Orchid Insights

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Hal Kaiser

5100 Westheimer Rd, Suite 200
Houston, Texas 77056 USA
hal.kaiser@orchidgroup.biz
Phone: +1-713-819-3482

Debby Sung

5100 Westheimer Rd, Suite 200
Houston, Texas 77056 USA
debby,sung@orchidgroup.biz
Phone: +1-281-591-4809

Volatility in gas prices, but positives for gas focused basins

Back in January when the calendar flipped over from 2019 to 2020, the outlook for natural gas in the United States was extremely bearish. Continued growth in oil production in the Permian meant increasing volumes of gas flooding the market regardless of benchmark prices given that gas production there is a by-product of oil production and, therefore, is not impacted by declining gas prices.

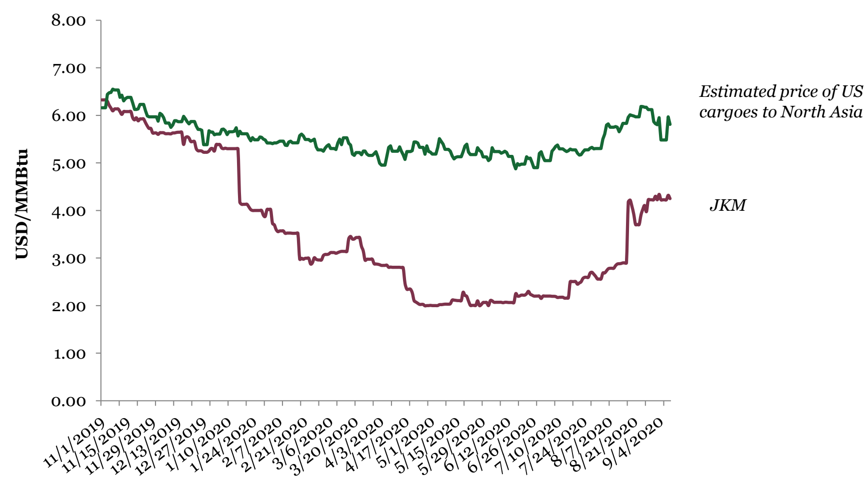
As a result, producers operating in the two key gas focused basins in the United States, the Marcellus/Utica and the Haynesville, were already reducing rig counts and cutting back on spending heading into 2020. Those with assets in other basins declared they would focus investment activities elsewhere and, as Chevron did in the 4th quarter of 2019, wrote down the value of their Marcellus/Utica investments.

Then COVID-19 hit, and a roller coaster began for the outlook in the United States gas markets. Initially, COVID-19 was a positive for the gas focused basins. A reduction in oil production in the Permian and elsewhere meant less gas coming into the market from oil focused basins and support for gas prices as well as more competitive space for the Marcellus/Utica and Haynesville.

"…the competitiveness of US LNG took a significant hit."

Domestic gas demand declined, but not to the same degree as global oil demand. However, the story in global LNG markets was different. Coming off a wave of new LNG liquefaction start-ups in recent years, the decline in global demand was enough to send spot LNG prices below $3.00/MMBtu. As a result, the competitiveness of US LNG took a significant hit.

