

MARKET SUMMARY REPORT

November 2023

UNDERSTANDING THIS MARKET SNAPSHOT

Use the information in this report to identify trends and movements affecting electricity in the MWNE market to make informed energy decisions. Here are a few quick tips:

- **Power prices** are determined from forward Heat Rate and natural gas strips for a specific timeframe. *Power Price = Heat Rate x Natural Gas Price*. Power prices can change based on electricity supply and demand, which is driven by factors such as weather, the economy, available generation and grid conditions.
- **Natural Gas** prices are a key driver of power prices because natural gas fuels the power plants that are brought online primarily to satisfy peak demand.

Heat Rates are the common measure of power plant efficiency and are derived from power and natural gas prices: Heat Rate = Power Price ÷ Natural Gas Price. Heat rates are typically higher when gas prices are lower. Heat rates are impacted by weather, regulatory changes, consumer demand and power plant retirements.



DAY-AHEAD LMP MONTHLY AVERAGES (\$/MWH)

										РЈМ									MISO
Date	AECO	AEPOHIO	APS	BGE	COMED	DAY	DEOK	DPL	DUQ	FEOHIO	JCPL	METED	PECO	PENELEC	PENNPOWER	PPL	PSEG	UGI	AMEREN
11/1/2023	\$26.86	\$31.74	\$36.53	\$40.61	\$24.81	\$32.93	\$32.14	\$25.48	\$40.63	\$30.02	\$28.06	\$32.94	\$25.41	\$33.71	\$29.29	\$30.66	\$27.83	\$28.23	\$31.28
10/1/2023	\$22.13	\$35.74	\$38.25	\$44.83	\$30.29	\$36.05	\$35.48	\$19.00	\$37.15	\$36.29	\$24.13	\$32.14	\$20.20	\$33.10	\$36.32	\$27.97	\$23.97	\$24.96	\$31.90
9/1/2023	\$19.90	\$29.54	\$30.71	\$40.44	\$27.56	\$30.62	\$30.19	\$25.91	\$28.70	\$29.17	\$20.51	\$21.62	\$19.23	\$27.43	\$27.90	\$19.28	\$20.84	\$17.72	\$30.66
8/1/2023	\$19.72	\$30.03	\$29.53	\$38.97	\$29.72	\$31.36	\$31.02	\$26.71	\$28.27	\$28.84	\$20.06	\$20.42	\$19.27	\$25.85	\$27.64	\$19.25	\$20.18	\$18.38	\$33.67
7/1/2023	\$31.47	\$36.37	\$36.98	\$44.59	\$35.27	\$37.64	\$37.11	\$45.90	\$35.86	\$36.61	\$31.23	\$31.14	\$30.84	\$36.09	\$35.37	\$29.54	\$31.30	\$27.69	\$36.05
6/1/2023	\$18.78	\$27.42	\$27.47	\$33.27	\$25.79	\$28.93	\$28.95	\$18.27	\$26.08	\$26.61	\$19.75	\$22.20	\$17.86	\$24.77	\$25.64	\$20.48	\$19.75	\$18.70	\$29.21
5/1/2023	\$18.40	\$30.85	\$30.45	\$35.89	\$23.58	\$32.89	\$32.63	\$16.34	\$29.67	\$29.19	\$20.12	\$24.85	\$16.83	\$26.49	\$29.10	\$22.55	\$20.00	\$20.47	\$28.77
4/1/2023	\$23.91	\$30.57	\$30.71	\$35.23	\$18.67	\$31.57	\$31.09	\$24.03	\$30.33	\$30.55	\$24.35	\$25.43	\$23.63	\$28.25	\$30.05	\$23.89	\$24.38	\$24.04	\$25.17
