

Weekly Headlines

- ERCOT Drama
- Natural Gas Bull & Bear
- Solar NIMBY?

POWER PRICING (\$/MWh)

Day-Ahead LMPs		Mon 8/14	Tue 8/15	Wed 8/16	Thu 8/17	Fri 8/18
PJM	On-Peak WESTERN HUB	\$42.39	\$46.20	\$34.66	\$35.02	\$28.96
	Off-Peak WESTERN HUB	\$23.47	\$23.22	\$19.30	\$18.21	\$18.16
	On-Peak N ILLINOIS HUB	\$37.07	\$35.42	\$28.72	\$29.52	\$26.97
	Off-Peak N ILLINOIS HUB	\$21.97	\$20.14	\$16.73	\$14.89	\$17.45
	On-Peak PPL	\$29.84	\$32.41	\$26.31	\$25.28	\$21.29
	Off-Peak PPL	\$13.79	\$17.39	\$15.48	\$14.03	\$15.84
	On-Peak PENELEC	\$34.83	\$41.17	\$30.76	\$30.84	\$25.47
	Off-Peak PENELEC	\$20.97	\$22.50	\$18.75	\$17.71	\$17.56
	On-Peak COMED	\$37.18	\$35.47	\$28.85	\$29.66	\$27.08
	Off-Peak COMED	\$22.04	\$20.19	\$16.79	\$14.95	\$17.50
MISO	On-Peak INDIANA HUB	\$35.67	\$34.55	\$36.33	\$30.59	\$29.92
	Off-Peak INDIANA HUB	\$24.06	\$22.87	\$23.07	\$19.29	\$20.79
	On-Peak MICHIGAN HUB	\$35.36	\$34.15	\$36.52	\$30.18	\$29.07
	Off-Peak MICHIGAN HUB	\$23.99	\$22.97	\$23.24	\$19.33	\$20.79
	On-Peak MINN HUB	\$31.31	\$41.20	\$25.62	\$32.38	\$27.39
	Off-Peak MINN HUB	\$20.76	\$22.02	\$14.30	\$18.85	\$19.34
ERCOT	On-Peak NORTH	\$189.59	\$798.09	\$359.31	\$992.82	\$365.58
	Off-Peak NORTH	\$19.80	\$24.52	\$15.31	\$12.46	\$19.65
	On-Peak SOUTH	\$224.13	\$819.03	\$369.27	\$989.66	\$371.17
	Off-Peak SOUTH	\$24.65	\$26.44	\$22.58	\$20.07	\$22.74

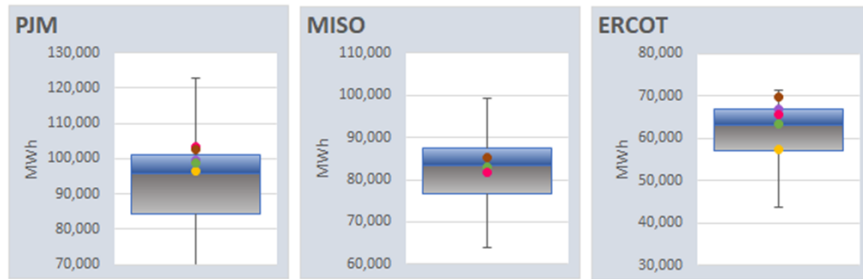
* Red signifies week over week price change down / Green signifies week over week price change up

Futures	Western Hub		Indiana Hub		North Hub	
	On-Peak	Off-Peak	On-Peak	Off-Peak	On-Peak	Off-Peak
	\$50.66	\$37.37	\$53.58	\$39.53	\$64.25	\$38.13

* Forward 12 month strip

DAILY RTO LOAD PROFILE (MWh)

● -8/14 ● -8/15 ● -8/16 ● -8/17 ● -8/18



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

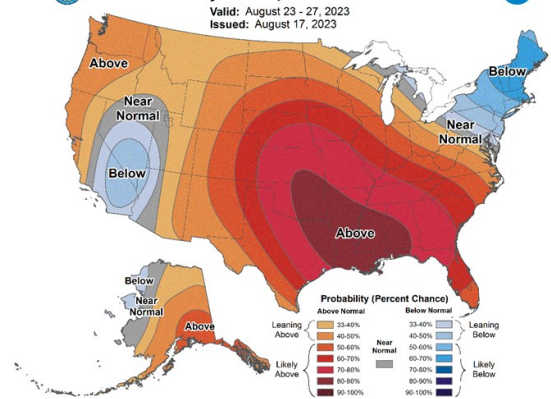
COMMENTARY

This week, ERCOT has been sweating it out and we aren't talking about just the heat. Thursday conservative actions were requested as the RTO trended to below 5000 MW of reserve capacity. Wind has certainly saved ERCOT this summer, but yesterday at one point it was only 3.5% of the stack and below 30% of its summer capacity which is roughly one fourth of nameplate capacity. The phenomenon of wind in ERCOT can be seen in the Day Ahead markets in the pricing table below. Wind typically blows hardest overnight. For instance, today's forecast calls for about 6k MW of generation at noon and around 25k MW midnight. The prices in the table are averages, and while yesterday's On Peak DA market averaged about \$1000/MW in the North, the peak hour was above \$3,200/MW. Conversely, the Off Peak DA market averaged \$12/MW. Adding to the conservative operations drama yesterday, Real Time pricing was over \$5000/MW during the afternoon.

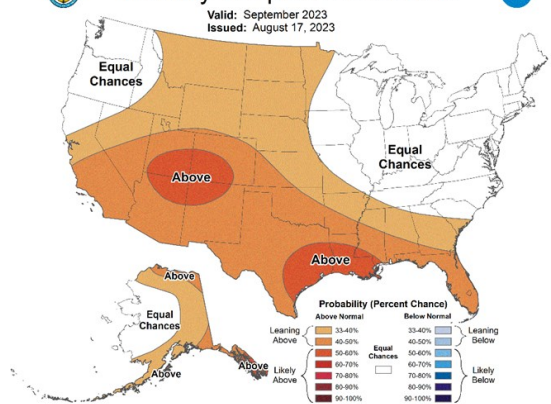
The rally in natural gas prices seems to have come and gone. The EIA reported an injection of 35 Bcf for the week ending August 11. This is in line with the 34 Bcf that was expected. Hot weather and large electricity burn can't seem to help the market hold any kind of rally. The October futures contract traded below \$2.70 this morning after a recent high of around \$3.20. For those scoring at home, that might meet the definition of a bull and bear market all in the span of two weeks. Weather might provide some short-term volatility, but right now it seems any sustained move to the upside will come only if there is meaningful movement in the inventory numbers. Right now, we are still 21% higher than last year and 10% above the five-year average.

More and more there seems to be cases where the same people that are championing renewables are starting to pushback. The drama playing out in the Northeast with offshore wind is another example. Ultimately, some of these projects may get resubmitted and built or built somewhere else. Regardless, local utilities and municipalities have may have an added hurdle in the effort to go green.

6-10 Day Temperature Outlook



Monthly Temperature Outlook



COMMODITIES PRICING (\$/MMBtu)

Henry HUB Nat Gas	8/18/2023	\$2.55
WTI Crude Oil	8/18/2023	\$80.40

