Market Monitor Report

MC

October 28, 2026

IMM

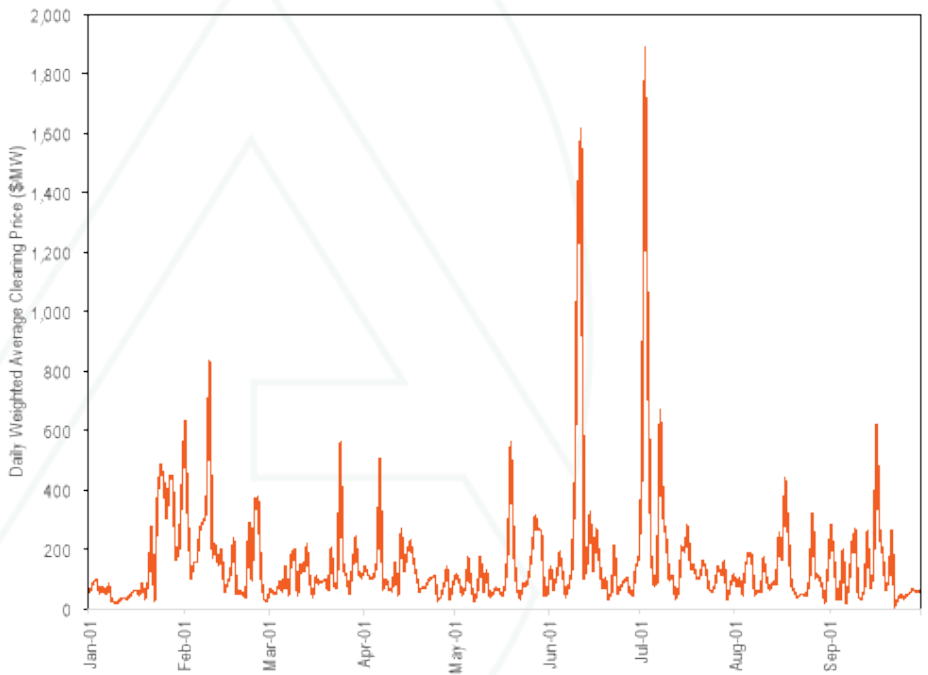
Monitoring Analytics

CURRENT ISSUES

REGULATION MARKET

Weighted Average Regulation Clearing Price

Year	Month	Scheduled Regulation (Effective MW)	Total Regulation Charges ($)	Weighted Average Regulation Market Price ($/Effective MW)	Cost of Regulation ($/Effective MW)	Price as Percent of Cost
	Jan	501,730.2	$74,547,801	$143.64	$148.58	96.7%
	Feb	451,980.3	$90,471,480	$196.96	$200.17	98.4%
	Mar	481,303.7	$52,467,503	$107.22	$109.01	98.4%
	Apr	466,089.6	$51,554,512	$109.42	$110.61	98.9%
2026	May	544,273.3	$53,421,513	$96.68	$98.15	98.5%
	Jun	525,169.0	$89,269,703	$169.19	$169.98	99.5%
	Jul	543,380.8	$102,010,012	$185.62	$187.73	98.9%
	Aug	542,753.4	$48,405,309	$88.37	$89.18	99.1%
	Sep	495,298.7	$48,255,174	$96.08	$97.43	98.6%
Total		4,551,979.0	$610,403,007	$132.16	$134.10	98.6%

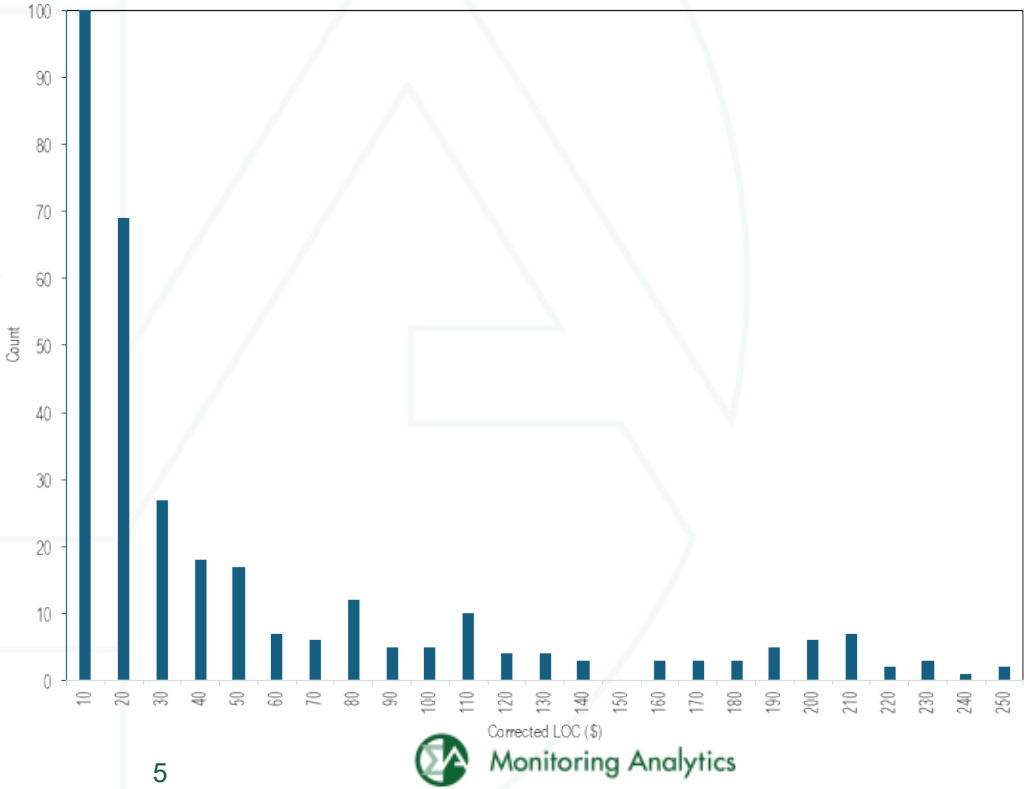


- **Lower average LMP in August and September contributed to a reduction in average regulation prices.**
  - **Weighted average regulation price decreased 48.2 percent in September compared to July.**
- **Ongoing issues with LOC logic continue to result in excessive regulation prices.**
- **The IMM is investigating a potential clearing engine issue where inframarginal units may not be clearing correctly. IMM is are currently working with PJM to confirm/resolve the issue.**

Incorrect ASO LOC Calculation

- For units already providing regulation the clearing engine is double counting units' ramp capabilities when calculating LOC.
- Assumes ramp can be used to move both the unit's regulation set point and provide regulation at the same time.
- In many cases this causes ASO to calculate very small expected LOC when it should be large based on expected LMP under the LPC.
- Causes ASO to clear resource that should be uneconomic and to not clear resources that should.
- Artificially increases real time prices relative to least cost commitment.

Distribution of corrected ASO LOC estimates for gas and coal units that were given $0/MW ASO LOC in September



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Recommendation

- **The implementation of the Phase 2 regulation market should be postponed until the issues with the current Phase 1 regulation market design have been fully addressed.**

YEAR TO YEAR UPDATE: TOTAL COST OF WHOLESALE POWER

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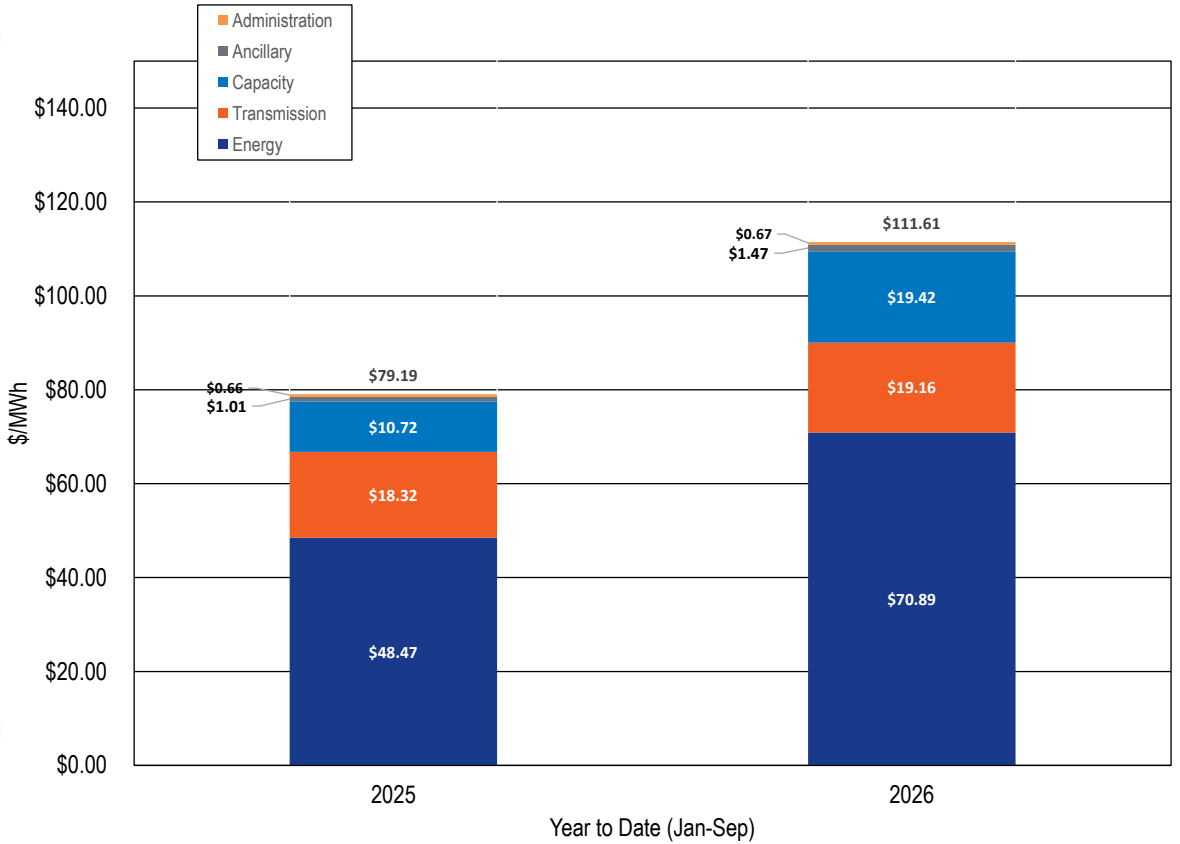
Total Cost of Wholesale Power – YTD 2025/2026



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Total Cost of Wholesale Power – YTD 2025/2026

