



GELBER MONTHLY JOURNAL

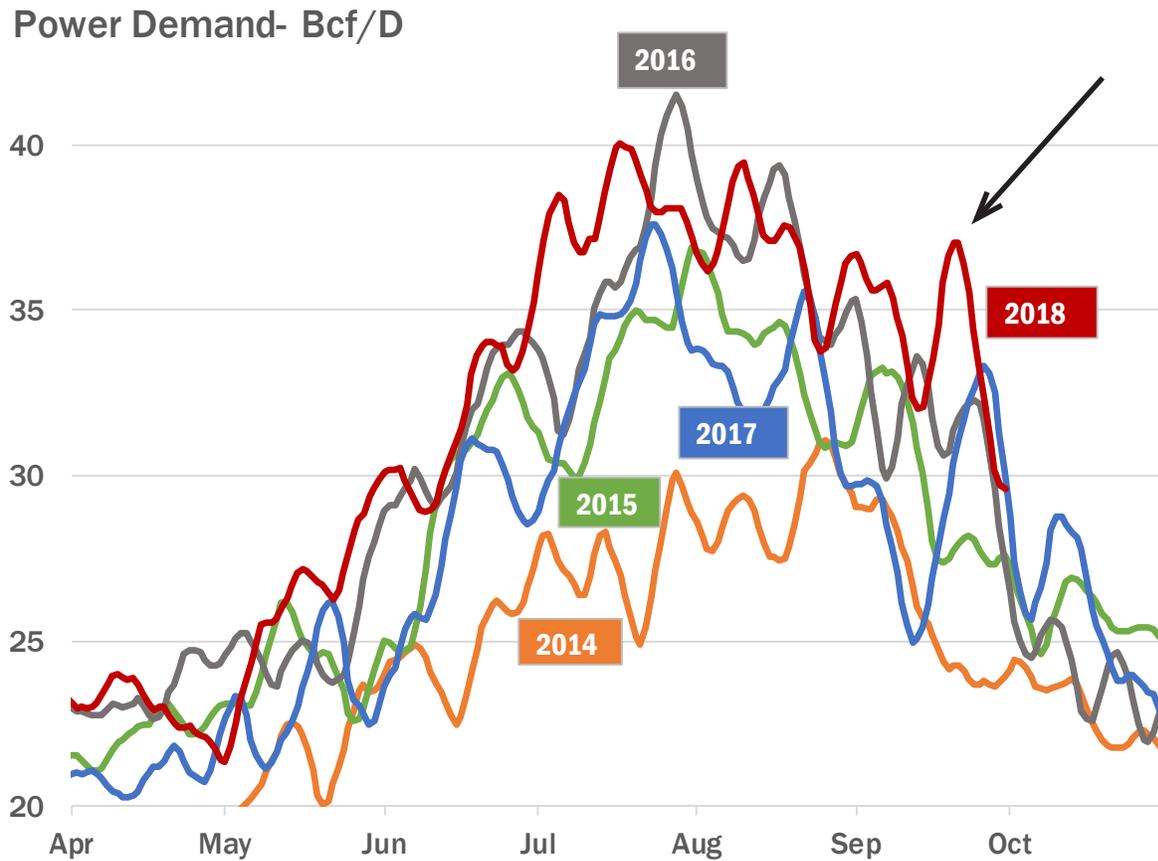
October 2018

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EXECUTIVE SUMMARY

Demand for natural gas fired power increased in mid and late September and set off a rally in NYMEX futures to \$3/MMBtu and above. For October, lingering above-normal warmth in the East will keep power demand unseasonably high, while also delaying the onset of significant demand for heating. Although production continues to swell, demand hasn't let up enough for it to flow convincingly into storage. Much focus will be placed in the rate of storage injections as the end of the season approaches and storage threatens to end at its lowest level in 15 years. If supply can demonstrate its robustness with several large injections it will put concerns to rest, but continued under-performance leaves prices vulnerable as winter weather arrives.

