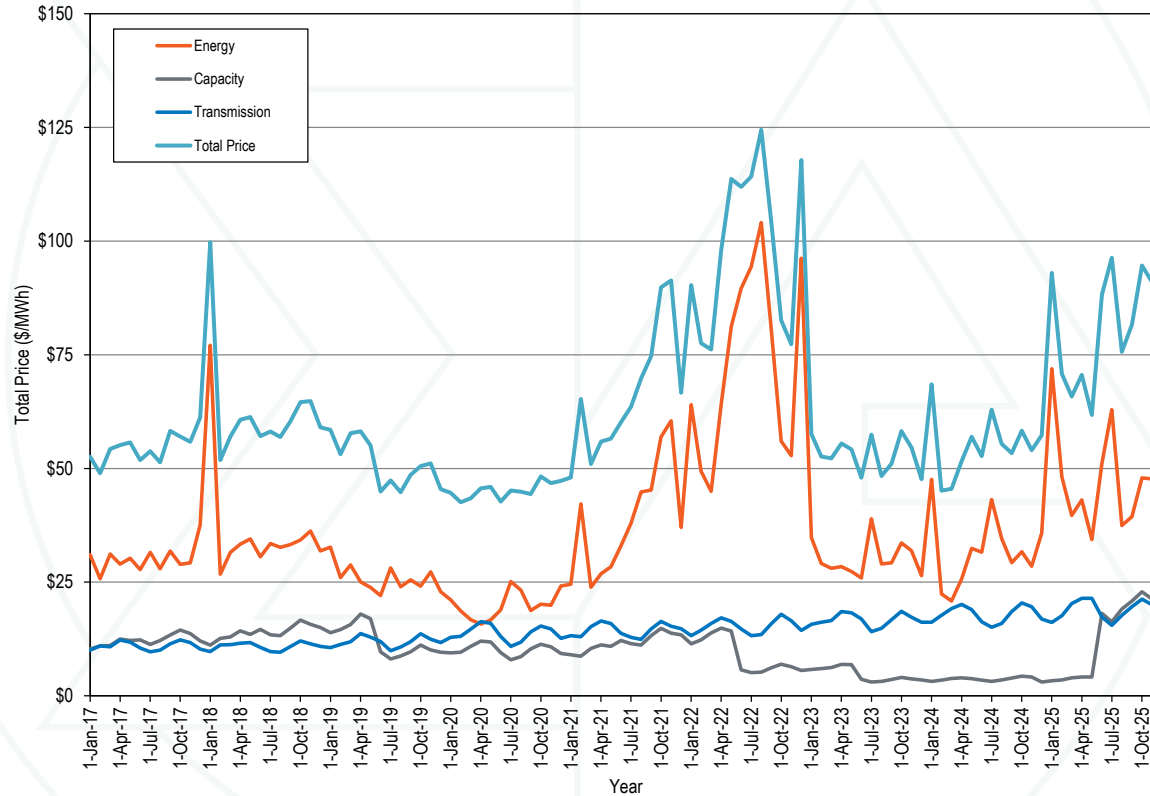
Category	Jan \$/MWh	Feb \$/MWh	Mar \$/MWh	Apr \$/MWh	May \$/MWh	Jun \$/MWh	Jul \$/MWh	Aug \$/MWh	Sep \$/MWh	Oct \$/MWh	Nov \$/MWh	Dec \$/MWh
<b>Energy</b>	\$71.90	\$48.15	\$39.66	\$43.09	\$34.35	\$51.09	\$62.92	\$37.44	\$39.41	\$47.94	\$47.70	\$56.15
Day Ahead Energy	\$66.89	\$48.26	\$40.37	\$43.74	\$36.98	\$52.00	\$65.90	\$39.02	\$40.74	\$50.58	\$49.45	\$57.31
Balancing Energy	\$1.45	\$1.08	\$0.66	\$0.94	\$0.62	\$2.01	\$1.19	\$0.47	\$0.87	\$0.82	\$0.72	\$1.08
ARR Credits	(\$1.04)	(\$1.22)	(\$1.29)	(\$1.39)	(\$1.34)	(\$1.79)	(\$1.74)	(\$1.84)	(\$1.81)	(\$2.06)	(\$1.95)	(\$1.59)
Self Scheduled FTR Credits	(\$1.29)	(\$0.32)	(\$1.07)	(\$1.04)	(\$2.16)	(\$1.71)	(\$2.24)	(\$0.44)	(\$1.18)	(\$2.15)	(\$0.84)	(\$1.17)
Balancing Congestion	\$1.70	\$0.33	\$0.72	\$0.42	\$0.27	\$0.86	\$0.20	\$0.36	\$0.40	\$0.53	\$0.42	\$0.56
Emergency Energy	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.08	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Inadvertent Energy	(\$0.01)	(\$0.01)	(\$0.02)	(\$0.02)	(\$0.03)	(\$0.01)	\$0.00	\$0.01	(\$0.02)	(\$0.02)	(\$0.01)	(\$0.01)
Load Response - Energy	\$0.01	\$0.00	\$0.09	\$0.04	\$0.10	\$0.00	\$0.04	\$0.03	\$0.03	\$0.03	\$0.01	\$0.02
Emergency Load Response	\$0.00	\$0.00	\$0.00	\$0.00	\$0.01	\$0.00	\$0.00	\$0.00	\$0.56	\$0.40	\$0.02	\$0.00
Energy Uplift (Operating Reserves)	\$5.07	\$0.53	\$0.56	\$0.71	\$0.33	\$0.52	\$0.58	\$0.37	\$0.27	\$0.34	\$0.53	\$0.68
Marginal Loss Surplus Allocation	(\$1.06)	(\$0.59)	(\$0.54)	(\$0.51)	(\$0.50)	(\$0.88)	(\$1.02)	(\$0.52)	(\$0.53)	(\$0.76)	(\$0.73)	(\$0.90)
Market to Market Payments	\$0.19	\$0.09	\$0.17	\$0.20	\$0.06	\$0.01	\$0.02	(\$0.02)	\$0.09	\$0.24	\$0.09	\$0.18
<b>Capacity</b>	\$3.33	\$3.49	\$3.96	\$4.14	\$4.16	\$18.12	\$16.30	\$19.07	\$20.84	\$22.87	\$21.31	\$17.88
Capacity (Capacity Market and FRR)	\$3.11	\$3.36	\$3.96	\$4.14	\$4.16	\$18.15	\$16.22	\$18.60	\$20.54	\$22.45	\$21.06	\$17.88
Capacity Part V (RMR)	\$0.23	\$0.13	\$0.00	\$0.00	\$0.00	(\$0.02)	\$0.08	\$0.23	\$0.30	\$0.42	\$0.25	\$0.00
Load Response - Capacity	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.25	\$0.00	\$0.00	\$0.00	\$0.00
<b>Transmission</b>	\$16.13	\$17.63	\$20.30	\$21.46	\$21.47	\$17.33	\$15.48	\$17.71	\$19.62	\$21.26	\$20.06	\$16.77
Transmission Service Charges	\$13.73	\$14.74	\$17.24	\$18.16	\$18.24	\$14.70	\$13.18	\$15.09	\$16.65	\$18.13	\$17.03	\$14.25
Transmission Enhancement Cost Recovery	\$2.31	\$2.79	\$2.97	\$3.21	\$3.13	\$2.54	\$2.20	\$2.52	\$2.87	\$3.04	\$2.94	\$2.42
Transmission Owner (Schedule 1A)	\$0.09	\$0.09	\$0.09	\$0.09	\$0.09	\$0.10	\$0.10	\$0.10	\$0.10	\$0.09	\$0.09	\$0.09
Transmission Seams Elimination Cost Assignment (SECA)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Transmission Facility Charges	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>Ancillary</b>	\$1.00	\$0.90	\$1.18	\$1.15	\$1.05	\$1.11	\$1.02	\$0.82	\$1.02	\$1.81	\$1.24	\$1.08
Reactive	\$0.39	\$0.46	\$0.50	\$0.52	\$0.51	\$0.42	\$0.36	\$0.41	\$0.47	\$0.48	\$0.47	\$0.38
Regulation	\$0.40	\$0.25	\$0.31	\$0.26	\$0.24	\$0.41	\$0.27	\$0.21	\$0.29	\$1.01	\$0.51	\$0.46
Black Start	\$0.07	\$0.08	\$0.09	\$0.08	\$0.08	\$0.05	\$0.04	\$0.05	\$0.06	\$0.06	\$0.06	\$0.05
Synchronized Reserves	\$0.14	\$0.09	\$0.25	\$0.25	\$0.19	\$0.21	\$0.30	\$0.12	\$0.17	\$0.20	\$0.17	\$0.14
Secondary Reserves	\$0.00	\$0.00	\$0.00	\$0.00	\$0.01	\$0.01	\$0.02	\$0.02	\$0.01	\$0.02	\$0.01	\$0.02
Non-Synchronized Reserves	\$0.01	\$0.01	\$0.03	\$0.03	\$0.02	\$0.00	\$0.03	\$0.01	\$0.02	\$0.03	\$0.02	\$0.02
Day Ahead Scheduling Reserve (DASR)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>Administration</b>	\$0.60	\$0.65	\$0.75	\$0.73	\$0.75	\$0.61	\$0.58	\$0.63	\$0.69	\$0.73	\$0.72	\$0.70
PJM Administrative Fees	\$0.56	\$0.61	\$0.70	\$0.68	\$0.70	\$0.56	\$0.53	\$0.58	\$0.64	\$0.69	\$0.68	\$0.63
NERC/RFC	\$0.04	\$0.04	\$0.04	\$0.04	\$0.04	\$0.04	\$0.04	\$0.04	\$0.04	\$0.04	\$0.04	\$0.07
RTO Startup and Expansion	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Other	\$0.00	\$0.00	\$0.00	\$0.01	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.01	\$0.00	\$0.00
<b>Total Price</b>	\$92.97	\$70.82	\$65.84	\$70.57	\$61.78	\$88.26	\$96.30	\$75.66	\$81.59	\$94.62	\$91.04	\$92.58
<b>Total Day Ahead Load (GWh)</b>	77,617	64,784	61,400	56,635	58,352	69,898	81,672	72,152	62,679	59,624	61,234	74,467
<b>Total Balancing Load (GWh)</b>	(1,292)	(1,181)	(561)	(697)	(501)	(1,923)	(1,342)	(266)	(765)	(356)	(656)	(838)
<b>Total Real Time Load (GWh)</b>	78,909	65,965	61,961	57,332	58,853	71,822	83,014	72,418	63,444	59,980	61,890	75,305
<b>Total Cost (\$ Billions)</b>	\$7.34	\$4.67	\$4.08	\$4.05	\$3.64	\$6.34	\$7.99	\$5.48	\$5.18	\$5.68	\$5.63	\$6.97