Category	2025 (Jan-Sep) $/MWh	2025 (Jan-Sep) ($ Millions)	2025 (Jan-Sep) Percent of Total	2026 (Jan-Sep) $/MWh	2026 (Jan-Sep) ($ Millions)	2026 (Jan-Sep) Percent of Total	Percent Change
Energy	$48.47	$29,748	61.2%	$70.89	$44,978	63.5%	46.3%
Day Ahead Energy	$49.31	$30,263	62.3%	$71.79	$45,543	64.3%	45.6%
Balancing Energy	$1.06	$650	1.3%	$2.16	$1,372	1.9%	104.3%
ARR Credits	($1.76)	($1,078)	(2.2%)	($2.74)	($1,738)	(2.5%)	55.9%
Self Scheduled FTR Credits	($1.29)	($792)	(1.6%)	($2.55)	($1,615)	(2.3%)	97.4%
Balancing Congestion	$0.60	$370	0.8%	$0.79	$500	0.7%	30.9%
Emergency Energy	$0.01	$6	0.0%	$0.03	$20	0.0%	241.9%
Inadvertent Energy	($0.01)	($6)	(0.0%)	$0.02	$12	0.0%	(285.2%)
Load Response - Energy	$0.04	$22	0.0%	$0.04	$24	0.0%	9.5%
Emergency Load Response	$0.06	$35	0.1%	$0.02	$12	0.0%	(66.4%)
Energy Uplift (Operating Reserves)	$1.08	$661	1.4%	$2.21	$1,403	2.0%	105.4%
Marginal Loss Surplus Allocation	($0.71)	($433)	(0.9%)	($1.17)	($740)	(1.0%)	65.1%
Market to Market Payments	$0.09	$52	0.1%	$0.29	$184	0.3%	239.4%
Capacity	$10.72	$6,579	13.5%	$19.42	$12,319	17.4%	81.1%
Capacity (Capacity Market and FRR)	$10.58	$6,493	13.4%	$19.54	$12,394	17.5%	84.6%
Capacity Part V (RMR)	$0.11	$68	0.1%	($0.16)	($102)	(0.1%)	(245.5%)
Load Response - Capacity	$0.03	$18	0.0%	$0.04	$27	0.0%	43.1%
Transmission	$18.32	$11,244	23.1%	$19.16	$12,154	17.2%	4.6%
Transmission Service Charges	$15.54	$9,538	19.6%	$16.57	$10,511	14.8%	6.6%
Transmission Enhancement Cost Recovery	$2.68	$1,648	3.4%	$2.50	$1,585	2.2%	(6.9%)
Transmission Owner (Schedule 1A)	$0.10	$58	0.1%	$0.09	$57	0.1%	(5.3%)
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%
Ancillary	$1.01	$622	1.3%	$1.47	$931	1.3%	44.7%
Reactive	$0.43	$266	0.5%	$0.22	$142	0.2%	(48.2%)
Regulation	$0.30	$183	0.4%	$0.96	$610	0.9%	223.3%
Black Start	$0.06	$40	0.1%	$0.05	$33	0.0%	(18.8%)
Synchronized Reserves	$0.19	$118	0.2%	$0.20	$126	0.2%	3.2%
Secondary Reserves	$0.01	$5	0.0%	$0.02	$12	0.0%	119.0%
Non-Synchronized Reserves	$0.02	$11	0.0%	$0.01	$8	0.0%	(34.2%)
Day Ahead Scheduling Reserve (DASR)	$0.00	$0	0.0%	$0.00	$0	0.0%	0.0%
Administration	$0.66	$404	0.8%	$0.67	$425	0.6%	1.8%
PJM Administrative Fees	$0.61	$375	0.8%	$0.62	$392	0.6%	1.1%
NERC/RFC	$0.04	$26	0.1%	$0.05	$29	0.0%	6.1%
RTO Startup and Expansion	$0.00	$0	0.0%	$0.00	$0	0.0%	0.0%
Other	$0.00	$3	0.0%	$0.01	$4	0.0%	53.2%
Total Cost	$79.19	$48,598	100.0%	$111.61	$70,807	100.0%	40.9%
Total Day Ahead Load (GWh)	605,190			621,386			2.7%
Total Balancing Load (GWh)	(8,528)			(13,044)			52.9%
Total Real Time Load (GWh)	613,718			634,430			3.4%
Total Cost ($ Billions)	$48.60			$70.81			45.7%

Total Cost of Wholesale Power – YTD 2025/2026

For January through September 2026 compared to January through September 2025:

- **Energy costs increased by 46.3 percent.**
  - **Energy costs were 63.5 percent of total in 2026 YTD.**
- **Capacity costs increased by 81.1 percent.**
  - **Capacity costs were 17.4 percent of total in 2026 YTD.**
- **Transmission costs increased by 4.6 percent.**
  - **Transmission costs were 17.2 percent of total in 2026 YTD.**
- **Total cost of wholesale power increased by 40.9 percent.**

Total Cost of Wholesale Power – YTD 2025/2026

- **Not all of the increase in capacity market costs was a result of data center load.**
- **The Market Monitor analyzed the impact of data center load on the capacity market base residual auctions:**
  - **2025/2026**
  - **2026/2027**
  - **2027/2028**
  - **2028/2029**

Total Cost of Wholesale Power – YTD 2025/2026

- **In the first nine months of 2026, the total cost of wholesale power would have been $101.66/MWh if not for data center load and its impact on the cost of capacity for the 2025/2026 and 2026/2027 Delivery Years.**
- **In the first nine months of 2026, the total cost of wholesale power increased by $9.95/MWh (9.8 percent) from $101.66/MWh to $111.61/MWh as a result of including data center load in the capacity market.**

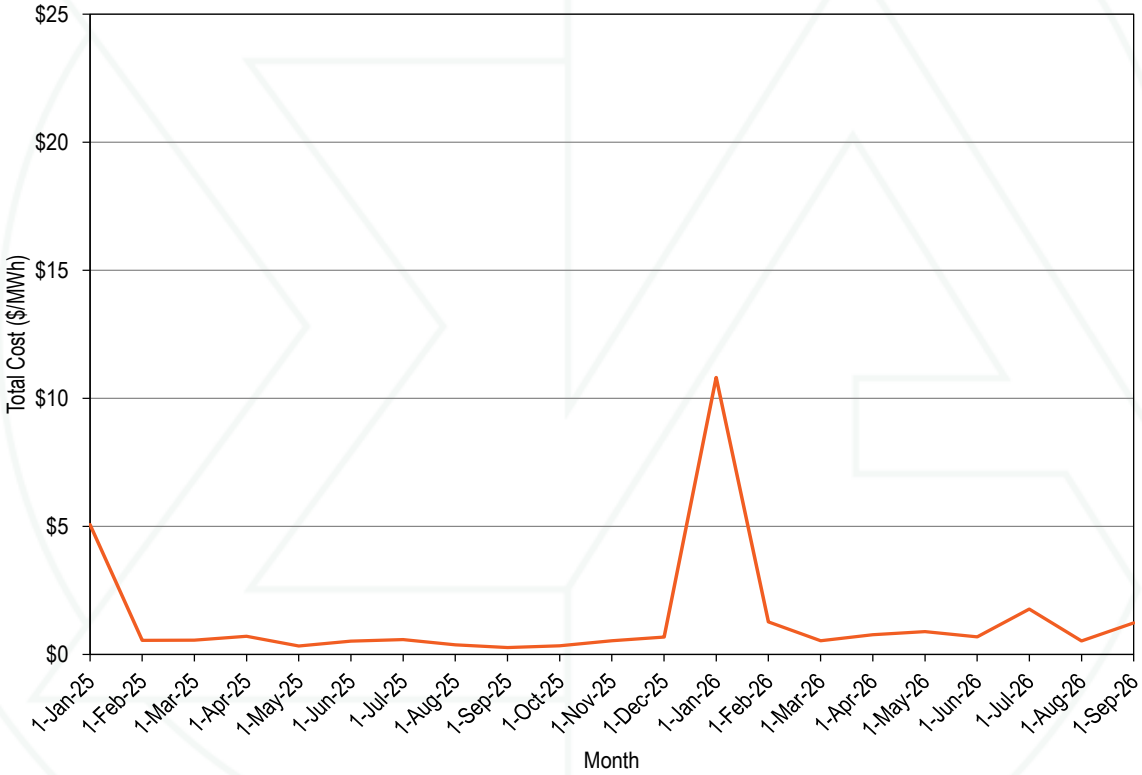
Total Cost of Wholesale Power – October 2025 through September 2026 Monthly ($/MWh)

Category	Oct, 2025 $/MWh	Nov, 2025 $/MWh	Dec, 2025 $/MWh	Jan, 2026 $/MWh	Feb, 2026 $/MWh	Mar, 2026 $/MWh	Apr, 2026 $/MWh	May, 2026 $/MWh	Jun, 2026 $/MWh	Jul, 2026 $/MWh	Aug, 2026 $/MWh	Sep, 2026 $/MWh
Energy	$47.20	$47.09	$55.61	$155.38	$82.00	$40.38	$44.01	$45.25	$51.25	$90.02	$47.27	$61.10
Day Ahead Energy	$50.58	$49.45	$57.31	$149.09	$82.52	$41.80	$45.01	$47.30	$56.06	$92.82	$49.12	$61.66
Balancing Energy	$0.82	$0.72	$1.08	$2.31	$2.68	$0.99	$1.33	$2.60	$2.57	$1.88	$1.82	$3.20
ARR Credits	($2.68)	($2.54)	($2.08)	($2.05)	($2.07)	($2.49)	($2.61)	($2.55)	($3.31)	($2.98)	($3.13)	($3.40)
Self Scheduled FTR Credits	($2.28)	($0.90)	($1.26)	($4.28)	($2.66)	($0.65)	($1.12)	($3.69)	($4.31)	($3.08)	($1.03)	($1.69)
Balancing Congestion	$0.57	$0.45	$0.59	$1.70	$1.47	$0.44	$0.74	$1.07	$0.20	$0.64	$0.40	$0.39
Emergency Energy	$0.00	$0.00	$0.00	$0.16	$0.11	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Inadvertent Energy	($0.02)	($0.01)	($0.01)	$0.05	$0.04	$0.03	$0.06	$0.02	($0.06)	$0.03	$0.00	$0.00
Load Response - Energy	$0.03	$0.01	$0.02	$0.02	$0.13	$0.06	$0.03	$0.01	$0.00	$0.03	$0.04	$0.03
Emergency Load Response	$0.37	$0.02	$0.00	$0.00	$0.00	$0.00	$0.04	$0.00	$0.00	$0.00	$0.13	$0.00
Energy Uplift (Operating Reserves)	$0.34	$0.53	$0.68	$10.82	$1.27	$0.54	$0.77	$0.89	$0.69	$1.77	$0.52	$1.23
Marginal Loss Surplus Allocation	($0.76)	($0.73)	($0.90)	($2.87)	($1.77)	($0.54)	($0.64)	($0.72)	($0.71)	($1.20)	($0.73)	($0.95)
Market to Market Payments	$0.24	$0.09	$0.18	$0.43	$0.28	$0.20	$0.40	$0.31	$0.12	$0.13	$0.15	$0.63
Capacity	$22.87	$21.36	$18.04	$15.90	$17.00	$21.21	$22.46	$22.12	$20.20	$17.70	$19.22	$20.67
Capacity (Capacity Market and FRR)	$22.45	$21.06	$17.88	$16.94	$17.53	$20.94	$22.13	$21.70	$20.33	$18.09	$18.92	$20.67
Capacity Part V (RMR)	$0.42	$0.30	$0.16	($1.03)	($0.53)	$0.27	$0.32	$0.42	($0.13)	($0.39)	($0.05)	$0.00
Load Response - Capacity	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.34	$0.00
Transmission	$21.26	$20.06	$16.78	$17.38	$18.18	$21.25	$22.60	$22.04	$19.01	$16.91	$17.57	$19.33
Transmission Service Charges	$18.13	$17.03	$14.27	$15.07	$15.55	$18.42	$19.52	$19.12	$16.42	$14.66	$15.23	$16.71
Transmission Enhancement Cost Recovery	$3.04	$2.94	$2.42	$2.22	$2.54	$2.74	$2.99	$2.84	$2.50	$2.15	$2.25	$2.54
Transmission Owner (Schedule 1A)	$0.09	$0.09	$0.09	$0.09	$0.09	$0.09	$0.09	$0.09	$0.09	$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
Ancillary	$1.80	$1.23	$1.10	$1.69	$1.89	$1.57	$1.56	$1.56	$1.44	$1.80	$0.80	$0.91
Reactive	$0.47	$0.46	$0.37	$0.35	$0.41	$0.43	$0.47	$0.48	$0.00	$0.00	$0.00	$0.00
Regulation	$1.01	$0.51	$0.46	$0.94	$1.30	$0.82	$0.88	$0.86	$1.26	$1.24	$0.62	$0.70
Black Start	$0.06	$0.06	$0.05	$0.05	$0.06	$0.06	$0.06	$0.06	$0.05	$0.05	$0.05	$0.05
Synchronized Reserves	$0.20	$0.17	$0.17	$0.33	$0.10	$0.23	$0.12	$0.14	$0.10	$0.47	$0.11	$0.12
Secondary Reserves	$0.02	$0.01	$0.02	$0.02	$0.03	$0.02	$0.01	$0.01	$0.01	$0.04	$0.01	$0.02
Non-Synchronized Reserves	$0.03	$0.02	$0.02	$0.01	$0.00	$0.02	$0.01	$0.02	$0.02	$0.01	$0.01	$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
Administration	$0.73	$0.72	$0.70	$0.63	$0.65	$0.71	$0.79	$0.71	$0.67	$0.63	$0.62	$0.65
PJM Administrative Fees	$0.69	$0.68	$0.62	$0.58	$0.60	$0.66	$0.74	$0.66	$0.62	$0.58	$0.56	$0.60
NERC/RFC	$0.04	$0.04	$0.07	$0.05	$0.05	$0.05	$0.05	$0.04	$0.05	$0.05	$0.05	$0.04
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	$0.01	$0.00	$0.00	$0.00	$0.01	$0.00	$0.01	$0.00	$0.01	$0.01	$0.01	$0.01
Total Cost	$93.88	$90.46	$92.23	$190.99	$119.73	$85.12	$91.41	$91.68	$92.57	$127.07	$85.48	$102.66
Total Day Ahead Load (GWh)	59,624	61,234	74,467	78,572	67,999	63,441	57,915	60,323	69,014	80,226	76,303	67,594
Total Balancing Load (GWh)	(356)	(656)	(838)	(930)	(1,375)	(881)	(966)	(1,722)	(1,572)	(1,716)	(2,050)	(1,831)
Total Real Time Load (GWh)	59,980	61,890	75,305	79,502	69,374	64,322	58,880	62,046	70,586	81,942	78,353	69,425
Total Cost ($ Billions)	$5.63	$5.60	$6.95	$15.18	$8.31	$5.47	$5.38	$5.69	$6.53	$10.41	$6.70	$7.13

