Oil and Gas News Briefs Compiled by Larry Persily March 17, 2022

IEA estimates 3 million barrels per day of Russian supply at risk

(CNBC; March 16) - Three million barrels per day of Russian oil output is at risk beginning in April as sanctions hit and as buyers shun the nation's exports, the International Energy Agency said March 16. "The prospect of large-scale disruptions to Russian oil production is threatening to create a global oil supply shock," the Paris-based agency said in its monthly oil report, adding this could ultimately be the "biggest supply crisis in decades." (Brent crude opened March 17 up about 7%, or \$7 per barrel, on the IEA report.)

"The implications of a potential loss of Russian oil exports to global markets cannot be understated," the IEA said. Russia is the third-largest oil producer behind the U.S. and Saudi Arabia. But Russia is the largest oil and refined products exporter in the world, and Europe depends on it for supplies. In January, total Russia oil and products output was 11.3 million barrels per day, of which 8 million was exported. Looking forward, the IEA said 2.5 million barrels per day of exports are at risk. Of that, 1.5 million is crude, with products making up the other 1 million. "These losses could deepen," the IEA said.

The U.S. and Canada have banned oil imports, while the U.K. has said it will phase out purchases. But other European nations have not followed suit, given their dependence on Russia for energy. For now, energy supplies continue to exchange hands due in part to deals that were struck before Russia launched an invasion in Ukraine. But the IEA said oil companies, trading houses, shipping firms and banks are backing away from doing business with Russia for reputational reasons and because of a lack of clarity around possible future sanctions. "New business has all but dried up."

Oil prices retreat on supply hopes, possible demand cutback in China

(CNN Business; March 15) - After Russia invaded Ukraine, global oil prices spiked. Just over a week ago, Brent crude leaped to \$139 per barrel. Analysts warned prices could touch \$185, then \$200 as traders shunned Russian oil, pushing inflation even higher. But there's been a rapid reversal since then. Brent crude futures, the global benchmark, have cratered almost 30% from their peak. They settled below \$100 per barrel for the first time this month after shedding another 6.5% on March 15.

The unusually sharp pullback has been driven by hopes that Saudi Arabia and the United Arab Emirates could boost oil production, and that demand from China could drop due to new coronavirus restrictions in major cities. This would ease the squeeze on the market. Yet analysts warn we're not out of the woods yet. Oil is still trading above

what it costs to produce it, and extreme swings are likely to persist. "I wouldn't rule out \$200 a barrel just yet," said Bjørnar Tonhaugen, head of oil markets at Rystad Energy.

Following the invasion, oil skyrocketed as traders began to see Russian crude exports as untouchable. This sparked concerns about how that supply of between 4 million and 5 million barrels per day could be replaced, especially as demand for fuel ramps up over the summer. Over the past week, however, investors seem to be considering whether they went too far, too fast. The UAE ambassador to the U.S. said that the country wants to increase oil production, sparking hopes that OPEC could intervene after all.

Plus, China's commitment to halting the spread of COVID-19, which has led to a lockdown in the tech hub of Shenzhen and new rules in Shanghai, could mean the country needs less energy in the short-term. China imports about 11 million barrels of oil per day. "People remembered we are still in a pandemic," Tonhaugen said.

Self-sanctioning cuts into Russian coal, oil and LNG exports

(Reuters column; March 14) - The voluntary shunning of Russian commodities by Western buyers, or self-sanctioning, was expected to start hitting exports of crude oil, liquefied natural gas and coal in April, but there are already signs that flows are weakening. Russia's invasion of Ukraine has prompted numerous Western companies to withdraw from their investments in Russia and scale back or halt their purchases.

Many companies are pulling back from buying from Russia due to a combination of fear of public opposition and difficulties in securing financing, insurance and a reluctance of ship owners to load from Russian ports. This self-sanctioning was expected to largely hit Russia's exports from April, as most March cargoes would have been arranged prior to Moscow's first attack on Ukraine on Feb. 24.

There are already signs of exports starting to slow, with coal the most affected. Russia's shipments of coal to Europe stood at 1.16 million tonnes in the first two weeks of March, according to Refinitiv data, which has been filtered to show only vessels that have sailed or are being loaded. For February, Russia's coal exports to Europe were 3.37 million tonnes and January was 3.88 million. Russian coal to Asia also is on track for a sharp slump in March, with Refinitiv showing 1.84 million tonnes shipped in the first two weeks. Russia sent 6.16 million tonnes to Asia in February and 4.88 million in January.

