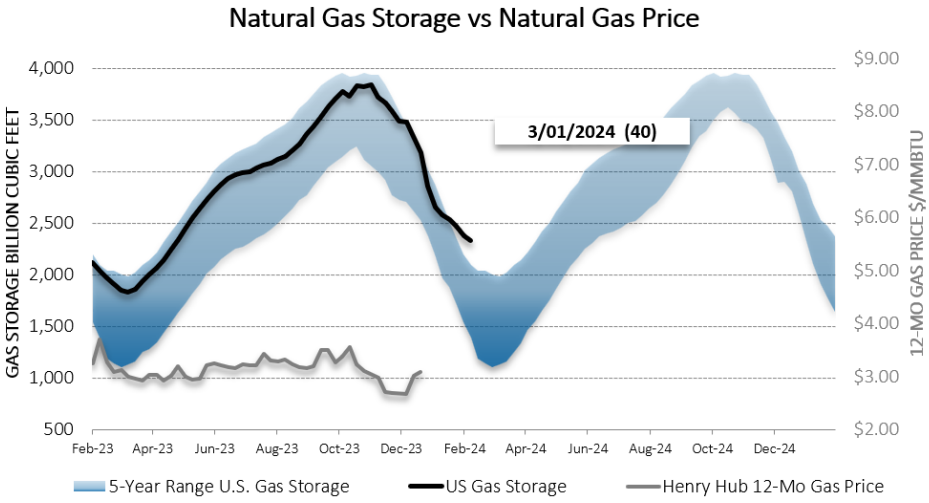
WEEKLY MARKET UPDATE

Week Ending March 1, 2024



POWER MARKETS

West Day Ahead prices have dispersed considerably among the three regional hubs this week, bringing the averages over the last seven days to $58.87/MWh at Mid-C, $39.63/MWh at NP15, and $18.85/MWh at SP15. Despite some anomalous precipitation on Wednesday, this week's predominantly blue skies and surge in hydro generation have sunk midday prices into negative territory in Southern California. Meanwhile, the picture has been less rosy in the neighboring hubs to the north, where the Pacific Northwest has had to lean on NP15 to address a surge in demand due to the cold.

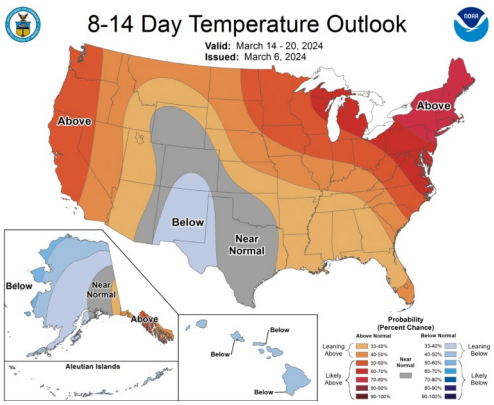
ERCOT March now in full swing, real-time prices are showing volatility. For example, their average for the month to date is just under $22/MWh at the Houston Hub, but embedded in that figure are several hours of triple-digit prices during the evening hours when a shortage arises in the gap between the tapering of solar generation and the takeover by wind turbines. Also contributing to price fluctuations is the scheduled shuttering of certain thermal units for seasonal maintenance. Depending on the term, forward prices have risen by $0.50-$1.50/MWh as forward natural gas prices have flirted with climbing out of the cellar.

East Despite some wetness, the weather has been remarkably warm throughout much of the Northeast this week and kept averages under $29/MWh in all regions. Day Ahead prices are averaging $22.70/MWh in PJM, $27.93/MWh in NYISO, and $24.75/MWh in ISO-NE's WCMASS, and the Real Time averages are marginally higher at $23.55/MWh, $28.74/MWh, and $26.48/MWh, respectively. Although storms are expected next week, low natural gas prices and low HDDs should keep LMPs down. However, the shape of the curve is set to shift early Sunday morning with the start of Daylight Saving Time, which should make morning hours pricier because of darker skies during baseload ramp-up.