Total Cost of Wholesale Power – October 2025 through September 2026 Monthly (Percents)

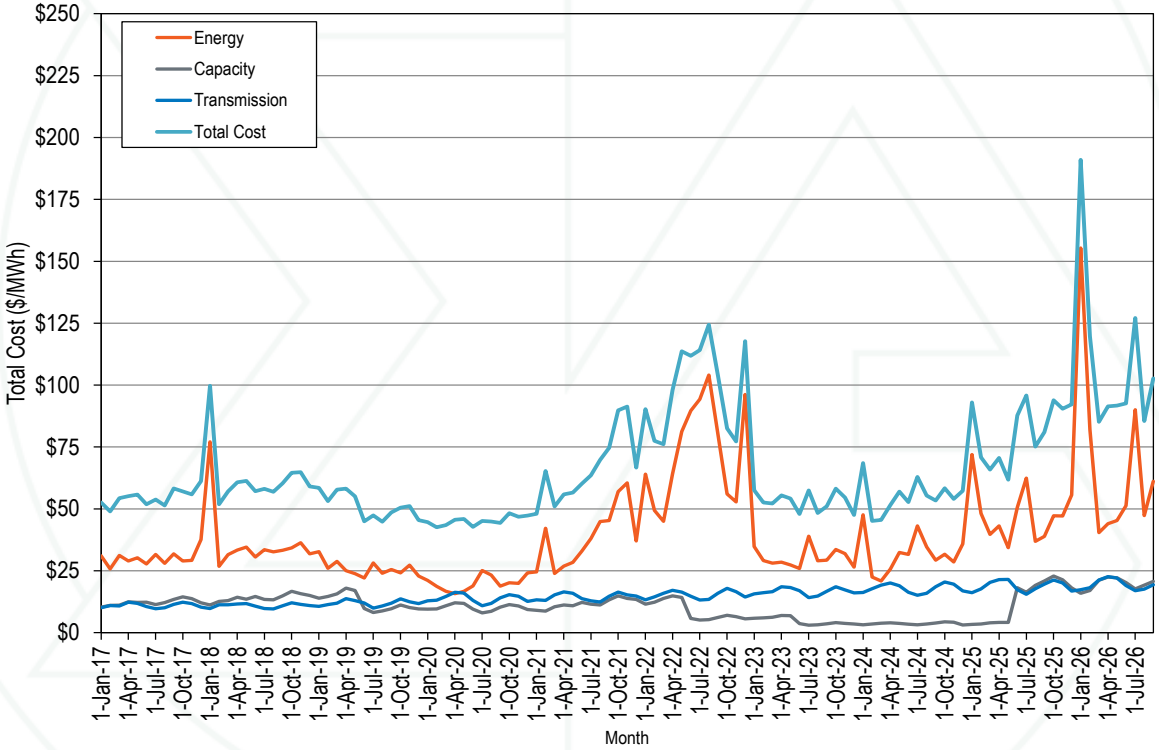
Category	Oct, 2025 % of Total	Nov, 2025 % of Total	Dec, 2025 % of Total	Jan, 2026 % of Total	Feb, 2026 % of Total	Mar, 2026 % of Total	Apr, 2026 % of Total	May, 2026 % of Total	Jun, 2026 % of Total	Jul, 2026 % of Total	Aug, 2026 % of Total	Sep, 2026 % of Total
Energy	50.3%	52.1%	60.3%	81.4%	68.5%	47.4%	48.1%	49.4%	55.4%	70.8%	55.3%	59.5%
Day Ahead Energy	53.9%	54.7%	62.1%	78.1%	68.9%	49.1%	49.2%	51.6%	60.6%	73.0%	57.5%	60.1%
Balancing Energy	0.9%	0.8%	1.2%	1.2%	2.2%	1.2%	1.5%	2.8%	2.8%	1.5%	2.1%	3.1%
ARR Credits	-2.9%	-2.8%	-2.3%	-1.1%	-1.7%	-2.9%	-2.9%	-2.8%	-3.6%	-2.3%	-3.7%	-3.3%
Self Scheduled FTR Credits	-2.4%	-1.0%	-1.4%	-2.2%	-2.2%	-0.8%	-1.2%	-4.0%	-4.7%	-2.4%	-1.2%	-1.6%
Balancing Congestion	0.6%	0.5%	0.6%	0.9%	1.2%	0.5%	0.8%	1.2%	0.2%	0.5%	0.5%	0.4%
Emergency Energy	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	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%	0.1%	0.0%	-0.1%	0.0%	0.0%	0.0%
Load Response - Energy	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Emergency Load Response	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%
Energy Uplift (Operating Reserves)	0.4%	0.6%	0.7%	5.7%	1.1%	0.6%	0.8%	1.0%	0.7%	1.4%	0.6%	1.2%
Marginal Loss Surplus Allocation	-0.8%	-0.8%	-1.0%	-1.5%	-1.5%	-0.6%	-0.7%	-0.8%	-0.8%	-0.9%	-0.9%	-0.9%
Market to Market Payments	0.3%	0.1%	0.2%	0.2%	0.2%	0.2%	0.4%	0.3%	0.1%	0.1%	0.2%	0.6%
Capacity	24.4%	23.6%	19.6%	8.3%	14.2%	24.9%	24.6%	24.1%	21.8%	13.9%	22.5%	20.1%
Capacity (Capacity Market and FRR)	23.9%	23.3%	19.4%	8.9%	14.6%	24.6%	24.2%	23.7%	22.0%	14.2%	22.1%	20.1%
Capacity Part V (RMR)	0.4%	0.3%	0.2%	-0.5%	-0.4%	0.3%	0.4%	0.5%	-0.1%	-0.3%	-0.1%	0.0%
Load Response - Capacity	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%
Transmission	22.6%	22.2%	18.2%	9.1%	15.2%	25.0%	24.7%	24.0%	20.5%	13.3%	20.6%	18.8%
Transmission Service Charges	19.3%	18.8%	15.5%	7.9%	13.0%	21.6%	21.4%	20.9%	17.7%	11.5%	17.8%	16.3%
Transmission Enhancement Cost Recovery	3.2%	3.3%	2.6%	1.2%	2.1%	3.2%	3.3%	3.1%	2.7%	1.7%	2.6%	2.5%
Transmission Owner (Schedule 1A)	0.1%	0.1%	0.1%	0.0%	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	1.9%	1.4%	1.2%	0.9%	1.6%	1.8%	1.7%	1.7%	1.6%	1.4%	0.9%	0.9%
Reactive	0.5%	0.5%	0.4%	0.2%	0.3%	0.5%	0.5%	0.5%	0.0%	0.0%	0.0%	0.0%
Regulation	1.1%	0.6%	0.5%	0.5%	1.1%	1.0%	1.0%	0.9%	1.4%	1.0%	0.7%	0.7%
Black Start	0.1%	0.1%	0.1%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%	0.1%	0.0%
Synchronized Reserves	0.2%	0.2%	0.2%	0.2%	0.1%	0.3%	0.1%	0.2%	0.1%	0.4%	0.1%	0.1%
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	0.8%	0.8%	0.8%	0.3%	0.5%	0.8%	0.9%	0.8%	0.7%	0.5%	0.7%	0.6%
PJM Administrative Fees	0.7%	0.8%	0.7%	0.3%	0.5%	0.8%	0.8%	0.7%	0.7%	0.5%	0.7%	0.6%
NERC/RFC	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.1%	0.0%	0.1%	0.0%	0.1%	0.0%
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 Cost	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Energy Uplift Component – January 2025 through September 2026 Monthly

