Oil and Gas News Briefs
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U.S. shale oil producers may be at end of cost efficiencies

(The Wall Street Journal; Nov. 16) - America's shale patch has emerged from multiple busts with the survivors stronger than before, lowering the price at which new wells can break even. That evolutionary push had ratcheted down oil-price expectations globally, spooking the likes of Saudi Arabia. Now, in the aftermath of climate talks in Glasgow, the investor cash that powered that cycle is scarce. This might be the end of an era.

Since 2014, U.S. shale producers' average break-even oil prices have largely been on a downward trajectory, according to survey data collected by the Kansas City Federal Reserve. In the third quarter of 2014, U.S. producers on average needed West Texas Intermediate oil prices to be at $79 a barrel to profitably drill a new well. By the first quarter of 2020, that price had fallen to $47 a barrel. Between those two periods, U.S. oil production grew by almost 30%, while using 61% fewer rigs.

But the trend of declining break-even prices has reversed during the pandemic. Since the first quarter of 2020, break-even prices have increased every subsequent survey and are at $57 a barrel as of the third quarter, the highest since 2015. Broad-based inflation in materials and labor are partly to blame for today's rising costs. Another reason is that shale producers have plucked the low-hanging technological fruit.

"In the early innings of the shale boom, efficiencies were a lot easier to find," said Kunal Patel, economist at the Federal Reserve Bank of Dallas. Future efficiency gains could be even tougher to come by as the industry limits its capital spending. Investors would rather see cash flows go toward dividends or share buybacks than splashy projects. It could be the end of an era for U.S. shale, but not the end of its influence.

Rosneft reports work underway at massive Arctic oil project

(The Barents Observer; Norway; Nov. 19) - According to the Russian state oil company Rosneft, 15 ships this past summer delivered 145,000 tons of construction materials to the remote coast of the Taymyr Peninsula. On site now are 220 workers and 100 pieces of machinery, Rosneft said. According to the company, the Vostok oil project is the world's biggest investment in the oil and gas sector. It includes 52 field licenses with resources estimated at 45 billion barrels of oil equivalent, with production planned at 2 million barrels per day by 2030.

Dredging in the adjacent waters for a first loading terminal has already been conducted and workers are now doing groundwork for the first village and a fuel storage site. Also in the making is a piece of artificial land in the nearby bay and the building of a dam that is to protect another sea terminal facility. In all, the project will include the building of 15 new industry towns, three airports, about 500 miles of new pipelines, almost 2,500 miles of new electricity lines and 2,000 megawatts of electric generating capacity.

Lukoil works with Iraq to boost nation's oil production

(S&P Global Platts; Nov. 21) - Iraq's southern oil field of West Qurna 2, which is operated by Russia's Lukoil, is expected to reach peak production of 800,000 barrels per day by 2027, the country's oil minister said Nov. 19, as OPEC's second-biggest producer seeks to hit a production capacity of 8 million barrels per day by the end of that year. Ihsan Ismaael didn't provide current production figures for the West Qurna 2 field in the interview with state-run Iraqi News Agency. Iraq's current total production capacity is estimated at 5 million barrels per day.

West Qurna 2 is one of the world's largest oil fields, with about 14 billion barrels of initial recoverable reserves, according to Lukoil's website. The field pumps around 9% of Iraq's total oil production. Lukoil holds a 75% interest in West Qurna 2, with the rest held by state-owned North Oil Co.

In a separate filling, Lukoil has submitted to Iraq's oil ministry a preliminary development proposal for Eridu field, which may yield 250,000 barrels per day at peak, the ministry said Nov. 12. Initial indications point to Eridu holding potential resources ranging between 7 billion and 12 billion barrels, the ministry said. The field, located in southern Iraq, was discovered in 2016. Lukoil holds a 60% interest and Japan's Inpex 40%.