Late-September Demand Surge

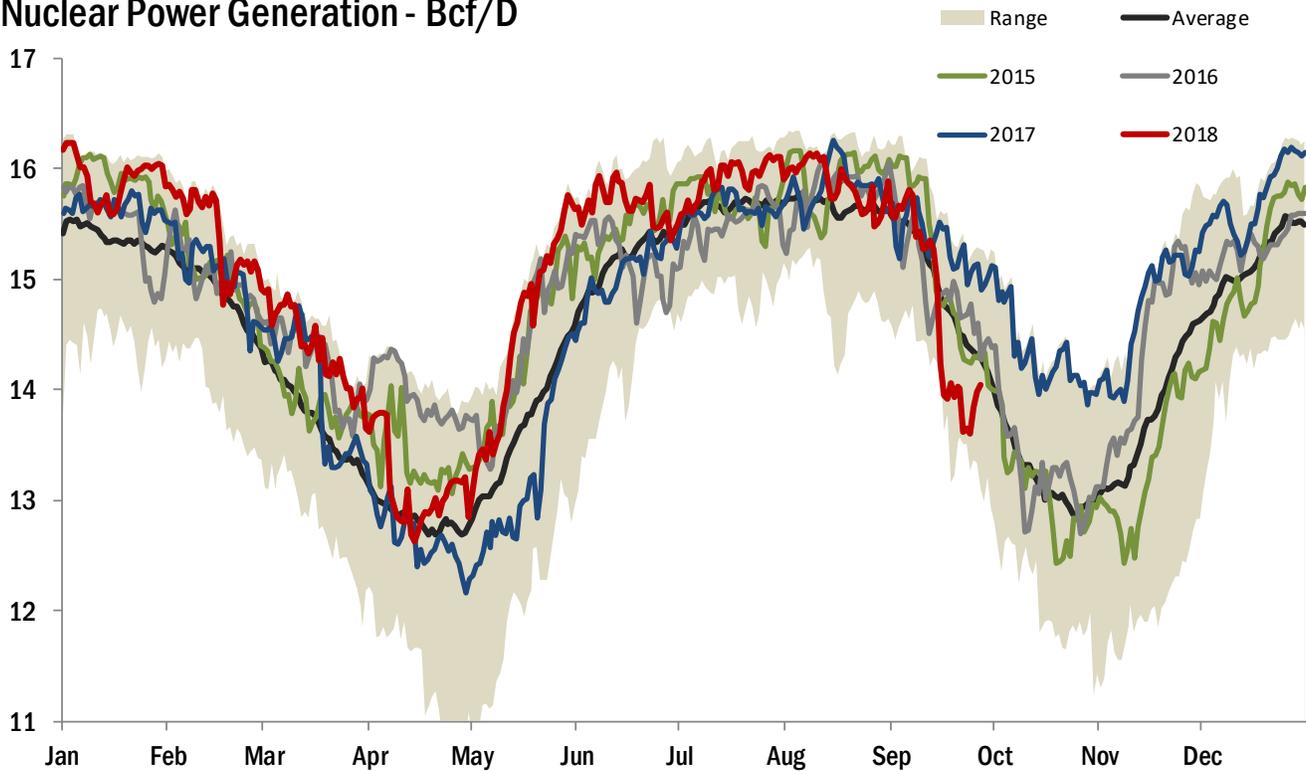


POWER DEMAND STRONG THROUGH SEPTEMBER

Natural gas-fired power generation was strong in September as lingering summer warmth kept cooling needs high. Above-normal temperatures coupled with reduced nuclear and low coal generation drove power demand to a record late-season seven-day average of 37 Bcf/D in late September, although milder weather has already reduced cooling demand significantly since that time. For October, power demand may not fall off completely as warm fall temperatures hold out in the eastern US until cold invades the second half of the month.