The extent of self-sanctioning in Europe will become more obvious in April, but there are already reports that Russian crude can't find buyers, even with record high discounts of more than \$30 a barrel to the Brent benchmark. There are also signs that buyers are starting to shun Russian LNG, with just 447,000 tonnes of the fuel going to Asian buyers so far in March, and Refinitiv data shows no further cargoes currently awaiting loading. Russia shipped 933,000 tonnes of LNG to Asia in February and 1.15 million in January.

Canadian producers start to increase oil drilling

(Bloomberg; March 14) - Canada's slumbering oil industry is beginning to stir. For years, the country's drillers, like those in the shale fields of West Texas, have been under great pressure from their investors to avoid the kind of expansion plans that have backfired on them countless times before. So when oil blew past US\$70 a barrel last year, then US\$80 and US\$90 in rapid succession, executives in Calgary watched idly.

But as it soared above US\$100 after Russia's invasion of Ukraine, the potential windfall became too irresistible. Demand for rigs is now higher than it's been in years, and the summer drilling season is likely to start earlier than usual, said Kevin Neveu, CEO of Precision Drilling. "This is certainly more activity than we were expecting even three weeks ago," he said. The war in Ukraine hardened producers' resolve to get moving.

The CEO of closely held DeltaStream Energy said he will drill more wells this year to boost output by 18%. Whitecap Resources CEO Grant Fagerheim said his company will soon review spending for the second half of the year, which could boost the company's 2023 production but not earlier. These are smaller producers that focus largely on non-oil sands projects with quicker turnaround times than those run by large producers. Yet they represent an awakening in the world's fourth-largest oil-producing country.

Spending on conventional oil and gas in Canada is projected to climb to \$28.9 billion (US\$22.7 billion) this year, up 36% from \$21.3 billion in 2021, according to a March 7 report from ARC Energy Research Institute. The Canadian oil industry could raise production by more than 200,000 barrels in a short period of time, Suncor Energy CEO Mark Little told the CERAWeek by S&P Global conference last week in Houston.

China plans large increase in coal production

(Bloomberg; March 14) - China plans a massive increase in coal mining, a move that will dramatically reduce its reliance on imports and deal a blow to its near-term climate actions. The National Development and Reform Commission, the nation's top economic planner, told officials from major mining areas last week that it wants to boost domestic production capacity by about 300 million tons, almost 10%, according to sources, and will build a 620-million-ton coal stockpile, split between government, miners and users.

Such an increase in output would cut the country's already scant dependence on foreign coal imports after global prices hit record levels in the wake of Russia's invasion of Ukraine. The measures also highlight concerns that China's reliance on fossil fuels remains as entrenched as ever, as it seeks to enhance energy security to limit disruptions to economic growth, regardless of the impact on its climate goals.

It's hard to overstate the importance to China of coal, the most-polluting fossil fuel. The nation produces and consumes more than half of global supply, and coal is the biggest

contributor to its world-leading greenhouse gas emissions. China has said that coal consumption should begin to fall off in the second half of this decade as it strives to reduce emissions across the economy by 2030. The production increase would be split, with 150 million tons of annual capacity coming from new, upgraded coal operations and 150 million from open-pit mines and some mines that had previously been shut.

Chinese LNG buyer resells cargoes to higher-price European market

(Bloomberg; March 14) - China resold several U.S. liquefied natural gas shipments to Europe, a rare move by the world's top buyer that highlights how sky-high prices are rerouting trade flows. Unipec, the trading arm of China's state-owned Sinopec, sold at least three LNG cargoes for delivery through June to ports in Europe via a tender that closed late last week, according to traders with knowledge of the matter.

The shipments will load from Venture Global LNG's new Calcasieu Pass export facility in Louisiana, where Sinopec has a deal to purchase LNG, they said, requesting anonymity to discuss private details. European gas rates surged to a record high last week on fears that the war in Ukraine will curb flows from top supplier Russia. The rally prompted Unipec's traders to turn away from the lower-priced Chinese market, even as Beijing demands its importers secure more fuel amid concerns over disruptions.

European gas usually trades at a discount to LNG in North Asia, home to the top importers. But Europe's plan to ditch Russian gas means that it will need to significantly boost LNG imports, with the continent's prices primed to stay higher than Asian rates as it seeks to attract every last drop of fuel from the spot market.

Iran wants to get into the LNG export business

(Bloomberg; March 15) - Iran is reviving efforts to export liquefied natural gas, just as Europe tries to cut its reliance on Russian energy and as world powers negotiate sanctions relief for the Islamic Republic. State-run National Iranian Oil Co. invited investors to submit proposals to construct mini-liquefaction units, without specifying the size, timeline or location, according to a statement. Proposals are due by April 30.