Italian credit agency may help with Russia's Arctic LNG-2 project

(Reuters; Nov. 19) - Italy's SACE may insure a loan of around 500 million euros ($567 million) for Novatek's Arctic LNG-2 project, two sources close to the matter told Reuters, amid calls by green European Union lawmakers for national export credit agencies not to support the $21 billion project. Italy's Ambassador to Russia, Giorgio Starace, said on Nov. 18 that financing will be provided by Italian state lender Cassa Depositi e Prestiti, which controls Italy's export credit agency SACE, and Intesa Sanpaolo.

In a letter in May, some members of the European Parliament had expressed concern about potential support by the French, German and Italian export credit agencies to Arctic LNG-2 which, they said, was not compatible with climate targets. SACE and Intesa Sanpaolo declined to comment. The sources said the lending insurance deal had not been finalized, adding that due diligence was still underway on the financing.

The plant is expected to produce almost 20 million tonnes of liquefied natural gas per year at full build-out in 2026. Earlier this year, Novatek shareholders approved external financing of $11 billion for the Arctic project, which is expected to start production in 2023. Leonid Mikhelson, head of the project's major shareholder, Novatek, told Reuters on Nov. 19 that Italy has provided the largest volumes of equipment and engineering service supplies among European contractors involved in the development.

FERC asks Oregon LNG project developer to make a decision

(S&P Global Platts; Nov. 19) - The Federal Energy Regulatory Commission has told the developers of the stalled Jordan Cove LNG project in Oregon and affiliated Pacific Connector feed gas pipeline they "should clarify whether they plan to move forward with the projects" as the commission considers whether to suspend a permit for the pipeline to prevent any property condemnations. FERC unanimously decided to approve the issuance of a briefing order in the matter during the commission's Nov. 18 meeting.

Canada's Pembina Pipeline told the U.S. Court of Appeals for the District of Columbia Circuit in April that it would "pause" the development of Jordan Cove to assess the impact of state regulatory decisions that could threaten the project's future. The project continues to face other major hurdles, including stiff environmental opposition and challenges in securing commercial agreements needed to advance to construction.

The FERC action on the briefing order followed a D.C. Circuit Court decision to give the regulator a new opportunity to stay its authorization of the project after landowners argued that they are stuck in limbo while the project remains paused. Even though Pembina has yet to commercially sanction the pipeline, the FERC authorizations for the projects mean the developers could start pursuing eminent domain proceedings to secure land for construction, landowners contend.

FERC wrestling with authority over gas project emissions

(S&P Global Platts; Nov. 19) - A strong divide over the limits of the Federal Energy Regulatory Commission's legal authorities repeatedly surfaced as the commission began sorting through ways to mitigate potential greenhouse gas emissions as part of its natural gas project reviews. The commission held a technical conference Nov. 19 to examine methods natural gas companies may use to mitigate the effects of direct and indirect greenhouse gas emissions from gas pipelines and liquefied natural gas plants.

Commissioner James Danly, at the start and end of the Nov. 19 forum, questioned a central assumption: That it is legal for FERC to get into mitigation of GHGs under its authority in federal law. Chairman Richard Glick long has argued FERC should assess the significance of a gas project's climate impacts and should seek mitigation of such impacts if they are significant. He has cited federal appeals court decisions to argue this will enhance the legal durability of FERC's orders.

Danly, however, said there is an "impending collision" between court decisions. Former FERC Chairman Joseph Kelliher, a panelist Nov. 19, shared the view that FERC lacks direct or indirect authority under the Natural Gas Act to order mitigation of GHG emissions. Glick declared himself "a little astounded" by Kelliher's position. Glick said a recent court decision clearly states that FERC has authority to deny a project if it is too harmful to the environment and the authority to mitigate foreseeable downstream emissions. The approach FERC takes could affect which projects are approved.

Gas flaring in Bakken down to 6% from 2019 rate of 19%

(S&P Global Platts; Nov. 17) - Natural gas flaring in North Dakota's Bakken Shale has reached a new record low, according to state data, while new infrastructure set to enter service soon could push gas production in the play above pre-pandemic volumes. Flaring of associated gas produced in North Dakota's Bakken has fallen to 6%, according to the latest data released by the North Dakota Industrial Commission. Producers in the shale play flared 19% of their gas in 2019, prompting new state rules.

