Oil and Gas News Briefs Compiled by Larry Persily April 10, 2023

U.S. utilities consider selling part of their gas pipeline networks

(Wall Street Journal; April 7) - Two of the country's largest utilities are weighing potential sales of parts of their gas pipeline networks as efforts to phase out residential gas use accelerate. Dominion Energy is considering selling its distribution companies serving North Carolina, Ohio and parts of the Western U.S., according to people familiar with the matter. Combined, the assets could be worth as much as \$13 billion. National Grid is exploring a possible sale of part of its pipeline network serving the Northeast as lawmakers there look to curtail fossil fuel use, according to sources.

The potential sales come as lawmakers and regulators across the U.S. debate the future of gas for home heating and cooking as more towns and cities look to phase it out. Utilities are working to determine how to modify or repurpose their gas networks in response. The electrification of homes and businesses is a key part of the Biden administration's climate agenda. Last year's Inflation Reduction Act includes tax credits to motivate the purchase of heat pumps and other electric appliances and fixtures.

Utilities are beginning to grapple with the likelihood that parts of their gas systems could become stranded assets — facilities that retire before they pay for themselves — as fewer homes and businesses rely on the vast networks of pipelines. Brattle Group, a consulting firm, has estimated that U.S. gas distribution infrastructure worth as much as \$180 billion might risk becoming stranded with the transition. The momentum first began at the local level, as cities and towns across the U.S. enacted measures restricting the use of gas in new buildings to cut carbon emissions over concerns of climate change.

China's state energy companies plan big investment in renewables

(Nikkei Asia; April 6) - China's three state-owned energy majors plan to invest a combined 100 billion yuan (\$14.5 billion) or more in renewable energy through 2025, diversifying their business as Beijing pushes toward net-zero carbon dioxide emissions by 2060. "We want to become China's top player in hydrogen," China Petroleum and Chemical Chairman Ma Yongsheng told reporters in Hong Kong on March 27.

"We will expand investments in renewable energy every year," Ma said. He did not give a specific figure, but the company is seen investing at least 60 billion yuan in the field over the three years through 2025. Sinopec, as the company is commonly known, is China's largest oil refiner, with more than 30,000 gas stations nationwide. It plans to tap its existing infrastructure to set up more hydrogen stations for fuel cell vehicles. Sinopec plans to expand its network of hydrogen stations to 1,000 locations by the end of 2025 from 98 at the end of 2022. The investment rush comes as China aims to peak CO2 emissions by 2030 and reach net-zero emissions by 2060. Meanwhile, wind and solar are expected to account for 28% of China's electricity production by 2030 and 81% by 2060, up from 13% in 2022, according to a state-backed research institution. China National Offshore Oil Co. (CNOOC) is focusing on offshore wind. It finished building the Haiyou Guanlan deep-sea floating wind power platform last month, which is slated to start operations in June in waters more than 320 feet deep and 60 miles from shore.

Smaller producers boost oil flow while OPEC+ leaders cut back

(Wall Street Journal; April 9) - A burst of supply from a grab bag of smaller oil-producing countries threatens to undermine efforts by Saudi Arabia and its allies to keep prices high. Iran, Guyana, Norway, Kazakhstan, Brazil and Nigeria have pumped more oil since the fall, boosting the world's supplies even as some of the biggest producers cut back. Nigeria in particular has seen output bounce, with help from armed guards protecting oil barges in the vast creeks and waterways of the oil-rich Niger Delta.

"You had 100,000 barrels a day here, 200,000 a day there," said Martijn Rats, chief commodities strategy at Morgan Stanley. "You started to think, 'Oh jeez, this second-half-tightening story starts to feel like a little bit of a stretch," he said, referring to the widely held view that global oil supplies will shrink from midyear. Coupled with weaker demand in the U.S. and Europe, the additional flows of oil left the market vulnerable.

Saudi Arabia stepped in to prop up the market last week. The second-biggest crude producer said it would further ax production, in tandem with Russia, Iraq, the United Arab Emirates and others. The surprise move led to a jump in oil prices. But, at about \$85 a barrel, global benchmark Brent crude is no higher than in early March, and below the pandemic-era highs of more than \$125 posted shortly after the invasion of Ukraine.