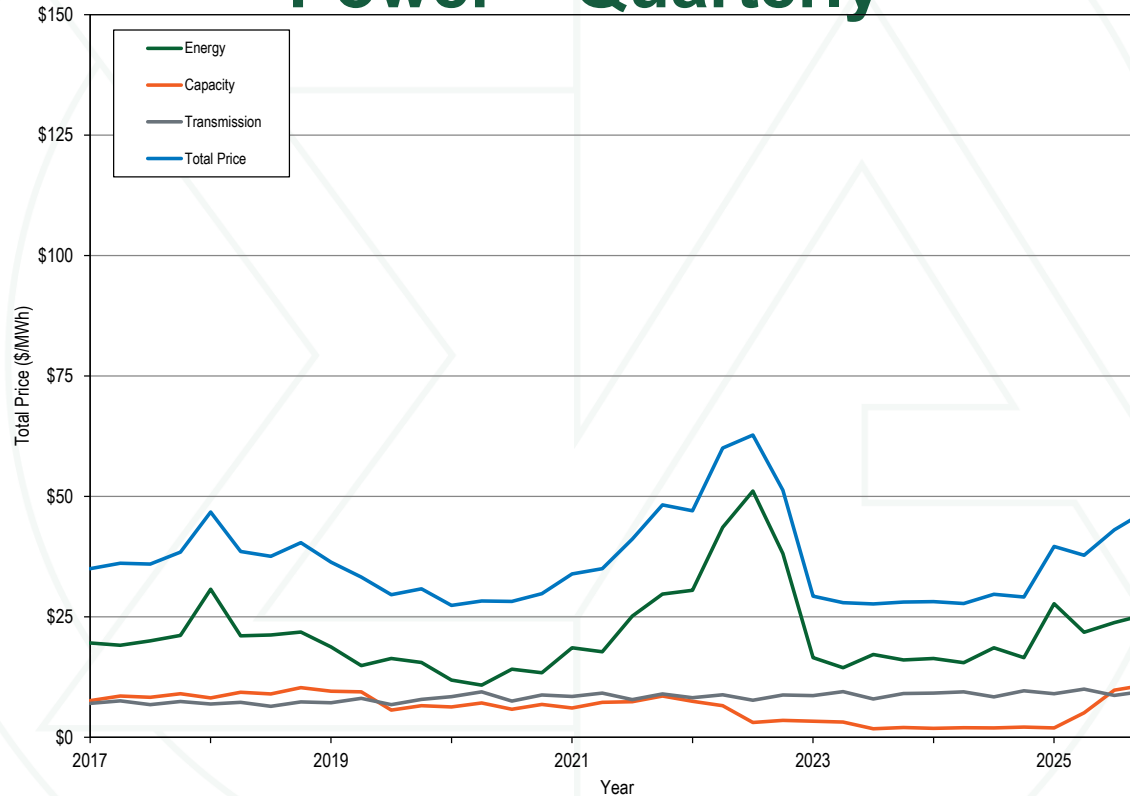
# Total Cost of Wholesale Power – 2025 Monthly

Category	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	% of Total	% of Total	% of Total	% of Total	% of Total	% of Total	% of Total	% of Total	% of Total	% of Total	% of Total	% of Total
Energy	77.3%	68.0%	60.2%	61.1%	55.6%	57.9%	65.3%	49.5%	48.3%	52.4%	60.7%	
Day Ahead Energy	71.9%	68.1%	61.3%	62.0%	59.9%	58.9%	68.4%	51.6%	49.9%	53.5%	54.3%	61.9%
Balancing Energy	1.6%	1.5%	1.0%	1.3%	1.0%	2.3%	1.2%	0.6%	1.1%	0.9%	0.8%	1.2%
ARR Credits	-1.1%	-1.7%	-2.0%	-2.0%	-2.2%	-2.0%	-1.8%	-2.4%	-2.2%	-2.2%	-2.1%	-1.7%
Self Scheduled FTR Credits	-1.4%	-0.5%	-1.6%	-1.5%	-3.5%	-1.9%	-2.3%	-0.6%	-1.4%	-2.3%	-0.9%	-1.3%
Balancing Congestion	1.8%	0.5%	1.1%	0.6%	0.4%	1.0%	0.2%	0.5%	0.5%	0.6%	0.5%	0.6%
Emergency Energy	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Inadvertent Energy	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Load Response - Energy	0.0%	0.0%	0.1%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Emergency Load Response	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.4%	0.0%	0.0%
Energy Uplift (Operating Reserves)	5.5%	0.7%	0.9%	1.0%	0.5%	0.6%	0.6%	0.5%	0.3%	0.4%	0.6%	0.7%
Marginal Loss Surplus Allocation	-1.1%	-0.8%	-0.8%	-0.7%	-0.8%	-1.0%	-1.1%	-0.7%	-0.6%	-0.8%	-0.8%	-1.0%
Market to Market Payments	0.2%	0.1%	0.3%	0.3%	0.1%	0.0%	0.0%	0.0%	0.1%	0.3%	0.1%	0.2%
Capacity	3.6%	4.9%	6.0%	5.9%	6.7%	20.5%	16.9%	25.2%	25.5%	24.2%	23.4%	19.3%
Capacity (Capacity Market and FRR)	3.3%	4.7%	6.0%	5.9%	6.7%	20.6%	16.8%	24.6%	25.2%	23.7%	23.1%	19.3%
Capacity Part V (RMR)	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.1%	0.3%	0.4%	0.4%	0.3%	0.0%
Load Response - Capacity	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%
Transmission	17.3%	24.9%	30.8%	30.4%	34.8%	19.6%	16.1%	23.4%	24.0%	22.5%	22.0%	18.1%
Transmission Service Charges	14.8%	20.8%	26.2%	25.7%	29.5%	16.7%	13.7%	19.9%	20.4%	19.2%	18.7%	15.4%
Transmission Enhancement Cost Recovery	2.5%	3.9%	4.5%	4.5%	5.1%	2.9%	2.3%	3.3%	3.5%	3.2%	3.2%	2.6%
Transmission Owner (Schedule 1A)	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Transmission Seams Elimination Cost Assignment (SECA)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission Facility Charges	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Ancillary	1.1%	1.3%	1.8%	1.6%	1.7%	1.3%	1.1%	1.1%	1.3%	1.9%	1.4%	1.2%
Reactive	0.4%	0.6%	0.8%	0.7%	0.8%	0.5%	0.4%	0.5%	0.6%	0.5%	0.5%	0.4%
Regulation	0.4%	0.4%	0.5%	0.4%	0.4%	0.5%	0.3%	0.3%	0.4%	1.1%	0.6%	0.5%
Black Start	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%
Synchronized Reserves	0.2%	0.1%	0.4%	0.4%	0.3%	0.2%	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%
Secondary Reserves	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Non-Synchronized Reserves	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Day Ahead Scheduling Reserve (DASR)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Administration	0.6%	0.9%	1.1%	1.0%	1.2%	0.7%	0.6%	0.8%	0.8%	0.8%	0.8%	0.8%
PJM Administrative Fees	0.6%	0.9%	1.1%	1.0%	1.1%	0.6%	0.6%	0.8%	0.8%	0.7%	0.7%	0.7%
NERC/RFC	0.0%	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%
RTO Startup and Expansion	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Price	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

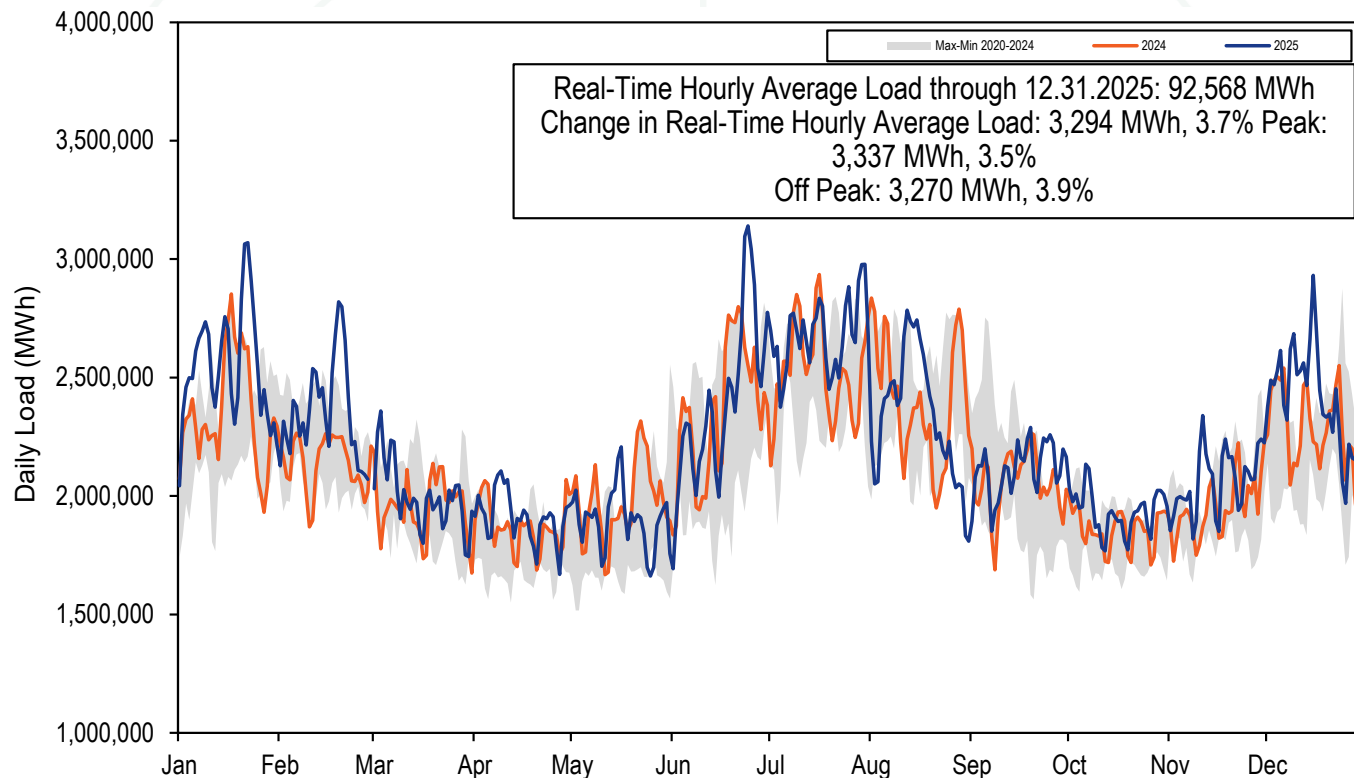
# Total Cost of Wholesale Power – 2025 Monthly