US LNG to Asia vs Asian Spot LNG Prices

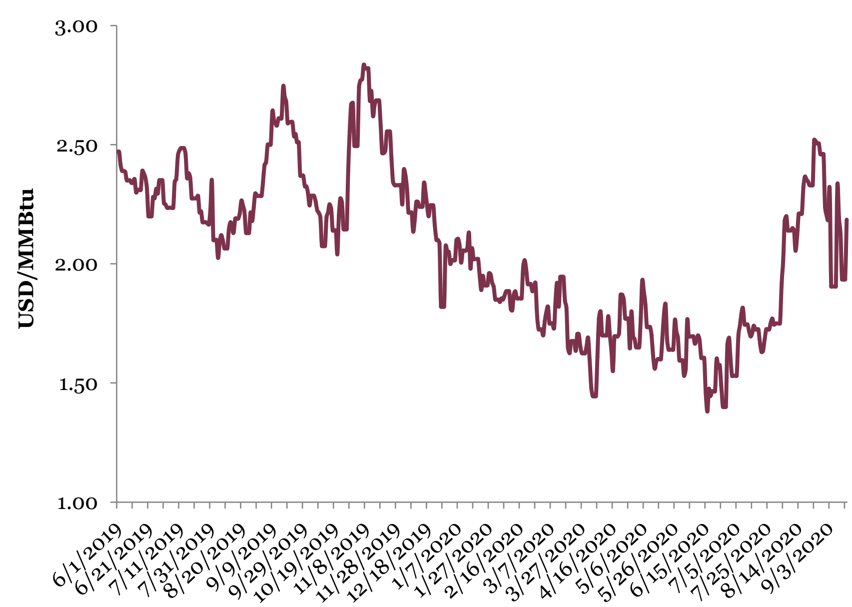


Source: Platts, NYMEX, Orchid Group

"Customers of US LNG export projects began cancelling cargoes, including an estimated 129 between June and August."

Customers of US LNG export projects began cancelling cargoes, including an estimated 129 between June and August. All total, from April to October the number of cancelled cargoes is over 170. That, in turn, led to a drop in pipeline receipts of gas at LNG export terminals, dropping from a high of 9.6 Bcf/d during the first week of April to 3.2 Bcf/d by the end of August.

Henry Hub Prices



Source: Natural Gas Intelligence

"Heading into the winter months, there is some optimism for LNG exports."

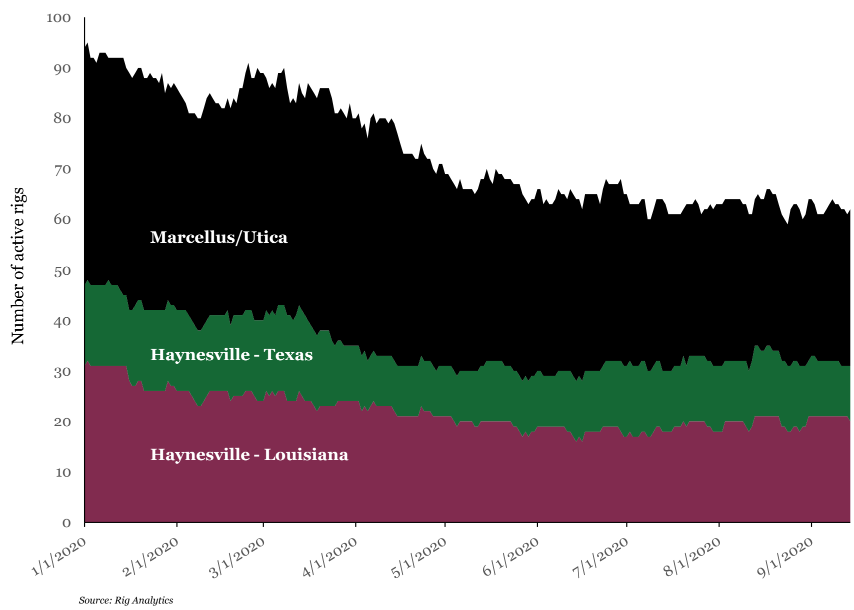
However, heading into the winter months there is some optimism for LNG exports, and pipeline receipts have increased to over 4 Bcf/d since then. Hurricane Laura in late August slowed that increase by forcing Sabine Pass out of commission until the end of the first week of September, while Cameron LNG remains down as of September 21st. Nevertheless, in recent days pipeline receipts at export terminals have surpassed 7 Bcf/d.

Gas Basins – Weathering the Storm

"While rig counts have plunged since April in most basins, the Appalachia and Haynesville regions have seen less of a drop off."