Nuclear Outages Jump in September

Nuclear Power Generation - Bcf/D

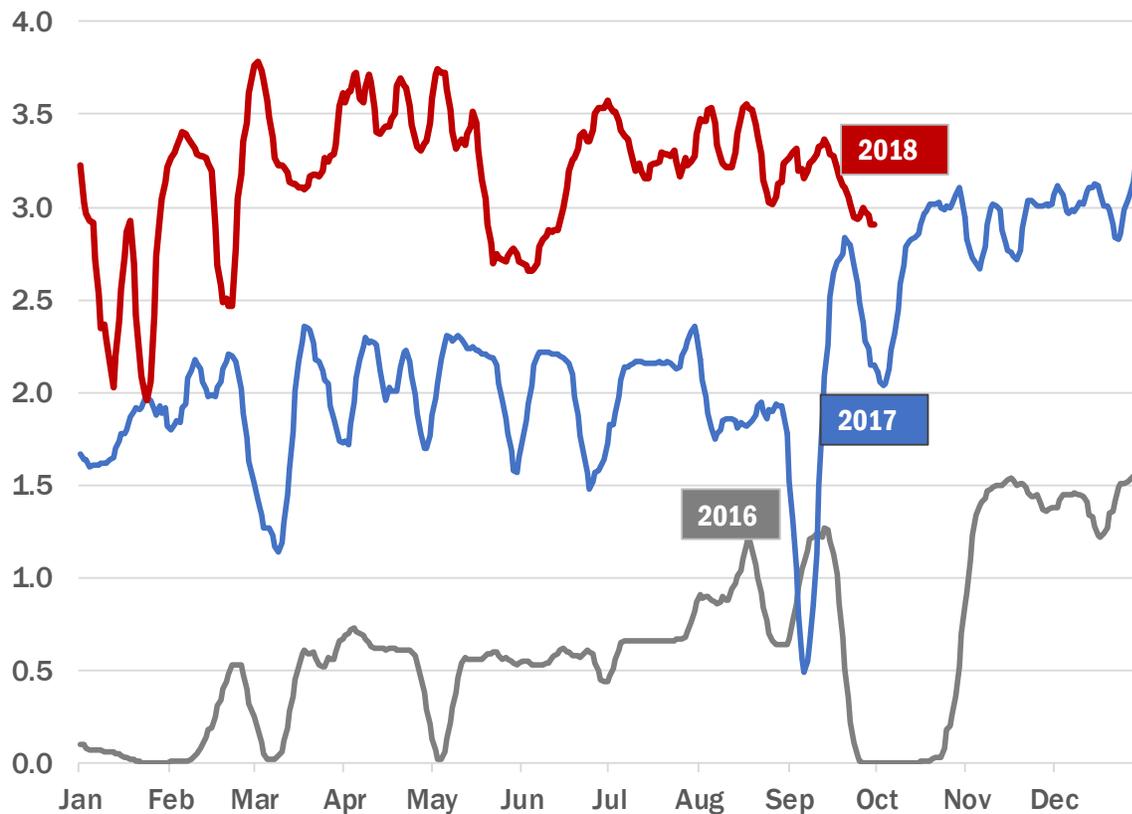


REDUCED NUCLEAR GENERATION FUELS DEMAND FOR GAS

Nuclear power utilization tumbled in mid-September when both planned and unplanned outages combined to fuel a loss of over 10% of capacity within a week. Nuclear outages are common in the shoulder months as plants perform routine maintenance, but additional shut-ins that occurred as Hurricane Florence headed for the East Coast combined with the early retirement of a nuclear facility in New Jersey sent utilization toward the bottom of its 20-year range. The lost nuclear generation in September was equivalent to about 2 Bcf/D of natural gas demand at its peak as natural gas covered the difference in mid to late September. Although nuclear generation still remains relatively low this week, it is moving more in line with seasonal averages. In general, reduced need for electricity generation as temperatures trend cooler in October will put less pressure on natural gas to fill in if nuclear utilization remains low.