Meanwhile, gross gas production in the state has now crossed 3 billion cubic feet per day, only about 100 million off the all-time high reached in November 2019. Midsummer flaring in the Bakken was strong, surging to over 8% for the first time since summer 2020 and exceeding state standards. But the burning of gas has since declined. And while gas production is up, the state's oil production is at 1.1 million barrels per day, still 400,000 barrels per day below the all-time high, also reached in November 2019.

The impending completion of WBI Energy Transmission's North Bakken Expansion gas pipeline project is likely to increase the Bakken's ability push more gas to the Northern Border Pipeline for ultimate delivery downstream in the Midwest. While the project will increase access to prolific production, it could also reduce flaring. The expansion is scheduled for completion in December.

Texas LNG project proposes carbon capture amendment to FERC

(S&P Global Platts; Nov. 18) - NextDecade LNG has pitched an amendment to its federal authorization for the Rio Grande LNG terminal in Brownsville, Texas, that would allow it to capture and store carbon dioxide produced at the terminal. The change should allow the Federal Energy Regulatory Commission to "expeditiously find that the terminal's contribution to global climate change with CCS systems operating would not be significant," Rio Grande said in an application filed Nov. 17.

The proposal comes as the U.S. Court of Appeals for the District of Columbia Circuit has found fault with the original FERC authorization for the project, remanding the orders for further review by the commission without vacating them. The court Aug. 3 found FERC had failed to adequately assess the impact of the projects' greenhouse gas emissions because the commission neglected to answer arguments that it must use the social cost of carbon or some other generally accepted method to assess the effects. The panel also found FERC's environmental justice analysis for the project was flawed.

In its new application, Rio Grande LNG said deploying CCS systems at the terminal would allow it to capture and store at least 90% of CO2 emissions that would have been emitted during commercial operation of the terminal — removing CO2 from both the feed gas and exhaust flue gas. Once captured, Rio Grande LNG told FERC the CO2 would be shipped via pipeline to an underground geologic formation that would be permitted by the Environmental Protection Agency as well as Texas regulators.

U.S. gas producers hedged much of 2022 production at lower prices

(Reuters; Nov. 19) - U.S. natural gas producers will face billions of dollars in hedging losses for 2022 as the global energy crunch boosts gas prices to multi-year highs, according to research by consultancy Rystad Energy. Expectations of strong LNG demand for months boosted U.S. gas futures to a 12-year high in early October, with prices nearly doubling from last year to around $4.94 per million Btu on Nov. 19. But the companies already had hedged — presold — much of their 2022 output at lower prices.

Eleven operators analyzed by Rystad stand to lose more than $5.2 billion in 2022 if the average price at the Henry Hub benchmark terminal remains at $4, an amount that could double to about $9.8 billion if prices average $5 per million Btu. "Given that the whole strip for 2022 currently remains above $4 ... the current state of the programs is likely to impose a material downward pressure on corporate cash flows of gas producers next year," said Artem Abramov, head of shale research at Rystad Energy.

Rystad said the 11 operators had already hedged more than half of their 2022 production when they reported second-quarter results. Prices were trading much lower back then, as opposed to the currently inflated prices. By the end of September, as much as 64% of the companies’ projected production was hedged, the report said.

New Mexico worries about wastewater disposal from Texas wells

(The Associated Press; Nov. 20) - Multiple earthquakes were felt earlier this fall in West Texas, leading state regulators to designate a seismic response area, calling for less wastewater reinjection from oil and gas development in disposal wells. As more seismic activity was reported closer to the state line, New Mexico officials have been watching and gathering data. They are concerned that as Texas limits the injection of produced water as a means to curb seismic activity, that could affect producers in New Mexico.

In October, Texas regulators created a second seismic response area along the border with southeastern New Mexico. Officials pointed to more than a dozen quakes along the state line since Jan. 1, 2020, with six of those this fall. That meant almost half of the seismic activity in the area since last year occurred in the past month. Texas officials referred to the activity as “unprecedented.”

