Oil and Gas News Briefs Compiled by Larry Persily July 3, 2023

Russia needs to find buyers for the gas it doesn't sell to Europe

(Bloomberg; June 29) - Much of Russia's existing gas export infrastructure points West. Unfortunately for Moscow, most of its gas customers are now to its East, and a lot of the infrastructure it needs to supply them is yet to be built. This mismatch of pipelines and customers — which is likely to take years to resolve — forms part of a bigger question triggered by Moscow's assault on Ukraine. The war has cut Russia adrift from Europe, its biggest gas export market. So what has Russia done with all that spare gas?

In 2021, Russia pumped about 5.3 trillion cubic feet of pipeline gas to Europe. The continent represented two-thirds of the country's gas exports, including flows of liquefied natural gas. Since the Ukraine invasion severely dented that trade Moscow has sought new markets, expanded others and committed to provide gas to parts of Russia not yet on the domestic network. Even with these efforts, Russia has no customers for almost 3.2 tcf a year of pipeline gas, adding to the pressure on its heavily sanctioned economy.

"The harder the sanctions, the more creative a country typically gets in terms of figuring out how to overcome them," said Peter Tertzakian, managing director of ARC Financial, a veteran energy investor referring to the impact of the broader sanctions on the sector. Russia has accelerated its pivot to selling gas to China. The switch to China will require new pipelines to be built to supplement the Power of Siberia link, which began operating in December 2019. Shipments to China are just a fraction of those that flowed to Europe before the war, but have grown and are expected to reach 1.34 tcf by 2025.

Talks over the Power of Siberia 2 project — which would double Russia's total gas to China to almost 3.5 tcf a year — have been at "a final stage" for months. Even after a deal, it would take at least five years to build, underscoring how difficult it is for Moscow to replace Europe. "China seems to be under no time pressure to negotiate," said Vitaly Yermakov, senior researcher at The Oxford Institute for Energy Studies. "While Russia is sitting on a time bomb, facing a potential sharp reduction in gas export volumes."

New Mexico fines producer \$40 million for illegally flaring gas

(Associated Press; June 29) - New Mexico oil field and air quality regulators on June 29 announced unprecedented state fines against a Texas-based oil and gas producer on accusations that the company flouted local pollution reporting and control requirements by burning off vast amounts of natural gas in a prolific energy-production zone in the southeast of the state. The New Mexico Environment Department announced a \$40.3

million penalty against Ameredev, alleging the burning caused excessive emissions in 2019 and 2020 at five facilities in New Mexico's Lea County near the town of Jal.

Regulators raised concerns about the excess release of several pollutants linked to climate warming or known to cause serious health issues, including sulfur dioxide. The agency alleged that Ameredev produced oil and gas without any means of transporting the gas away via pipeline, as required by state law. The company is accused of burning off the gas without authorization — with excess emissions equivalent to pollution that would come from heating 16,640 homes for a year, the agency said in a statement.

The open-air burning of natural gas is often used as a control measure to avoid direct emissions into the atmosphere. "They simply were not following what they had represented in their permits. ... They represented that they would capture 100% of their gas, send it to the sales pipeline," said Cindy Hollman, section chief for air quality compliance at the New Mexico Environment Department. Representatives for Ameredev could not immediately be reached for comment by phone or email.

China opens new gas pipeline to help move domestic production

(Reuters; June 30) - State-controlled oil and gas infrastructure giant PipeChina began operating part of a new natural gas trunkline in northern China, linking an import terminal and domestic production sites, PipeChina said on its official WeChat account on June 29. The new 257-mile gas line starts at PipeChina's receiving terminal for liquefied natural gas in the northern port of Tianjin and ends at Baoding, in Hebei province, and can transport 230 billion cubic feet of gas a year.

This segment costs 8.6 billion yuan (\$1.19 billion) to build, state media has reported. It's part of the 793-mile trunkline PipeChina is building in phases that links gas production sites in the Inner Mongolia region and Shanxi province — where coal is being converted into gas — with gas imported via the Tianjin terminal, the company said. The project will eventually become part of a sprawling pipeline grid that also connects key projects including the Power of Siberia, which imports Russian gas, and Shaanxi-Beijing lines that carry the fuel from western regions of China, PipeChina added.

Canadian policy think tank sides against Keystone damages claim

(The Canadian Press; June 28) - A progressive public policy think tank in Canada is urging the Canadian federal government to side against oil and gas transmission giant TC Energy in its ongoing dispute with the United States over the ill-fated Keystone XL oil pipeline. The Calgary-based company is seeking to recoup US\$15 billion in lost revenue from the on-again, off-again cross-border pipeline expansion, which Joe Biden killed off for good in 2021 on his first day on the job.