LNG Maintenance Restricts Flows

Gas Demand for LNG Exports - Bcf/D

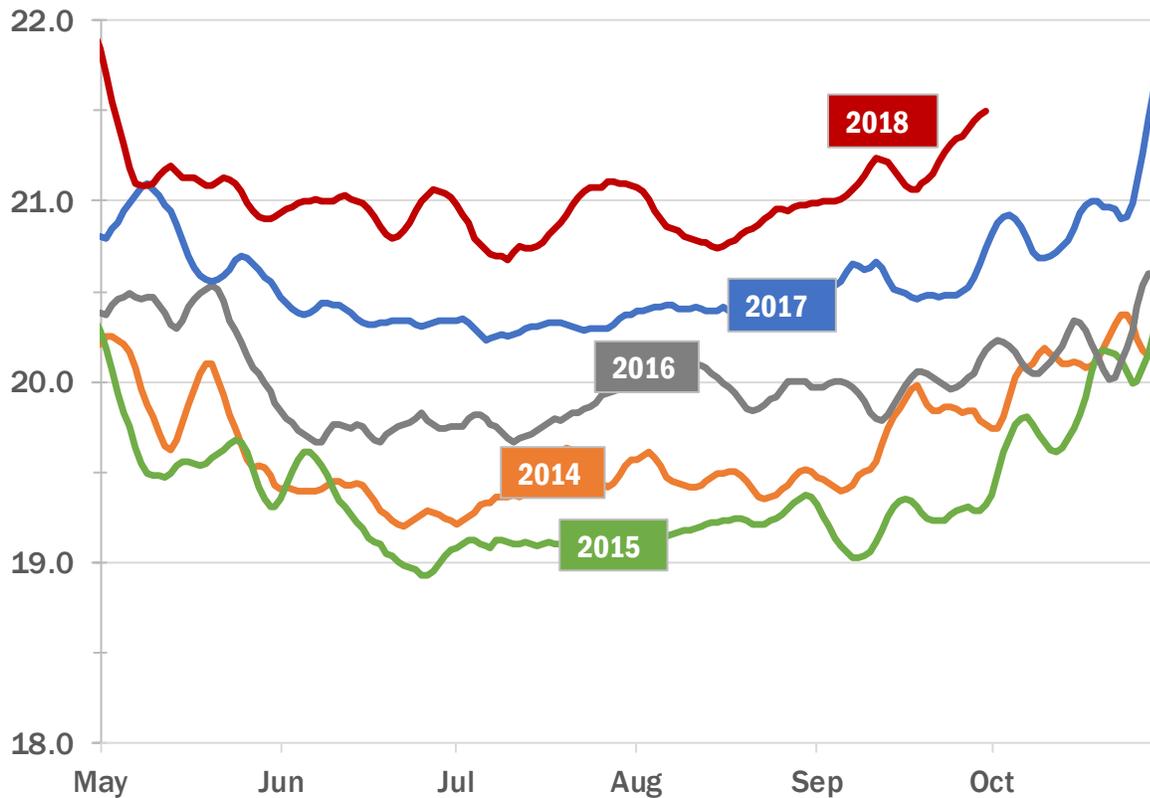


REDUCED DEMAND FROM COVE POINT IN OCTOBER

LNG feedgas demand continues to be relatively consistent from 3-3.5 Bcf/d and is expected to ramp up further as new plants commission late this year. However, Cove Point LNG is now reportedly under scheduled maintenance that has the potential to restrict flows on its nearly 0.8 Bcf/d capacity through at least mid-October. Relatively weak LNG demand is likely to persist during this time and may slip to levels last seen in early June when Sabine Pass was performing similar maintenance. Despite the short setback this month, LNG feedgas demand is still set to increase appreciably later this year when Corpus Christi Train 1 and Sabine Pass Train 5 begin receiving more significant commissioning volumes.

Impressive Industrial Demand

Industrial Demand - Bcf/D

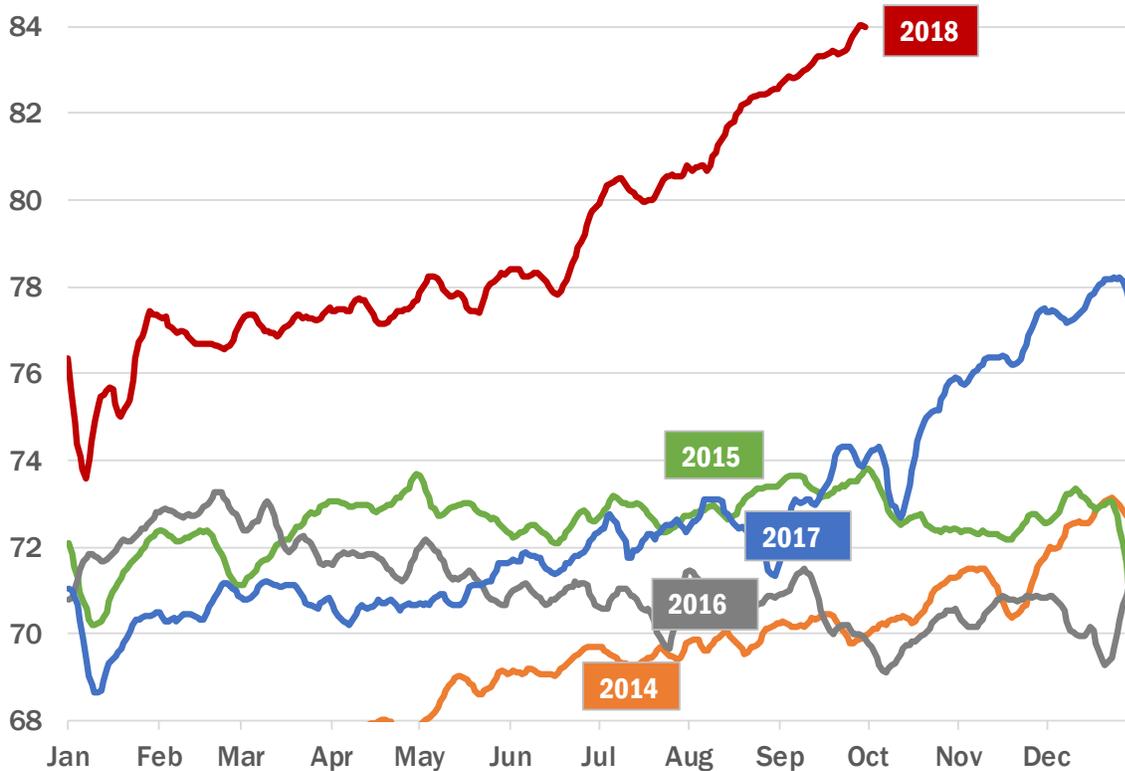


SUMMER INDUSTRIAL GROWS 0.5 BCF/D YEAR-OVER-YEAR

After several years of somewhat disappointing growth, rising industrial activity is making itself felt. Industrial demand has maintained an average of 21 Bcf/D in the May through September period, an increase of about 0.5 Bcf/D over 2017. This period provides an important measure for industrial growth, as it comes at a time of year when the heating-related aspect of industrial demand is relatively insignificant. The growth in steady, base industrial demand has had implications for storage injections this summer, and will likely take an even bigger slice of demand as winter approaches.