Michael Hightower, director of the New Mexico Produced Water Research Consortium at New Mexico State University, said it was clear that Texas’ earthquake problem was spreading toward New Mexico. “We know there’s a lot of water coming over from Texas,” he said. “If you inject all that, you’re going to have seismicity problems." He said most of the seismicity is due to disposal wells and possible over-pressurization.

Federal regulators propose suspending rules allowing LNG by rail

(The Associated Press; Nov. 16) - Federal regulators have proposed suspending a Trump administration rule that would have allowed railroads to haul liquefied natural gas, while they take a closer look at the potential safety risks. The rule, which was backed by both the natural gas and freight rail industries, had already been on hold because several environmental groups and 14 states filed lawsuits challenging it.

The federal Pipelines and Hazardous Materials Safety Administration said the uncertainty about the rule kept companies from investing in the specialized rail tank cars that were required, so railroads haven’t actually handled any shipments of LNG since the rule was issued last summer. The opponents’ lawsuits have all now been put on hold while federal regulators review the rule, which could take until the summer of 2024. Before the rule was issued last summer, federal hazardous materials regulations allowed shipments of LNG by truck, but not by rail, except with a special permit.

The rule would have required enhancements — including a thicker outer tank with a greater puncture resistance — to the rail tank car design that, for decades, has been approved for shipments of other flammable cryogenic materials, such as liquid ethylene and liquid ethane. In their lawsuit, environmental groups argued that those new railcars, which have yet to be built, were untested and might not withstand high-speed impacts, increasing the threat of an explosive train derailment along rail lines.

Quebec bans oil heat in all new construction after Dec. 31

(Montreal Gazette; Nov. 17) - As of Dec. 31, the installation of oil-fueled heating systems will be banned in all new construction in Quebec. The regulation adopted by the provincial government also states that as of Dec. 31, 2023, the installation of an oil-fueled heating system or the replacement of a heating system with one powered by fossil fuel will be forbidden in all existing buildings. Property owners who are obliged to install a system using renewable energy may benefit from financial assistance.

The regulation also bans the repair of oil-fueled heating systems over 20 years old or of oil-fueled water heaters over 10 years old. Nearly 200,000 Quebec households still use oil-fueled heat, according to the province. Home heating represents more than 60% of a household’s energy use and can be a major piece of its carbon footprint. The province believes the measures it announced Nov. 17 will contribute to reaching its 2030 target of reducing greenhouse gas emissions linked to heating buildings by 50%.

Oil-fueled residential heating systems generate about one million tonnes of carbon dioxide annually, the equivalent of the greenhouse gas emissions from 300,000 light vehicles, according to the provincial government. The combustion of home heating oil also generates nitrogen oxide and sulfur dioxide, and pollutes the air with fine particles.

Coal plant outages prompt Japanese utilities to preserve LNG

(S&P Global Platts; Nov. 18) - Four Japanese power utilities — Chugoku Electric, Kyushu Electric, Hokuriku Electric and Shikoku Electric — are restricting their use of liquefied natural gas for power generation as a result of unplanned outages at coal-fired power plants and higher-than-expected fuel consumption, which has led to one of these utilities to arrange for an additional LNG cargo for delivery in early December.

According to documents presented to the Ministry of Economy, Trade and Industry's electricity and gas policy subcommittee on Nov. 18, Chugoku Electric and Kyushu Electric are restricting their use of LNG at gas-fired power plants as a result of multiple unplanned outages at their coal-fired power units.

Chugoku Electric is in talks with its LNG suppliers for incremental supplies, advancing shipping arrangements and scrutinizing whether it will need additional cargoes, while Kyushu Electric is in the midst of arranging for an LNG cargo to arrive early December, the documents showed. But the utilities are finding it difficult to take more LNG supply because shipping schedules had already been set for their one LNG storage tank each.

Alberta utility converts coal-fired power plants to natural gas

(Calgary Herald; Nov. 17) - Alberta’s electric utilities’ strategy to switch their energy source from coal to natural gas has put them in an awkward position: Burning coal is cheaper than gas, even after paying the federal $75-per-tonne carbon tax. Still, Heartland Generation said last week it had completed a multi-year project to convert its coal-fired power plants in Alberta to run on gas. The conversion allowed Heartland to leapfrog TransAlta to become the largest provider of gas-fired electricity in the province.