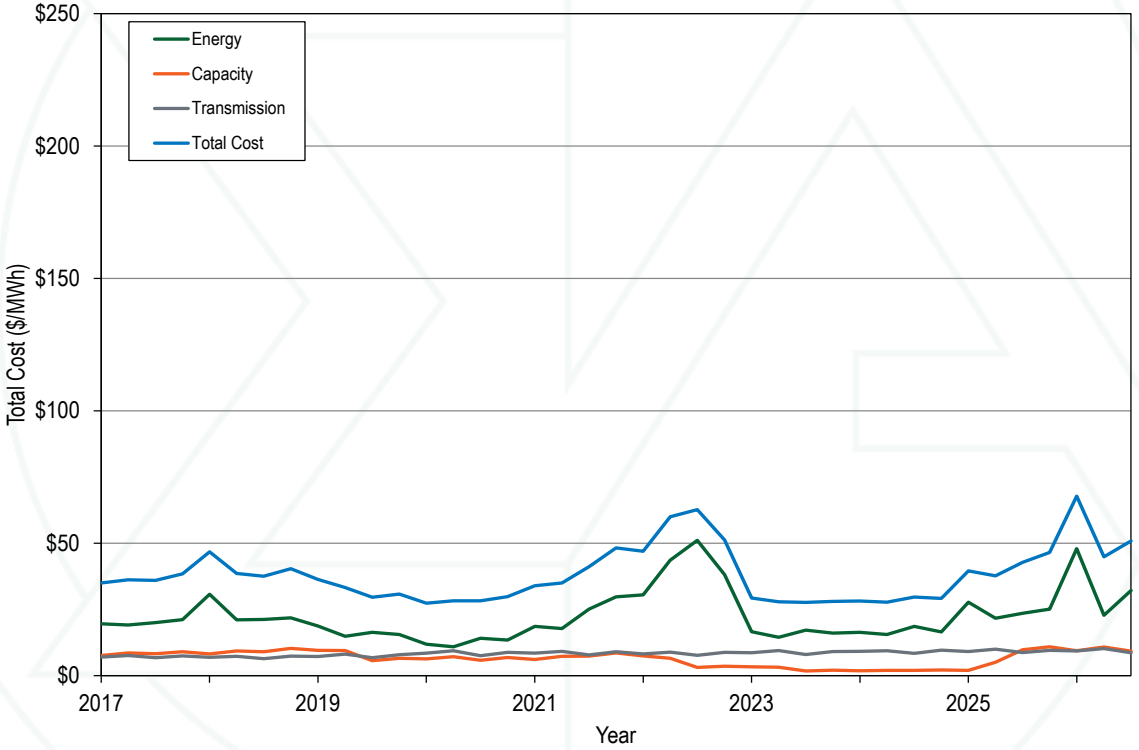


Monitoring Analytics

Total Cost of Wholesale Power – January 2017 through September 2026 Monthly



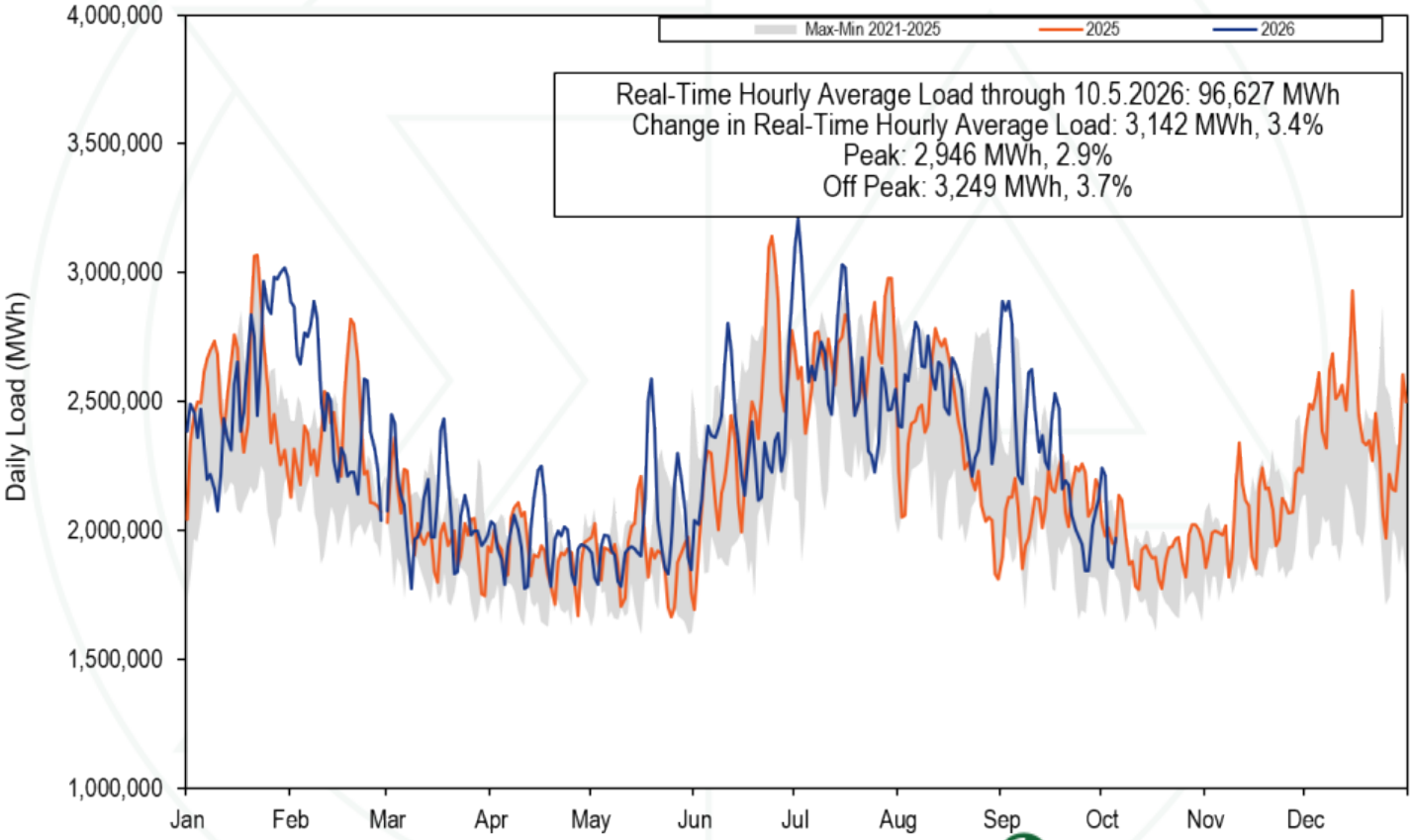
Inflation Adjusted Total Cost of Wholesale Power – Quarterly



