NATURAL GAS MARKET INDICATORS

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Natural Gas Market Summary – the US set a two-day record for natural gas consumption over February 14 and 15 as an arctic air mass over the US catapulted heating and electricity demand. The cold event led to declines in inflowing gas production, boosted natural gas storage withdrawals and imports, and led to temporary decreases in natural gas exports. In some geographic areas, the market rationalized the sharp changes in supply and demand with triple-digit cash prices for spot gas. As temperatures eased, dry-gas production, imports, exports, and prices have returned to pre-event levels. Storage volumes, withdrawals of which ramped up significantly to meet demand during the cold event, are now in a deficit compared with the five-year average after beginning the heating season at near-record levels.

Reported Prices – the cold weather that affected most of the country over the second and third weeks of February had a significant effect on spot prices, with reports coming out of the Oneok natural gas transportation hub of spot prices nearing $1,200 on February 15. The cold temperatures also led to a temporary increase in April's future prices, which peaked at $3.06 on February 18. Since then, prices have declined fairly consistently. On February 26, April futures were trading as low as $2.70, the lowest price in nearly a month. Long-term strip prices fared similarly, with prices on February 26 dropping to $2.79 for June futures and $2.84 for July, both monthly lows. WTI and Brent oil prices continue to climb, reaching their highest prices since December 2019. As of February 22, WTI was trading at $61.50, and Brent was trading at $65.97.

Weather – the historically cold weather that impacted much of the US is gone, as relatively warmer temperatures have taken hold of much of the US. The temperatures during the second and third weeks of February were unprecedented. All but six states in the US experienced higher-than-normal heating degree days, with Texas, Louisiana, Oklahoma, Mississippi, and Arkansas experiencing more than twice the normal number of heating degree days for the week. For the weeks ending February 13 and 20, the US experienced temperatures 26 and 39 percent colder than normal, respectively, as measured by HDDs. The West South Central census region saw heating degree days 169.2% higher than normal, 23 percent higher than the previously recorded high in October 1997. While the GFS-16 is forecasting a cold front to hit the lower-48 in the coming days, it is expecting temperatures that are predominantly warmer than normal over the next two weeks.

Working Gas in Underground Storage – beginning the week ending February 12, working gas inventories drew down by 575 Bcf in two weeks as bitter arctic cold descended on the US from Texas to the Northeast. The week ending February 19 saw the second-largest natural gas withdrawal from storage in history at 338 Bcf. The record, set in January 2018, is 359 Bcf. Withdrawals in the US South Central region, which serves Texas and surrounding markets, increased by 184 percent from two weeks earlier, for a record amount withdrawal of 156 Bcf from storage. National underground inventories now sit at 1,943 Bcf, which is 13.3 percent lower than one year ago and 7.7 percent lower than the five-year average.

Natural Gas Production – US natural gas production recovered quickly following a sharp decline in February triggered by the frigid temperatures. Estimated lower-48 dry gas production fell to about 75 Bcf on February 18, according to S&P Global Platts. Most of the decline in production has occurred in the Permian and Anadarko basins which, in February 2021, experienced average daily production 25.8 and 38.2 percent below 2020 levels. By February 26, dry gas production was 92.7 Bcf per day. February month-to-date average production was at 87.3 Bcf per day, only 5.6 percent below 2020 levels.

Rig Count – the domestic oil and gas rig count rose by five over the last week of February, bringing the total rig count to 402. Rigs seeking gas total 92, one more than the week prior, but still below the 110 gas rigs in operation one year ago. There are now 309 oil rigs in operation, 77 percent of all US rig activity, but remains substantially below the 678 rigs in operation during the same week in February 2020. Despite these declines, domestic gas and oil production has remained stable.

Pipeline Imports and Exports – US pipeline exports to Mexico were also impacted by the effects of Winter Storm Uri. According to data from S&P Global, US pipeline exports to Mexico fell from a high of 6.1 Bcf per day on February 10 to 3.8 Bcf per day on February 16. The majority of the declines occurred on the South Texas corridor, which typically sends the largest amount of natural gas supply to Mexico, saw declines of up to 20 percent as temperatures plummeted. As of February 26, US pipeline exports to Mexico have recovered to 5.5 Bcf per day. The effect of the receding cold temperatures had the opposite effect on imports from Canada. Following high monthly imports of 8.4 Bcf per day on February 18, imports have fallen to 3.6 Bcf per day as of February 26.

LNG Markets – feedgas deliveries to US LNG export facilities have rebounded since their sharp declines during the recent polar blast. Daily gas deliveries from pipelines connected to US LNG export facilities reached the lowest volumes of the cold spell on February 16 at 2.2 Bcf per day. Levels returned to pre-polar blast levels of 10.0 Bcf per day by February 23, according to data from S&P Global.