Reported Prices – US crude oil futures for the prompt-month collapsed below $0 per barrel on April 20 for the first time in history, ending that day at a stunning negative $40 per barrel amid limited storage capacity and the COVID-19-induced demand collapse. The prompt-month oil contract rolled over to June, and current oil prices are trading above $17 per barrel at West Texas Intermediate. Brent crude remains at a premium at $25 per barrel. Meanwhile, natural gas prices remain relatively low and steady. Henry Hub prompt-month calls for $1.89 per MMBtu on April 30. Prices ahead show some strength. The gas futures strip rises as high as $3.09 per MMBtu for a January 2021 delivery.

Weather – AGA does not publish heating or cooling degree day data for the months of April and September. However, the transition to spring seems far away still for much of the lower-48, which in turn has driven late-season residential and commercial demand and smaller than normal injections into storage. Meanwhile, the Weather Company outlook is forecasting a more active-than-average 2020 Atlantic hurricane season, comprising of 18 named storms, nine hurricanes, and four major hurricanes. The forecast is significantly above the 30-year normalized average of 13 named storms, seven hurricanes, and three major hurricanes. Though the official Atlantic hurricane season runs from June through November, storms occasionally develop outside those months, as was the case last year with Subtropical Storm Andrea in May 2019. How many storms make landfall, or become a disruption to energy production, remains to be seen.

Working Gas in Underground Storage – the EIA announced an injection of 43 Bcf for the week ending April 17, 2020, followed by an additional 70 Bcf for the week ending April 24. While widespread social distancing and non-essential business closures may have changed a lot about daily life, natural gas demand in aggregate has not experienced significant declines. Colder temperatures have driven elevated residential and commercial demand, and storage injections have been lower compared to the past five-year average as a result. Inventories in underground storage stand at 2,210 Bcf, 54.9 percent more than the corresponding week in 2019 but nearly 19.5 percent higher than the five-year average.

Natural Gas Production – US lower-48 gas production remains strong through the end of the month. Compared with last year, domestic daily dry gas production in April averaged 3.2 Bcf per day higher than in April 2019, and nearly 4.0 Bcf per day higher year-to-date than one year ago as we observe January through April statistics. However, the final ten days of April showed a 0.3 Bcf per day decline compared with April 1-20, according to an S&P Global analysis. Slowed drilling activity and potential oil well shut-ins may increase the prospect of
reductions in US associated gas flows from petroleum production. Conversely, dry gas production in the Northeast has remained steady.

**Rig Count** – rig counts in the oil patch have fallen much faster than gas-directed plays. Operations are down by 169 rigs (41 percent) and 25 rigs (48 percent) in the oil-rich Permian and Williston basins, respectively, since the week ending March 6. By contrast, the gas-rich Marcellus declined by 5 rigs (13 percent) during that time. The Utica has shed only two rigs (18 percent). The Haynesville’s activity has seen a steeper decline with nine rigs (21 percent) coming off since March 6. In aggregate, oil-directed rigs fell 60 and gas was down five for the week ending April 24. There are now 465 rigs in operation, 53 percent below year-ago levels.

**Pipeline Imports and Exports** – month-to-date import volumes from Canada are down 0.9 Bcf per day compared with April 2019. Daily averages for imports from Canada have fluctuated during the end of April, ranging from 2.6–4.0 Bcf per day. Meanwhile, pipeline exports to Mexico are averaging 4.7 Bcf per day, which is no change from April of last year.

**LNG Markets** – Asian LNG spot prices at the Japan-Korea Marker fell to an all-time low of $1.90 per MMBtu on April 27, according to S&P Global. European gas prices have fallen to below $1.80 per MMBtu. With Henry Hub in similar territory, major gas markets across the globe are pricing gas supplies in a sub $2.00 per MMBtu range. Meanwhile, the development of new US gas liquefaction trains continues to ramp up. On April 22, Cameron LNG reached the final commissioning stage for its third liquefaction train. Freeport LNG is expected to start commercial operations of its third train in May. The Elba Island LNG terminal in Georgia received a federal authorization on April 20 to bring the sixth of ten small modular liquefaction units online. All the while, month-to-date flows of US feedgas for export are averaging 8.2 Bcf per day in April, which is 82 percent above April 2019.

**Natural Gas Market Summary** – So far, the data suggests relatively minimal impacts of COVID-19 on the US natural gas market. As it stands, aggregate demand is steady, averaging 92.3 Bcf per day in April. Storage inventories are growing, but at a slower-than-usual pace during the past two weeks as cooler temperatures drive volumes to residential and commercial demand. Feedgas volumes for LNG export are 83 percent ahead of this time last year, despite sub-$2.00 per MMBtu prices for natural gas in major Asian and European markets. And US natural gas production remains steady, though slight declines in total flows at the end of April could signal a slowdown. Ongoing declines in oil rig activity may affect future associated gas flows. It remains an open question of how substantial that effect will be.