Who's Ready for Next Winter?

U.S. Power and Gas Weekly

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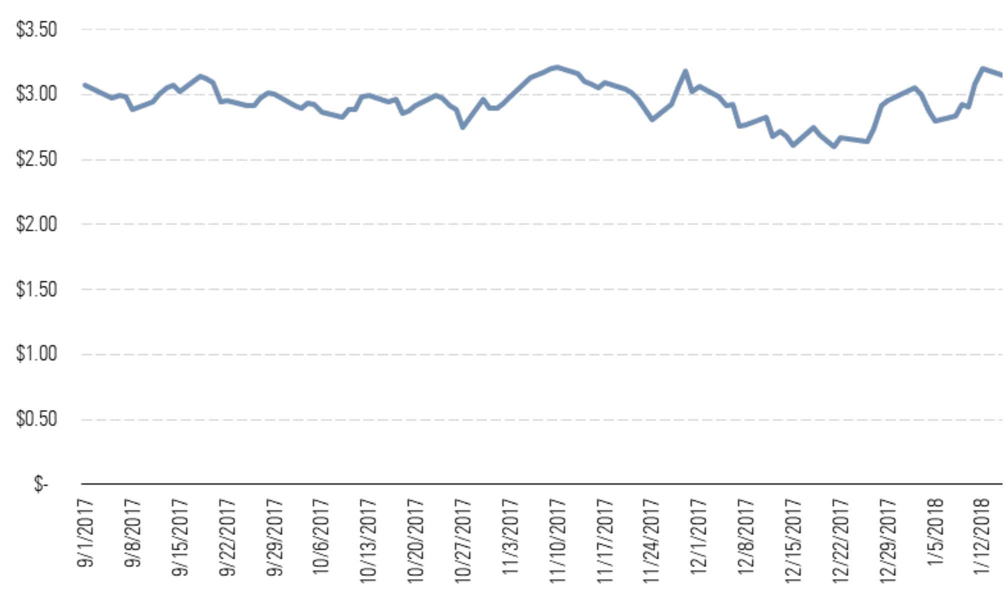
Data Sources Used in This Publication
New York Mercantile Exchange
Energy Information Administration
PointLogic Energy
Intercontinental Exchange

Looking Forward to Next Winter

Although we are not fully through the winter season, prices at Henry Hub have proved to be very resilient to changes in the demand landscape. Prices at Henry Hub have traded between $2.60 and $3.21 per million British thermal units this season (Exhibit 1) and traded in an even narrower range when temperatures hit their lowest levels between Dec. 25 and Jan. 5. During this period, the Hub traded between $2.64mmBtu and $3.06/mmBtu. Conversely, there is more volatility in basis markets. Algonquin has been trading between $2.187/mmBtu and $9.568/mmBtu, and Tetco-M3 has traded between $.048/mmBtu and $3.286/mmBtu, a much wider range this winter to date. For comparison, given that Nymex traded between $3.44/mmBtu and $6.15/mmBtu during the 2013-14 polar vortex this winter's trend of shifting volatility to regional markets may spell more range-bound Nymex trading for the future.

Exhibit 1 Spot Month Henry Hub Price ($/mmBtu)