3/1/2023	\$24.65	\$29.10	\$29.02	\$32.25	\$22.88	\$30.33	\$30.06	\$24.47	\$28.30	\$29.11	\$25.24	\$26.71	\$23.70	\$27.59	\$28.07	\$25.71	\$25.25	\$24.64	\$27.21
2/1/2023	\$28.79	\$28.60	\$30.31	\$35.45	\$24.74	\$29.55	\$28.61	\$32.15	\$27.61	\$28.41	\$28.90	\$30.38	\$27.92	\$30.95	\$26.94	\$28.90	\$30.22	\$27.46	\$27.64
1/1/2023	\$31.16	\$37.39	\$38.26	\$41.75	\$32.64	\$38.20	\$37.11	\$31.17	\$36.51	\$37.26	\$31.72	\$36.68	\$29.61	\$37.10	\$35.90	\$32.60	\$32.30	\$31.12	\$35.02
12/1/2022	\$87.61	\$83.47	\$86.71	\$100.68	\$63.14	\$86.52	\$84.30	\$94.69	\$81.41	\$84.18	\$88.18	\$93.82	\$85.79	\$84.48	\$80.15	\$89.08	\$88.61	\$80.91	\$63.63
11/1/2022	\$43.35	\$53.96	\$54.65	\$61.44	\$45.03	\$55.80	\$54.89	\$46.77	\$52.88	\$52.88	\$44.14	\$52.46	\$41.24	\$51.73	\$52.00	\$48.22	\$44.16	\$42.77	\$47.94
10/1/2022	\$45.70	\$60.78	\$59.82	\$67.68	\$48.61	\$62.12	\$61.17	\$52.73	\$58.79	\$59.53	\$47.74	\$55.53	\$43.65	\$55.58	\$58.26	\$51.77	\$47.59	\$46.47	\$51.80
9/1/2022	\$63.01	\$79.54	\$79.58	\$94.73	\$71.99	\$82.74	\$81.18	\$62.28	\$76.43	\$77.70	\$64.37	\$76.53	\$61.05	\$75.06	\$75.91	\$70.28	\$64.78	\$63.40	\$77.88
8/1/2022	\$94.33	\$94.65	\$95.18	\$111.54	\$90.60	\$98.35	\$95.97	\$105.70	\$91.34	\$93.70	\$93.17	\$116.36	\$94.89	\$92.28	\$90.68	\$103.68	\$92.81	\$85.65	\$93.81
7/1/2022	\$82.70	\$89.32	\$89.50	\$102.06	\$83.21	\$91.91	\$90.19	\$92.39	\$87.41	\$88.34	\$82.77	\$91.93	\$81.58	\$85.47	\$86.47	\$86.84	\$82.79	\$78.24	\$86.29
6/1/2022	\$64.35	\$89.28	\$85.63	\$99.49	\$82.46	\$90.90	\$90.38	\$62.64	\$85.06	\$85.73	\$66.54	\$77.25	\$61.72	\$77.94	\$86.43	\$72.67	\$66.64	\$65.42	\$88.08
5/1/2022	\$62.54	\$78.44	\$78.75	\$90.42	\$67.16	\$80.48	\$79.42	\$62.17	\$76.44	\$77.31	\$64.34	\$77.34	\$60.89	\$72.34	\$75.55	\$70.96	\$64.19	\$62.91	\$78.81
4/1/2022	\$55.64	\$66.19	\$66.19	\$72.76	\$50.08	\$67.99	\$66.70	\$55.45	\$64.88	\$66.30	\$57.08	\$62.27	\$54.42	\$63.05	\$64.69	\$59.38	\$57.15	\$57.40	\$61.33
3/1/2022	\$39.85	\$45.56	\$45.86	\$50.06	\$38.09	\$47.03	\$46.34	\$42.86	\$44.20	\$45.88	\$41.09	\$43.61	\$39.51	\$44.53	\$44.85	\$41.72	\$41.45	\$39.17	\$41.07
2/1/2022	\$46.61	\$47.49	\$49.78	\$56.68	\$38.97	\$48.90	\$47.31	\$55.57	\$46.69	\$48.26	\$48.15	\$52.81	\$47.37	\$50.08	\$46.46	\$49.85	\$51.38	\$42.42	\$46.06
1/1/2022	\$67.61	\$53.50	\$60.89	\$72.09	\$43.91	\$56.11	\$54.98	\$73.49	\$50.86	\$53.31	\$70.38	\$76.47	\$67.17	\$69.96	\$50.46	\$67.91	\$76.18	\$50.65	\$46.23
12/1/2021	\$28.44	\$37.27	\$38.09	\$42.85	\$31.05	\$38.92	\$38.80	\$43.99	\$35.70	\$36.93	\$31.76	\$40.13	\$31.98	\$39.45	\$35.45	\$35.75	\$32.15	\$30.89	\$37.97

