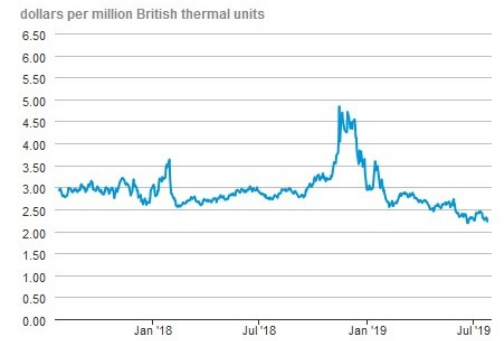




GENERAL UPDATE

- Financial gas markets trended downward week over week. The August 2019 NYMEX Henry Hub forward contract decreased $-\$0.08$ (-3.7%) from the previous Wednesday, reaching $\$2.220$ /MMBtu. The price of the 12-month strip averaging August 2019 through July 2020 futures contracts decreased, falling $-\$0.07$ (-2.8%) to $\$2.394$ /MMBtu.
- Northeast natural gas prices moved down in demand markets. Boston's Algonquin Citygate prices decreased $-\$0.28$ (-11.9%) to $\$2.07$ /MMBtu last Wednesday. Transco Zone 6 NYC prices fell, decreasing $\$0.32$ (-13.3%) from $\$2.41$ /MMBtu to $\$2.09$ /MMBtu.
- Pennsylvania's Dominion South decreased $-\$0.19$ (-8.9%) to $\$1.95$ /MMBtu. Tennessee Zone 4 Marcellus spot prices decreased $-\$0.18$ (-8.6%) to $\$1.92$ /MMBtu.
- California prices moved up since last week. SoCal Citygate prices increased $\$0.89$ (33%) to $\$3.58$ /MMBtu last Wednesday. Prices at Northern California PG&E Citygate increased, rising $\$0.09$ (3.4%) to $\$2.78$ /MMBtu. Gas supply constraints in Southern California continue to push prices upward in the region.

Near-month natural gas futures prices (Nymex)



Source: CME Group as compiled by Bloomberg L.P.

POWER

- For the NEMASS BOST zone in ISO-NE, the 12-Month ATC strip decreased $-\$0.85$ (-2.1%) to $\$39.47$. The 24-Month ATC strip decreased $-\$0.87$ (-2.1%) to $\$40.28$ and the Cal '20 ATC strip decreased $-\$0.97$ (-2.3%) to $\$40.57$.
- For the NYC (J) zone in NYISO, the 12-Month ATC strip decreased $-\$1.34$ (-3.6%) to $\$36.42$. The 24-Month ATC strip decreased $\$1.12$ (-2.9%) to $\$37.04$ and the Cal '20 ATC strip decreased $\$1.57$ (-4.1%) to $\$37.10$.
- For the PEPCO zone in PJM, the 12-Month ATC strip decreased $-\$1.02$ (-3.0%) to $\$32.60$. The 24-Month ATC strip decreased $-\$0.98$ (-2.9%) to $\$32.32$ and the Cal '20 ATC strip decreased $-\$0.98$ (-3.0%) to $\$32.21$.
- For the HOUSTON zone in ERCOT, the 12-Month ATC strip decreased $-\$1.04$ (-3.3%) to $\$30.53$. The 24-Month ATC strip decreased $-\$0.60$ (-1.8%) to $\$32.90$ and the Cal '20 ATC strip decreased $-\$0.83$ (-2.3%) to $\$34.88$.

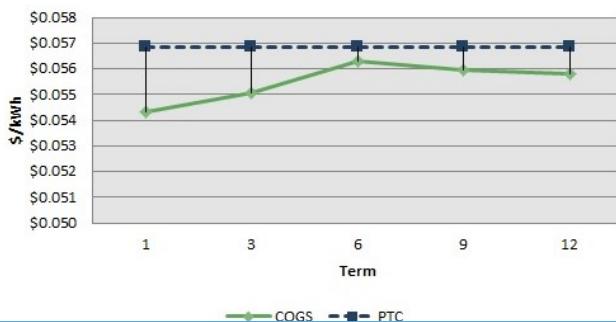
UTILITY HIGHLIGHT

PJM

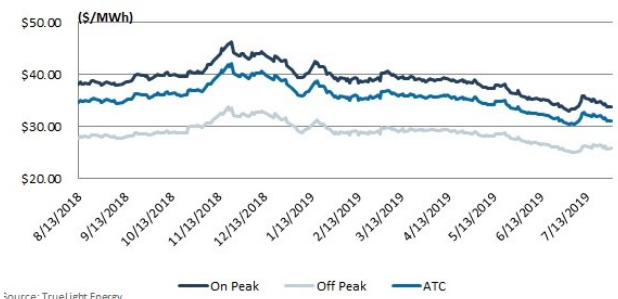
OH

DUKE

Duke R50



DEOK - 12 MONTH STRIP PRICING



- The upcoming Price to Compare for Ohio's Duke Residential rate class (R50) is approximately $\$0.056821$ /kWh, in effect from July 1, 2019 to September 30, 2019. This rate is a -0.3% decrease from the previous rate of $\$0.056991$ /kWh for the June 1, 2019 to June 30, 2019 price period.
- TRUELight's expert analytics and proprietary models indicate that headroom in Duke is now available in all of the 1, 3, 6, 9 and 12 month terms. Headroom of $\$0.00086$ /kWh and $\$0.00101$ /kWh is likely for the 9 and 12 month terms, respectively.
- Over the last week, the DEOK ATC 12-month strip decreased, slipping -3.1% to finish at $\$31.12$ /MWh yesterday. This time last year, the strip was trading at $\$34.68$ /MWh, which is 11.4% higher than this year.
- Since the beginning of the year, the ATC strip has reached a high of $\$38.69$ /MWh on January 17, 2019 and a low of $\$30.42$ /MWh on July 2, 2019.