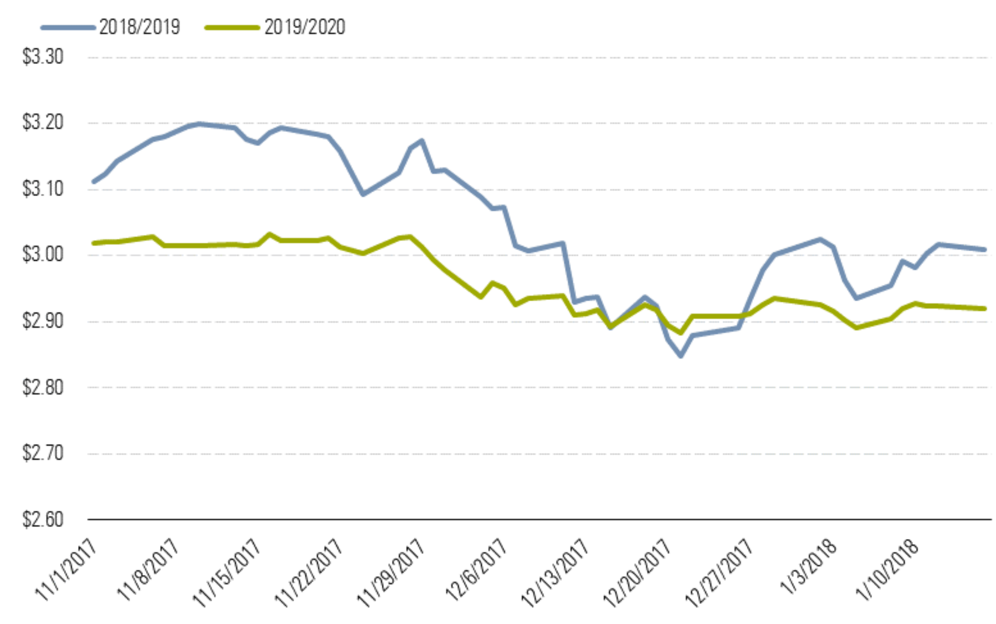


Source: Nymex

Supply and Demand Fundamentals

One of the interesting observations this season was seen further out on the curve, and although it may be early to be talking about the next few winters, we thought it was worth discussing. Especially as the underlying fundamentals continue to change. Prompt futures prices fell from $3.17 /mmBtu on Nov. 29 to $2.85/mmBtu on Dec. 21, a 10% drop. Since the low in December, prices have recovered to around $3/mmBtu. The 2019-20 winter strip has stayed even flatter, hovering around $2.90/mmBtu for most of the winter. Although some of the decline in the 2018-19 contracts can be attributed to the winter strip sympathetically moving with the front of the curve, it is worth noting where the long-term fundamentals sit today.

Exhibit 2 Henry Hub Winter Strips ($/mmBtu)