	РЈМ																	MISO	
Delta From	AECO	AEPOHIO	APS	BGE	COMED	DAY	DEOK	DPL	DUQ	FEOHIO	JCPL	METED	PECO	PENELEC	PENNPOWER	PPL	PSEG	UGI	AMEREN
2-Weeks Ago	\$5.06	(\$3.82)	(\$1.54)	(\$4.21)	(\$5.38)	(\$2.89)	(\$3.13)	\$6.82	\$3.53	(\$6.13)	\$4.24	\$1.25	\$5.50	\$0.78	(\$6.92)	\$3.11	\$4.17	\$3.56	(\$0.22)
1-Month Ago	\$4.73	(\$3.99)	(\$1.71)	(\$4.21)	(\$5.48)	(\$3.12)	(\$3.34)	\$6.48	\$3.48	(\$6.27)	\$3.93	\$0.81	\$5.21	\$0.61	(\$7.03)	\$2.69	\$3.86	\$3.27	(\$0.61)
3-Months Ago	\$7.14	\$1.72	\$7.00	\$1.65	(\$4.91)	\$1.57	\$1.12	(\$1.23)	\$12.35	\$1.19	\$8.00	\$12.52	\$6.14	\$7.86	\$1.65	\$11.41	\$7.66	\$9.85	(\$2.38)
6-Months Ago	\$8.46	\$0.89	\$6.08	\$4.72	\$1.23	\$0.04	(\$0.49)	\$9.14	\$10.96	\$0.83	\$7.95	\$8.10	\$8.58	\$7.23	\$0.19	\$8.11	\$7.83	\$7.77	\$2.52
1-Year Ago	(\$16.49)	(\$22.22)	(\$18.12)	(\$20.82)	(\$20.22)	(\$22.86)	(\$22.75)	(\$21.29)	(\$12.25)	(\$22.86)	(\$16.08)	(\$19.51)	(\$15.83)	(\$18.02)	(\$22.71)	(\$17.56)	(\$16.32)	(\$14.54)	(\$16.66)



REAL-TIME LMP MONTHLY AVERAGES (\$/MWH)