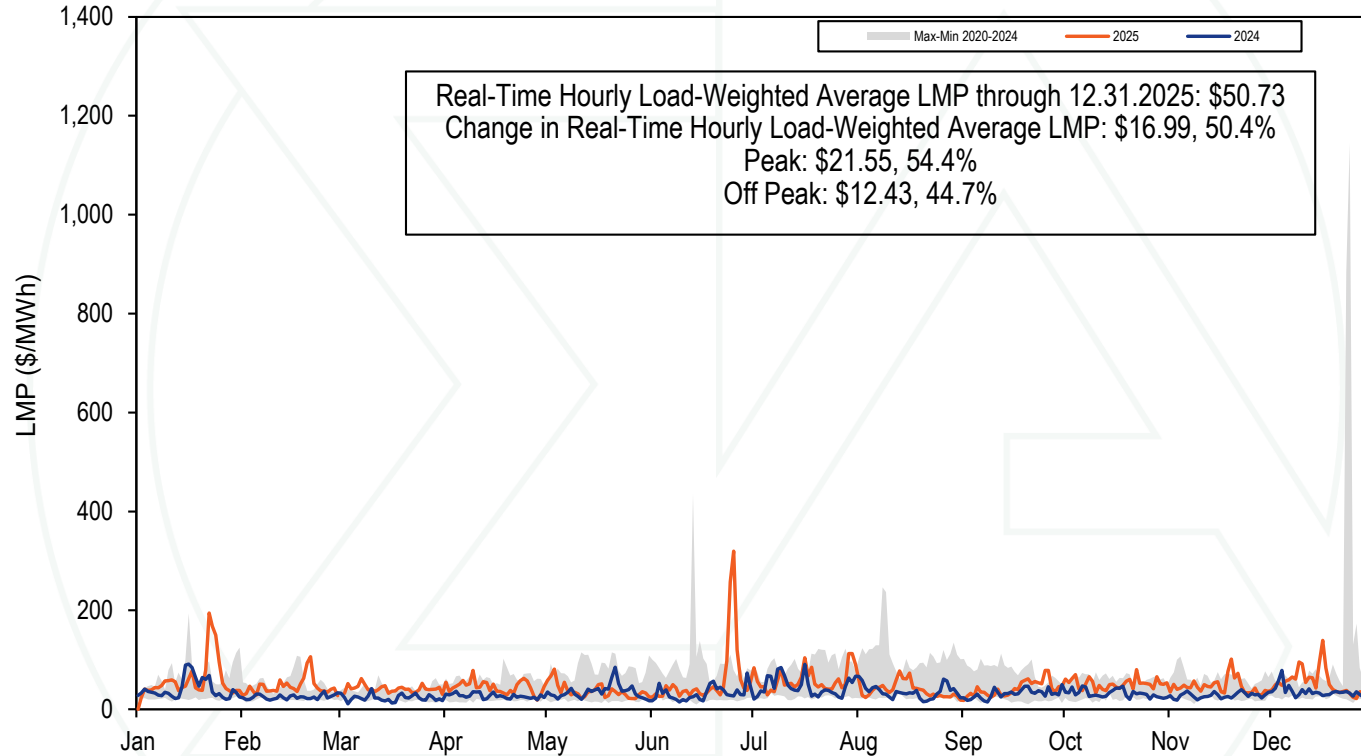
# Inflation Adjusted Total Cost of Wholesale Power – Quarterly



# 2025 PJM Real-Time Daily Load



# 2025 PJM Real-Time Daily LMP



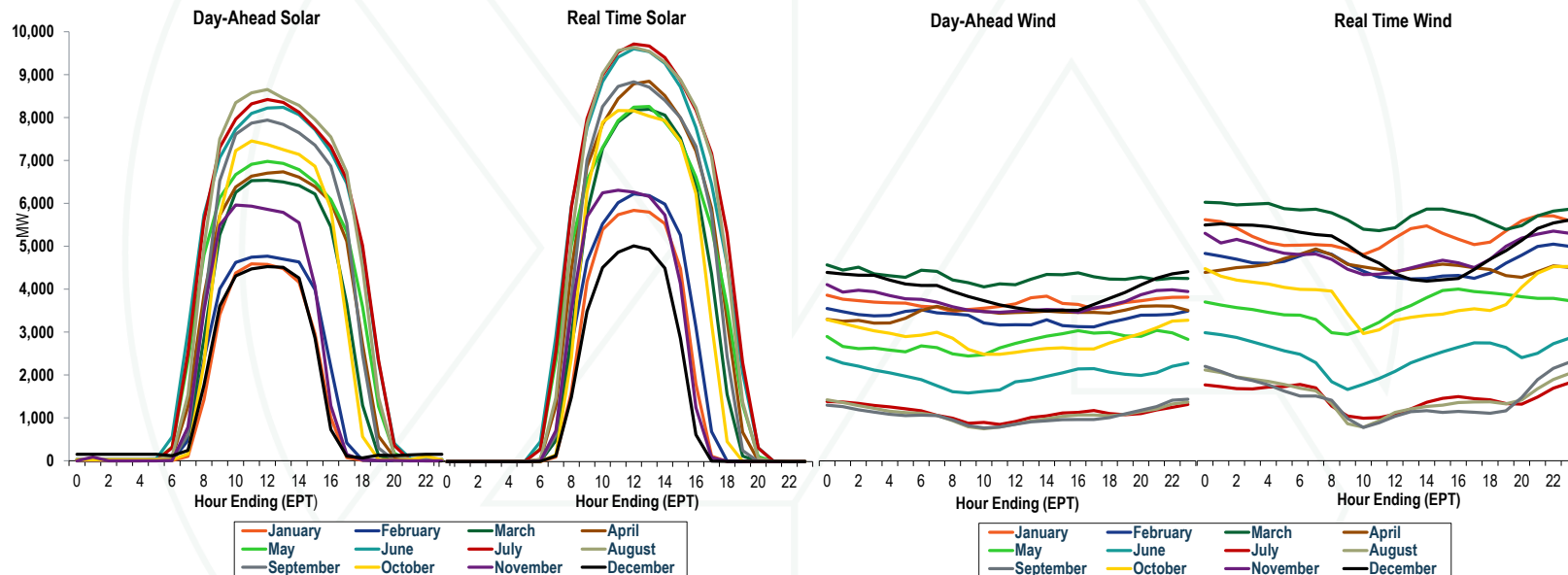
# Annual Maximum Hourly Solar and Wind Output