TC's lawsuit is based on the investor-state dispute rules in the now-expired NAFTA, as well as that deal's successor, the U.S.-Mexico-Canada Agreement, which included a three-year extension of the rules for "legacy" investors. A report released June 28 by the Canadian Centre for Policy Alternatives recommends Ottawa back the U.S. position that TC Energy has no legal recourse under North American trade rules, past or present.

"Though the TC Energy dispute pits a Canadian company against the U.S., it does not follow that it is in Canada's interest for TC Energy to prevail," the report reads. Rather, it argues, the case represents an important chance for both governments to defend their ability to pursue climate-friendly public policy without being forced to "unjustly" enrich impacted investors. "The Keystone XL case is a clear example of a company wanting to be compensated for making a risky bet," wrote senior researcher Stuart Trew and Queen's University professor Kyla Tienhaara, the report's co-authors.

The gamble, the report says, was on the 2020 reelection of former president Donald Trump, who championed and resurrected the project in 2017 after it had been rejected by the Obama administration. "This bet didn't play out," the report says.

Oil market not convinced of price recovery in second half of the year

(Wall Street Journal; July 2) - The oil market has sent a warning to Saudi Arabia and everyone else betting that prices are poised for a rebound: Don't count on it. The petroleum-rich kingdom throttled back output starting this past weekend, part of a high-stakes gamble unveiled last month to crimp supply. Saudi officials think that demand will outstrip production later this year, teeing up a rally that will restore a gusher of profits to oil producers. Analysts at the International Energy Agency and Wall Street banks agree that demand could return in the second half of 2023.

The trouble is, however, the oil market appears to be at odds with that thinking. A key market indicator suggests traders believe that supplies won't shrink for months. The gauge is based on the gap between the price of oil at different dates. In recent days, contracts for Brent oil that will change hands imminently fell to a discount compared with crude that will be delivered down the line. That dynamic, known as contango, is a signal that supplies are more than sufficient to meet demand.

"It's a really bearish sign," said Greg Newman, CEO of London-based brokerage Onyx Capital. He expects Brent prices to lurch down to between \$58 and \$62 a barrel. The implication is that Saudi Arabia, the second-largest oil producer behind the U.S., might have to take more drastic action to boost prices in the face of sluggish demand, higher interest rates and an unexpected bounty of oil from the U.S., Iran and Russia. A big part of the picture is that China's recovery has been slower than economists had predicted.

No easy answers for oil industry's projection of future demand

(Wall Street Journal; June 29) - When is it game over for oil? Don't expect a clear answer from the people with the most to lose from a shift to cleaner fuels. Within energy circles, estimates of how much oil will be needed in 2050 range anywhere from 80% less than today to business as usual. Investors have the difficult job of betting which companies are on the wrong side of the most important trend for the sector in decades.

At an energy conference this week, Haitham al-Ghais, secretary-general of the Organization of the Petroleum Exporting Countries, repeated the cartel's view that global oil demand will grow to 110 million barrels a day by 2045 — as far out as OPEC currently projects. This is roughly a 10% increase from current flows. Natural gas, renewable power and hydrogen will play bigger roles, but oil will remain center stage.

If OPEC is right, it is bad news for efforts to limit climate change. Most U.S. majors are also in the "high-demand" camp, said Alexander Schay, managing director at the energy consulting firm WK Associates and co-author of a Securities and Exchange Commission comment that compiled 2050 oil forecasts. ExxonMobil said in a recent filing that the chances of the world getting to net-zero carbon emissions are low because of the drop in living standards it would cause. All of this underlines the uncertainty that energy bosses face — an oil industry in limbo, waiting to see what happens next.

Saudis announce oil production cut will extend into August

(Bloomberg; July 3) - Saudi Arabia will prolong its unilateral oil production cut by one month, keeping a lid on supply amid persisting fears over the global economy. The Saudis will maintain the reduction of 1 million barrels a day — which started this month on top of existing curbs agreed with OPEC+ — into August and could extend it further, according to a statement published by state-run Saudi Press Agency. The country will pump about 9 million barrels a day, the lowest in several years, sacrificing sales volumes for what has so far been a minimal reward in terms of higher prices.

The Saudi effort will be assisted by Russia, which will reduce oil exports by 500,000 barrels a day in August, Deputy Prime Minister Alexander Novak said in comments published by his press service. So far this year, however, Moscow has dragged its heels on cutbacks agreed with OPEC+ as it faces pressure to keep funds flowing to its war against Ukraine. Continued flows of Russian crude are helping to hold down prices.