Production Continues Upward

US Dry Gas Production - Bcf/D

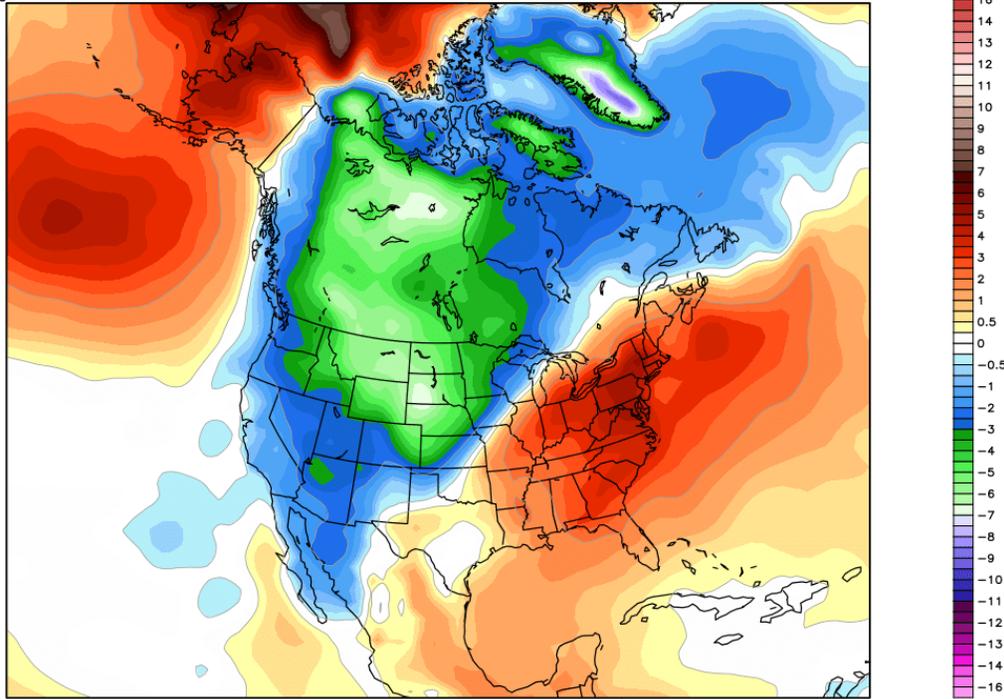


PIPELINE COMPLETIONS IN LATE-SEPTEMBER FUEL GROWTH

Supply growth continues and is likely to get another boost from new pipelines completed in late September. The Rover Pipeline is now utilizing only slightly under its 3.25 Bcf/d capacity as it carries Appalachian gas to markets in the Midwest. NEXUS Gas Transmission is ready for flows to begin on 1 Bcf/d of its capacity and will transport gas on a similar path to Rover. Atlantic Sunrise has also finished construction after slight delays this month and is now seeking permission to begin flows as soon as possible. These pipelines have all faced a variety of construction difficulties and regulatory delays, but FERC approvals to the two newest projects are likely to come this month and provide a boost to production.

Cold West, Warmer East in Early October

NCEP CFS 2-meter TEMPERATURE [°C] Monthly Mean Forecast Departure
4x Daily Forecast Runs Averaged from: 18Z30SEP2018 --> 18Z30SEP2018 -- Last 0.25 days
Target Season: OCTOBER 2018



