

Weekly Headlines

- Another Scorcher
- Nat Gas
- NYISO Reliability

POWER PRICING (\$/MWh)

| Day-Ahead LMPs | | Mon 7/17 | Tue 7/18 | Wed 7/19 | Thu 7/20 | Fri 7/21 |
|----------------|-------------------------|----------|----------|----------|----------|----------|
| PJM | On-Peak WESTERN HUB | \$46.77 | \$41.10 | \$38.87 | \$39.09 | \$36.77 |
| | Off-Peak WESTERN HUB | \$19.36 | \$18.72 | \$19.26 | \$19.68 | \$19.53 |
| | On-Peak N ILLINOIS HUB | \$38.90 | \$37.50 | \$37.81 | \$38.67 | \$36.17 |
| | Off-Peak N ILLINOIS HUB | \$17.29 | \$17.82 | \$18.15 | \$19.13 | \$19.83 |
| | On-Peak PPL | \$41.52 | \$34.71 | \$29.65 | \$27.88 | \$22.90 |
| | Off-Peak PPL | \$17.26 | \$17.33 | \$16.45 | \$15.32 | \$15.27 |
| | On-Peak PENELEC | \$45.50 | \$39.57 | \$37.70 | \$35.74 | \$31.19 |
| | Off-Peak PENELEC | \$19.42 | \$18.86 | \$21.44 | \$19.28 | \$19.26 |
| | On-Peak COMED | \$38.60 | \$37.26 | \$37.22 | \$38.25 | \$35.75 |
| | Off-Peak COMED | \$17.37 | \$17.90 | \$18.20 | \$19.19 | \$19.91 |
| MISO | On-Peak INDIANA HUB | \$41.43 | \$39.14 | \$42.99 | \$39.37 | \$38.48 |
| | Off-Peak INDIANA HUB | \$22.90 | \$22.32 | \$22.93 | \$23.32 | \$23.68 |
| | On-Peak MICHIGAN HUB | \$41.48 | \$38.92 | \$42.81 | \$39.58 | \$38.55 |
| | Off-Peak MICHIGAN HUB | \$23.44 | \$23.09 | \$23.67 | \$23.46 | \$23.90 |
| | On-Peak MINN HUB | \$39.31 | \$37.97 | \$31.86 | \$30.33 | \$38.80 |
| | Off-Peak MINN HUB | \$20.29 | \$19.96 | \$18.37 | \$16.38 | \$21.12 |
| ERCOT | On-Peak NORTH | \$119.60 | \$30.20 | \$36.19 | \$150.78 | \$114.58 |
| | Off-Peak NORTH | \$17.20 | \$9.78 | \$10.32 | \$17.88 | \$18.31 |
| | On-Peak SOUTH | \$128.05 | \$63.05 | \$56.44 | \$153.91 | \$117.01 |
| | Off-Peak SOUTH | \$19.53 | \$19.09 | \$19.95 | \$20.89 | \$20.82 |

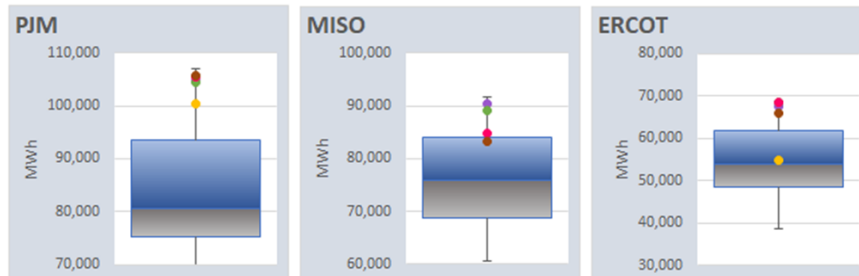
* Red signifies week over week price change down / Green signifies week over week price change up

| Futures | Western Hub | | Indiana Hub | | North Hub | |
|---------|-------------|----------|-------------|----------|-----------|----------|
| | On-Peak | Off-Peak | On-Peak | Off-Peak | On-Peak | Off-Peak |
| | \$51.61 | \$38.34 | \$54.23 | \$40.12 | \$63.94 | \$36.24 |

* Forward 12 month strip

DAILY RTO LOAD PROFILE (MWh)

● -7/17 ● -7/18 ● -7/19 ● -7/20 ● -7/21



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

COMMENTARY

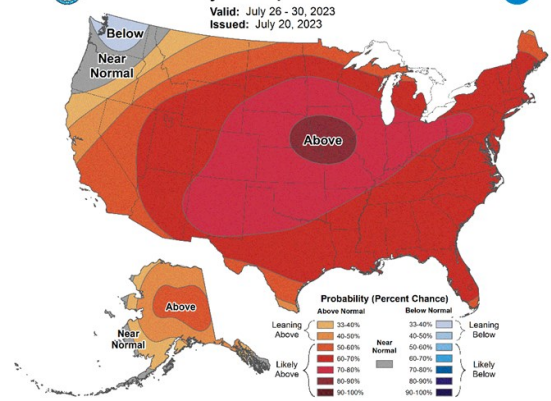
In last week's report the NOAA 6-10 day temperature report was calling for well above average chances for hotter weather in the US South and Southwest. It's safe to say they nailed that one. There's been a lot of discussion lately about the hottest day on earth, including arguments about measuring ground temps or higher. Frankly, we didn't even know that was a thing.

Every so often we are asked, 'why so natural gas centric when discussing electricity and pricing?'. Often pictures are better than words, so we will let some hourly data provided by EIA for one of the hottest weeks of the year answer the question. If you do some quick back of the envelope math, or eyeball it natural gas is almost 50% during peak hours.

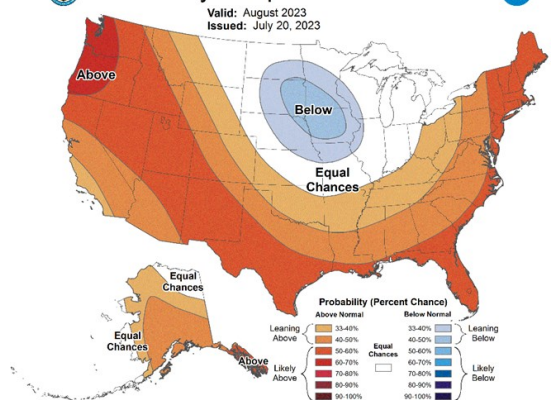
Speaking of natural gas, today is the first time in a month where weekly prices have the chance to close the week higher than it started. A somewhat lighter storage build, along with an 8% WoW burn for electric generation given the weather in the south, have been the catalyst. While not top of mind for market participants just yet, there are rumblings that the diminished rig counts might start cutting into production that has easily met demand this summer.

This week the NYISO released their [second quarter short term reliability study](#). As with most of the reliability studies lately, there are potential issues here as well. Interestingly enough, along with the retired assets conversation that seems to be included in all these reliability reports, was a discussion about transmission overload being the biggest issue. In a demand scenario above baseline, NYISO could find itself up to 446 MW short of capacity margin. Right now, the nearest term remedy of this problem is a transmission line being built from Quebec to New York not scheduled to be in service until 2026.

6-10 Day Temperature Outlook



Monthly Temperature Outlook



COMMODITIES PRICING (\$/MMBtu)

| | | |
|-------------------|-----------|---------|
| Henry HUB Nat Gas | 7/21/2023 | \$2.73 |
| WTI Crude Oil | 7/21/2023 | \$76.23 |