"Faced with little investor confidence and very narrow range-bound trading, Saudi Arabia had virtually no other option but to extend the production cut," said Viktor Katona, head crude analyst at market intelligence firm Kpler. Lackluster demand in China has capped crude near \$76 a barrel, below the level that the International Monetary Fund believes Saudi Arabia needs to cover its budget. Against this backdrop, the extension of the kingdom's cuts for another month was no surprise.

Economic struggles will restrain global oil prices, poll results say

(Reuters; June 30) - Oil prices will struggle for traction this year as global economic headwinds stymie price gains that could be fueled by a rebound in China's demand and OPEC+ production cuts, a Reuters poll showed on June 30. The survey of 37 economists and analysts forecast Brent crude would average \$83.03 a barrel in 2023, versus the \$84.73 consensus in May. The global benchmark is now trading around \$75 a barrel after having shed about 13% thus far in 2023. The survey results show it averaging \$83.28 in the third quarter and hitting the \$86 mark in the next two quarters.

Forecasts for U.S. crude were also scaled back to \$78.38 a barrel in 2023 from last month's \$79.20. The third quarter will be a "make-or-break quarter ahead as lofty demand growth expectations from OPEC and IEA (International Energy Agency) need to come to fruition to avoid additional downward pressure on prices," said Ole Hansen, Saxo Bank's head of commodity strategy.

Goldman Sachs said this week that rising interest rates would remain a "persistent drag" on oil. Global oil demand is forecast to grow between 1 million to 2 million barrels per day, as per the poll. Five respondents to the poll predicted a supply deficit in the second half of 2023.

Report says China ahead of schedule on wind and solar power

(BBC; June 29) - Wind and solar power are booming in China and may help limit global carbon emissions far faster than expected, according to a new study. Solar panel installations alone are growing at a pace that would increase global capacity by 85% by 2025. The report says the country's green energy targets for 2030 look set to be exceeded five years ahead of schedule. But coal plants are also increasing, partly as backup for all the new wind and solar farms, the authors say.

China is often seen as the key to the world's efforts to rein in the carbon emissions that are the root cause of climate change. The country is the world's biggest user of coal, mainly for making electricity. The use of coal is responsible for about 69% of China's emissions of carbon dioxide. But this new study shows that China is fast building up capacity to generate power from wind and solar, which could have a significant impact on limiting the impacts of rising global temperatures.

The report from Global Energy Monitor, an independent research group whose work is used by the World Bank, the International Energy Agency and governments. The report looks at China's installed green energy capacity and makes projections on what is under construction and been announced for the next two years. It finds that China has more large-scale solar panel projects than the rest of the world combined. On wind energy, the country has doubled its capacity since 2017. GEM says China will more than double its capacity for wind and solar power by the end of 2025.

China's Sinopec starts producing green hydrogen

(Reuters; June 30) - China's Sinopec has begun producing green hydrogen at a plant in Kuqa city in Xinjiang, Chinese state media outlet Xinhua reported on June 30. The plant — Sinopec's first green hydrogen facility — has the capacity to produce 20,000 metric tons of hydrogen per year, using solar power to electrolyze water, according to the report. China and other countries are racing to develop green hydrogen — produced using renewable power to split water into hydrogen and oxygen — as a crucial source of fuel with no carbon emissions to help limit climate change.

China's state planner last year announced a target to produce 100,000 to 200,000 metric tons of green hydrogen a year by 2025. Sinopec's facility also includes hydrogen storage capacity and pipeline transmission. Hydrogen produced at the facility will be supplied to Sinopec's Tahe refinery to replace hydrogen produced from natural gas.

Sinopec began building the plant in 2021, with an initial investment of about 3 billion yuan (\$414 million). In February, the company launched construction of a 30,000-metric-ton green hydrogen demonstration project in Inner Mongolia and announced plans to build a 250-mile pipeline from Inner Mongolia to Beijing to transport hydrogen.

Officials in Texas sign ghostwritten letters in support of LNG project

(Texas Public Radio; June 28) - In March, several Rio Grande Valley public officials and industry leaders signed letters of support for Rio Grande LNG — a liquefied natural gas export plant slated for construction in the Port of Brownsville, Texas — urging the Federal Energy Regulatory Commission to approve the project. But they did not write any of the letters.