NATURAL GAS

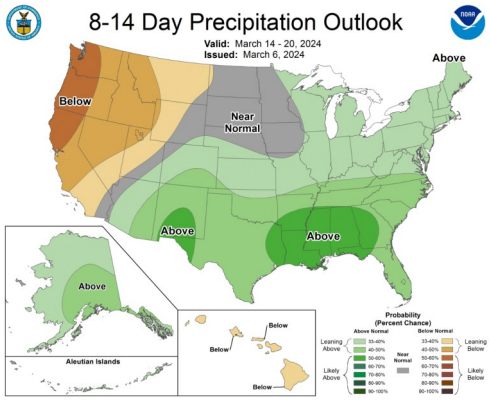
- The EIA reported Thursday morning that, for the week ending March 1, U.S. inventories fell by 40 Bcf, managing to retain roughly 5% of the assumed usage of 42 Bcf. Total stockpiles now stand at 2,334 Bcf, up by 13.6% from a year ago and 30.9% above the five-year average for the same week.

- Having briefly touched $2.00/MMBtu earlier this week, the NYMEX Henry Hub prompt month of April has since retreated to approximately $1.87/MMBtu at the time of this writing. News of production cuts and expectations of colder weather in the 11-to-15-day forecast period have nonetheless provided some upward momentum for the prompt month in the short term. In the California spot market, demand remains relatively low and is keeping supplies ample. Consequently, spot prices at both PG&E Citygate and SoCal Citygate continue to average below $3.00/MMBtu for the month to date.



WEATHER

- Whereas the South will be drenched with heavy rain during the 1-to-5-day forecast period, temperatures will be above average in the Midwest
- The Midwest should stay warm weather at the beginning of the 6-to-10-day forecast period before temperatures regress to seasonal averages in the back half
- Over the 11-to-15 day forecast period, the entire eastern half of the U.S. should be cool



If Only Energy Could Be Virtual…

Although the rapid rise of artificial intelligence (AI) has joined the accelerating online transition of fundamental institutions such as currency and commerce in taking more aspects of everyday life virtual, one facet will remain forever tethered to the real world: their need for energy. Unfortunately, the unstoppable proliferation of data centers facilitating these shifts is on a collision course with the immovable object that is this truism.

In a recap from two months ago, Bloomberg relayed a forecast by the International Energy Agency projecting that electricity consumption by data centers around the globe "could more than double over the next three years, adding the equivalent of Germany's entire power needs." This report came on the heels of a December brief in Utility Dive by Robert Walton, in which he cited the spread of data centers as a primary contributor to an alarming 81% surge in U.S. electricity load growth over the next five years, noted in a study by Grid Strategies. Such predictions underscore a critical challenge for proponents and providers of sustainable energy to solve.

As observed in a January 2023 report in Bloom Energy, "[d]ata centers are packed with an enormous number of processors and servers that run 24/7 and require heavy air conditioning capacity to dissipate all the operational heat generated." It went on to note that, despite advancements in renewable energy procurement, "[u]tilities serving these concentrated loads are struggling to keep pace with the unrelenting demands" of the growing digital infrastructure. Moreover, the problem implicates not only generation but also transmission, for the power lines in existence are proving simply too few.

When weighed alongside the ongoing ethical questionability of AI, financial stability of cryptocurrency, and long-term economic impact of online services on the broader brick-and-mortar economy, these concerns may overwhelm the speed, convenience, and general impressiveness of such innovations. Indeed, both the expansion of current data centers and the construction of new ones "are now at risk of being delayed by several years," according to Bloom Energy. All segments of the energy industry are certainly toiling to solve this growing conundrum. In the meantime, captains of industry would do well to keep allowing consumers to write their own reports, carry cash, and play movies on their home disc players. Those practices may be quaint but undeniably consume a fraction of the energy required by their futuristic replacements.