The switch would cut the company's carbon dioxide emissions from the converted power plants by roughly half, said Rob Dutton, CEO of Heartland Generation. But the switch comes at an inopportune time for the company. Natural gas prices in Alberta have jumped 43% to about US$4.50 per million Btu at the AECO pricing hub from about $3.20 last year. At times this fall, the price surpassed $5, making the power and heat source a more expensive option for electricity generation than coal.

Coal prices have also risen as utilities consider gas-to-coal switching to save money. The U.S. Energy Information Administration puts the price of coal in the Powder River Basin, immediately south of Alberta in Wyoming, at US$30.70 per ton, which is up US$16.30 per ton over the past week. Heartland, backed by New York private-equity firm Energy Capital Partners, bought its coal and gas-fired power plants from Canadian Utilities for $835 million in 2019 and has been working on retrofits to switch the coal-fired Battle River and Sheerness generating stations to run on gas since that time.

Asia-Pacific LNG spot-charter rates spike to record $316,750 a day

(Bloomberg; Nov. 18) - Spot freight rates for liquefied natural gas tankers in the Asia-Pacific have surged to record highs as a steady flow of U.S. cargoes to the region boosts demand for ships. The cost of chartering a vessel to carry a shipment of the fuel from Australia to Japan spiked to $316,750 per day on Nov. 16, five times higher than two months ago, according to data from Spark Commodities. That beats the previous high in January during a cold snap in Northeast Asia.

The jump comes in the run-up to the peak winter consumption season and is spurring concern among Asian buyers that colder-than-normal temperatures could be exacerbated by the shortage of ships, pushing costs of the electricity feedstock fuel even higher. Asian benchmark LNG prices are currently about $39 per million Btu. That's down from a peak above $56 in early October, but above the high last winter.

"There has recently been more demand in Asia for U.S. LNG, but that also means more demand for ships to bring LNG to the Pacific," said CEO Joseph Sigelman, of AG&P Group. "The situation for ships will remain tight through the rest of winter."

Police clear protestors from blockade on B.C. gas pipeline route

(The Canadian Press; Nov. 18) - The access road that has been blockaded by First Nations protesters since Nov. 14 has been cleared by the RCMP and can now be used to bring water and other supplies to more than 500 workers on the Coastal GasLink pipeline that will serve the LNG Canada project under construction in Kitimat, British Columbia, the company said. Mounties said Nov. 18 that they were enforcing an injunction barring protests from blocking the access road used by the pipeline workers.

The blockade was set up by members of the Gidimt'en clan, one of five in the Wet'suwet'en Nation, cutting off access for pipeline workers. Gidimt'en spokesperson Sleydo', who also goes by the English name Molly Wickham, said about 15 people have been arrested, including two Wet'suwet'en elders, for breaching the injunction, but no criminal charges have been filed.

A statement Nov. 17 by the elected Wet'suwet'en council said the protesters didn't consult with them before blocking the road and their actions "can't claim to represent the members of the Gidimt'en or any others in the First Nation." The dispute over the 416-mile gas pipeline flared in 2019 and 2020, and protesters who defied the court injunction were arrested. Opposition to the pipeline among Wet'suwet'en hereditary chiefs at the time sparked solidarity rallies and rail blockades across Canada last year. The elected chief and council of the Wet'suwet'en First Nation had approved the pipeline project.

Opponents sue Army Corps over permit for Texas LNG project

(Reuters; Nov. 19) - Fishermen and environmental groups have sued the Army Corps of Engineers in federal appeals court over its issuance of a permit for the proposed Rio Grande LNG export terminal and pipeline in southern Texas. The Sierra Club and others on Nov. 18 asked the 5th U.S. Circuit Court of Appeals to review the Corps' approval, alleging it violated the Clean Water Act by permitting projects that could result in hundreds of acres of wetlands being "destroyed" with fill material.