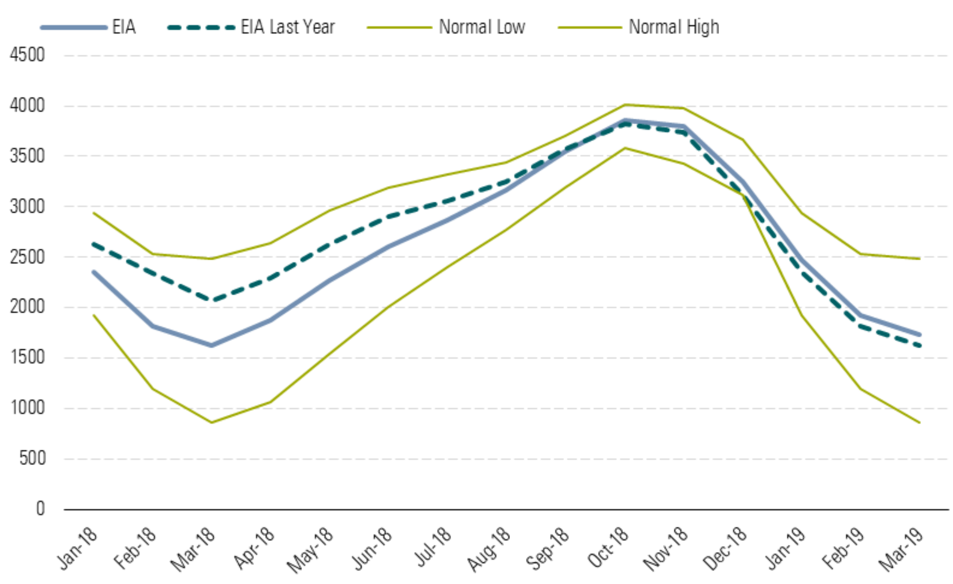
Source: Nymex

Looking at supply, natural gas production is expected to remain strong. According to the U.S. Energy Information Administration, natural gas production should average 86.4 billion cubic feet per day for 2018, which is 7.6 bcf/d more than the 2017 average of 78.8 bcf/d. This growth represents 9.6% more supply forecast for 2018, with most of it originating from the Marcellus, Utica, and Permian basins. EIA's production forecast shows a slowdown for 2019, which is estimated to increase 3.4%, averaging 89.4 bcf/d. If 2017 had been marked as the year for growth in natural gas supply, 2019 may be the year where production limits get tested, and producers determine the efficiencies of their operations.

On the demand side, the EIA is forecasting an increase of 4.7% in natural gas demand for 2018. The primary drive for the increase will come from first-quarter consumption. First-quarter 2017 ended up much milder than normal, leading to lower natural gas consumption, while the current forecast for first-quarter 2018 is trending toward a more normal winter. Looking at heating degree days, or HDDs, in the U.S. for next winter, 2018-19, temperatures are forecast to be warmer by 18 HDDs on average compared with the 30-year average, which will translate to lower domestic consumption in aggregate. The variable that could swing demand will be exports. Cove Point, which is taking gas into storage, should be fully operational this quarter, and Elba Island, which is a smaller facility, should also be on line this year. However, a bulk of the export capacity for liquefied natural gas will be on line in 2019, with the EIA forecasting 5.5 bcf/d in the second half of 2019. Gross Mexico pipeline exports are forecast to increase to 7.2 bcf/d in 2018 and 8.0 bcf/d in 2019. Now, export capacity alone is not a driver for demand, and the degree to which the world consumes U.S. supply will depend on prices in the demand hubs in Asia. Prices into Japan Korea Marker for the next two winters are trading between \$7.55 and \$8.70/mmBtu, which is in line with historical levels, and the spot arbitrage between the U.S. and Asia has been closed. Prices in Asia would need to go up for us to see more export activity.

Turning to the storage picture, the largest withdrawal occurred in the first week of the year, where the U.S. pulled 359 bcf out of storage, which was 71 bcf more than the previous record set four years ago. However, natural gas withdrawals in the second week of January fell short of the 195 bcf the market was expecting. In 2017, working natural gas in storage started the year well above the five-year average, driven primarily by the milder winter, and ended the year at a point well below the average and very close to the five-year minimum point, which means we are starting 2018 with much tighter storage (Exhibit 3). The EIA is forecasting January month-end storage levels 269 bcf below January 2017 and around 5% below the average. Factoring in the most recent storage withdrawal, inventory levels at the end of January 2018 will likely be lower than the 2,353 bcf forecast by the EIA. Additionally, month-ending storage levels have the country below the average for much of the year, which could test producers and their ability to bring working natural gas storage back to normal levels.