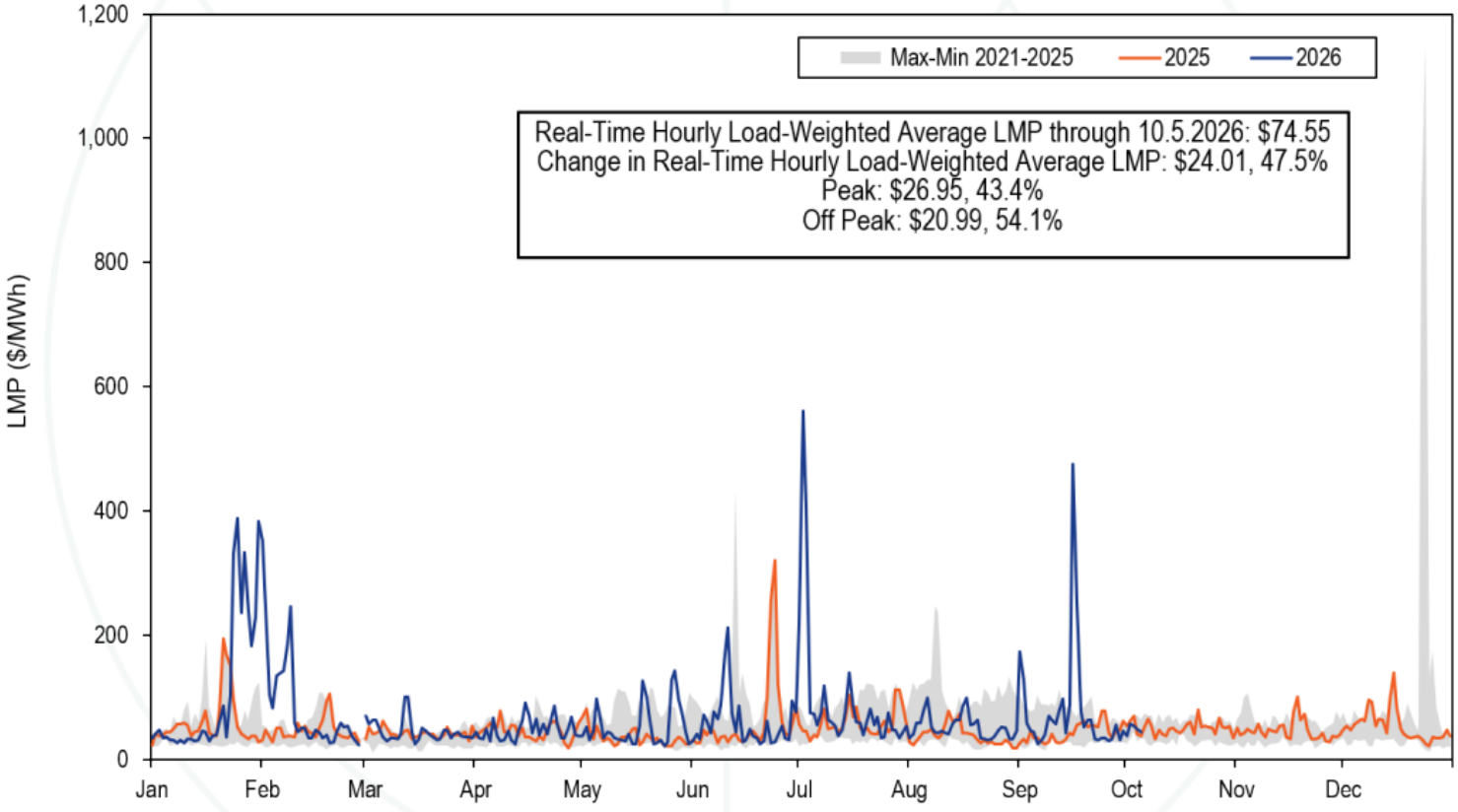
Monitoring Analytics

YEAR TO YEAR UPDATE

2026 YTD PJM Real-Time Daily Load



2026 YTD PJM Real-Time Daily LMP

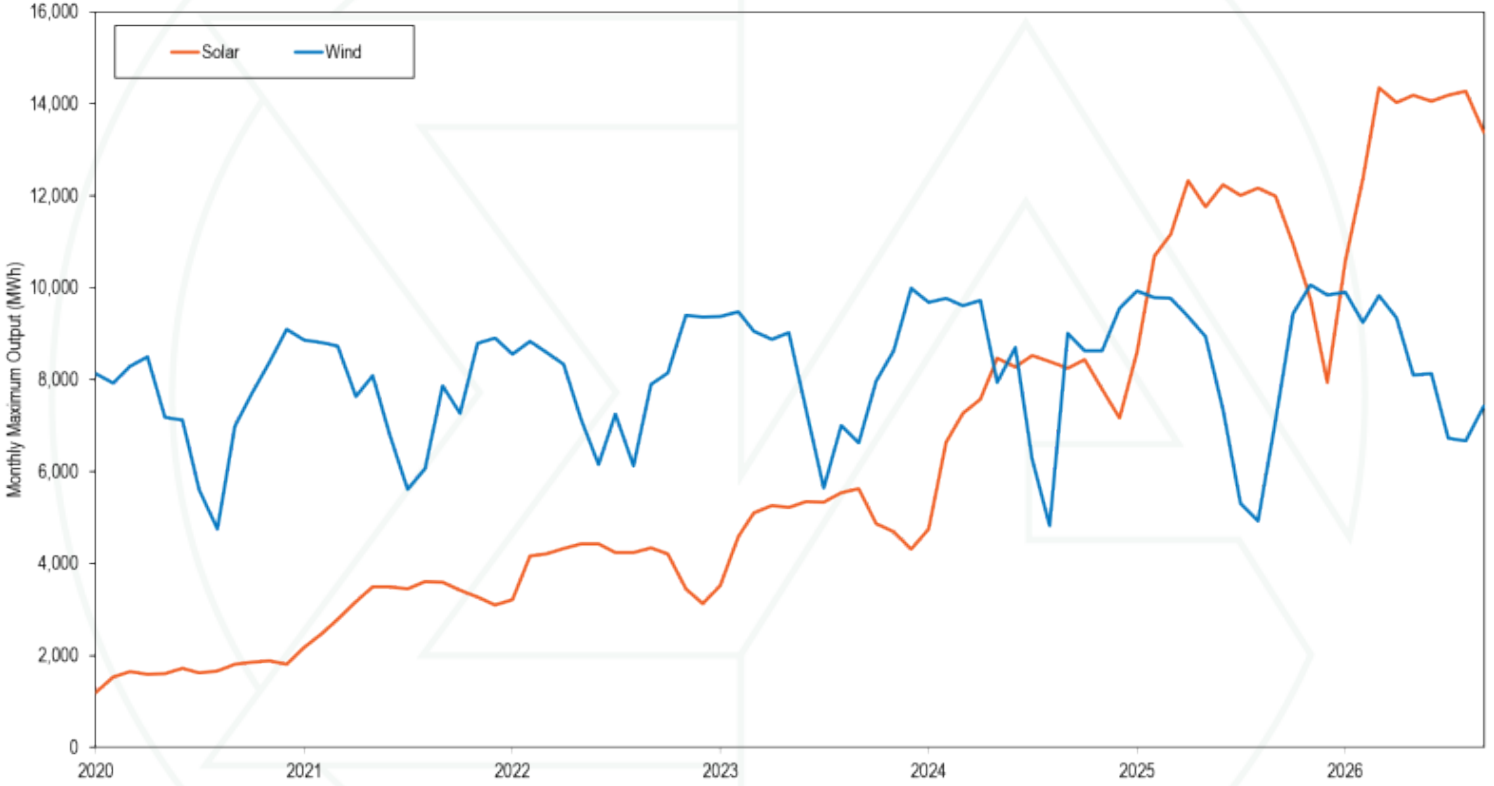


Monitoring Analytics

Annual Maximum Hourly Solar and Wind Output

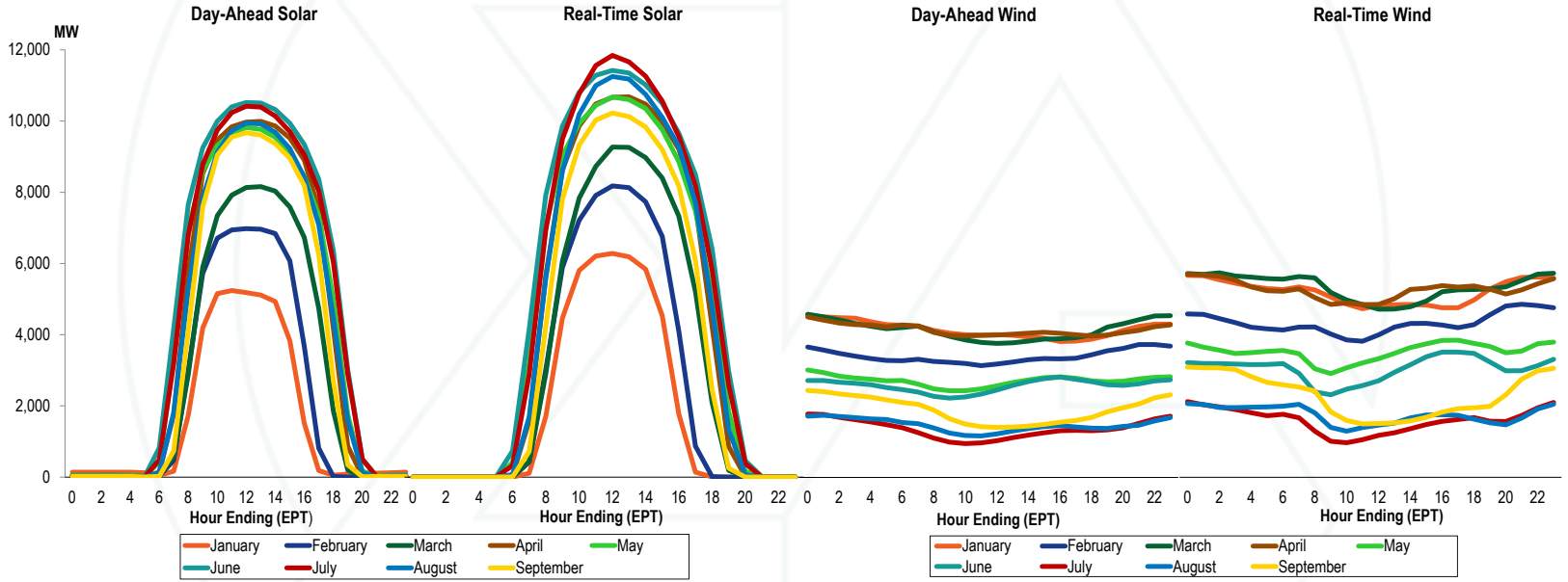
	Solar Maximum Hourly Output			Solar Percent of	Wind Maximum Hourly Output			Wind Percent of
Year	Maximum Hourly MWh	Change	Percent Change	All Generation For The Year	Maximum Hourly MWh	Change	Percent Change	All Generation For The Year
2020	1,879			0.4%	9,095			3.3%
2021	3,617	1,739	92.5%	0.9%	8,911	(184)	(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%
2026	14,348	2,023	16.4%	3.5%	9,896	(161)	(1.6%)	4.5%

Maximum Solar and Wind Hourly Output by Month



Monitoring Analytics

2026 Average Hourly Solar and Wind: DA and RT

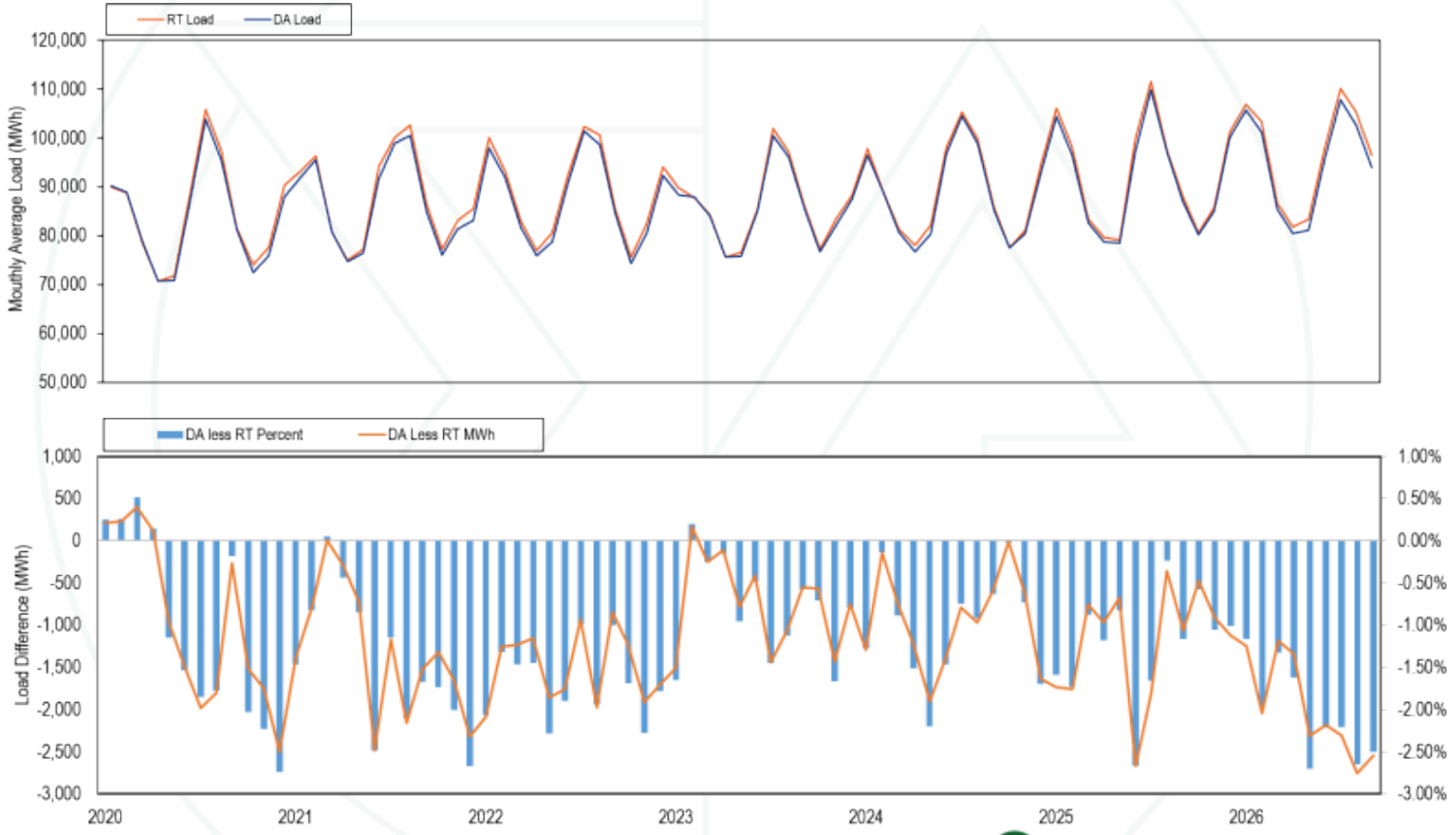


Monitoring Analytics

Real-Time Load-Weighted Average LMP

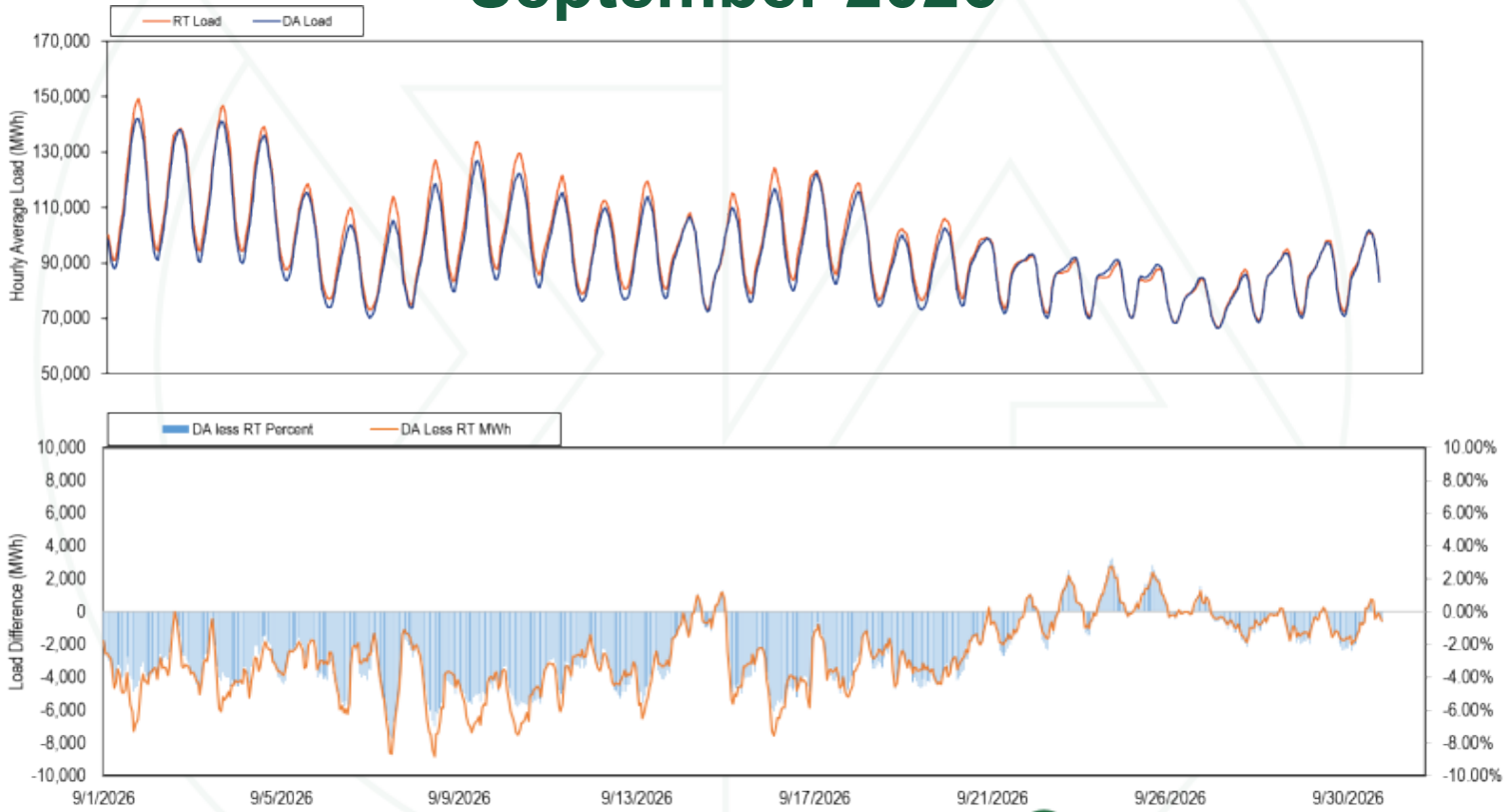
	2025				2026			
	Off Peak	On Peak	Difference	Percent Difference	Off Peak	On Peak	Difference	Percent Difference
Jan	$55.29	$70.54	$15.25	27.6%	$127.59	$102.73	($24.86)	(19.5%)
Feb	$43.75	$54.12	$10.37	23.7%	$106.39	$79.83	($26.56)	(25.0%)
Mar	$38.89	$45.68	$6.79	17.5%	$38.30	$53.85	$15.55	40.6%
Apr	$38.15	$52.08	$13.93	36.5%	$38.77	$57.19	$18.42	47.5%
May	$27.32	$45.53	$18.21	66.7%	$37.27	$77.10	$39.83	106.9%
Jun	$39.62	$94.51	$54.89	138.5%	$38.86	$81.82	$42.96	110.5%
Jul	$39.08	$77.77	$38.68	99.0%	$47.27	$147.73	$100.46	212.5%
Aug	$29.15	$49.92	$20.77	71.2%	$39.88	$65.60	$25.72	64.5%
Sep	$34.41	$52.55	$18.14	52.7%	$45.18	$117.78	$72.61	160.7%
Oct	$41.55	$59.43	$17.88	43.0%				
Nov	$40.52	$55.12	$14.59	36.0%				
Dec	$49.92	$60.68	$10.76	21.6%				