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%	2.9%	10,058	290	3.0%	3.7%

# Maximum Solar and Wind Hourly Output by Month



# Average Hourly Solar & Wind MW: DA and RT



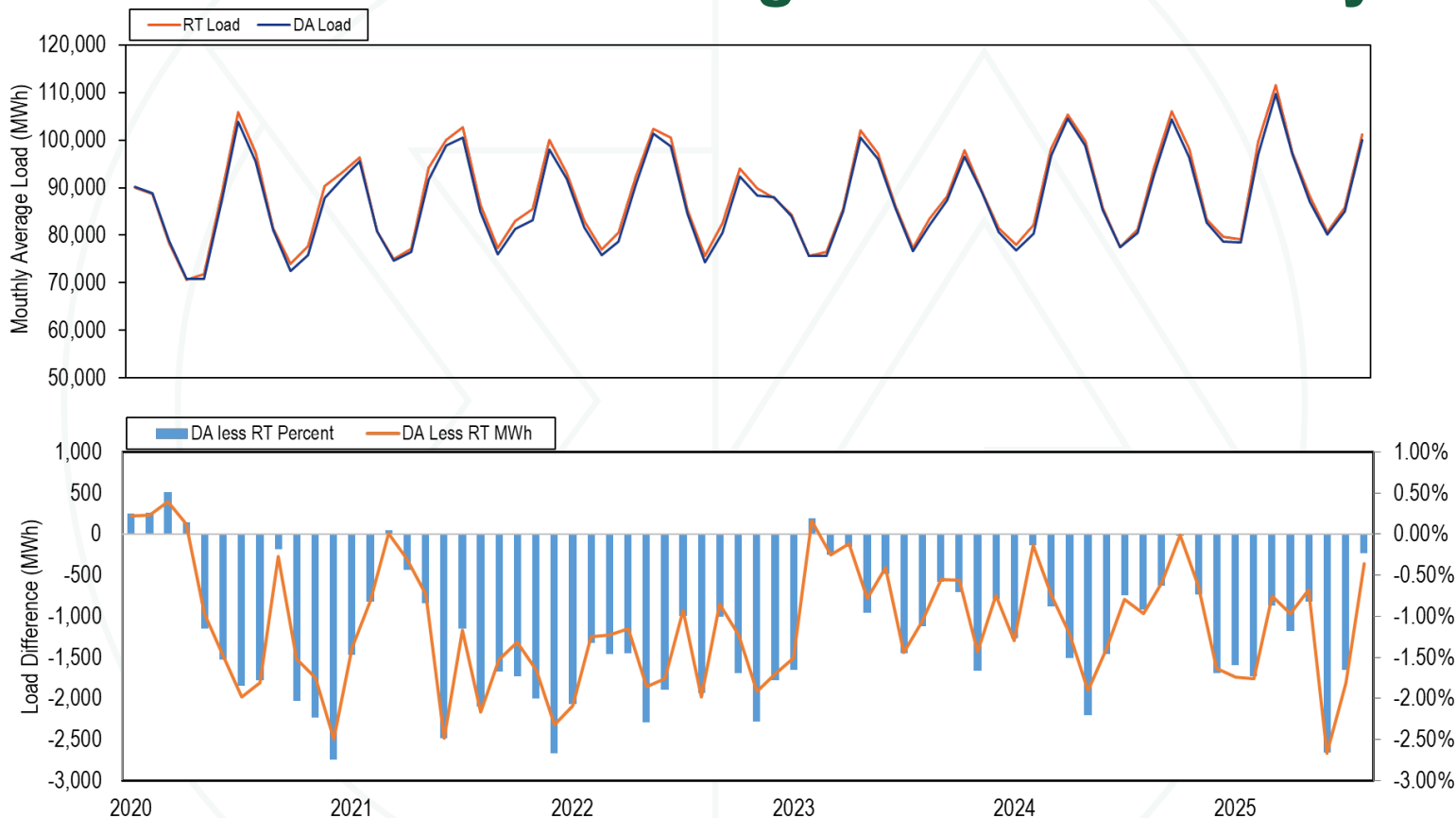


# Real-Time Load-Weighted Average LMP

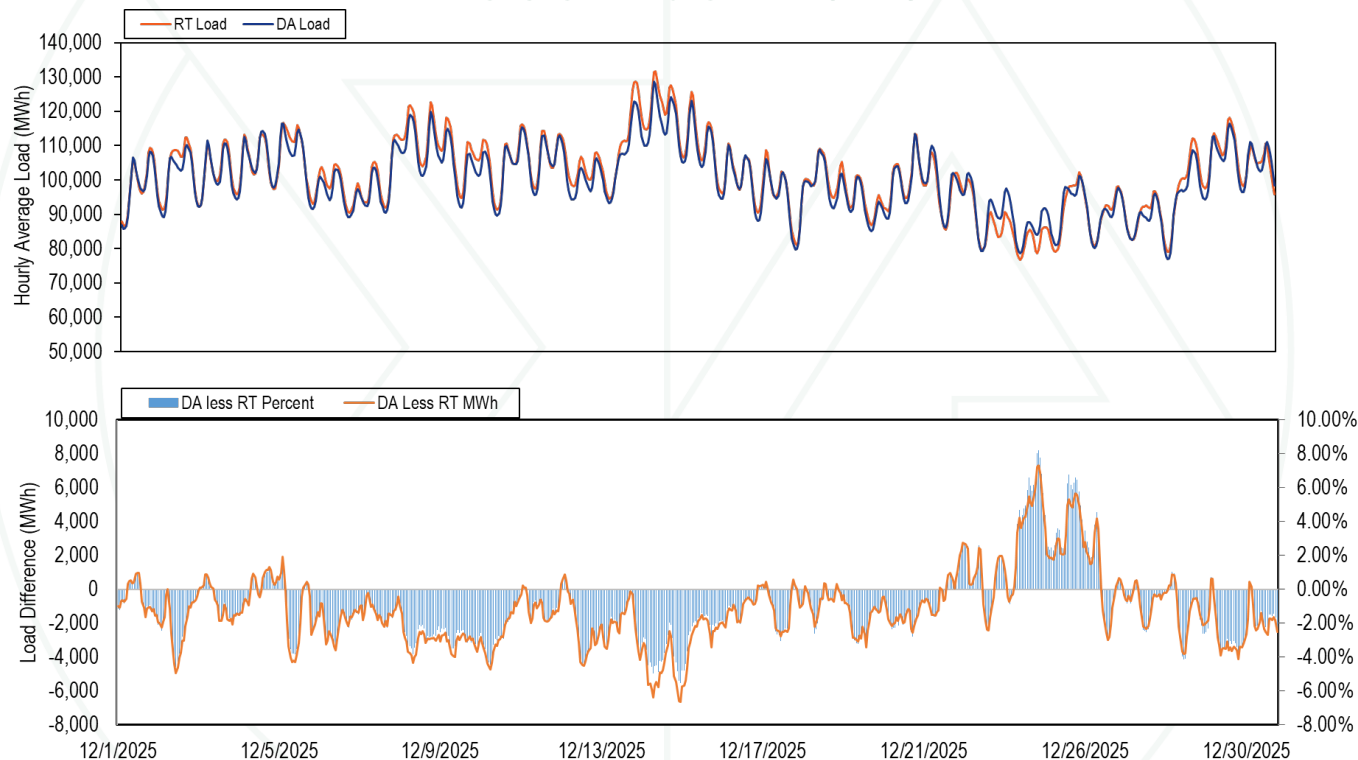
	2024				2025			
	Off Peak	On Peak	Difference	Percent Difference	Off Peak	On Peak	Difference	Percent Difference
Jan	\$38.50	\$47.10	\$8.60	22.3%	\$55.29	\$70.54	\$15.25	27.6%
Feb	\$24.49	\$25.23	\$0.74	3.0%	\$43.75	\$54.12	\$10.37	23.7%
Mar	\$21.64	\$24.79	\$3.15	14.6%	\$38.89	\$45.68	\$6.79	17.5%
Apr	\$23.99	\$30.03	\$6.04	25.2%	\$38.15	\$52.08	\$13.93	36.5%
May	\$28.99	\$42.74	\$13.75	47.4%	\$27.32	\$45.53	\$18.21	66.7%
Jun	\$26.66	\$40.04	\$13.38	50.2%	\$39.62	\$94.51	\$54.89	138.5%
Jul	\$32.20	\$60.78	\$28.58	88.7%	\$39.08	\$77.77	\$38.68	99.0%
Aug	\$26.71	\$44.99	\$18.28	68.5%	\$29.15	\$49.92	\$20.77	71.2%
Sep	\$24.53	\$39.42	\$14.89	60.7%	\$34.41	\$52.55	\$18.14	52.7%
Oct	\$26.60	\$36.49	\$9.89	37.2%	\$41.55	\$59.43	\$17.88	43.0%
Nov	\$23.80	\$33.18	\$9.38	39.4%	\$40.52	\$55.12	\$14.59	36.0%
Dec	\$31.60	\$38.70	\$7.10	22.5%	\$49.92	\$60.68	\$10.76	21.6%



# DA vs RT Load Bidding Difference History



# DA vs RT Hourly Load Bidding Difference, December 2025



# FAST START



# Fast Start Pricing: DLMP and PLMP

- **PJM implemented fast start pricing in both the day-ahead and real-time markets on September 1, 2021.**
- **The goal of fast start pricing is to allow inflexible resources to set prices based on the sum of their commitment costs per MWh and their marginal costs.**
- **The pricing run LMP (PLMP) is now the official settlement LMP in PJM, replacing the dispatch run LMP (DLMP).**

# Fast Start Pricing: DLMP and PLMP

- **Fast start pricing employs a new LMP calculation called the pricing run.**
- **The pricing run calculates LMP using the same optimal power flow algorithm as the dispatch run while simultaneously reducing (“relaxing” or ignoring) the economic minimum and maximum output MW constraints for all eligible fast start units.**

## Fast Start Pricing: DLMP and PLMP

- The price signal no longer equals the short run marginal cost and therefore no longer provides the correct signal for efficient behavior for market participants making decisions on the margin.
- The differences between the actual LMP (DLMP) and the fast start LMP (PLMP) distort the incentive for market participants to behave competitively and to follow PJM's dispatch instructions.

# Fast Start Pricing: DLMP and PLMP

- **PJM also uses the pricing run for capping the system marginal price at \$3,700 per MWh.**
  - **This was last used during Winter Storm Elliott.**
  - **The cap applies to the marginal energy component of LMP, but the congestion and loss components of LMP can exceed the cap.**
- **PJM uses a lower default transmission constraint penalty factor in the pricing run in the day-ahead market.**
  - **\$30,000 per MWh in the dispatch run**
  - **\$2,000 per MWh in the pricing run**