The plaintiffs said the "dredge and fill" permit, issued in September, "falls short of legal requirements to avoid and compensate for impacts to wetlands." The Rio Grande LNG project, which Houston-based NextDecade is working to develop, would export gas from the port of Brownsville to global markets. Calgary-based Enbridge owns the pipeline that would supply the terminal.

The projects suffered a setback in August when a federal appeals court ruled that their approval by the Federal Energy Regulatory Commission suffered from "deficient" environmental analyses. The Sierra Club and the local group Save the Rio Grande Valley from LNG are among the plaintiffs in that case.

Opponents want to stop gas project offshore Australia

(Reuters; Nov. 19) - Lawyers for the Conservation Council of Western Australia have sent letters to Woodside Petroleum and the country's energy minister seeking to delay, if not stop, the company's Scarborough natural gas project. The letters were sent just weeks ahead of a final investment decision by Woodside on the Scarborough project off the coast of Western Australia and an expansion of its Pluto liquefied natural gas plant, together expected to cost A$12 billion.

Writing on behalf of the Conservation Council of WA, the Environmental Defenders Office said in letters to Woodside CEO Meg O'Neill and Environment Minister Sussan Ley that the development needs to be reviewed under provisions of the Environment Protection and Biodiversity Conservation Act that bar any harm to the Great Barrier Reef. The green group says emissions from the gas produced at Scarborough will worsen global warming which is damaging the reef off Australia's East Coast.

Woodside did not comment on the issues raised in the letter, but said it already has primary environmental approvals from the federal government and the Western Australian state government to support a go-ahead decision for Scarborough. The National Offshore Petroleum Safety and Environmental Management Authority said on Nov. 19 that Woodside has an "'in principle' approval for the project as a whole," but still needs further approvals for any activity to begin, including an environment plan.

Higher prices help Canadian producers pursue energy transition

(Bloomberg; Nov. 18) - The global energy crisis that many blame on efforts to move away from fossil fuels is actually giving new momentum to the shift to renewables in Canada, according to some of the bankers helping oil sands producers navigate that transition. That's because, for all the doubt that's been cast on the reliability of solar and wind power, surging oil and gas prices are providing cash for major energy companies such as Suncor and Cenovus to pursue their long-term targets to cut emissions.

For Canadian energy companies — that in the depths of the pandemic were mostly concerned with keeping creditors at bay — higher prices mean they can put long-term transition projects back on the agenda in response to growing pressure from investors to slow global warming. "In a strange way, these high prices have actually enabled a lot of our clients to pursue some of these transition-related issues more quickly than they otherwise would have," said Mike Freeborn, managing director and co-head of Canadian Imperial Bank of Commerce's energy, infrastructure and transition group.

Already, Pembina Pipeline and TC Energy have announced plans to use their pipelines to transport and store underground more than 20 million tons of carbon dioxide a year. Shell is looking to partner with Indigenous communities to build a carbon storage hub in Alberta. "A strong oil price enables investment in riskier and expensive green energy solutions, such as carbon capture, utilization and storage," financial and accounting advisory firm Deloitte said in its recently released 2022 oil and gas industry outlook.

Flooding forces operator to take BC-Washington gas pipe offline

(S&P Global Platts; Nov. 19) - The shutdown of one of two natural gas lines on Westcoast Energy's British Columbia pipeline system, following severe flooding in the Vancouver, British Columbia, area, has spiked prices at some regional price hubs, and higher demand could lead to further price surges. The flooding Nov. 15-16 resulted in Westcoast taking offline the smaller of the two mainlines, a 30-inch pipe that supplies the Sumas export hub at the British Columbia-Washington border.

Westcoast parent Enbridge Nov. 16 announced capacity into Huntingdon, just north of Vancouver, would be cut to about 1.5 billion cubic feet per day from 2 bcf per day. This effectively cuts supply to Vancouver and the hub at Sumas, Washington. No timeline has been provided on when the line will return to full service. This loss of supply to Sumas sent prices at the hub to about US$6 per million Btu, up from $4.70.

Vancouver takes what it needs off the pipe and what remains is available for Sumas. If cold weather moves into Vancouver and boosts demand, Sumas could be vulnerable to price blowouts during this outage, according to S&P Global Platts Analytics.