										РЈМ									MISO
Date	AECO	AEPOHIO	APS	BGE	COMED	DAY	DEOK	DPL	DUQ	FEOHIO	JCPL	METED	PECO	PENELEC	PENNPOWER	PPL	PSEG	UGI	AMEREN
11/1/2023	\$27.10	\$30.72	\$36.46	\$39.73	\$24.66	\$32.18	\$31.43	\$25.31	\$43.81	\$29.04	\$28.29	\$32.40	\$25.79	\$33.83	\$28.69	\$30.14	\$28.04	\$28.85	\$30.14
10/1/2023	\$20.66	\$34.31	\$37.56	\$45.73	\$28.91	\$34.37	\$33.93	\$16.46	\$36.40	\$35.37	\$22.88	\$31.24	\$18.67	\$32.69	\$35.95	\$27.52	\$22.70	\$24.18	\$33.46
9/1/2023	\$21.30	\$29.41	\$30.73	\$40.34	\$26.46	\$30.21	\$29.94	\$23.54	\$29.56	\$30.05	\$22.26	\$21.97	\$20.54	\$30.09	\$29.00	\$19.72	\$22.83	\$18.64	\$31.32
8/1/2023	\$19.48	\$30.34	\$30.28	\$40.85	\$30.04	\$32.04	\$31.45	\$28.59	\$28.30	\$28.73	\$19.97	\$20.82	\$19.16	\$25.88	\$27.62	\$19.43	\$20.30	\$18.25	\$32.66
7/1/2023	\$29.44	\$34.00	\$34.40	\$41.27	\$33.21	\$34.84	\$34.06	\$47.79	\$33.44	\$34.34	\$29.33	\$29.02	\$28.87	\$34.86	\$32.96	\$27.44	\$29.78	\$25.37	\$33.31
6/1/2023	\$19.56	\$26.89	\$26.81	\$30.93	\$25.82	\$28.19	\$27.83	\$18.50	\$25.97	\$26.69	\$20.44	\$22.39	\$18.79	\$25.57	\$25.56	\$20.83	\$20.66	\$19.12	\$27.94
5/1/2023	\$17.24	\$29.86	\$29.84	\$35.78	\$21.73	\$32.69	\$32.60	\$14.22	\$28.87	\$28.52	\$19.18	\$26.14	\$15.53	\$26.02	\$28.40	\$22.85	\$19.05	\$20.17	\$27.36
4/1/2023	\$22.96	\$28.99	\$28.55	\$31.90	\$17.24	\$29.89	\$29.68	\$22.76	\$28.80	\$29.01	\$23.43	\$24.03	\$22.79	\$26.80	\$28.61	\$23.28	\$23.48	\$23.41	\$25.98
3/1/2023	\$24.07	\$28.60	\$28.13	\$30.60	\$23.70	\$30.08	\$29.80	\$23.10	\$27.72	\$28.45	\$24.57	\$25.73	\$23.07	\$27.10	\$27.47	\$24.81	\$24.57	\$24.30	\$26.34
2/1/2023	\$23.34	\$25.41	\$25.89	\$28.00	\$22.52	\$26.11	\$25.14	\$29.39	\$24.76	\$25.10	\$23.66	\$24.31	\$22.82	\$25.07	\$24.70	\$23.66	\$24.17	\$23.27	\$25.87
1/1/2023	\$31.83	\$35.93	\$36.91	\$38.48	\$32.48	\$36.78	\$35.84	\$31.27	\$35.37	\$35.53	\$32.02	\$36.38	\$30.62	\$35.45	\$35.09	\$32.30	\$32.26	\$31.74	\$34.29
12/1/2022	\$114.60	\$117.82	\$124.51	\$138.28	\$88.64	\$123.39	\$120.73	\$123.65	\$116.60	\$117.40	\$118.85	\$126.50	\$111.78	\$115.14	\$115.79	\$121.08	\$118.29	\$114.81	\$77.76
11/1/2022	\$42.10	\$50.61	\$50.92	\$56.61	\$43.68	\$52.40	\$51.71	\$42.75	\$50.24	\$50.20	\$42.53	\$48.53	\$39.72	\$48.71	\$49.57	\$45.33	\$42.45	\$42.53	\$44.62
10/1/2022	\$45.66	\$57.47	\$56.14	\$62.36	\$48.08	\$58.59	\$57.93	\$51.82	\$55.35	\$54.68	\$47.30	\$53.94	\$43.88	\$52.66	\$54.81	\$50.89	\$47.14	\$46.19	\$52.69
9/1/2022	\$58.12	\$74.83	\$75.32	\$91.24	\$69.31	\$77.60	\$76.09	\$55.39	\$72.22	\$72.91	\$59.72	\$69.79	\$55.75	\$69.56	\$71.28	\$64.45	\$59.88	\$59.77	\$75.04
8/1/2022	\$101.26	\$95.66	\$97.90	\$121.70	\$89.25	\$99.36	\$97.27	\$112.63	\$92.62	\$95.33	\$100.17	\$123.35	\$101.75	\$94.79	\$92.79	\$111.61	\$99.90	\$93.61	\$95.51
7/1/2022	\$78.86	\$86.50	\$85.81	\$98.86	\$79.32	\$89.07	\$87.26	\$95.85	\$83.09	\$83.94	\$79.19	\$89.00	\$78.54	\$81.49	\$82.26	\$83.49	\$78.93	\$76.27	\$84.85
6/1/2022	\$69.90	\$94.75	\$91.36	\$107.89	\$84.36	\$96.85	\$94.86	\$66.44	\$89.84	\$90.86	\$72.25	\$83.48	\$66.80	\$85.42	\$89.01	\$78.75	\$72.00	\$71.01	\$84.79
5/1/2022	\$59.80	\$75.49	\$73.59	\$84.56	\$65.99	\$77.83	\$76.25	\$57.95	\$73.27	\$73.54	\$61.35	\$70.40	\$57.99	\$67.11	\$73.00	\$66.05	\$61.32	\$60.60	\$77.13
4/1/2022	\$52.28	\$65.59	\$65.44	\$72.98	\$45.74	\$67.39	\$65.84	\$51.25	\$64.04	\$65.51	\$54.08	\$60.92	\$50.91	\$61.45	\$63.52	\$57.20	\$54.05	\$55.32	\$59.76
3/1/2022	\$38.94	\$44.05	\$43.81	\$46.83	\$36.53	\$45.67	\$45.08	\$41.95	\$42.77	\$44.15	\$39.72	\$40.92	\$38.22	\$42.79	\$43.40	\$39.69	\$40.13	\$38.84	\$41.49
2/1/2022	\$41.72	\$44.73	\$45.84	\$49.56	\$38.15	\$46.66	\$45.14	\$56.43	\$43.09	\$44.71	\$42.39	\$45.13	\$43.48	\$46.92	\$42.51	\$42.82	\$50.33	\$39.67	\$43.66
1/1/2022	\$82.06	\$50.87	\$62.73	\$81.23	\$39.98	\$53.07	\$50.87	\$86.60	\$48.48	\$51.04	\$86.42	\$84.86	\$80.95	\$67.20	\$49.38	\$73.77	\$91.71	\$55.06	\$46.00
12/1/2021	\$29.87	\$38.12	\$38.62	\$42.98	\$33.82	\$40.02	\$39.34	\$42.20	\$36.46	\$37.40	\$32.99	\$38.91	\$32.98	\$38.15	\$36.70	\$35.02	\$33.53	\$31.23	\$36.00