# Monthly Average Load-Weighted DLMP and PLMP

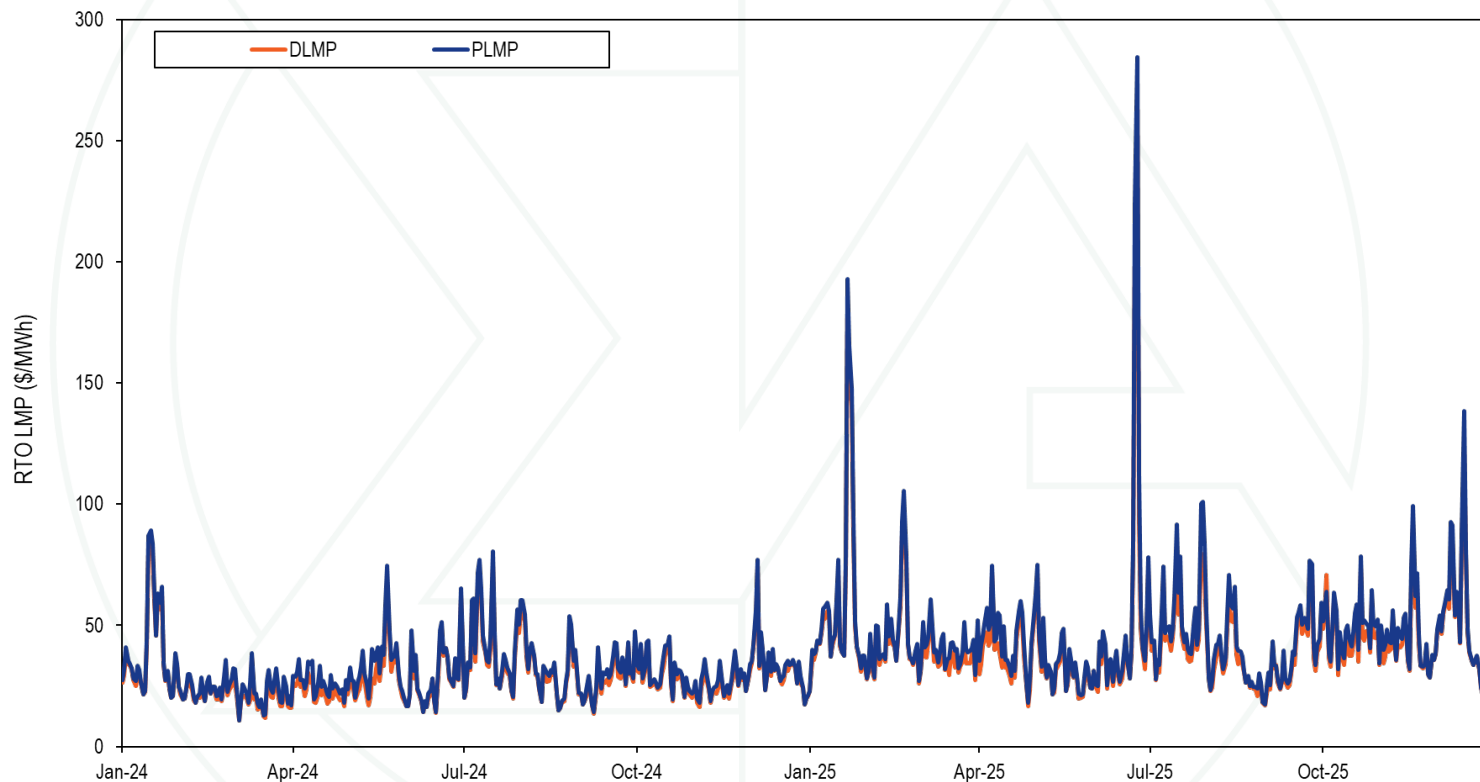
Day-Ahead Load-Weighted Average						Real-Time Load-Weighted Average			
Year	Month	DLMP	PLMP	Difference	Percent Difference	DLMP	PLMP	Difference	Percent Difference
2024	Jan	\$48.45	\$48.65	\$0.20	0.4%	\$40.82	\$42.78	\$1.95	4.8%
2024	Feb	\$23.67	\$23.70	\$0.03	0.1%	\$23.20	\$24.86	\$1.66	7.2%
2024	Mar	\$21.89	\$21.93	\$0.04	0.2%	\$20.30	\$23.15	\$2.85	14.0%
2024	Apr	\$26.73	\$26.75	\$0.02	0.1%	\$23.29	\$27.17	\$3.87	16.6%
2024	May	\$32.92	\$32.90	(\$0.02)	(0.1%)	\$31.70	\$36.16	\$4.46	14.1%
2024	Jun	\$32.59	\$32.62	\$0.03	0.1%	\$31.95	\$33.35	\$1.40	4.4%
2024	Jul	\$44.51	\$44.69	\$0.18	0.4%	\$44.12	\$47.17	\$3.04	6.9%
2024	Aug	\$36.34	\$36.31	(\$0.03)	(0.1%)	\$34.37	\$36.29	\$1.92	5.6%
2024	Sep	\$30.63	\$30.77	\$0.14	0.4%	\$29.32	\$31.81	\$2.48	8.5%
2024	Oct	\$33.18	\$33.26	\$0.08	0.2%	\$29.85	\$31.87	\$2.02	6.8%
2024	Nov	\$29.78	\$29.82	\$0.04	0.1%	\$25.70	\$28.26	\$2.55	9.9%
2024	Dec	\$36.98	\$37.05	\$0.06	0.2%	\$33.62	\$34.98	\$1.36	4.0%
2024		\$33.72	\$33.79	\$0.07	0.2%	\$31.31	\$33.74	\$2.43	7.7%
2025	Jan	\$67.53	\$67.74	\$0.21	0.3%	\$59.93	\$62.87	\$2.94	4.9%
2025	Feb	\$48.85	\$49.02	\$0.16	0.3%	\$46.27	\$48.90	\$2.62	5.7%
2025	Mar	\$40.76	\$40.74	(\$0.03)	(0.1%)	\$37.82	\$42.11	\$4.30	11.4%
2025	Apr	\$44.36	\$44.35	(\$0.01)	(0.0%)	\$40.07	\$45.42	\$5.35	13.4%
2025	May	\$37.56	\$37.40	(\$0.16)	(0.4%)	\$33.98	\$36.34	\$2.36	6.9%
2025	Jun	\$53.01	\$53.14	\$0.13	0.2%	\$62.53	\$68.13	\$5.60	9.0%
2025	Jul	\$66.56	\$66.76	\$0.20	0.3%	\$52.41	\$59.38	\$6.97	13.3%
2025	Aug	\$39.24	\$39.27	\$0.03	0.1%	\$35.97	\$39.52	\$3.55	9.9%
2025	Sep	\$41.26	\$41.24	(\$0.02)	(0.0%)	\$40.49	\$43.71	\$3.22	7.9%
2025	Oct	\$50.56	\$50.73	\$0.17	0.3%	\$47.32	\$51.01	\$3.69	7.8%
2025	Nov	\$49.70	\$49.85	\$0.15	0.3%	\$43.82	\$47.08	\$3.26	7.4%
2025	Dec	\$57.97	\$58.08	\$0.11	0.2%	\$52.55	\$55.29	\$2.74	5.2%
2025		\$59.01	\$59.20	\$0.19	0.3%	\$53.71	\$56.51	\$2.80	5.2%



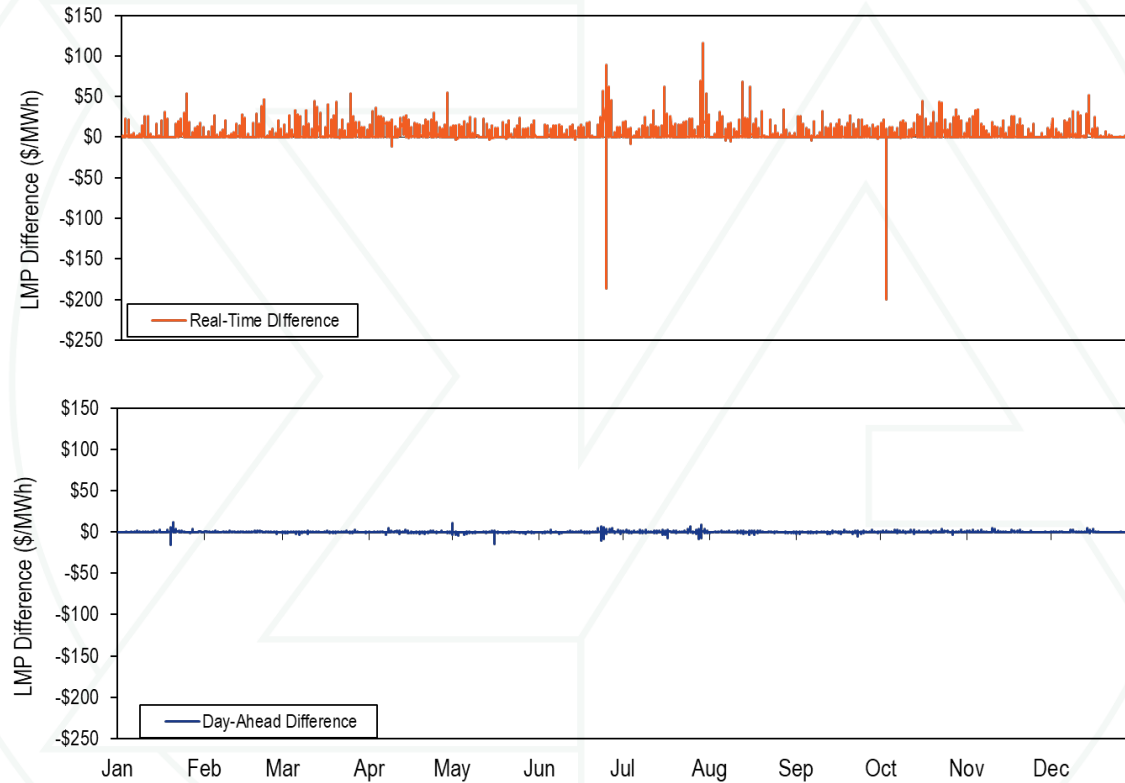
# Real-Time Fast Start Impact

Month	2022 (In Millions)	2023 (In Millions)	2024 (In Millions)	2025 (In Millions)
Jan	\$196.33	\$72.89	\$142.06	\$232.11
Feb	\$52.11	\$33.74	\$103.17	\$173.03
Mar	\$106.74	\$53.11	\$172.59	\$266.16
Apr	\$195.22	\$121.28	\$217.50	\$306.90
May	\$247.03	\$143.80	\$272.73	\$138.96
Jun	\$429.42	\$98.31	\$98.74	\$402.22
Jul	\$643.44	\$217.56	\$238.39	\$578.75
Aug	\$602.88	\$112.21	\$142.81	\$257.33
Sep	\$259.08	\$137.94	\$153.65	\$95.35
Oct	\$204.26	\$239.25	\$116.28	\$221.30
Nov	\$122.77	\$152.91	\$149.38	\$201.99
Dec	-\$99.68	\$104.53	\$95.35	\$206.05
Total	\$2,959.60	\$1,487.52	\$1,902.66	\$3,080.15

