

Newstracker:

-Natural gas spot prices rose at most locations for the Report Week of Wednesday, September 4 to Wednesday, September 11. Henry Hub spot prices rose from \$2.42 per million British thermal units (MMBtu) to \$2.59/MMBtu during the course of the Report Week.

-At the New York Mercantile Exchange (Nymex), the price of the October 2019 natural gas futures contract increased 11¢, from \$2.445/MMBtu to \$2.552/MMBtu from open to close of the Report Week. The price of the 12-month strip averaging October 2019 through September 2020 futures contracts climbed 9¢/MMBtu to \$2.561/MMBtu.

- Net natural gas injections into storage totaled 78 Bcf for the storage week ending September 6, compared with the five-year (2014-18) average net injections of 73 Bcf and last year's net injections of 68 Bcf during the same week. Working gas stocks totaled 3,019 Bcf, which is 77 Bcf (2%) lower than the five-year average and 393 Bcf (15%) more than last year at this time.

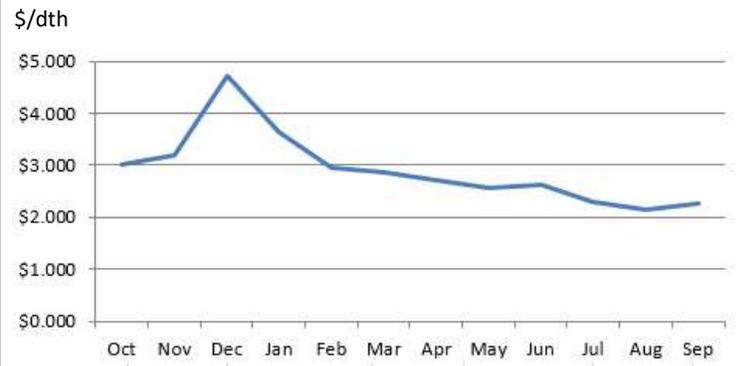
- Total U.S. consumption of natural gas rose by 2% compared with the previous report week, according to data from IHS Markit. Natural gas consumed for power generation climbed by 3% week over week. Industrial sector consumption stayed constant, averaging 21.5 Bcf/d. In the residential and commercial sectors, consumption also remained at last week's level, averaging 8.9 Bcf/d. Natural gas exports to Mexico decreased 1%. The average rate of net injections into storage is 29% higher than the five-year average so far in the refill season (April through October). If the rate of injections into storage matched the five-year average of 10.8 Bcf/d for the remainder of the refill season, total inventories would be 3,615 Bcf on October 31, which is 77 Bcf lower than the five-year average of 3,692 Bcf for that time of year.

-The natural gas plant liquids composite price at Mont Belvieu, Texas, rose by 30¢/MMBtu, averaging \$4.86/MMBtu for the week ending September 11. The price of natural gasoline, ethane, propane, butane, and isobutane all rose, by 6%, 12%, 5%, 3%, and 5%, respectively.

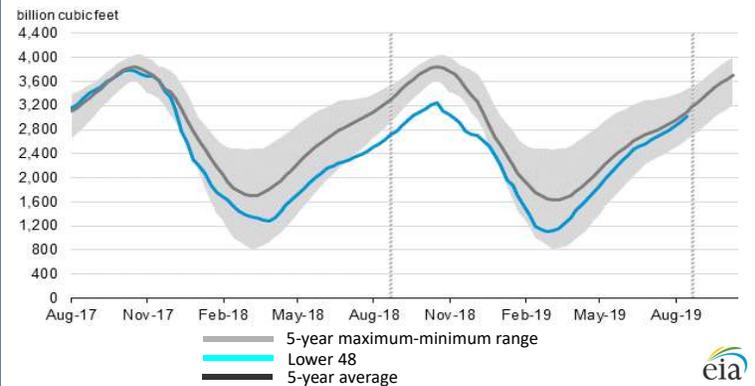
-According to Baker Hughes, for the week ending Tuesday, September 3, the natural gas rig count decreased by 2 to 160. The number of oil-directed rigs fell by 4 to 738. The total rig count decreased by 6, and it now stands at 898.

Excerpted from 

Monthly NYMEX Natural Gas Settle Price: Oct 2018 - Sep 2019:



Working natural gas in underground storage as of September 6, 2019



Forward 12-month NYMEX natural gas strip price - Oct19-Sep20:

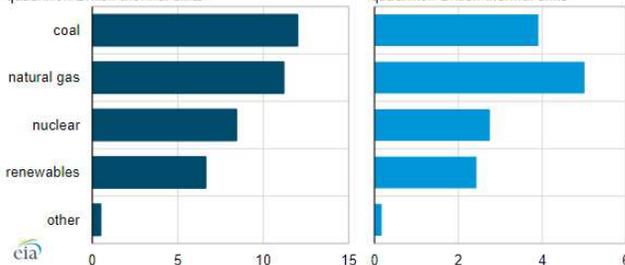
Process Load-weighted \$2.561/dth - w/o/w = ▲\$0.087
 Typical Heat Load-weighted \$2.657/dth - w/o/w = ▲\$0.099

Electric generation transforms primary energy into secondary energy:

In 2018, U.S. utility-scale electricity generation facilities consumed nearly 39 quadrillion British thermal units (quads) of energy to provide 13 quads of electricity for end-use consumption. Of the 101 quads of total primary energy consumed in 2018, U.S. electricity generation accounted for more than 38% of total end-use consumption. Electricity is a secondary energy source that is produced when energy sources such as coal, natural gas, nuclear, and renewable energy are converted into electric power. Conversion losses, which refer to the energy lost while generating electricity, totaled 23.8 quads in 2018, or 61% of total consumption. The technology and the fuel type used to generate electricity affect the efficiency of power plants. For example, in 2018, coal represented 31% of energy consumption (12.0 quads), and it produced 27% of the electricity generated in the United States (3.9 quads). By contrast, natural gas represented 29% of energy consumption (11.2 quads), but it produced 35% of US electricity generation (5.0 quads). The difference reflects the fact that the plants installed in the US generate electricity from coal less efficiently than those that generate electricity from natural gas. In operating US power plants, generating a kilowatt-hour of electricity from coal requires about one-third more British thermal units of energy than producing a kilowatt-hour from natural gas. In recent decades, the US electric power grid's fuel mix has shifted from mostly coal to a more diverse selection of fuels including natural gas, nuclear power, and renewable energy. In particular, the shift toward newer, more efficient natural gas-fired power plants with combined-cycle generators has resulted in an increase in the average efficiency of fossil fuel-fired electric power plants and in lower levels of overall conversion losses.

Excerpted from 

U.S. energy consumption for electricity generation and U.S. net generation (2018)
 quadrillion British thermal units



“Life doesn’t give you all the practice races you need.” -Jesse Owens¹