While rig counts have plunged since April in most basins, the Appalachia and Haynesville regions have seen less of a drop off based on the expectation that declining volumes from the Permian would mean greater demand for gas production elsewhere. The Marcellus/Utica basins began this year with 47 active rigs and remained above 40 until the end of April. A gradual decline occurred through the end of June but has held steady since then. As of September 14, 2020, the active rig count stands at 31.

Gas Basin Rig Count



"The current active rig count in the Haynesville is the same as it was on April 15th."

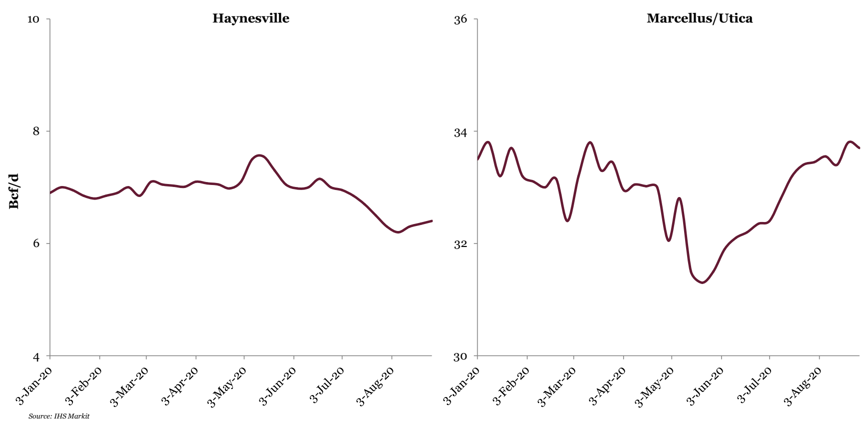
The Haynesville opened the year with 47 active rigs as well. Unlike the Marcellus/Utica, the drop off in active rigs in the Haynesville took place between January and mid-April. The current active rig count of 31 in the Haynesville is the same as it was on April 15th

"Marcellus/Utica gas production declined through June, however now stands above January levels."

More important than the rig count, however, is what the impact has been on natural gas production. In the Haynesville, production actually grew through May, reaching 7.5 Bcf/d, before declining to approximately 6.3 Bcf/d by the end of August.

Marcellus/Utica gas production declined through June, however now stands above January levels.

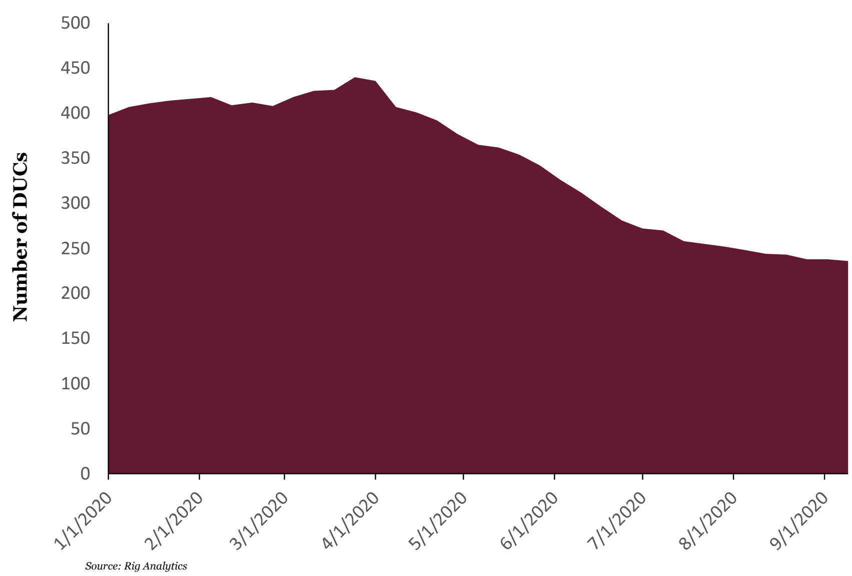
Gas Basin Production Levels



"… the number of DUCs has been on the decline since April."