# Daily Average Real-Time DLMP and PLMP



# Hourly Difference: PLMP – DLMP



# Fast Start Units as a Percent of Marginal Units

Dispatch Run							Pricing Run				
Year	Month	CT	Diesel	Wind	Solar	All Fast Start Units	CT	Diesel	Wind	Solar	All Fast Start Units
2024	Jan	0.7%	0.6%	0.0%	0.0%	1.3%	3.5%	1.1%	0.0%	0.0%	4.7%
2024	Feb	0.4%	0.1%	0.1%	0.0%	0.5%	2.2%	0.1%	0.1%	0.0%	2.4%
2024	Mar	0.7%	0.2%	1.2%	0.0%	2.1%	4.1%	0.8%	1.3%	0.0%	6.2%
2024	Apr	1.5%	0.2%	0.2%	0.0%	1.9%	6.5%	0.7%	0.1%	0.0%	7.3%
2024	May	0.6%	0.2%	0.1%	0.0%	1.0%	5.1%	0.6%	0.1%	0.0%	5.8%
2024	Jun	0.5%	0.3%	0.1%	0.0%	0.8%	3.5%	0.4%	0.1%	0.0%	4.0%
2024	Jul	0.8%	0.5%	0.0%	0.1%	1.4%	7.4%	1.0%	0.0%	0.1%	8.5%
2024	Aug	0.6%	0.5%	0.0%	0.0%	1.1%	5.0%	1.0%	0.0%	0.0%	6.0%
2024	Sep	1.0%	0.1%	0.0%	0.0%	1.1%	7.1%	0.4%	0.0%	0.0%	7.6%
2024	Oct	1.2%	0.1%	0.0%	0.0%	1.3%	6.4%	1.3%	0.0%	0.0%	7.7%
2024	Nov	1.0%	0.2%	0.0%	0.1%	1.4%	6.2%	0.6%	0.0%	0.1%	7.0%
2024	Dec	0.5%	0.2%	0.0%	0.0%	0.7%	2.2%	0.6%	0.0%	0.0%	2.9%
2024		0.8%	0.3%	0.2%	0.0%	1.2%	4.9%	0.7%	0.2%	0.0%	5.8%
2025	Jan	0.8%	0.6%	0.1%	0.0%	1.5%	4.5%	2.1%	0.1%	0.0%	6.8%
2025	Feb	1.5%	0.1%	0.4%	0.0%	2.0%	3.7%	0.6%	0.3%	0.0%	4.6%
2025	Mar	0.5%	4.5%	0.1%	0.2%	5.2%	3.4%	5.0%	0.1%	0.2%	8.6%
2025	Apr	1.9%	1.8%	0.3%	0.1%	4.1%	7.1%	2.2%	0.3%	0.1%	9.7%
2025	May	0.6%	0.3%	0.0%	0.0%	1.0%	3.9%	1.5%	0.0%	0.0%	5.4%
2025	Jun	1.4%	0.2%	0.0%	0.0%	1.6%	6.2%	0.8%	0.0%	0.0%	7.0%
2025	Jul	2.6%	0.6%	0.0%	0.0%	3.2%	11.2%	1.5%	0.0%	0.0%	12.8%
2025	Aug	2.2%	0.5%	0.0%	0.0%	2.7%	7.8%	1.1%	0.0%	0.0%	8.9%
2025	Sep	1.2%	0.4%	0.0%	0.0%	1.6%	5.7%	1.2%	0.0%	0.0%	6.9%
2025	Oct	1.4%	0.3%	0.2%	0.0%	1.8%	4.8%	0.6%	0.2%	0.0%	5.6%
2025	Nov	0.7%	0.5%	0.6%	0.0%	1.8%	3.8%	1.3%	0.5%	0.0%	5.7%
2025	Dec	1.8%	0.1%	0.1%	0.0%	1.9%	6.1%	0.6%	0.1%	0.0%	6.7%
2025		1.4%	0.8%	0.2%	0.0%	2.4%	5.7%	1.5%	0.1%	0.0%	7.4%



# Fast Start Impacts: Zone Average Differences

Zone	2025							
	Day-Ahead				Real-Time			
	Average DLMP	Average PLMP	Difference	Percent Difference	Average DLMP	Average PLMP	Difference	Percent Difference
ACEC	\$34.56	\$34.63	\$0.07	0.2%	\$32.04	\$34.26	\$2.22	6.9%
AEP	\$38.41	\$38.48	\$0.07	0.2%	\$35.35	\$38.23	\$2.88	8.2%
APS	\$39.91	\$39.97	\$0.06	0.2%	\$36.82	\$39.85	\$3.03	8.2%
ATSI	\$38.62	\$38.65	\$0.03	0.1%	\$35.02	\$37.85	\$2.83	8.1%
BGE	\$48.64	\$48.73	\$0.09	0.2%	\$44.39	\$48.03	\$3.64	8.2%
COMED	\$31.01	\$31.09	\$0.08	0.3%	\$28.19	\$30.60	\$2.41	8.5%
DAY	\$39.47	\$39.55	\$0.07	0.2%	\$35.93	\$38.90	\$2.97	8.3%
DUKE	\$38.11	\$38.18	\$0.07	0.2%	\$34.60	\$37.46	\$2.86	8.3%
DOM	\$48.46	\$48.51	\$0.05	0.1%	\$45.11	\$48.40	\$3.29	7.3%
DPL	\$38.91	\$39.02	\$0.11	0.3%	\$35.73	\$39.01	\$3.27	9.2%
DUQ	\$37.45	\$37.51	\$0.06	0.2%	\$34.44	\$37.22	\$2.78	8.1%
EKPC	\$37.54	\$37.61	\$0.07	0.2%	\$34.56	\$37.40	\$2.84	8.2%
JCPLC	\$34.67	\$34.74	\$0.07	0.2%	\$32.19	\$34.46	\$2.27	7.0%
MEC	\$36.08	\$36.15	\$0.07	0.2%	\$32.98	\$35.45	\$2.47	7.5%
OVEC	\$36.75	\$36.82	\$0.07	0.2%	\$33.35	\$36.10	\$2.75	8.2%
PECO	\$33.95	\$34.02	\$0.07	0.2%	\$31.52	\$33.68	\$2.16	6.8%
PE	\$40.49	\$40.53	\$0.04	0.1%	\$36.96	\$39.75	\$2.79	7.5%
PEPCO	\$47.14	\$47.22	\$0.08	0.2%	\$43.18	\$46.63	\$3.44	8.0%
PPL	\$33.20	\$33.27	\$0.07	0.2%	\$30.63	\$32.92	\$2.29	7.5%
PSEG	\$35.08	\$35.15	\$0.07	0.2%	\$32.98	\$35.32	\$2.33	7.1%
REC	\$38.24	\$38.31	\$0.07	0.2%	\$35.72	\$38.20	\$2.48	6.9%

# Fast Start Impacts: Hub Average Differences

Hub	2025							
	Average DLMP	Day-Ahead			Average DLMP	Real-Time		
		Average PLMP	Difference	Percent Difference		Average PLMP	Difference	Percent Difference
AEP GEN HUB	\$36.57	\$36.61	\$0.05	0.1%	\$33.21	\$35.96	\$2.75	8.3%
AEP-DAYTON HUB	\$37.88	\$37.92	\$0.05	0.1%	\$34.44	\$37.27	\$2.83	8.2%
ATSI GEN HUB	\$38.00	\$38.02	\$0.02	0.1%	\$34.22	\$36.97	\$2.76	8.1%
CHICAGO GEN HUB	\$30.27	\$30.35	\$0.08	0.3%	\$27.18	\$29.61	\$2.43	8.9%
CHICAGO HUB	\$31.18	\$31.22	\$0.04	0.1%	\$28.26	\$30.67	\$2.41	8.5%
DOMINION HUB	\$42.42	\$42.46	\$0.04	0.1%	\$39.16	\$42.31	\$3.15	8.0%
EASTERN HUB	\$38.54	\$38.62	\$0.08	0.2%	\$35.19	\$38.37	\$3.17	9.0%
N ILLINOIS HUB	\$30.96	\$31.05	\$0.09	0.3%	\$28.23	\$30.64	\$2.41	8.5%
NEW JERSEY HUB	\$34.85	\$34.90	\$0.05	0.1%	\$32.53	\$34.82	\$2.29	7.0%
OHIO HUB	\$37.90	\$37.95	\$0.05	0.1%	\$34.48	\$37.31	\$2.83	8.2%
WEST INT HUB	\$39.69	\$39.72	\$0.03	0.1%	\$36.33	\$39.25	\$2.92	8.0%
WESTERN HUB	\$41.98	\$42.03	\$0.04	0.1%	\$38.20	\$41.24	\$3.04	8.0%