NCEP CFSv2 384x190 Surface Flux Thinned Gaussian Forecast Grid

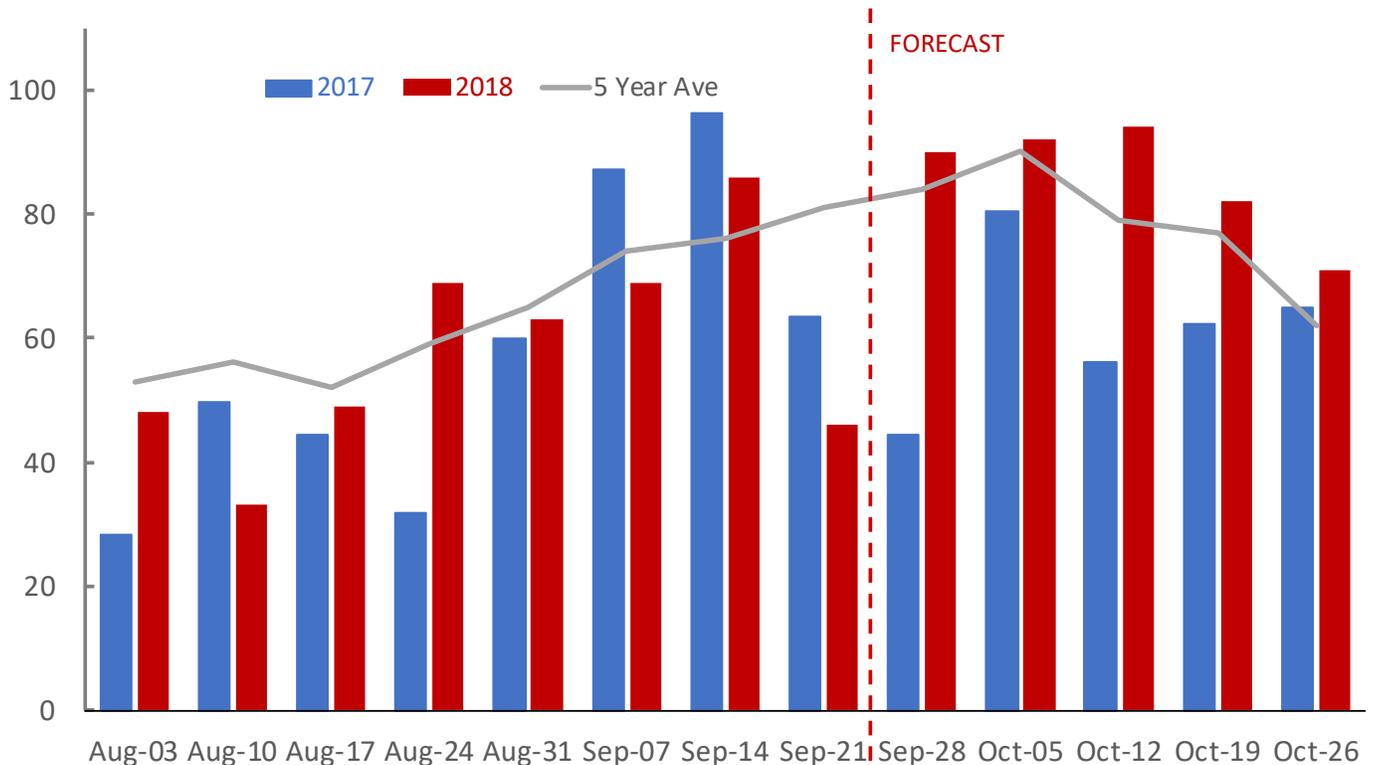
Shown above is a model forecast for the month of October (Weather Bell)

COLD PUSHES EAST LATER IN THE MONTH

Above-normal warmth lingered into September and helped keep cooling demand elevated. However, milder temperatures have taken over heading into October, and continued above-average temperatures in the eastern US will become more bearish this month as they stave off significant, early heating demand in the first half of October. However, colder temperatures will not stay bottled up in the West forever and will look to push east and south by the end of the month. This will bring the first substantial heating demand of the season in late October.