How is growth in Marcellus/Utica production possible despite a reduction in drilling activity? A ramp up in completion activity; the number of drilled uncompleted wells ("DUCs") has been on the decline since April.

Marcellus/Utica DUC count



"Producers in other basins are beginning to shift their focus to completion of DUCs as well…."

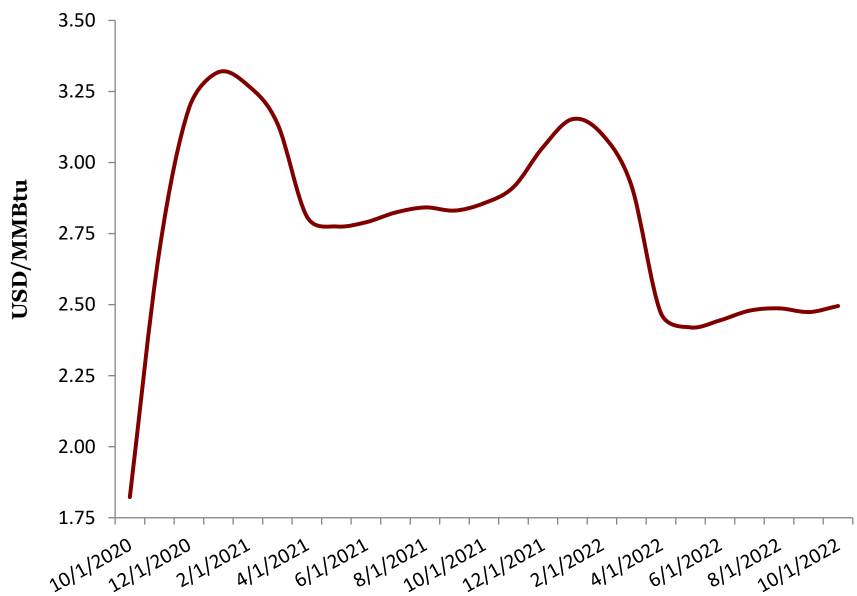
"The forward curve for natural gas prices is relatively bullish."

Producers in other basins are beginning to shift their focus to completion of DUCs as well as a means of sustaining production in a reduced drilling environment.

However, producers in the Marcellus/Utica and Haynesville basins are uniquely positioned to take advantage as LNG exports recover while gas production in the United States overall remains stagnant (it is unlikely we will see an increase in gas production out of the Permian or other oil focused basins until perhaps the second half of 2021).

As a result of the above scenario, the forward curve for natural gas prices is relatively bullish. By December the curve is over $3/MMBtu and does not drop below $2.80/MMBtu until mid-2022.

NYMEX Forward Curve



Source: NYMEX

Implications

Barring any further COVID-19 linked reductions in demand or a surge in oil prices that triggers new investment in oil basins, the Haynesville and Marcellus/Utica, which have already weathered 2020 as well as can be expected, are poised for strong growth over the next two years.

Authors

Hal Kaiser

Hal is a partner and CEO of Orchid Group based in Houston. He has been working in the energy industry for over 20 years as a project developer, executive and an adviser. His primary areas of expertise are LNG, power generation, pipelines and upstream oil and gas. Hal focuses in particular on the Korean energy market and working with Korean investors on outbound investment. Prior to co-founding Orchid Group, Hal worked for Texaco, Chevron. Macquarie Korea and AWR Lloyd.

Debby Sung

Debby is an advisor of Orchid Group and attorney for Orchid Law, based in Houston. She is a dual licensed attorney in the state of Texas and Republic of Korea. Prior to joining Orchid, Debby worked in Austin and Seoul, published papers in the fields of energy (LNG trading) and environmental law and sciences. She holds stellar academic credentials: The University of Texas School of Law (LL.M.) and Kangwon National University School of Law (J.D.), Seoul National University (Civil and Environmental Engineering, M.S.) and Ewha Women's University (Environmental Engineering, B.S.).

Orchid Group

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