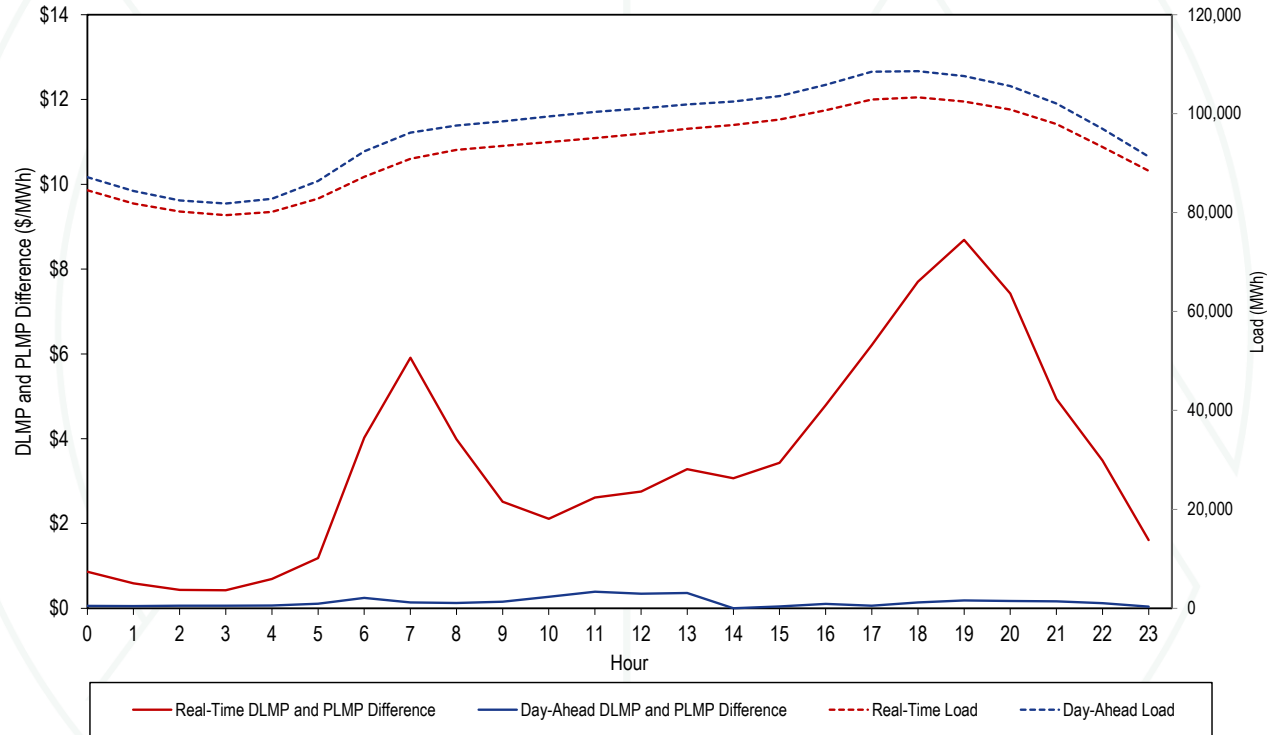
# Zonal Real-Time PLMP-DLMP Difference Frequency

Zone	2025									
	< (\$50)	(\$50) to (\$10)	(\$10) to \$0	\$0	\$0 to \$10	\$10 to \$20	\$20 to \$50	\$50 to \$100	\$100 to \$200	>= \$200
PJM-RTO	0.0%	0.0%	1.0%	46.2%	41.6%	7.2%	3.3%	0.5%	0.1%	0.0%
ACEC	0.0%	0.1%	5.0%	46.4%	39.7%	5.6%	2.7%	0.5%	0.1%	0.0%
AEP	0.0%	0.0%	1.6%	46.3%	40.8%	7.3%	3.3%	0.6%	0.1%	0.0%
APS	0.0%	0.0%	1.2%	46.3%	40.7%	7.3%	3.7%	0.6%	0.1%	0.0%
ATSI	0.0%	0.0%	1.8%	46.2%	40.8%	7.1%	3.3%	0.6%	0.1%	0.0%
BGE	0.0%	0.1%	2.6%	46.1%	37.7%	7.5%	4.6%	1.1%	0.2%	0.0%
COMED	0.1%	0.1%	5.1%	47.1%	37.9%	6.3%	2.7%	0.5%	0.1%	0.0%
DAY	0.0%	0.1%	1.8%	46.4%	40.4%	7.3%	3.4%	0.6%	0.1%	0.0%
DUKE	0.0%	0.1%	1.8%	46.4%	40.6%	7.2%	3.3%	0.6%	0.1%	0.0%
DOM	0.1%	0.3%	2.3%	46.2%	38.7%	7.2%	4.2%	0.9%	0.2%	0.0%
DPL	0.0%	0.1%	6.2%	46.3%	37.4%	5.3%	2.7%	1.0%	0.8%	0.0%
DUQ	0.0%	0.0%	1.9%	46.3%	40.9%	7.0%	3.2%	0.5%	0.1%	0.0%
EKPC	0.0%	0.0%	1.8%	46.3%	40.8%	7.3%	3.2%	0.6%	0.1%	0.0%
JCPLC	0.0%	0.0%	3.6%	46.4%	41.0%	5.7%	2.7%	0.5%	0.1%	0.0%
MEC	0.0%	0.2%	3.9%	46.2%	39.9%	6.1%	3.0%	0.6%	0.1%	0.0%
OVEC	0.0%	0.1%	2.0%	46.4%	40.7%	7.0%	3.1%	0.6%	0.1%	0.0%
PECO	0.0%	0.1%	5.6%	46.4%	39.2%	5.5%	2.6%	0.5%	0.1%	0.0%
PE	0.0%	0.1%	2.1%	46.1%	40.2%	7.2%	3.5%	0.5%	0.1%	0.0%
PEPCO	0.0%	0.1%	2.5%	46.3%	38.2%	7.4%	4.4%	1.0%	0.2%	0.0%
PPL	0.0%	0.1%	4.0%	46.2%	40.6%	5.7%	2.7%	0.5%	0.1%	0.0%
PSEG	0.0%	0.0%	3.2%	46.4%	41.2%	5.8%	2.8%	0.6%	0.1%	0.0%
REC	0.0%	0.1%	3.2%	46.1%	40.5%	6.2%	3.0%	0.6%	0.1%	0.0%





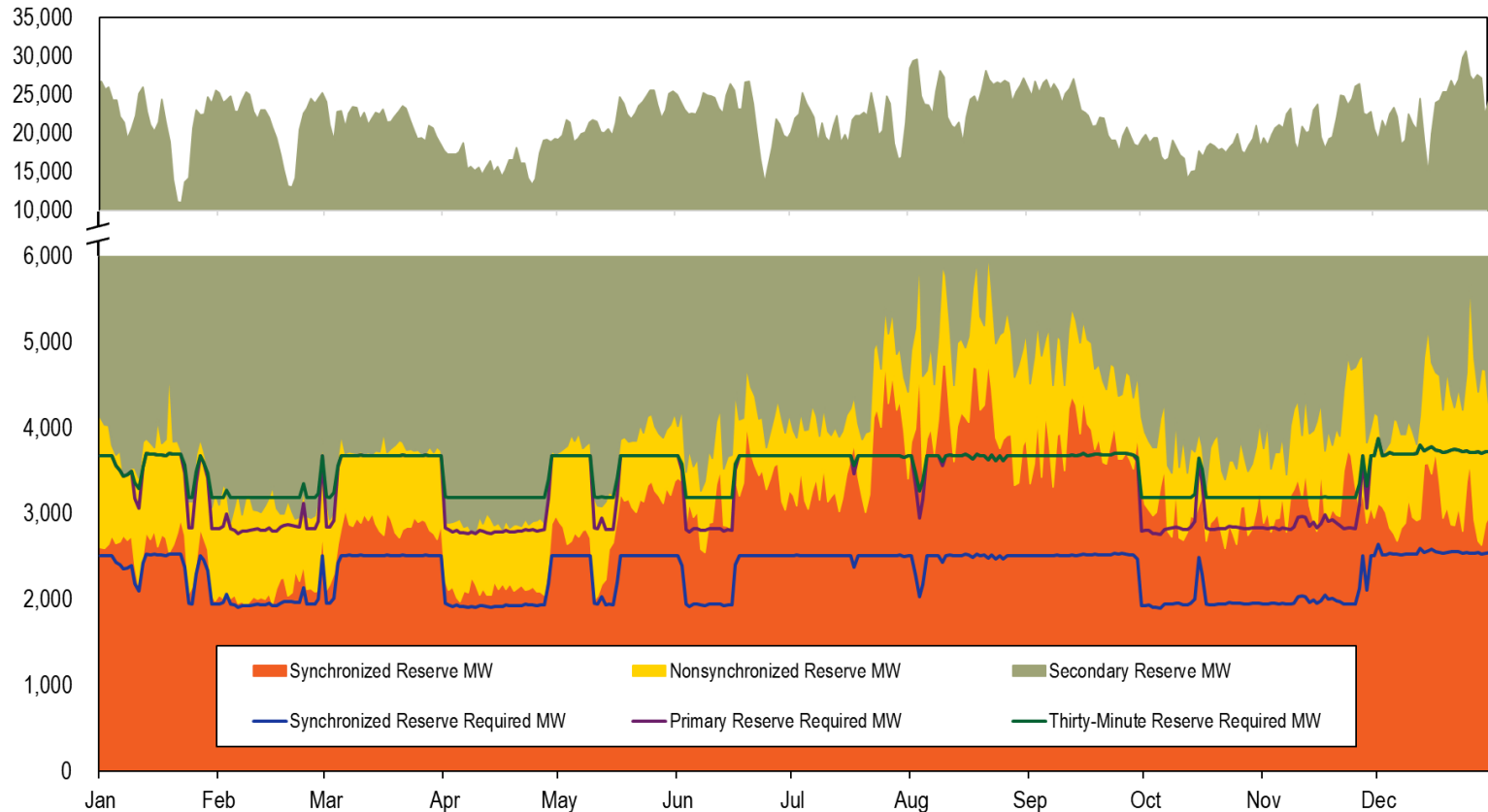
# Hourly Average Load and PLMP – DLMP Delta 2025



