

## News Tracker:

-Natural gas spot prices fell at most locations for the term Wednesday, September 20 to Wednesday, September 27 (the Report Week). The Henry Hub spot price fell from \$3.14 per million British thermal units (MMBtu) to \$2.95/MMBtu from open to close of the Report Week.

-At the New York Mercantile Exchange (Nymex), the October 2017 natural gas futures contract expired Wednesday, September 27 at \$2.974/MMBtu.

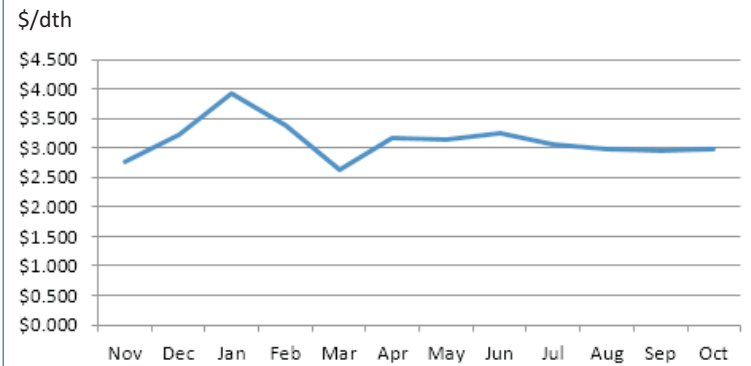
-Net natural gas injections into storage totaled 58 Bcf for the week ending September 22, compared with the five-year (2012-16) average net injections of 84 Bcf and last year's net injections of 49 Bcf during the same week. Increased power demand for natural gas likely contributed to lower net injections compared with the previous report week, despite increased natural gas production. Net injections into storage were lower than the five-year average in all regions east of the Rockies, with the South Central region 19 Bcf lower than the five-year average. Working gas stocks total 3,466 Bcf, which is 41 Bcf more than the five-year average and 127 Bcf less than last year at this time.

- Total U.S. consumption of natural gas rose by 6% compared with the previous report week, according to data from PointLogic Energy. This increase in consumption was driven by an increase in both heating and cooling demand, as the eastern and western halves of the country experienced contrasting weather patterns. Natural gas consumed for power generation climbed by 9% week over week as temperatures in the eastern half of the country rose further above seasonal norms to as much as 16°F above normal in some places. In contrast, the western half of the country had cooler temperatures than in the previous week. In some places, temperatures were 10°F below seasonal norms, which led to an increase of 11% in consumption in the residential and commercial sectors. Industrial sector consumption stayed constant, averaging 19.4 Bcf/d. Natural gas exports to Mexico increased 4%.

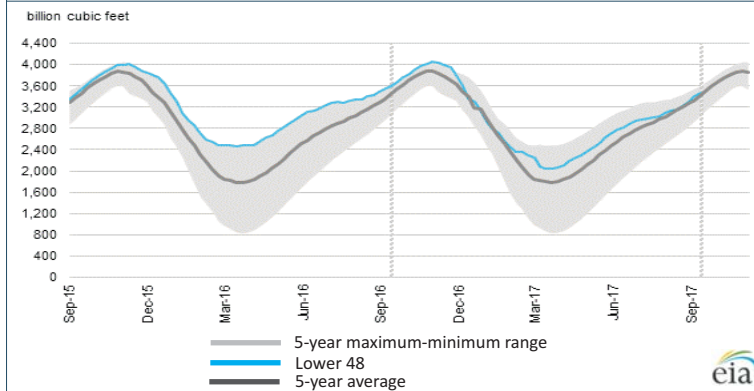
-According to Baker Hughes, for the week ending Friday, September 22, the natural gas rig count increased by 4 to 190. The number of oil-directed rigs fell by 5 to 744. The total rig count decreased by 1, and it now stands at 935.

Excerpted from 

## Monthly NYMEX Natural Gas Settle Price: Nov 2016 - Oct 2017:



## Working nat. gas in underground storage as of September 22, 2017



## Forward 12-month NYMEX natural gas strip price - Nov17-Oct18:

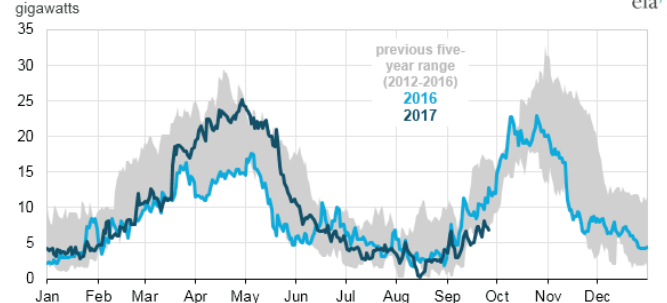
Process Load-weighted \$3.077/dth - w/o/w = ▼\$0.044  
 Typical Heat Load-weighted \$3.173/dth - w/o/w = ▼\$0.056

## Nuclear power plant outages were relatively low this summer:

U.S. nuclear power plant outages averaged 4.6 gigawatts (GW) during the summer of 2017 (June through August), 10% lower than outages during the summer of 2016. Nuclear outages are typically lowest during the summer and winter months when electricity demand is relatively high. Outages can be either scheduled or unscheduled, and they can range from a partial outage, where only some of a plant's capacity is offline, to a full outage, where the entire plant is shut down. Scheduled shutdowns may be timed to accommodate facility inspection, refueling, or maintenance and are typically planned well in advance. On rare occasions, these scheduled outages are deferred if the reactors are needed to continue operating during times of high electricity demand. Most scheduled outages take place during the fall and spring when electricity demand is lower. Nuclear power plants typically refuel every 18 to 24 months. Other maintenance work, such as repairs and power uprates (operational changes that allow existing plants to produce more electricity), is often scheduled at the same time as refueling to minimize downtime. A forced, or unscheduled, shutdown can be the result of equipment failure, operational error, fuel shortages or limitations, or weather or environmental concerns such as a hurricane. Most unplanned outages are because of non-reactor core issues including external plant conditions, such as severe weather, or non-nuclear internal plant conditions, such as those involving steam turbine and electricity generation sub-systems. Hurricane Irma led to an unscheduled outage at both of Florida's nuclear power plants: Turkey Point and St. Lucie. The Turkey Point plant was forced into unscheduled shutdown and reduced its output starting September 9. The St. Lucie plant reduced power in advance of the hurricane-force winds. As a precaution, nuclear power reactors are required to shut down at least two hours before the onset of hurricane-force winds, usually between 70 and 75 miles per hour. Turkey Point and St. Lucie resumed 100% output on September 18 and September 14, respectively.

Excerpted from 

Daily U.S. nuclear capacity outages (2012-2017)



"I love mankind; it's people I can't stand." -Charles M. Schulz<sup>1</sup>