DA vs RT Load Bidding Difference History



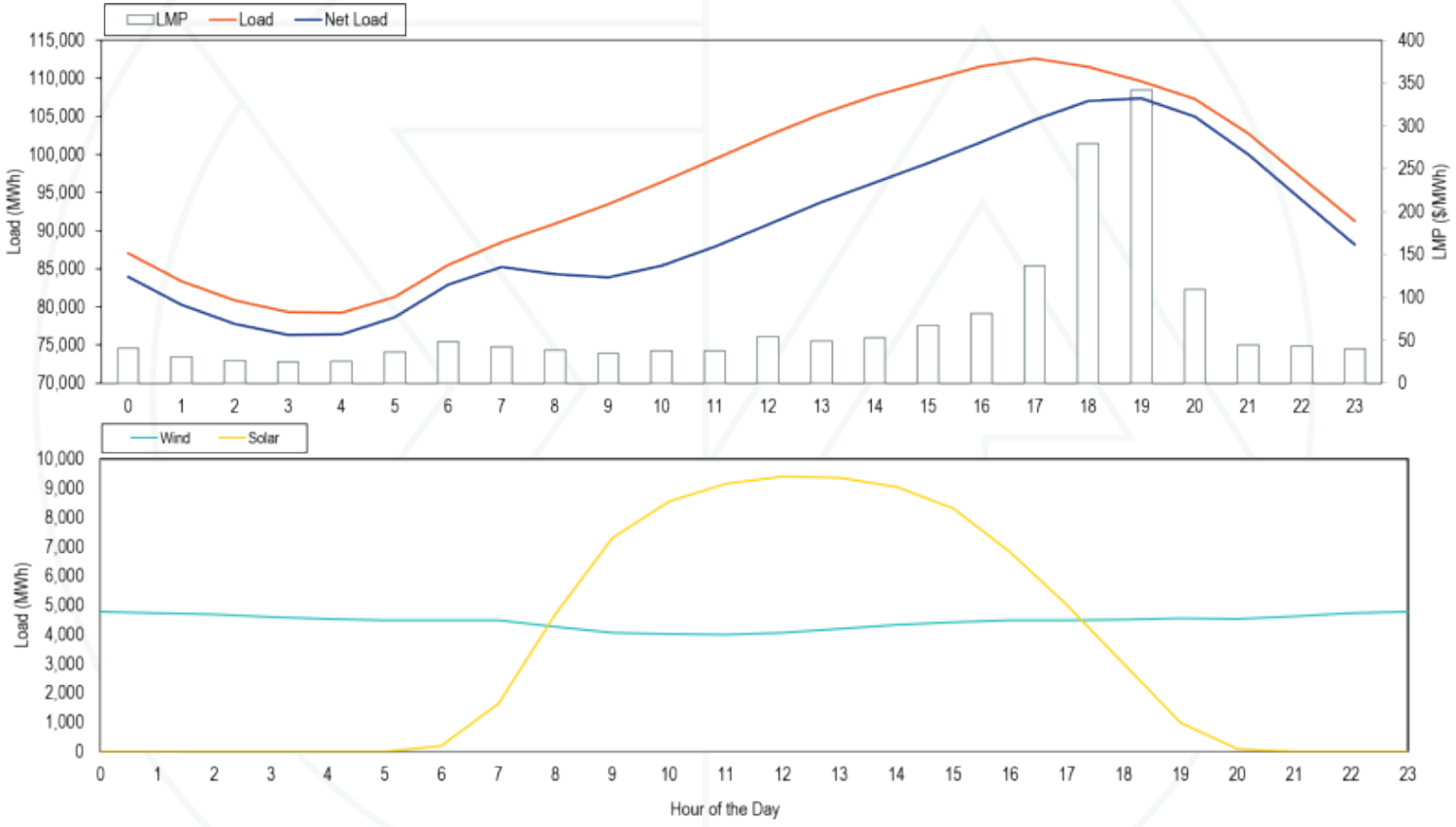
Monitoring Analytics

DA vs RT Hourly Load Bidding Difference, September 2026



Monitoring Analytics

Hourly Average Net Load September 2026



Monitoring Analytics

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.**
  - **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**

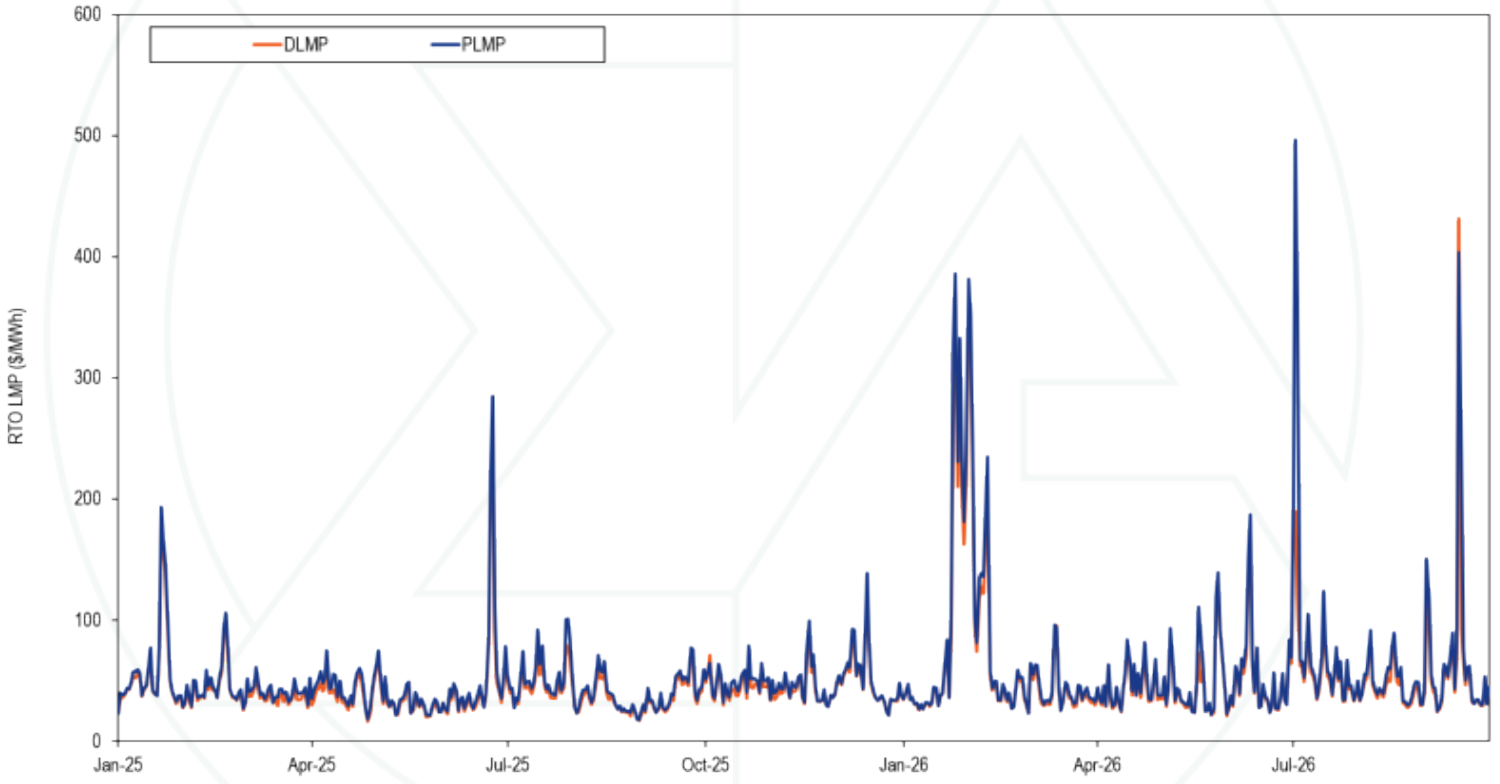
Monthly Average Load-Weighted DLMP and PLMP

		Day-Ahead Load-Weighted				Real-Time Load-Weighted			
Year	Month	DLMP	PLMP	Difference	Percent Difference	DLMP	PLMP	Difference	Percent Difference
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	Jan-Sep	$49.81	$49.88	$0.07	0.1%	$46.34	$50.51	$4.17	9.0%
2025		$50.61	$50.70	$0.09	0.2%	$46.79	$50.73	$3.93	8.4%
2026	Jan	$163.50	$148.80	($14.70)	(9.0%)	$106.94	$115.98	$9.04	8.5%
2026	Feb	$83.61	$83.95	$0.34	0.4%	$86.43	$93.41	$6.98	8.1%
2026	Mar	$42.07	$42.21	$0.14	0.3%	$43.35	$46.14	$2.79	6.4%
2026	Apr	$45.70	$45.95	$0.24	0.5%	$45.41	$48.46	$3.05	6.7%
2026	May	$48.75	$48.67	($0.08)	(0.2%)	$50.09	$56.00	$5.91	11.8%
2026	Jun	$56.92	$57.14	$0.22	0.4%	$58.59	$61.76	$3.17	5.4%
2026	Jul	$94.44	$94.57	$0.13	0.1%	$72.82	$102.03	$29.21	40.1%
2026	Aug	$50.29	$50.62	$0.32	0.6%	$47.93	$52.71	$4.78	10.0%
2026	Sep	$62.96	$63.20	$0.24	0.4%	$71.93	$82.39	$10.46	14.5%
2026	Jan-Sep	$74.39	$72.73	($1.66)	(2.2%)	$66.07	$74.98	$8.90	13.5%

Real-Time Fast Start Impact

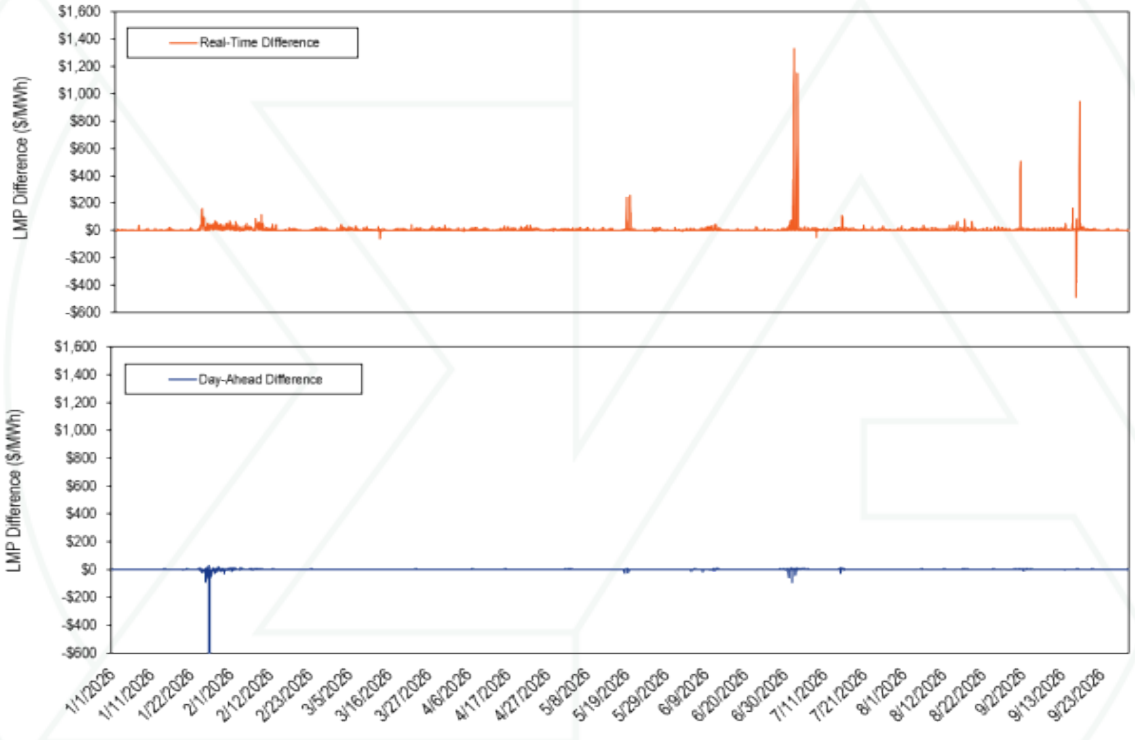
Month	2023 (In Millions)	2024 (In Millions)	2025 (In Millions)	2026 (In Millions)
Jan	$72.89	$142.06	$232.11	$719.05
Feb	$33.74	$103.17	$173.03	$483.95
Mar	$53.11	$172.59	$266.16	$179.45
Apr	$121.28	$217.50	$306.90	$179.42
May	$143.80	$272.73	$138.96	$366.86
Jun	$98.31	$98.74	$402.22	$223.59
Jul	$217.56	$238.39	$578.75	$2,393.42
Aug	$112.21	$142.81	$257.33	$374.47
Sep	$137.94	$153.65	$95.35	$726.49
Oct	$239.25	$116.28	$221.30	
Nov	$152.91	$149.38	$201.99	
Dec	$104.53	$95.35	$206.05	
Total	$1,487.52	$1,902.66	$3,080.15	

Daily Average Real-Time DLMP and PLMP



Monitoring Analytics

Hourly Difference: PLMP – DLMP



This figure truncates a negative DA DLMP/PLMP difference of -$5,060 per MWh on 1/27/2026 at 0700.