Whether prices climb higher depends in part on output in smaller-producing countries. The U.S. has also pumped additional crude, raising daily output by more than a million barrels over the past year. The wild card, though, lies in players such as Nigeria, where production has risen unexpectedly but is prone to outages and could falter again. Also at play: whether fears of a recession in the U.S. turn into a reality, sapping demand.

Oil markets caught between OPEC+ move and demand worries

(Bloomberg; April 8) - OPEC+'s surprise oil-production cut sent shock waves through financial markets and pushed up prices by the most in a year. Now that the dust has started to settle, a question looms large: Will that price rally stick, or fade away? Banks from Goldman Sachs to RBC Capital Markets raised their price forecasts after the

OPEC+ cut. Yet, many traders believe a souring economic outlook will block the group's actions from pushing prices higher. Demand indicators are starting to flash warnings.

It could end up being the ultimate test of what matters more to the market: tighter supplies, or the lackluster demand picture. That will likely bring more uncertainty over the direction of prices — a complicated development for the Federal Reserve and the world's central bankers in their ongoing battle against inflation. "It's a very hard market to trade right now," said Livia Gallarati, a senior analyst at Energy Aspects. "If you're a trader, you are pulled between what's happening at a macroeconomic level and what's happening fundamentally. It's two different directions."

One thing is certain: A major shift of market control into the hands of Saudi Arabia and its allies has now been cemented, with huge implications for geopolitics and the world economy. Investors continue to reward U.S. drillers for production discipline, making it unlikely that shale companies will ever again undertake the kind of disruptive growth that helped to keep energy inflation tame last decade. That leaves the oil market under the purview of OPEC+.

Global oil and gas industry moving back to prepandemic growth

(The New York Times; April 6) - When the Biden administration approved the \$8 billion Willow oil project on Alaska's North Slope last month, many decried it as a betrayal of the U.S. pledge to move away from fossil fuels in the fight against climate change. But an analysis of global data shows that Willow is a small fraction of hundreds of oil and gas projects approved the past year across the world, including many more in the U.S. And in the coming months, dozens of additional projects are expected to be approved.

The data reflect a surging industry that has rebounded to prepandemic levels of growth. Even though the past few years have seen many countries adopt policies encouraging renewable energy, demand for fossil fuels remains high. Russia's invasion of Ukraine drove up oil prices, contributing to record profits for producers, as governments hurried to secure their energy supplies, sending prices soaring. "It's a full bounce-back," said Espen Erlingsen, a partner at Rystad Energy, the research firm that provided the data.

"The future of this growth depends on policy. If the world wants to limit warming, it will have to limit demand for oil and gas because this industry can deliver this kind of volume for many more decades," Erlingsen said. Much of the growth is taking place in traditional oil- and gas-producing nations such as the U.S., Saudi Arabia and Norway. Natural gas, in particular, is booming. In the U.S., the fracking of shale rock for gas is resurgent, accounting for many times the level of investment as a project like Willow.

Vast new oil fields have also been approved for exploitation by Western companies in Guyana, Brazil and Uganda, among others. Some developing countries have argued

that income from fossil fuels is their right, and that climate change mitigation is largely the responsibility of wealthy nations.

China's recovering oil demand still has room to grow

(Wall Street Journal; April 6) - Russia and members of the Organization of the Petroleum Exporting Countries dropped another bombshell on global markets this past weekend — an additional planned production cut of 1.66 million barrels a day starting in May. Brent oil prices promptly spiked 6%. The move by major oil exporters may reflect concerns about global demand, but signals emerging from China — the world's largest crude importer — strongly suggest that its recovery in oil demand has further to run.

That will help underpin global prices even if U.S. demand weakens significantly. And a larger bump in Chinese demand is likely later this year as China's property and tourism sectors find steadier footing. China hasn't yet released its main March industrial data, meaning crucial direct gauges of demand such as refinery runs aren't available. But the health of the two main sectors driving oil demand — transport and housing-related heavy industry — are clearly on the mend, and the pace of improvement is accelerating.

The recent jump in global prices isn't likely to put much of a dent in Chinese oil demand either. For one, Chinese diesel and gasoline prices still benefit from some residual price controls — meaning they reflect moves in global benchmarks only with a lag and not always in full. Given the clear shift in Beijing's policy orientation toward growth this year, Chinese refiners are very likely to have to eat some of the cost of rising crude prices should Beijing conclude that high energy costs are starting to constrain the recovery.