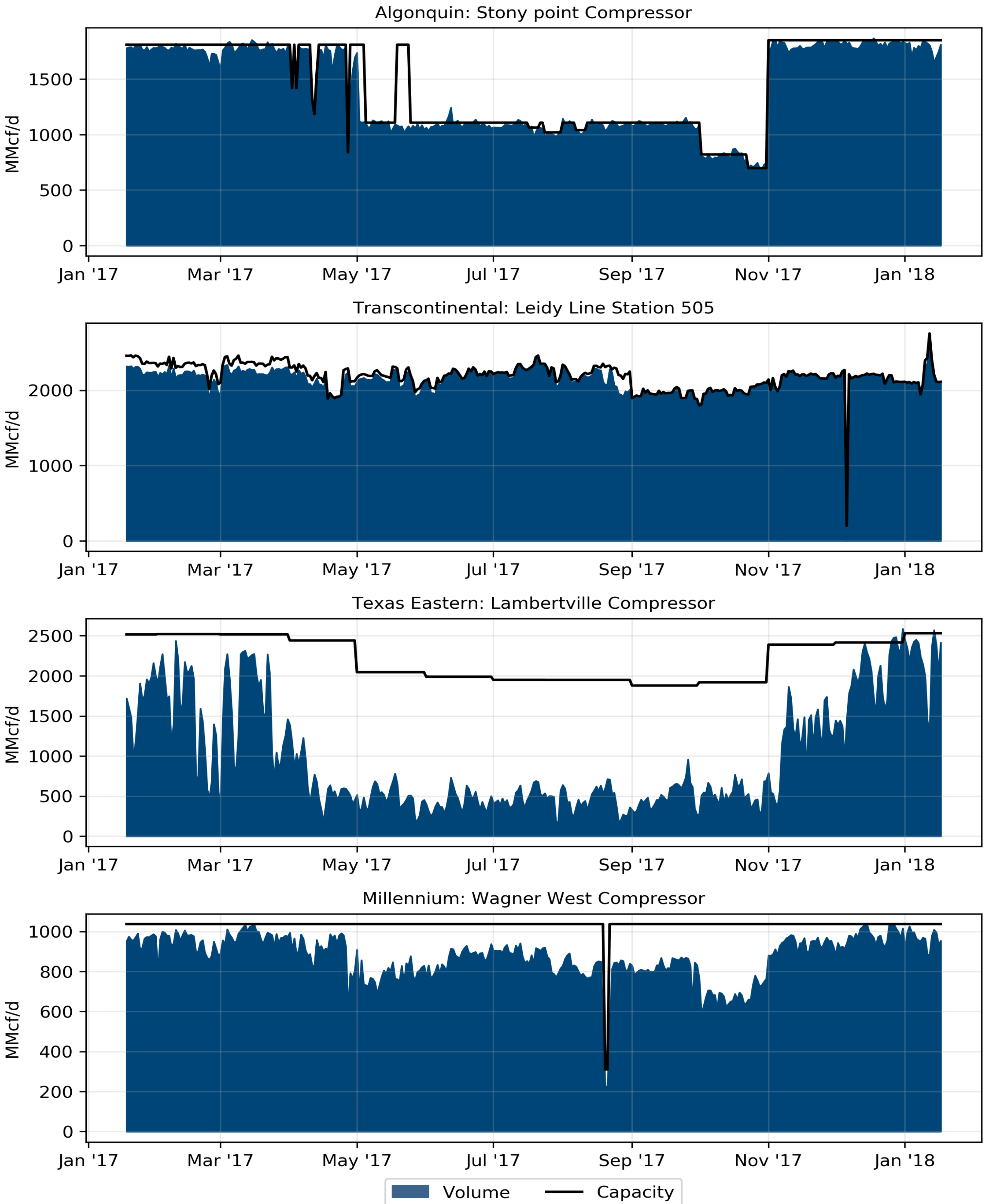
Exhibit 3 EIA Month-Ending Storage Forecast (Bcf)