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
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	Jan-Sep	1.4%	1.1%	0.1%	0.0%	2.7%	6.0%	1.9%	0.1%	0.0%	8.0%
2025		1.4%	0.8%	0.2%	0.0%	2.4%	5.7%	1.5%	0.1%	0.0%	7.4%
2026	Jan	1.0%	0.2%	0.3%	0.0%	1.6%	5.9%	0.7%	0.2%	0.0%	6.8%
2026	Feb	1.5%	0.6%	0.9%	0.0%	3.0%	6.3%	1.3%	0.8%	0.0%	8.5%
2026	Mar	0.7%	0.4%	0.2%	0.1%	1.4%	3.0%	0.6%	0.1%	0.1%	3.8%
2026	Apr	1.1%	0.5%	0.5%	0.0%	2.2%	4.2%	1.2%	0.4%	0.0%	5.8%
2026	May	0.9%	0.5%	0.4%	0.1%	1.9%	4.2%	1.2%	0.4%	0.1%	6.0%
2026	Jun	1.0%	0.4%	0.2%	0.2%	1.9%	3.6%	0.9%	0.2%	0.2%	4.9%
2026	Jul	2.0%	0.7%	0.1%	0.5%	3.3%	8.9%	1.2%	0.1%	0.4%	10.6%
2026	Aug	1.5%	1.0%	0.0%	0.4%	2.9%	6.6%	2.0%	0.0%	0.4%	9.1%
2026	Sep	1.2%	4.1%	0.0%	0.1%	5.3%	4.0%	4.7%	0.0%	0.0%	8.7%
2026	Jan-Sep	1.2%	0.9%	0.3%	0.2%	2.6%	5.2%	1.5%	0.3%	0.1%	7.1%

Fast Start Impacts: Zone Average Differences

	2026 Jan - Sep							
	Day-Ahead				Real-Time			
Zone	Average DLMP	Average PLMP	Difference	Percent Difference	Average DLMP	Average PLMP	Difference	Percent Difference
ACEC	$52.92	$53.00	$0.08	0.2%	$45.93	$52.16	$6.23	13.6%
AEP	$59.56	$59.55	($0.01)	(0.0%)	$54.67	$61.12	$6.45	11.8%
APS	$73.62	$71.23	($2.38)	(3.2%)	$65.46	$72.74	$7.28	11.1%
ATSI	$57.00	$57.30	$0.31	0.5%	$51.53	$58.05	$6.52	12.6%
BGE	$101.27	$93.44	($7.83)	(7.7%)	$83.43	$92.17	$8.74	10.5%
COMED	$43.58	$43.99	$0.40	0.9%	$35.36	$40.50	$5.14	14.5%
DAY	$62.07	$62.15	$0.08	0.1%	$56.15	$62.90	$6.75	12.0%
DUKE	$62.40	$62.53	$0.12	0.2%	$56.66	$63.55	$6.89	12.2%
DOM	$89.60	$86.98	($2.62)	(2.9%)	$86.89	$94.63	$7.74	8.9%
DPL	$58.75	$58.89	$0.15	0.3%	$50.14	$57.85	$7.71	15.4%
DUQ	$55.25	$55.74	$0.49	0.9%	$50.25	$56.79	$6.54	13.0%
EKPC	$58.25	$58.27	$0.02	0.0%	$52.63	$58.93	$6.30	12.0%
JCPLC	$53.98	$53.94	($0.03)	(0.1%)	$46.93	$53.19	$6.26	13.3%
MEC	$53.27	$53.01	($0.27)	(0.5%)	$46.54	$52.79	$6.25	13.4%
OVEC	$57.75	$57.90	$0.15	0.3%	$51.45	$57.83	$6.38	12.4%
PECO	$51.70	$51.78	$0.08	0.2%	$45.00	$51.09	$6.08	13.5%
PE	$58.63	$58.49	($0.13)	(0.2%)	$51.01	$57.63	$6.62	13.0%
PEPCO	$98.16	$90.34	($7.82)	(8.0%)	$82.00	$90.49	$8.48	10.3%
PPL	$51.21	$51.03	($0.18)	(0.4%)	$44.52	$50.57	$6.06	13.6%
PSEG	$54.34	$54.37	$0.02	0.0%	$47.69	$53.94	$6.25	13.1%
REC	$56.19	$56.27	$0.08	0.1%	$50.24	$56.54	$6.30	12.5%

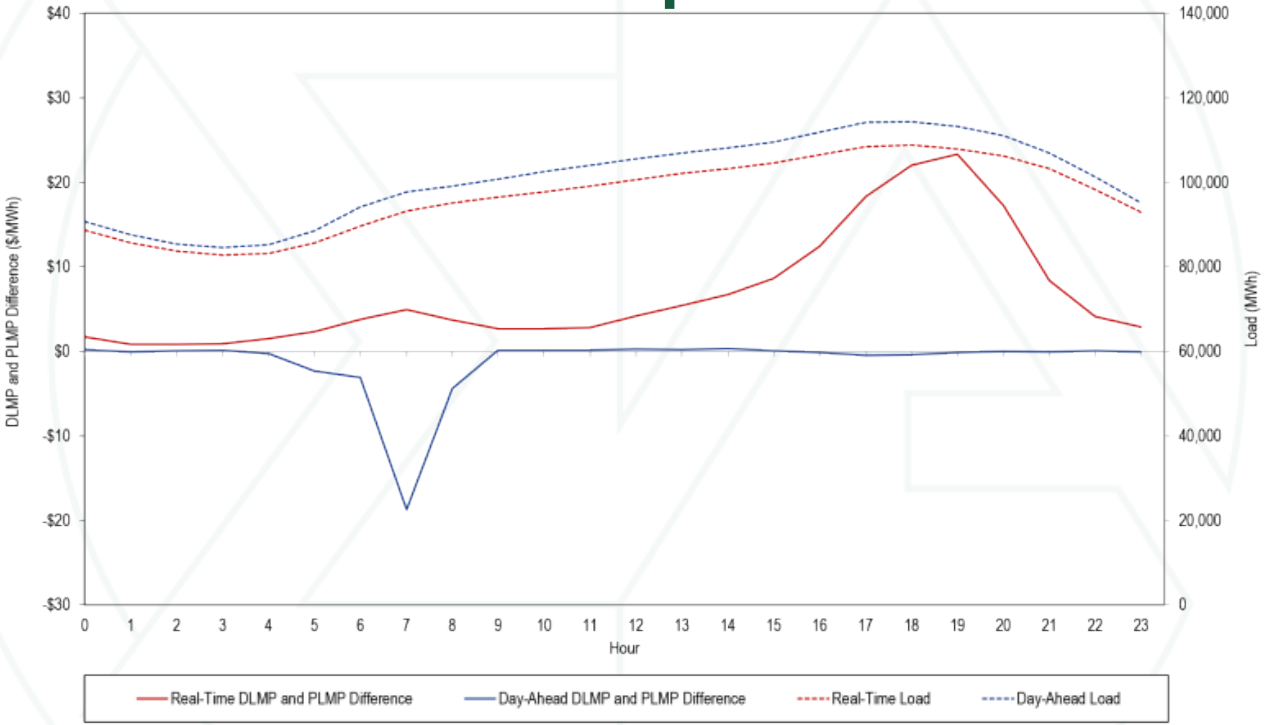
Fast Start Impacts: Hub Average Differences

	2026 Jan - Sep							
	Day-Ahead				Real-Time			
Hub	Average DLMP	Average PLMP	Difference	Percent Difference	Average DLMP	Average PLMP	Difference	Percent Difference
AEP GEN HUB	$48.48	$48.62	$0.14	0.3%	$43.43	$47.86	$4.43	10.2%
AEP-DAYTON HUB	$50.61	$50.69	$0.08	0.2%	$45.48	$50.11	$4.63	10.2%
ATSI GEN HUB	$49.54	$49.71	$0.17	0.3%	$44.37	$48.99	$4.63	10.4%
CHICAGO GEN HUB	$38.84	$39.06	$0.22	0.6%	$33.36	$37.18	$3.82	11.4%
CHICAGO HUB	$39.69	$39.91	$0.22	0.5%	$34.07	$37.91	$3.84	11.3%
DOMINION HUB	$60.60	$59.86	($0.74)	(1.2%)	$56.58	$61.68	$5.10	9.0%
EASTERN HUB	$50.81	$50.95	$0.14	0.3%	$45.18	$50.58	$5.40	11.9%
N ILLINOIS HUB	$39.51	$39.73	$0.22	0.6%	$34.05	$37.88	$3.83	11.3%
NEW JERSEY HUB	$47.11	$47.16	$0.06	0.1%	$42.41	$46.74	$4.33	10.2%
OHIO HUB	$50.58	$50.67	$0.10	0.2%	$45.48	$50.11	$4.63	10.2%
WEST INT HUB	$54.53	$54.36	($0.18)	(0.3%)	$49.77	$54.60	$4.84	9.7%
WESTERN HUB	$61.34	$59.91	($1.42)	(2.3%)	$53.90	$59.18	$5.28	9.8%

Zonal Real-Time PLMP-DLMP Difference Frequency

	2026 Jan - Sep									
Zone	< ($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%	47.9%	38.7%	6.6%	4.1%	1.0%	0.3%	0.4%
ACEC	0.0%	0.1%	4.6%	48.4%	37.2%	4.1%	3.7%	1.1%	0.4%	0.3%
AEP	0.0%	0.0%	1.8%	48.0%	37.6%	6.8%	4.0%	1.0%	0.3%	0.4%
APS	0.0%	0.1%	1.3%	47.9%	37.4%	6.9%	4.4%	1.3%	0.4%	0.4%
ATSI	0.0%	0.0%	1.7%	47.9%	38.2%	6.7%	3.9%	0.9%	0.3%	0.4%
BGE	0.1%	0.4%	3.4%	47.8%	33.3%	6.9%	5.6%	1.5%	0.5%	0.5%
COMED	0.1%	0.2%	4.8%	48.7%	36.8%	5.4%	2.8%	0.7%	0.2%	0.3%
DAY	0.0%	0.1%	1.7%	48.0%	37.2%	7.0%	4.2%	1.0%	0.3%	0.4%
DUKE	0.0%	0.1%	1.8%	48.1%	36.9%	7.1%	4.2%	1.1%	0.3%	0.4%
DOM	0.1%	0.2%	2.9%	48.0%	35.1%	7.0%	4.6%	1.3%	0.4%	0.5%
DPL	0.0%	0.2%	5.9%	48.4%	34.9%	3.9%	3.5%	1.6%	1.2%	0.4%
DUQ	0.0%	0.1%	1.6%	47.9%	38.2%	6.7%	3.9%	1.0%	0.3%	0.4%
EKPC	0.0%	0.1%	1.9%	48.1%	37.7%	6.8%	4.0%	0.9%	0.3%	0.4%
JCPLC	0.0%	0.0%	3.2%	48.3%	38.6%	4.2%	3.7%	1.1%	0.4%	0.3%
MEC	0.0%	0.4%	6.5%	48.0%	35.1%	4.3%	3.7%	1.2%	0.4%	0.4%
OVEC	0.0%	0.1%	1.9%	48.1%	37.5%	6.8%	4.0%	0.9%	0.3%	0.4%
PECO	0.0%	0.1%	5.3%	48.4%	36.5%	4.1%	3.7%	1.1%	0.4%	0.3%
PE	0.0%	0.1%	1.4%	47.9%	39.4%	5.5%	3.9%	1.1%	0.4%	0.4%
PEPCO	0.1%	0.3%	3.1%	47.9%	34.2%	7.0%	5.1%	1.4%	0.5%	0.5%
PPL	0.0%	0.2%	6.0%	48.0%	36.2%	4.1%	3.6%	1.1%	0.4%	0.4%
PSEG	0.0%	0.0%	2.9%	48.3%	38.8%	4.2%	3.8%	1.1%	0.4%	0.3%
REC	0.0%	0.1%	2.7%	48.0%	39.0%	4.4%	3.9%	1.1%	0.4%	0.3%