RioGrande's parent company, NextDecade, approached the officials with draft letters asking for support as FERC analyzed the environmental impacts of the project for a second time. NextDecade gave officials the option to edit the draft letter before sending it to FERC. Almost all signed the letters as is, with minimal edits. The letters came from county elected officials, the CEO of the regional hospital system, the mayor and city manager of Los Fresnos, the City of Brownsville's fire chief, the director of the Port Isabel-San Benito Navigation District, and every member of the port commission.

The letters also describe that residents of the Brownsville area "unequivocally" support the project and repeat NextDecade's claim that Rio Grande LNG is designed to emit low greenhouse gases. However, residents of the valley and beyond have protested construction of LNG projects in the area since 2015. Port Isabel's school district has voted against tax abatements for LNG plants twice. Along with Laguna Vista, South Padre Island and Port Isabel have signed resolutions against LNG projects in the area. Opponents have pointed to pollution and land destruction the plants would cause.

Delays push start-up of West Africa floating LNG project to 2024

(Forbes, July 1) - Increasing global demand for exports of liquefied natural gas has driven billions of dollars in investments in new export infrastructure in countries that are home to large gas reserves. One project that could become an economic and societal game-changer for two developing West African nations is advancing toward start-up next year, albeit behind schedule. The giant floating LNG production unit remains docked in Singapore, not ready to move onsite but reportedly at 94% completion. At full operation, the project is planned for 2.5 million tonnes annual production.

The Greater Tortue Ahmeyim (GTA) export facility appears poised to become a catalyst for economic development in the nations of Senegal and Mauritania in the same way the development by an ExxonMobil-led consortium of the Stabroek block offshore Guyana has become for that South American country. The GTA project is operated by BP, with non-operating interests held by Dallas-based Kosmos Energy and the Senegalese state-owned national oil company.

Feed gas will be derived from a pair of adjacent offshore fields, the Tortue field offshore Mauritania, and the Ahmeyim field offshore Senegal. Together, the two fields contain estimated proven reserves of 15 trillion cubic feet of recoverable gas with current technology. That number is likely to grow in the coming years as additional drilling takes place and technology advances. Originally scheduled to achieve first gas in 2022, the project has encountered a series of delays that extended the timeline into 2023, and which now has BP projecting first exports to occur sometime in 2024.

LNG transshipment station arrives in Russian waters

(High North News; June 30) - A new transfer station for liquefied natural gas in waters adjacent to the Barents Sea will further expedite the delivery of Russian LNG to Europe. The hub arrived this week after a 12,000-nautical-mile journey and will begin operations this summer. Novatek's first floating transfer hub for LNG, the Saam FSU, arrived in the narrow inlet of Ura Guba in the Russian Arctic after a four-month journey under tow from Okpo, South Korea, where it was built.

The company ordered the \$748 million barge three years ago from South Korean shipyard Daewoo Shipbuilding and Marine Engineering. A second barge, the Koryak FSU, will take up position off the coast of Kamchatka in the Far East later this year. The barges are more than twice the size of the large Arc7 ice-class LNG tankers, allowing for temporary storage of LNG before it is reloaded on to non-ice-capable gas carriers.

The goal of this logistics network is to shorten the distance that specialized and expensive ice-capable LNG carriers need to travel. Instead of delivering their cargo all the way to Europe or Asia, the vessels will now be able to turn around just outside ice-

covered waters near Murmansk and Kamchatka after offloading their cargo at the transshipment station for reloading aboard conventional carriers for the final delivery.

North America's first hydrogen-powered train on test run in Quebec

(Radio Canada; June 27) - The first hydrogen-powered train in North America is taking riders on a 2½-hour trip through central Quebec this summer. It's a demonstration to show how electricity stored as hydrogen in a fuel cell can replace diesel fuel on railways, where installing electrified rails or overhead wires would be challenging. Advocates for the use of hydrogen in heavy transportation say it could raise awareness and boost confidence in the emerging technology in North America.

The tourist train made by French company Alstom runs from Montmorency Falls in Quebec City to Baie-Saint-Paul — partway along the Train de Charlevoix route — through Sept. 30, carrying up to 120 people in two rail cars. Nancy Belley, general manager of Réseau Charlevoix, the private railway that runs the train, says it's an extraordinary chance for her company. The hydrogen replaces about 130 gallons of diesel that would be burned during the day's journey.

The same model of train has previously carried passengers in eight European countries. Germany purchased a version which uses Canadian-made fuel cells for a hydrogenonly route last year. The Quebec government said in February that it was investing \$3 million in the \$8 million project. At the time, Environment Minister Benoit Charette said it was part of the province's plan for a green economy by 2030, which relies on hydrogen to decarbonize parts of the economy where conventional electrification isn't possible.