

Weekly Headlines

- Load Growth
- Oil Production
- Holiday Lights!

POWER PRICING (\$/MWh)

Day-Ahead LMPs		Mon 12/11	Tue 12/12	Wed 12/13	Thu 12/14	Fri 12/15
PJM	On-Peak WESTERN HUB	\$49.30	\$48.57	\$39.39	\$38.21	\$32.49
	Off-Peak WESTERN HUB	\$36.39	\$55.26	\$38.11	\$41.64	\$35.13
	On-Peak N ILLINOIS HUB	\$37.19	\$31.06	\$30.28	\$26.11	\$24.54
	Off-Peak N ILLINOIS HUB	\$29.10	\$14.36	\$28.70	\$26.19	\$15.57
	On-Peak PPL	\$31.09	\$27.62	\$26.44	\$25.45	\$23.18
	Off-Peak PPL	\$21.31	\$24.47	\$22.99	\$23.04	\$22.70
	On-Peak PENELEC	\$43.09	\$47.86	\$35.75	\$33.84	\$28.52
	Off-Peak PENELEC	\$32.18	\$50.89	\$33.12	\$36.33	\$30.89
	On-Peak COMED	\$37.29	\$31.14	\$30.37	\$26.19	\$24.59
	Off-Peak COMED	\$29.15	\$14.33	\$28.76	\$26.26	\$15.56
MISO	On-Peak INDIANA HUB	\$36.91	\$36.13	\$36.52	\$28.82	\$28.34
	Off-Peak INDIANA HUB	\$29.87	\$30.87	\$28.87	\$27.26	\$23.37
	On-Peak MICHIGAN HUB	\$35.12	\$34.07	\$33.96	\$27.57	\$27.43
	Off-Peak MICHIGAN HUB	\$29.18	\$25.47	\$27.69	\$26.34	\$21.99
	On-Peak MINN HUB	\$30.79	\$35.60	\$35.39	\$24.13	\$30.09
	Off-Peak MINN HUB	\$28.30	\$16.97	\$28.46	\$17.58	\$20.32
ERCOT	On-Peak LOUISIANA HUB	\$29.49	\$24.92	\$24.46	\$23.69	\$23.06
	Off-Peak LOUISIANA HUB	\$26.87	\$24.05	\$20.81	\$21.06	\$19.76
	On-Peak NORTH	\$30.55	\$20.93	\$20.46	\$20.92	\$21.01
	Off-Peak NORTH	\$18.25	\$19.33	\$16.69	\$14.61	\$18.25
On-Peak SOUTH	\$32.25	\$23.05	\$23.24	\$21.78	\$22.85	
Off-Peak SOUTH	\$21.15	\$20.43	\$18.33	\$15.99	\$19.24	

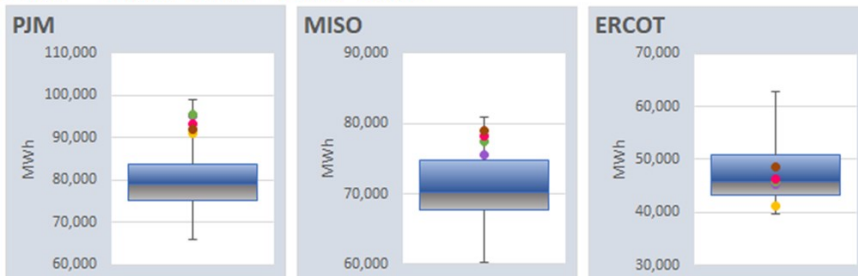
* Red signifies week over week price change down / Green signifies week over week price change up

Futures	Western Hub		Indiana Hub		North Hub	
	On-Peak	Off-Peak	On-Peak	Off-Peak	On-Peak	Off-Peak
	\$47.70	\$36.62	\$48.08	\$37.16	\$50.18	\$30.27

* Forward 12 month strip

DAILY RTO LOAD PROFILE (MWh)

● -12/11 ● -12/12 ● -12/13 ● -12/14 ● -12/15



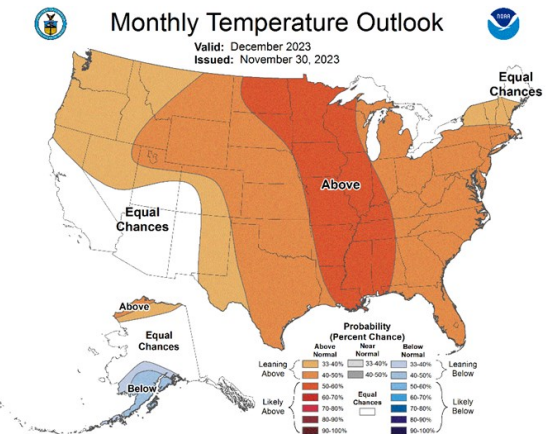
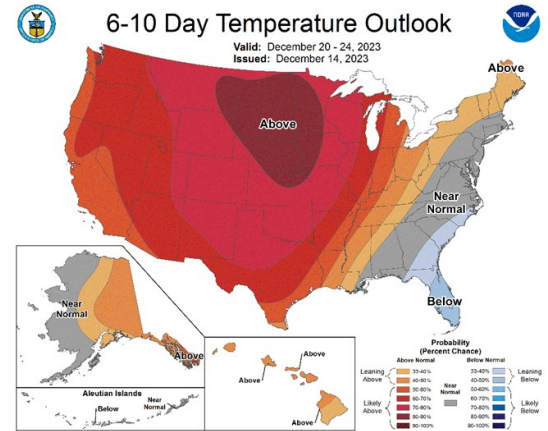
* Current week daily load plotted with past 3 months daily load

COMMENTARY

Each year FERC collects information through Form 714 (Form 714) from electric utilities, balancing authorities, and planning areas in the United States to help with forecasting and planning with regard to load demand. This week Utility Dive highlighted a comprehensive report from Grid Strategies. using the data from Form 714. According to the report, which is must read work, the rate of load growth in the US is expected to increase 4.7% over the next five years. This is an increase from a predicted growth rate of just 2.6% last year. The increase is specifically being driven by data centers. We've commented recently on how the conversation has moved fairly quickly from concerns about EVs to data centers. The chart below shows expected load growth coming from data centers for all geographic regions with the exception of CAISO.

Data centers has been synonymous with crypto mining over the last couple years. With each passing day, more and more comments from companies include AI and how it will drive their businesses. Given the electricity required for AI to search training sets that are going to get bigger and bigger, it's possible the conclusions in this report might be light.

The Thursday weekly EIA natural gas storage report showed a withdrawal of 55 Bcf which was in line with estimates. The report was a yawner for the natural gas market which continues to be in a supply glut. This week IEA announced that OPEC+ will be only 51% of the oil production in the world for 2023. A good chunk of that lower number is the US production which broke 20 million barrels per day in September. Right now, the US is on track to increase production by 1.4 million barrels per day for the year. While oil isn't typically thought of as a correlated to electricity, natural gas is a byproduct of oil production. As mild weather has limited load demand for heating so far this winter, natural gas continues to be in a simple economic model of supply outpacing demand. Until those dynamics change, expect electric futures prices to be muted.



COMMODITIES PRICING (\$/MMBtu)

Henry HUB Nat Gas	12/15/2023	\$2.45
WTI Crude Oil	12/15/2023	\$71.57