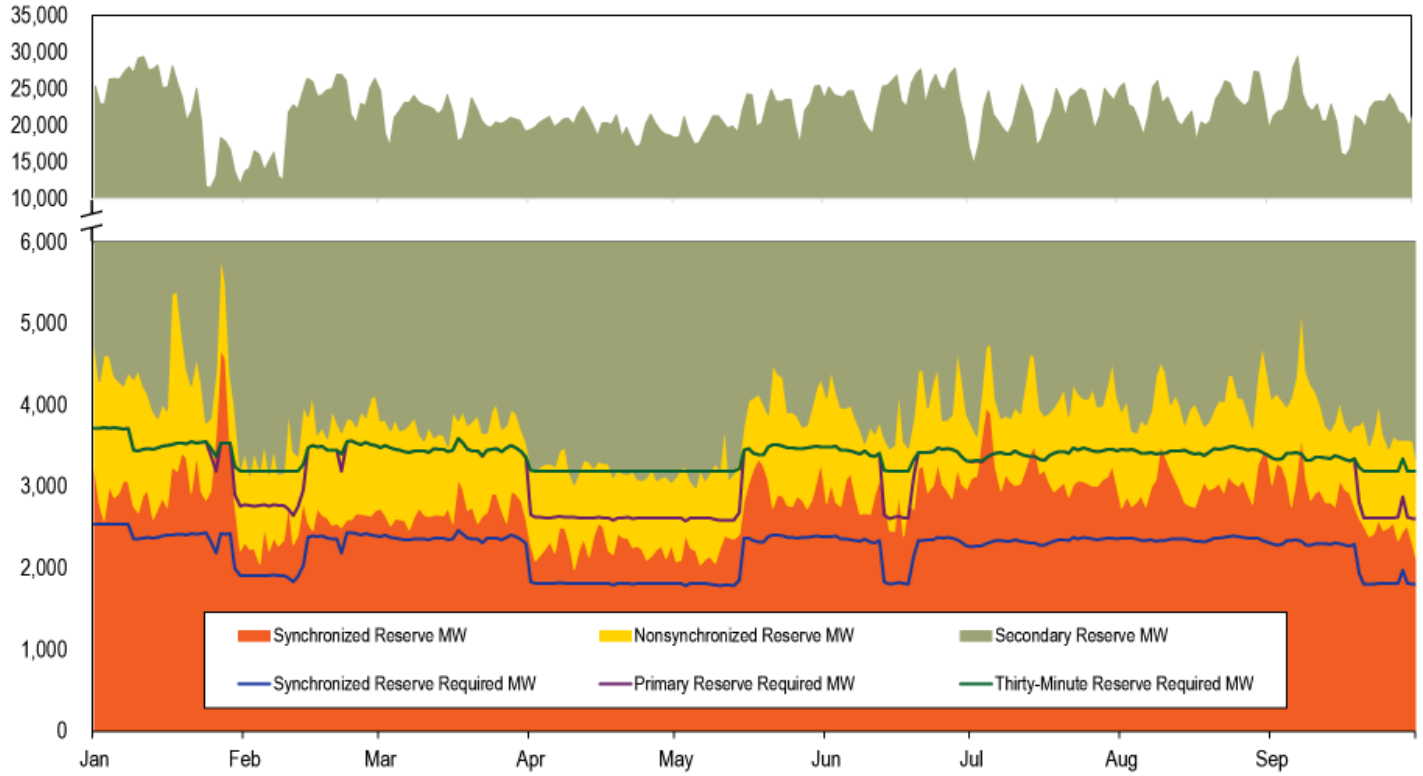
Hourly Average Load and PLMP – DLMP Delta Jan – Sep 2026



The negative DA DLMP/DA PLMP spread occurred on 1/27/2026 at 0700.

RESERVES

Real-Time Daily RTO Average Cleared Reserves and Requirements



Monitoring Analytics

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
2026	Jan	2,612	3,081	1,418	1,322	4,030	4,403	10,210	18,364	14,240	22,768
2026	Feb	2,329	2,503	1,111	1,147	3,440	3,649	10,764	17,510	14,204	21,160
2026	Mar	2,641	2,706	1,008	1,049	3,649	3,754	11,646	17,539	15,295	21,293
2026	Apr	1,998	2,275	889	934	2,888	3,209	9,738	16,787	12,626	19,996
2026	May	2,380	2,636	914	1,036	3,294	3,672	11,082	17,556	14,376	21,228
2026	Jun	2,521	2,900	901	1,053	3,422	3,953	13,419	20,349	16,841	24,301
2026	Jul	2,792	3,169	802	945	3,594	4,114	11,501	17,589	15,094	21,703
2026	Aug	2,794	3,013	843	1,038	3,637	4,051	11,835	18,901	15,472	22,952
2026	Sep	2,456	2,790	866	1,112	3,322	3,902	11,193	17,979	14,515	21,881

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
2026	Jan	1,991	2,048	1,077	960	3,069	3,008	NA	NA	NA	NA
2026	Feb	1,990	1,983	888	879	2,878	2,862	NA	NA	NA	NA
2026	Mar	1,956	1,963	783	790	2,739	2,753	NA	NA	NA	NA
2026	Apr	1,735	1,691	676	702	2,411	2,393	NA	NA	NA	NA
2026	May	1,810	1,766	729	805	2,539	2,571	NA	NA	NA	NA
2026	Jun	1,989	1,943	740	816	2,728	2,759	NA	NA	NA	NA
2026	Jul	2,001	2,020	684	765	2,686	2,785	NA	NA	NA	NA
2026	Aug	2,037	1,947	717	811	2,755	2,759	NA	NA	NA	NA
2026	Sep	1,817	1,751	650	745	2,467	2,496	NA	NA	NA	NA

Total Reserve Settlements by Month

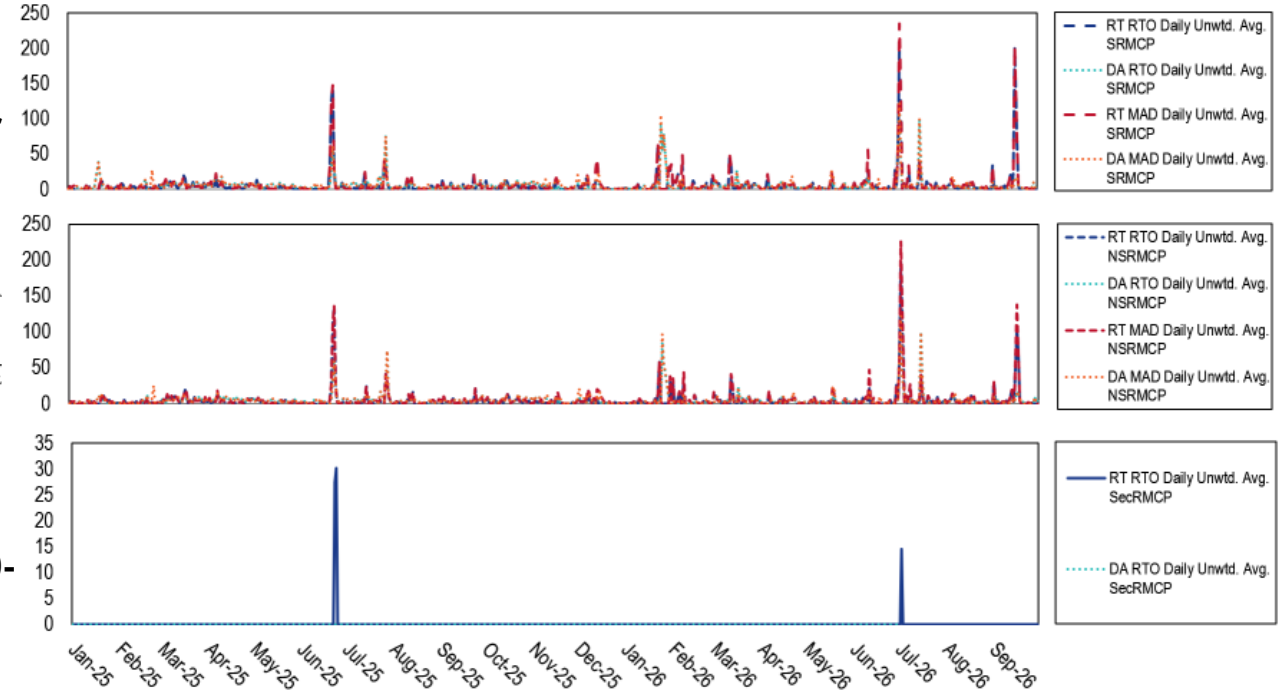
		Total Day-Ahead Credits			Total Balancing MCP Credits			Total LOC Credits		
Year	Month	SR	NSR	SecR	SR	NSR	SecR	SR	NSR	SecR
2026	Jan	$23,153,558	$2,369,695	$0	($231,344)	($2,046,579)	$0	$2,992,174	$123,066	$1,635,470
2026	Feb	$4,348,346	$585,493	$0	($1,100,363)	($729,174)	$0	$3,668,966	$135,868	$1,821,211
2026	Mar	$13,523,239	$2,041,630	$0	($1,974,988)	($775,305)	$0	$3,046,572	$158,641	$978,339
2026	Apr	$5,949,493	$811,720	$0	($407,185)	($194,360)	$0	$1,684,096	$61,152	$846,797
2026	May	$7,207,222	$1,013,798	$0	($391,748)	($121,370)	$0	$1,773,711	$43,605	$650,004
2026	Jun	$6,372,683	$1,034,841	$0	($1,142,562)	$81,885	$0	$2,134,274	$27,060	$583,407
2026	Jul	$29,308,496	$3,580,495	$181,607	($2,172,677)	($3,000,470)	$87,456	$11,077,376	$60,493	$2,799,722
2026	Aug	$7,255,040	$1,045,322	$0	($557,415)	$80,603	$0	$1,874,516	$25,756	$748,387
2026	Sep	$7,340,473	$1,103,491	$0	($5,766,265)	($18,037)	$0	$6,769,013	$80,462	$1,487,797

		Total Shortfall Charges			Total Credits		
Year	Month	SR	NSR	SecR	SR	NSR	SecR
2026	Jan	$0	NA	$0	$25,914,389	$446,182	$1,635,470
2026	Feb	$0	NA	$0	$6,916,949	($7,814)	$1,821,211
2026	Mar	$299,649	NA	$0	$14,295,174	$1,424,966	$978,339
2026	Apr	$0	NA	$0	$7,226,404	$678,513	$846,797
2026	May	$0	NA	$0	$8,589,185	$936,032	$650,004
2026	Jun	$0	NA	$0	$7,364,395	$1,143,786	$583,407
2026	Jul	$0	NA	$0	$38,213,194	$640,518	$3,068,786
2026	Aug	$0	NA	$0	$8,572,142	$1,151,681	$748,387
2026	Sep	$0	NA	$0	$8,343,221	$1,165,917	$1,487,797

- **High day-ahead synchronized reserve (SR) credits during Winter Storm Fern and during hot weather in July.**
- **Only March saw an SR event at least 10 minutes long, so only March has SR shortfall charges.**

Reserve Prices: January 2025 through September 2026

- SecRMCP spiked in June 2025 hot weather event.
- Spikes due to intervals of shortage pricing during Winter Storm Fern in January 2026.
- Spikes on February 9th, March 13th, May 18th, and June 29th, 2026, due to shortage pricing.
- RT SecRMCP spiked on July 2nd, 2026, but 30-minute Reserve was not short in RT SCED.
- DA SecRMCP spiked on July 2nd and 15th. The cleared DA 30-minute Reserve equaled the requirement.
- Spikes on September 16th and 17th during hotter weather.



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