		PJM																MISO	
Delta From	AECO	AEPOHIO	APS	BGE	COMED	DAY	DEOK	DPL	DUQ	FEOHIO	JCPL	METED	PECO	PENELEC	PENNPOWER	PPL	PSEG	UGI	AMEREN
2-Weeks Ago	\$6.62	(\$3.87)	(\$1.50)	(\$6.92)	(\$4.81)	(\$2.41)	(\$2.75)	\$9.22	\$6.82	(\$6.75)	\$5.49	\$1.00	\$7.39	\$0.89	(\$7.77)	\$2.56	\$5.46	\$4.71	(\$2.93)
1-Month Ago	\$6.44	(\$3.60)	(\$1.10)	(\$5.99)	(\$4.25)	(\$2.19)	(\$2.50)	\$8.85	\$7.42	(\$6.33)	\$5.41	\$1.16	\$7.12	\$1.14	(\$7.26)	\$2.62	\$5.34	\$4.67	(\$3.33)
3-Months Ago	\$7.62	\$0.38	\$6.18	(\$1.11)	(\$5.38)	\$0.14	(\$0.02)	(\$3.28)	\$15.51	\$0.31	\$8.32	\$11.58	\$6.63	\$7.95	\$1.06	\$10.72	\$7.74	\$10.60	(\$2.52)
6-Months Ago	\$9.86	\$0.85	\$6.62	\$3.95	\$2.93	(\$0.51)	(\$1.17)	\$11.09	\$14.94	\$0.52	\$9.11	\$6.26	\$10.26	\$7.81	\$0.28	\$7.30	\$8.99	\$8.67	\$2.78
1-Year Ago	(\$15.00)	(\$19.89)	(\$14.46)	(\$16.87)	(\$19.02)	(\$20.22)	(\$20.28)	(\$17.44)	(\$6.43)	(\$21.16)	(\$14.24)	(\$16.13)	(\$13.93)	(\$14.88)	(\$20.88)	(\$15.18)	(\$14.41)	(\$13.69)	(\$14.48)



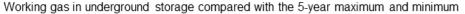
NYMEX **NATURAL GAS 12 MONTH PRICES**

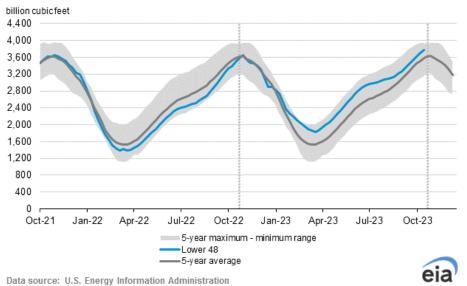
- The NYMEX Natural Gas 12-month strip finished the November 10th trading day at \$3.22/MMBtu.
- The 2023 average for the 12-month strip has been \$3.23/MMBtu.





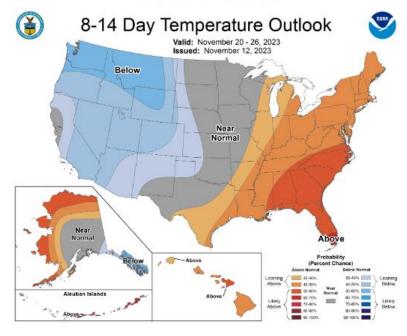
EIA NATURAL GAS STORAGE





- Working gas in storage was 3,779 Bcf as of Friday, October 27th, 2023
- An injection of 79 Bcf was within analyst's expectations
- Stocks are now 8.4% above this time last year and 5.7% above the 5-year average.

Temperature Probability







DYNEGY