Final pitches April 7 for hydrogen hub federal grants

(CBS News, San Francisco; April 6) - As fossil fuel emissions continue warming Earth's atmosphere, the Biden administration is turning to hydrogen as an energy source for vehicles, manufacturing and making electricity. It's offering \$8 billion to entice industries, engineers and planners to figure out how to produce and deliver clean hydrogen. States and businesses are making final pitches April 7 as they compete for funds to help create regional networks or "hubs" of hydrogen producers, consumers and infrastructure.

Nearly every state has joined at least one proposed hub and many are working together, hoping to reap the economic development and jobs they would bring. The governors of Arkansas, Louisiana and Oklahoma came up with the "HALO Hydrogen Hub" to compete for funding, for example. Big fossil fuel companies, renewable energy developers and researchers in university and government labs are involved, too. But only a select few will receive billions in federal funding. Alaska did not make the first cut.

The bipartisan infrastructure law signed by President Joe Biden last year included funds to help establish six to 10 regional "hydrogen hubs." A hub is meant to be a network of companies that produce clean hydrogen and of the industries that use it — heavy transportation, for example — and infrastructure such as pipelines and refueling stations. The Department of Energy is expected to start awarding money later this year.

Montana judge cancels air quality permit for gas-fueled power plant

(Associated Press; April 8) - A state judge canceled the air quality permit for a natural gas power plant that's under construction along the Yellowstone River in Montana, citing worries over climate change. State District Judge Michael Moses ruled April 6 that Montana officials failed to adequately consider the 23 million tons of planet-warming greenhouse gases that the project would emit over several decades.

Many utilities across the U.S. have replaced coal power with less polluting gas plants in recent years. But the industry remains under pressure to abandon fossil fuels altogether as climate change worsens. The \$250 million, 175-megawatt plant is being built by Sioux Falls, South Dakota-based NorthWestern Energy and would operate for at least 30 years. The company will appeal the judge's ruling, a spokesperson said, adding that the order could jeopardize reliable power service. The air permit was challenged in a 2021 lawsuit from the Montana Environmental Information Center and Sierra Club.

Montana officials had argued they had no authority to regulate greenhouse gas emissions. They also said that because climate change is a global phenomenon, state law prevented them from looking at its impacts. But the judge said officials from the Montana Department of Environmental Quality had misinterpreted the law. He ordered them to conduct further environmental review and said they must gauge the climate change impacts within Montana in relation to the project.

Europe's reluctance to sign long-term LNG deals could be costly

(Reuters; April 6) - Europe has not made enough progress in locking up long-term contracts for liquefied natural gas as an alternative to Russian pipeline gas, which may prove costly next winter as a rebound in China's demand could sharply tighten the global market. Buying LNG to replace curtailed Russian flows helped the bloc weather the first winter of the Ukraine conflict, with Europe importing 121 million tonnes of the fuel in 2022, a 60% increase from 2021. But it came at a cost.

Europe bought largely on the spot market last year, where prices are much higher than negotiated under long-term deals favored by seasoned buyers like China. According to the International Energy Agency, the cost of Europe's LNG imports more than tripled in 2022 to some \$190 billion. Analysts estimate that Europe accounted for more than a

third of global spot-market trades in 2022, up from about 13% in 2021. Such exposure could reach more than 50% this year if not enough long-term contracts are signed.

Europe's climate goals — the European Union aims to cut net emissions at least 55% by 2030, and to reach net-zero by 2050 — mean its LNG buyers struggle to commit to the timeframes necessary to lock in gas more cheaply under contract. Morten Frisch, of Morten Frisch Consulting, said Europe ideally needs 70% to 75% of its supply under firm long-term deals. "But since the green lobby in Europe has managed to persuade politicians wrongly that hydrogen to a large extent can replace natural gas as an energy carrier by 2030, Europe has become far too reliant on spot- and short-term LNG buys."

Bangladesh looking for a way out of costly LNG imports

(Reuters; April 6) - Jobayer Ahmed's textile business on the outskirts of Dhaka is going through a rough patch with the energy crisis in Bangladesh. Production costs at Shah Fatehullah Textile Mills, which employs about 2,200 workers, have risen by 40% in the past two years, Ahmed said, mainly due to natural gas prices for the company's inhouse power plant having nearly doubled in recent months. Despite this, "we are still not getting an uninterrupted gas supply, hampering our production," said the third-generation industrialist who runs one of the nation's oldest textile mills.