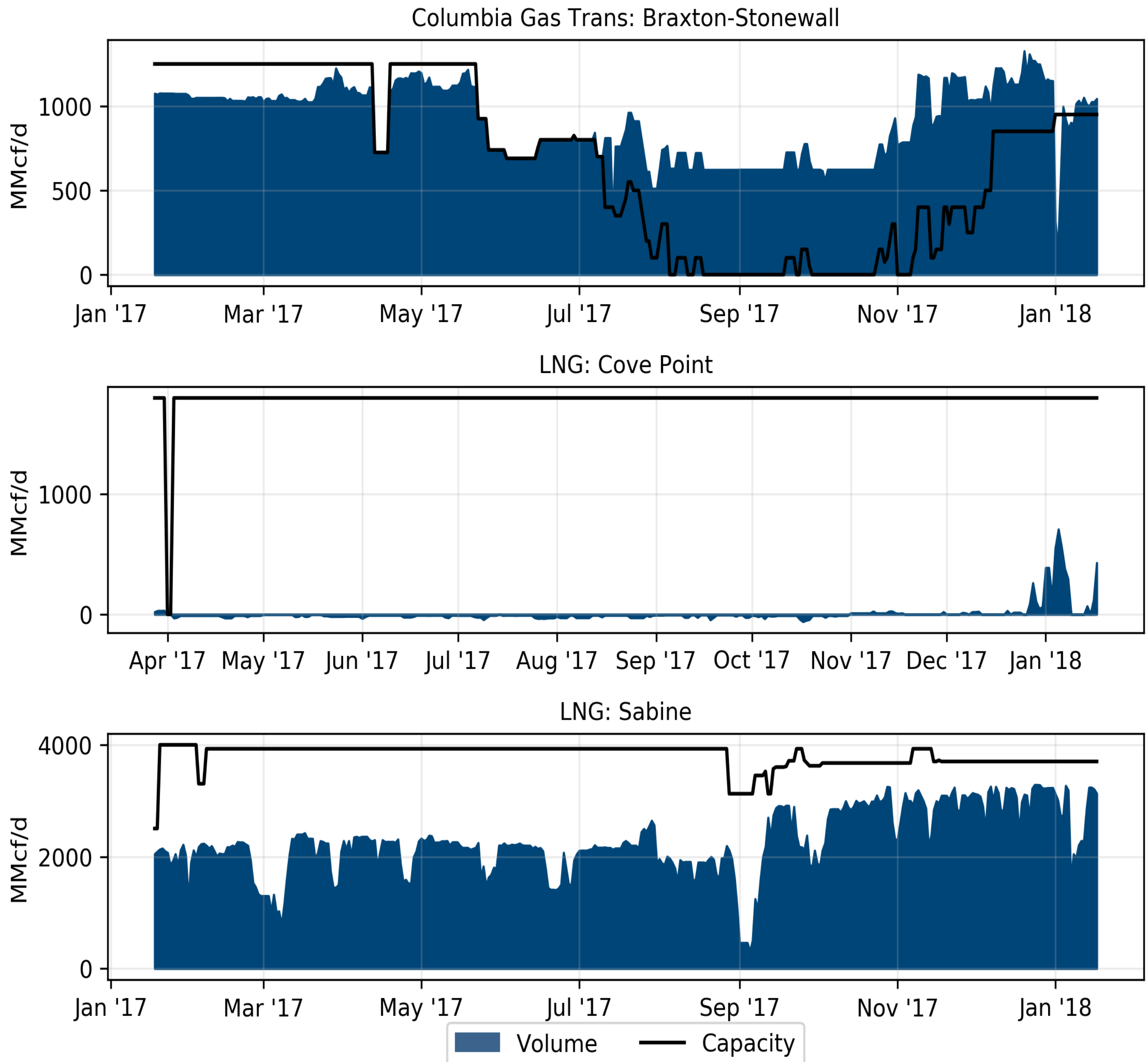
Source: EIA

Looking at the forward curve, there is currently a discount for the 2019-20 winter strip compared with the 2018-19 contracts, which does not seem warranted. If we assume the EIA's forecast is directionally correct, we would see a slowdown in production; growth in export demand from both Mexico and potentially the LNG seaborne market; and much tighter storage at the end of 2019, which EIA forecasts to be 7% below the average compared with 5% below for the end of December 2018. The fundamentals are pointing to tighter supply and demand two seasons from now, which means the discount should be a premium. Interestingly, we are also seeing a similar discount for winter in the seaborne LNG market. With the long-term fundamentals pointing to tighter supply and demand, and the 2019-20 Henry Hub staying flat at around $3/mmBtu, we feel that the 2019-20 winter strip is undervalued. We will continue to keep a pulse on changes to the overall natural gas complex as we move further into the year.

Natural Gas Important Points



Source: Pointlogic Energy



Source: Pointlogic Energy

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