# RESERVES



# Real-Time Average Cleared Reserves and Requirements



# Day-Ahead & Real-Time RTO Average Reserve MW

Year	Month	Average Synchronized Reserve MW		Average Nonsynchronized Reserve MW		Average Total Primary Reserve MW		Average Secondary Reserve MW		Average Total Thirty-Minute Reserve MW	
		DA	RT	DA	RT	DA	RT	DA	RT	DA	RT
2025	Jan	2,637	2,582	1,313	1,130	3,950	3,712	13,079	17,602	17,028	21,313
2025	Feb	2,180	2,111	1,220	1,013	3,400	3,124	13,024	18,628	16,424	21,752
2025	Mar	2,824	2,802	932	881	3,756	3,683	11,763	17,934	15,519	21,617
2025	Apr	2,171	2,183	809	776	2,981	2,959	8,536	13,507	11,517	16,466
2025	May	2,636	2,894	1,021	864	3,657	3,758	11,589	18,348	15,246	22,107
2025	Jun	2,686	3,223	953	734	3,639	3,957	12,801	18,589	16,440	22,546
2025	Jul	3,020	3,581	823	747	3,843	4,327	11,687	16,947	15,529	21,275
2025	Aug	2,903	4,068	1,016	1,096	3,918	5,165	12,462	19,947	16,380	25,112
2025	Sep	2,997	3,815	912	981	3,909	4,795	11,392	18,112	15,301	22,907
2025	Oct	2,319	2,952	627	789	2,946	3,741	9,098	14,211	12,044	17,953
2025	Nov	2,306	3,130	967	971	3,273	4,102	10,796	17,406	14,068	21,507
2025	Dec	2,841	3,066	1,318	1,298	4,159	4,365	11,662	19,031	15,821	23,396

# Day-Ahead & Real-Time MAD Average Reserve MW

Year	Month	Average Synchronized Reserve MW		Average Nonsynchronized Reserve MW		Average Total Primary Reserve MW		Average Secondary Reserve MW		Average Total Thirty-Minute Reserve MW	
		DA	RT	DA	RT	DA	RT	DA	RT	DA	RT
2025	Jan	2,004	1,985	985	925	2,989	2,909	NA	NA	NA	NA
2025	Feb	1,968	1,971	890	839	2,858	2,810	NA	NA	NA	NA
2025	Mar	2,034	1,966	657	667	2,690	2,633	NA	NA	NA	NA
2025	Apr	1,838	1,783	524	599	2,362	2,382	NA	NA	NA	NA
2025	May	1,819	1,833	592	619	2,411	2,451	NA	NA	NA	NA
2025	Jun	2,036	2,040	575	613	2,611	2,653	NA	NA	NA	NA
2025	Jul	2,068	2,038	525	621	2,593	2,659	NA	NA	NA	NA
2025	Aug	2,043	2,073	601	738	2,644	2,811	NA	NA	NA	NA
2025	Sep	1,956	2,089	696	771	2,651	2,860	NA	NA	NA	NA
2025	Oct	2,012	1,930	538	691	2,550	2,620	NA	NA	NA	NA
2025	Nov	2,156	1,972	721	714	2,877	2,686	NA	NA	NA	NA
2025	Dec	2,238	2,009	867	863	3,104	2,872	NA	NA	NA	NA

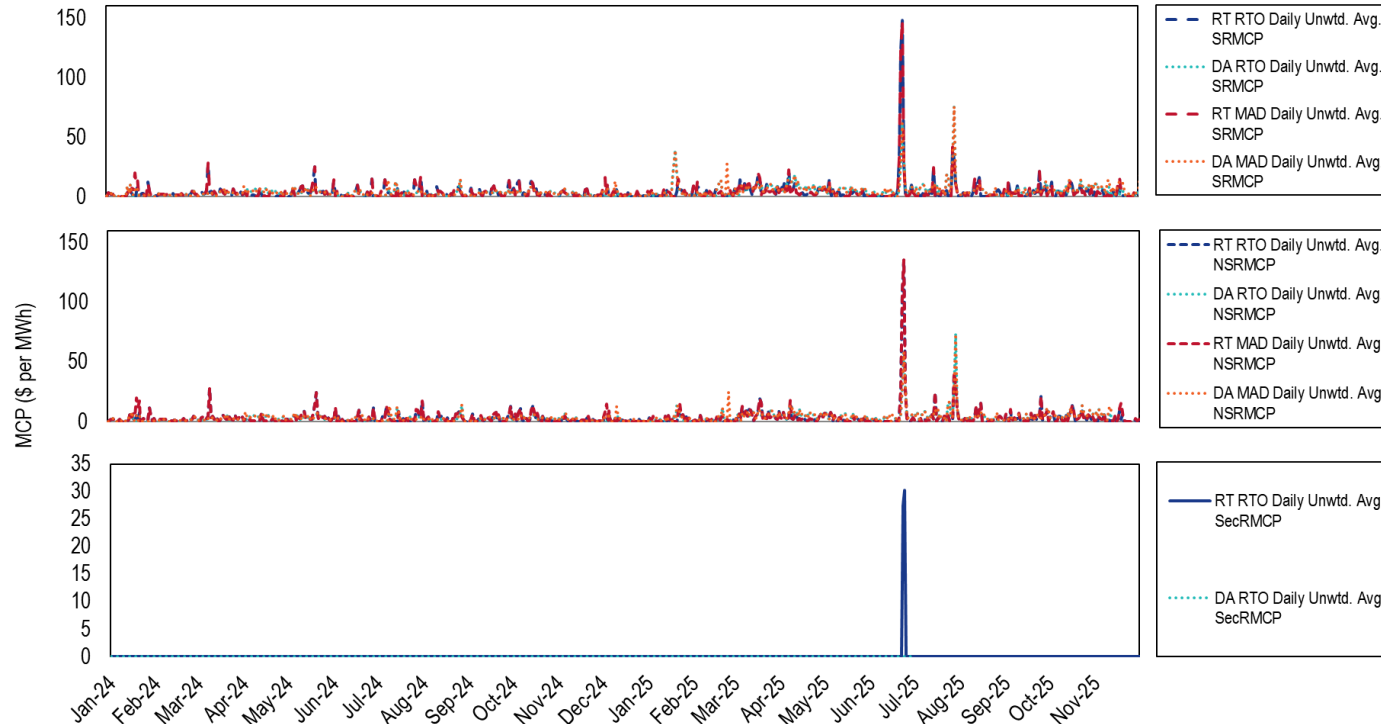
# Total Reserve Settlements by Month

Year	Month	Total Day-Ahead Credits			Total Balancing MCP Credits			Total LOC Credits		
		SR	NSR	SecR	SR	NSR	SecR	SR	NSR	SecR
2025	Jan	\$9,766,427	\$1,310,758	\$0	(\$93,903)	(\$807,014)	\$0	\$1,086,575	\$185,652	\$243,258
2025	Feb	\$5,437,781	\$698,931	\$0	(\$126,526)	(\$300,892)	\$0	\$779,549	\$96,940	\$133,463
2025	Mar	\$15,181,061	\$2,079,574	\$0	(\$1,464,818)	(\$470,698)	\$0	\$2,047,513	\$289,300	\$126,843
2025	Apr	\$13,256,012	\$1,984,502	\$0	(\$345,197)	(\$247,956)	\$0	\$1,268,522	\$91,497	\$135,333
2025	May	\$10,685,430	\$1,340,915	\$0	(\$13,743)	(\$151,404)	\$0	\$786,811	\$64,475	\$420,010
2025	Jun	\$15,012,782	\$2,457,199	\$0	(\$4,327,200)	(\$2,282,555)	(\$986,243)	\$4,657,382	\$102,702	\$1,825,703
2025	Jul	\$22,507,389	\$3,413,482	\$0	(\$310,371)	(\$958,506)	\$0	\$2,566,238	\$121,292	\$1,274,869
2025	Aug	\$7,390,714	\$1,266,236	\$0	\$20,554	(\$425,994)	\$0	\$1,016,144	\$67,415	\$1,150,153
2025	Sep	\$10,131,551	\$1,261,458	\$0	(\$840,026)	(\$283,100)	\$0	\$1,576,176	\$163,072	\$850,947
2025	Oct	\$11,138,947	\$1,708,180	\$0	(\$485,436)	\$132,540	\$0	\$1,527,077	\$61,983	\$929,807
2025	Nov	\$9,137,073	\$1,411,665	\$0	(\$11,596)	(\$124,998)	\$0	\$1,376,621	\$71,961	\$691,986
2025	Dec	\$9,324,658	\$1,658,885	\$0	(\$434,964)	(\$113,519)	\$0	\$1,998,439	\$184,463	\$1,540,616

Year	Month	Total Shortfall Charges			Total Credits		
		SR	NSR	SecR	SR	NSR	SecR
2025	Jan	\$0	NA	\$0	\$10,759,099	\$689,396	\$243,258
2025	Feb	\$118,146	NA	\$0	\$5,972,657	\$494,978	\$133,463
2025	Mar	\$0	NA	\$0	\$15,763,757	\$1,898,176	\$126,843
2025	Apr	\$0	NA	\$0	\$14,179,338	\$1,828,043	\$135,333
2025	May	\$0	NA	\$0	\$11,458,498	\$1,253,986	\$420,010
2025	Jun	\$0	NA	\$0	\$15,342,965	\$277,346	\$839,460
2025	Jul	\$76,684	NA	\$0	\$24,686,572	\$2,576,268	\$1,274,869
2025	Aug	\$0	NA	\$0	\$8,427,413	\$907,657	\$1,150,153
2025	Sep	\$159,581	NA	\$0	\$10,708,120	\$1,141,430	\$850,947
2025	Oct	\$114,170	NA	\$0	\$12,066,418	\$1,902,703	\$929,807
2025	Nov	\$4,280	NA	\$0	\$10,497,818	\$1,358,628	\$691,986
2025	Dec	\$0	NA	\$0	\$10,888,133	\$1,729,828	\$1,540,616

- Only February, July, and September through November had spin events that lasted at least 10 minutes, so only those months had synchronized reserve shortfall charges.
- Total credits were higher in June due to dozens of intervals of shortage pricing.
- Higher day-ahead credits in July correspond with higher prices during hot weather alerts and maximum emergency generation alerts.
- Higher SecR credits in December correlate with cold weather on the 14<sup>th</sup> and 15<sup>th</sup>.

# Reserve Prices: January 2024 through November 2025



- Many intervals of shortage pricing seen in June 2025 heatwave
- Higher day-ahead prices on July 24, July 25, July 28, and July 29 correspond with maximum emergency generation alerts and hot weather alerts.

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