Strong Demand Limits September Injections

Injections - Bcf - Week Ending



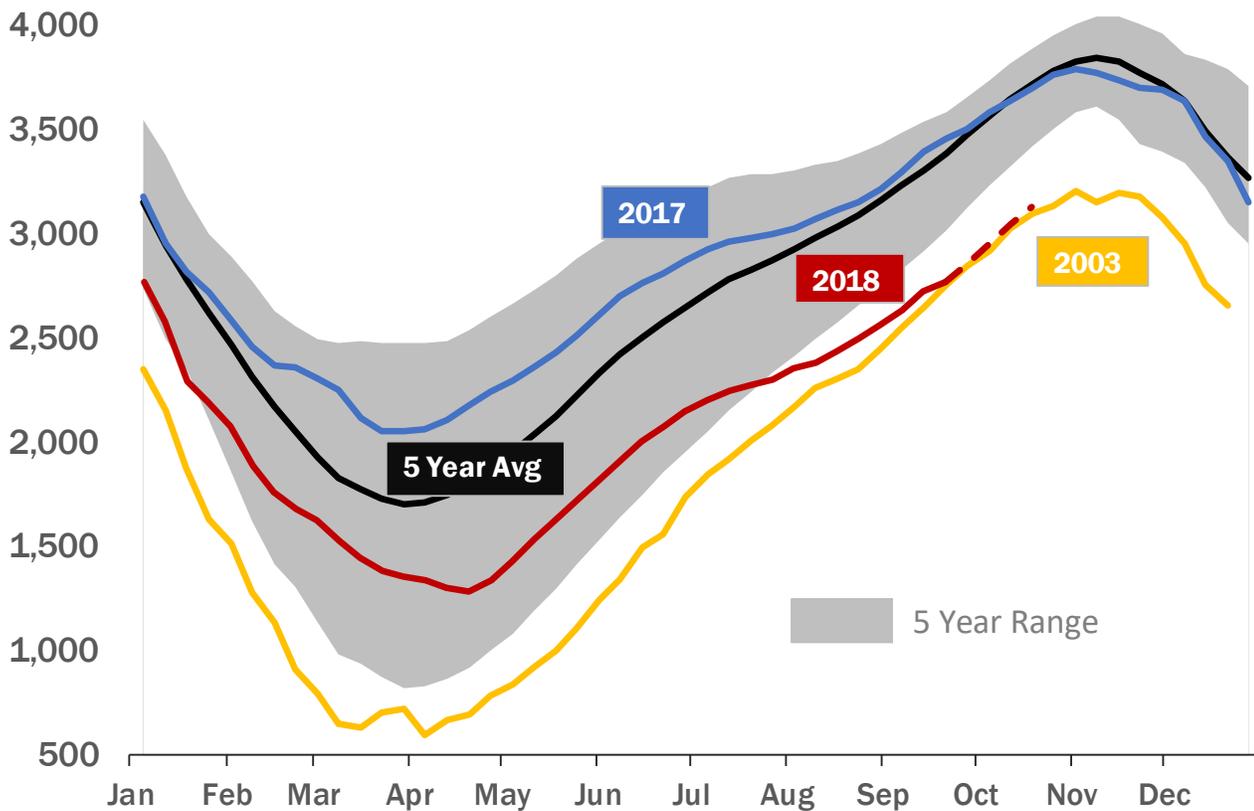
RELATIVELY LARGE INJECTIONS IN OCTOBER

Injections have shown inconsistent, modest increases but have been and limited by relatively strong demand in September. Milder weather going into October is expected to leave room for a broader increase in storage additions although they may still fail to reach triple-digits. These larger storage additions will be needed this month to put the market more at ease about storage levels going into winter.

Week Ended	5-Year Avg	Storage Forecast (Bcf)
September 28	84	90
October 5	90	92
October 12	79	94
October 19	77	82
October 26	62	71