NATURAL GAS

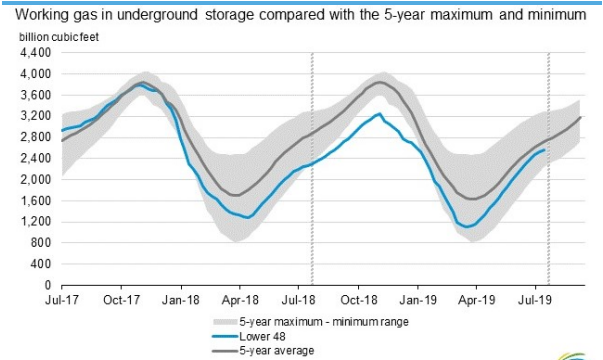
- For the week ending July 19, the EIA reported net injections from storage of 36 Bcf, which is higher than last year's net injections of 27 Bcf for this week and lower than the 5-year (2014–18) average net injections of 44 Bcf.
- Working natural gas in storage totaled 2,569 Bcf, which is 300 Bcf (13.2%) more than last year's working gas totals of 2,269 Bcf at the same time and 151 Bcf (-5.6%) lower than the 5-year (2014-2018) average of 2,720 Bcf. Total working gas is within the five-year historical range.

SUPPLY & DEMAND

- Average total supply of natural gas increased 1% week/week. Dry natural gas production increased 1%, while net imports with Canada decreased 4% week/week.
- Total US consumption of natural gas remained the same as in the previous week. Consumption for power generation was down 2% week/week, industrial sector consumption increased 4%, residential-commercial consumption decreased 2%, and exports to Mexico decreased 1%.
- US LNG exports increased week/week, with ten vessels departing US ports for a combined 37 Bcf.

MARKET INTELLIGENCE

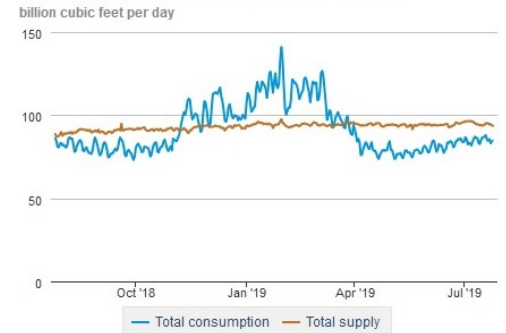
- FERC handed down an order to delay further PJM's Base Residual Auction for its RPM capacity market for the 2022-2023 delivery year. FERC had already ordered PJM to delay its auction to August 2019 due to its view that the PJM capacity market tariff was inadequate, specifically how to reconcile load that is exempt from the RPM auction due to resource owners electing the Fixed Resource Requirement (FRR) Alternative. According to FERC, retail supplier Direct Energy had been in favor of running the auction in August 2019 because the absence of future capacity price signals could impair suppliers' abilities to forecast prices.
- The governor of Ohio, Mike DeWine, signed the HB6 energy bill, which provides for millions of dollars in subsidies for two First Energy Solutions (FES) nuclear plants via customer surcharges, along with other measures. In addition to the nuclear bailout, the bill establishes another monthly customer charge to fund subsidies for two FES coal plants, reduces and eventually ends the state's renewable energy standards, and phases out the state's energy efficiency standards. The law goes into effect in October 2019, though an effort to move a petition forward to bring a voter referendum on HB6 is underway.



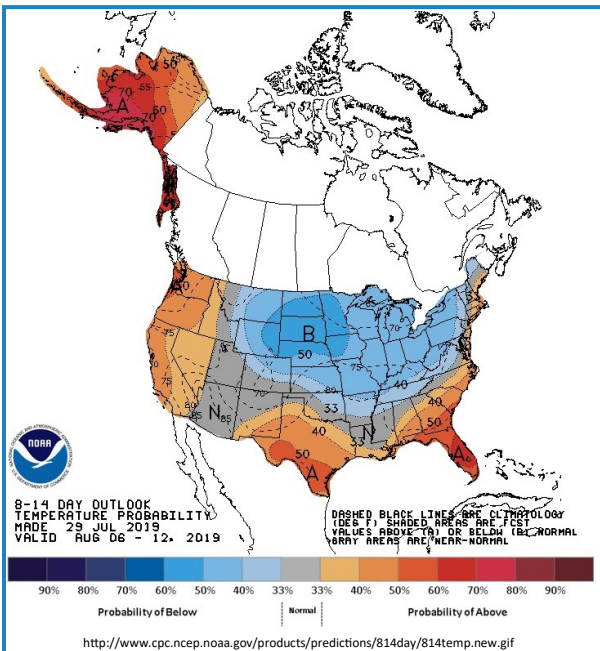
Source: U.S. Energy Information Administration



Total supply/demand balance (last 365 days)



Source: OPIS PointLogic Energy, an IHS Company



WEATHER

- As we move into August, above normal temperatures are expected to blanket the West Coast, Texas, and the coast from Florida through New England, with cooler than average anomalies in the northern Midwest through the Great Lakes. Precipitation is expected to be above average in the Rockies and east to the Mississippi River, a region which has seen heavy rain in recent months.
- Texas is expected to see warmer than average temperatures, especially in the southern region along the Rio Grande. Although rain risk will likely be greater than average for much of the center of the country, precipitation expectations call for average levels in southern Texas. If the rain stays out of the southern region, ERCOT could see high demand with hot temperatures and low precipitation through the beginning of August.

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