As Bangladesh's fast-growing economy has shifted to rely more on imported fuels such as liquefied natural gas to meet its growing energy needs, volatility in the international market stemming from Russia's invasion of Ukraine has caused a gas supply crunch and power outages. And as the appreciation of the dollar against the Bangladesh taka strained the country's foreign currency reserves, the government has significantly hiked gas and electricity prices over the past year to rein in energy subsidies.

Against this challenging backdrop, Bangladesh has drafted a new energy plan for 2024-2050, with a goal of ensuring affordable, sustainable and secure energy supply. Experts said the draft, soon to be finished, shows positive shifts — such as reducing an earlier emphasis on coal — but voiced concerns about a growing reliance on LNG and unclear ambitions for renewables. Several said Bangladesh should invest more in clean energy such as solar if it is to meet a target of generating 40% of its power from renewables, and that doing so would prove far more economical than spending on fuel imports.

U.S. LNG hopeful sells its land to buy more time to raise money

(Houston Chronicle; April 6) - Tellurian, a Houston-based liquefied natural gas project developer, reached a \$1 billion deal this week that may offer it the opportunity to make good on its plan to build the \$13.6 billion Driftwood LNG project in Lake Charles, Louisiana — though skeptics question whether it will work. The company said in an April 6 regulatory filing that an unnamed investor has agreed to buy about 800 acres of land that would make up the Driftwood site for \$1 billion. As part of the transaction, a Tellurian subsidiary entered into a 40-year deal to lease back the property.

The deal requires Tellurian to add equity investors to the project before July 14 or the agreement would be terminated, according to a filing with the Securities and Exchange Commission. The project began unraveling last year after partnerships with Shell and commodities trader Vitol collapsed, leaving the company with just one contracted buyer. It has since launched a failed attempt to raise \$1 billion for the project through a public offering and struggled to attract institutional investors for Driftwood, built on a riskier business model that, if constructed, could also allow Tellurian to reap bigger profits.

Nearly a year ago, Tellurian made the unusual decision to begin construction before reaching a final investment decision. Clark Williams-Derry, an analyst with the Institute of Energy Economics and Financial Analysis, said he believes the latest deal is a risk. "Equity partners could potentially be on the hook for a 40-year real estate lease with escalating annual payments," he said. "These are all huge red flags." Ben Nolan, an energy analyst with Stifel, wrote in a research note that the deal doesn't end skepticism about the project. He said Driftwood "has virtually no chance of moving forward."

Reshuffling of global fuel trade has tankers running longer routes

(Reuters; April 6) - Global suppliers are turning to longer and costlier tanker routes that produce more carbon emissions to move their diesel and other products as Western restrictions on Russian cargoes have reshuffled global energy shipping patterns. As a result of the European Union ban on Russian fuel that started Feb. 5, tankers carrying oil products such as gasoline, diesel, jet fuel and naphtha are traveling between 16 and 18 days to bring Russian supplies to Brazil or U.S. fuel to Europe, according to sources.

That is up from the four to six days a ship used to travel from Russia to Europe, said the two sources, a broker at a major shipbrokering firm and a charterer involved in the Russian trade of naphtha, which is used to make plastics and petrochemicals. Since the start of the ban, the Clean Tanker Index published by the Baltic Exchange, which measures average freight rates for shipping fuels like gasoline and diesel on some of the most common global routes, has more than doubled.

The redrawing of the shipping map underscores the knock-on effects of Western efforts to punish Russia over its invasion of Ukraine last year, adding to fuel supply insecurity and pushing up prices even as policymakers worry about inflation and the risk of a global economic downturn. Russian cargoes of fuel are heading to far-flung buyers in Brazil, Turkey, Nigeria and Morocco as Moscow compensates for the lost European business, while Europe is importing more fuels such as diesel from Asia and the Middle East, according to shipping data from Refinitiv and Kpler.

Indonesia may pay billions to take Shell's stake in costly gas project

(Asia Times; April 6) - Urged on by President Joko Widodo, the nationalist tide that has decimated Indonesia's oil and gas industry the past decade has left the nation on the bottom rung for prospective foreign investment and without the financial and technical means — or the inclination — to find and develop new fields itself. Yet cash-strapped state oil company Pertamina is on the verge of acquiring Shell's 35% stake in the giant Masela gas block in the Arafura Sea where operations have come to a virtual standstill since the government mandated a change from an offshore to an onshore development.