Storage Approaches 15-Year Low

US Gas Storage - Bcf

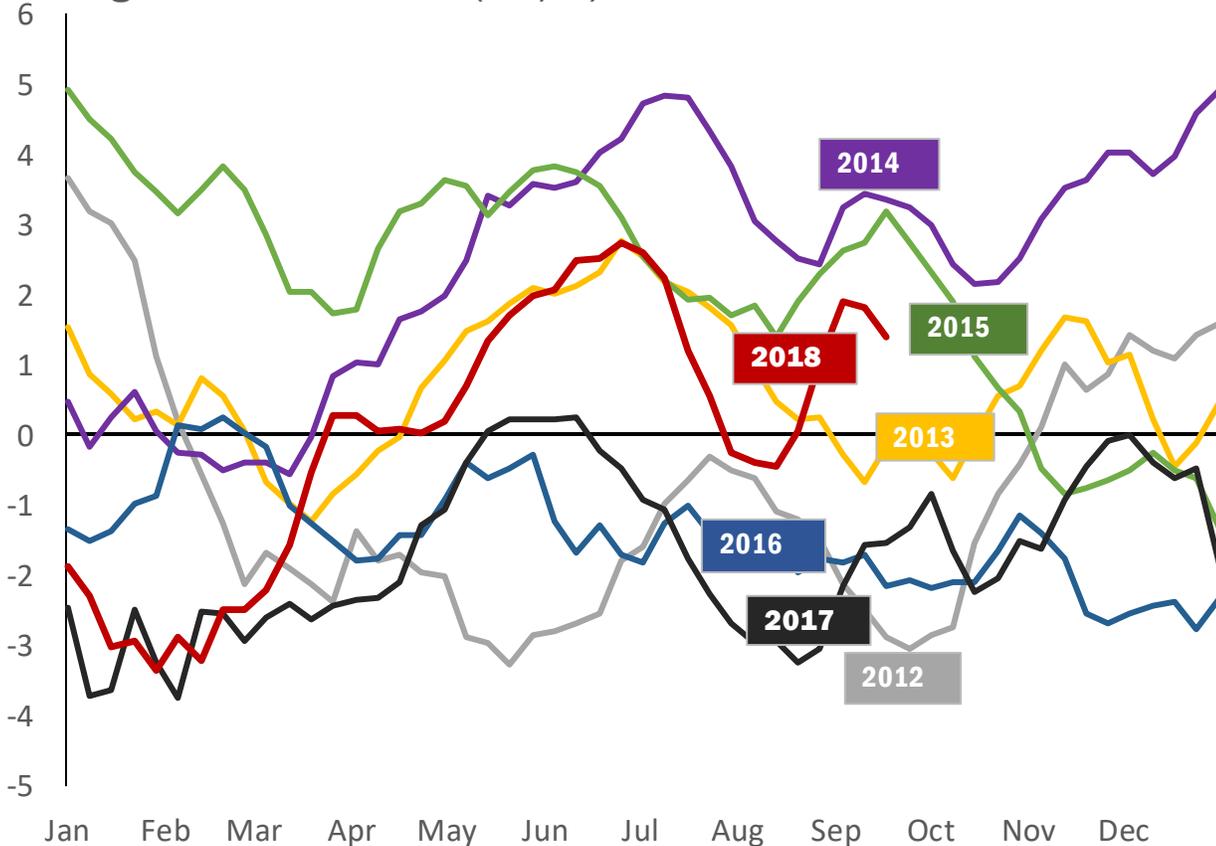


STORAGE ON PACE FOR LOWEST FINISH SINCE 2003

Storage inventories remain out of the five-year range at 2,768 Bcf and will approach a 15-year low if injections don't get the expected boost in October. End of season storage inventories are likely to end near 3.3 Tcf, at their lowest level since 2003, even with several large storage additions this month. However, a late season push to refill storage would still restore the market's faith in robust supply heading into winter.

Storage Residuals Recovering

Storage Model Residuals (Bcf/D)



RESIDUALS NOW RECOVERING

Since August, storage model residuals have trended positive due to the addition of new supply. However, in the past two weeks nuclear closures have reversed the positive residual trend. Residuals will need to become more positive and add more gas into storage for the market to feel comfortable this month.

*Storage Model Residual Definition:

The above chart shows storage model residuals. Storage model residuals are created by subtracting Gelber's weather based storage estimate from the actual weekly storage change. This essentially removes the weather component from storage changes, leaving the non-weather balance of supply and demand. Positive residuals imply an oversupplied market and negative residuals imply an under-supplied market.

Boston-Area Gas Explosions



IMPLICATIONS FOR NORTHEAST INFRASTRUCTURE

A series of gas explosions and fires rocked three towns north of Boston, MA in mid-September, destroying dozens of homes and causing one fatality. In a region already paranoid at the thought of natural gas pipelines flowing under their feet, such a tragic and salient event can only increase the distaste for additional projects in the Northeast. The opposition of New Englanders to natural gas infrastructure is deep-seated, visceral, and seemingly irrational to those who live in energy friendly states, but a horrible event like this seems to justify the position of those opposed to further development. The explosion is known to have been caused by a buildup of extreme pressure on the local distribution system, and the reputational risk to Columbia Gas of Massachusetts and their parent company NiSource is very real. However, the risk to the industry as a whole is also problematic, even though large long-haul pipelines that face extreme opposition in the Northeast bare little resemblance to the often outdated and sometimes poorly maintained small pipes that carry gas on local systems. Pipelines are perceived as the menace from below, quietly unseen until a terrible, attention-grabbing accident occurs. It would be encouraging to see natural gas companies and local LDC's take a proactive role in defining new safety measures and technologies to prevent pipeline failures before they happen, eventually helping shift the popular perception of these systems in places like New England.

Duke Dam Breach



MORE PROBLEMS FOR COAL

Heavy rains and flooding caused by Hurricane Florence impacted Duke Energy's L.V. Sutton Power Station outside Wilmington, North Carolina, eventually breaching the dam that separated the Cape Fear River from the plant's coal-ash disposal site. This breach opened the potential flow of harmful particles from the coal-ash pond into nearby Lake Sutton and the Cape Fear River, causing significant worry for those immediately impacted. The disposal of coal ash has become an increasingly costly and cumbersome task for coal-fired power generators, and exposure to liabilities from an occurrence like this only worsens coal's favor in their eyes. Despite the Trump Administration's seemingly friendly stance, incidents like the most recent dam breach bring this issue to the forefront and place further pressure on power generators to switch away from the use of coal to other power sources like natural gas.