Pertamina is reportedly lukewarm on the US\$1.4 billion deal, but Maritime Coordinating Minister Luhut Panjaitan and State Enterprise Minister Erick Thohir both want the company to proceed, despite it needing another US\$6.5 billion in working capital over the next five years. Pertamina will also have to pay its share of \$1.2 billion to \$1.4 billion for government-mandated carbon capture, utilization and storage facilities to reduce the project's greenhouse gas emissions to help Indonesia hit net-zero emissions by 2050.

Analysts doubt Pertamina's ability to act as a full partner with Japan's Inpex Corp., the majority 65% stakeholder in Masela. But in recent weeks, Malaysia's Petronas has emerged as a prospective partner for the 21 trillion-cubic-foot discovery. Analysts believe Pertamina is being compelled to buy into the venture to keep it alive, given the lack of foreign interest since the government's surprise intervention requiring onshore development, which added \$4 billion to the \$16 billion price tag and led to Shell's exit.

Widodo has insisted on a 110-mile subsea pipeline to an onshore plant on Yamdena, the main island in the Tanimbar archipelago, to spur development in eastern Indonesia. The pipe will have to cross a 10,000-foot-deep trench on a seismically active fault line.

Poland needs more time to build its first floating LNG terminal

(DW; Germany; April 6) - Germany launched its first floating liquefied natural gas import terminal at the North Sea port of Wilhelmshaven at the end of 2022. The construction pace was record-breaking: 200 days. The second state-leased terminal at Brunsbüttel port near Hamburg, which started operations earlier this year, was also built in less than a year. On the other hand, Gaz-System, responsible for construction of a similar facility in Poland, says start-up of that floating storage and regasification unit is set for 2027-28.

FSRUs are essentially liquefied gas tankers equipped to regasify the fuel so that it can be transferred into the onshore pipeline grid. Polish energy expert Piotr Przybyło believes that compared with Germany, Poland is doing the terminal on the cheap. "Germany has had much greater fiscal flexibility," he said, adding that since the two German terminals have started operating, the cost of renting such floating terminals has risen by 50%. "That means Poland will lose even more in the longer term," he added. "I would rather say that Germany is doing it on the expensive," said Anna Mikulska, an energy market expert at Rice University in Houston. "Poland is well situated for the next several years" given its existing LNG terminal, a pipeline for Norwegian and Danish gas and long-term contracts with non-Russian suppliers, she said. "The reason for the time lag is a matter of existing infrastructure ... that existed to a good degree in Germany but does not in Poland," Mikulska said.

Expansion of Vancouver-area LNG plant meets emissions standards

(Prince George Citizen; British Columbia; April 7) - Of the five LNG projects in British Columbia either under construction or in the environmental review process, two will need to pass a new provincial test for greenhouse gas intensity. One is FortisBC's Tilbury Island LNG expansion in Delta, across the Fraser River from Vancouver, which is still working its way through the BC Environmental Assessment Office review process.

With a cost of C\$3 billion to C\$3.5 billion, it's one of the largest capital projects for the Lower Mainland. It could bring the plant's total production capacity up from 250,000 tonnes annually to 3.4 million tonnes. The project is different from others in B.C. in two respects: It is an expansion of an existing LNG plant, not a greenfield project; and the LNG it would produce would not be solely, or even primarily, for export. Its main market would be domestic, including marine fuel bunkering and fueling trucks.

"We are very, very closely watching the marine fueling, the marine bunkering market, because that demand continues to grow," said Andrew Hamilton, FortisBC senior project manager. The plant has operated since 1971. Originally, its sole purpose was to provide backup gas for peak-demand periods or supply disruptions. Between 2014 and 2019, FortisBC spent \$425 million to boost production, mainly to serve a growing domestic market for natural gas as an alternative to diesel in the marine sector and trucking.

The earliest FortisBC could get an OK for Phase 2 is the end of 2024; it would not likely be in production until 2028-2030. By then, it would need to be at net-zero emissions, as per the provincial government's new Energy Action Framework announced earlier this month. The plant uses electricity, not gas, and would meet the emissions requirement.