European buyers are scouring the globe for sources of gas that could replace Russian flows after the invasion of Ukraine. Russia is the European Union's top supplier of the fuel, providing about 40% of the gas consumed in the bloc last year, according to the International Energy Agency. Iran has the second-biggest gas reserves in the world and already exports some via pipeline to neighbors Turkey and Iraq, totaling almost 550 billion cubic feet in 2020. But entering the LNG market, which requires multibillion-dollar plants to turn gas into liquid for shipment around the world, has proved more difficult.

At least eight previous Iranian LNG export projects have stalled due to sanctions or capital constraints, including partnerships with France's TotalEnergies and Russia's Gazprom, according to a Bloomberg New Energy Finance database. International sanctions on Iran would likely be eased if the country and other world powers agree on a return to the 2015 nuclear deal. Negotiations were suspended indefinitely last week after Russia sought additional guarantees.

U.S. LNG developer says 10-year contracts are enough for financing

(S&P Global Platts; March 15) - The rising demand for U.S. LNG and high gas prices abroad will allow Tellurian to finance a Gulf Coast export terminal without the traditional 20-year customer contracts that used to back U.S. projects, said Charif Souki, executive chairman and founder of the Driftwood LNG terminal developer. He said Tellurian is on the verge of commercially sanctioning the Louisiana project in the coming weeks.

Tellurian already was in financing talks over Driftwood during a massive run-up in European LNG prices this winter, before supply uncertainty after Russia's invasion of Ukraine drove up prices even more. The market dynamics represented a remarkable change from two years ago, when prices in Europe and spot prices in Asia fell below \$2 per million Btu. Recent prices have been assessed as high as 30 times that level.

Tellurian has said it holds 10-year agreements with traders Gunvor, Vitol and Shell totaling 9 million tonnes per year, more than covering the project's first phase of 11 million tonnes per year before expanding to 27.6 million. "I am sold out," Souki said. "I don't need or want any more commercial agreements. With current prices and what I envisage happening, once my first phase is built, the rest will be built from cash flow."

Tellurian's challenge is convincing banks its business model works and that its contracts provide sufficient collateral, as the repayment period for LNG projects typically exceeds 10 years, said Jason Feer, head of business intelligence at Poten & Partners. "If they are able to go to FID and get financing, it would be a seismic shift in how LNG projects are financed," he said. "We've never seen a project backstopped by 10-year contracts."

Developer awards major order for second Louisiana LNG terminal

(Natural Gas Intelligence; March 13) - Development of Venture Global LNG's Plaquemines liquefied natural gas terminal in Louisiana is heating up with a succession of engineering and procurement contracts. Baker Hughes announced March 9 that Venture Global had given it a major order for equipment and the notice to proceed. The first phase of Plaquemines is expected to produce 10 million tonnes of LNG per year, with a possible expansion to 20 million tonnes. The Baker Hughes' facility in Italy will manufacture the 24 modularized compression trains that are planned to start arriving pre-assembled sometime in the first half of 2023. The contractor and Venture Global have said the installation plan and timeline for Plaquemines will resemble those for Calcasieu Pass LNG, which Baker Hughes also worked on in 2019 and is currently being fully commissioned. That Venture Global project, the company's first LNG export terminal, loaded its initial cargo March 1.

During a March 9 discussion at CERAWeek by S&P Global in Houston, Venture Global CEO Michael Sabel said Calcasieu Pass holds the record for fastest construction of a large-scale greenfield LNG project. The first phase went from final investment decision to its first cargo in 29 months. Sabel believes Plaquemines will move at a similar pace. Venture Global has not yet sanctioned the project, but early construction work started last year. Assuming a favorable FID, Plaquemines is expected to enter service in 2024.

Rising natural gas prices drive up electricity rates for U.S. consumers

(The Wall Street Journal; March 14) - U.S. electricity customers are facing some of the largest bills in years because of volatile natural gas prices, driven higher by winter demand and a global supply shortage made worse by Russia's war against Ukraine. Already, the gas supply crunch has made it substantially more expensive for utilities to purchase or produce electricity, and some customers have seen winter power bills increase by 20% or more compared to last year, in addition to higher home-heating bills.

Now, with sanctions against Russia threatening to further constrain global gas supplies, higher prices are likely to persist, executives and analysts say, especially in U.S. regions heavily reliant on the fuel for power generation. Domestic gas prices reached the highest levels in years ahead of winter as exporters shipped record amounts of it overseas, and prices have lately risen again on fears of another global shortage.

U.S. Henry Hub gas prices on March 11 reached about \$4.73 per million Btu. That is up from about \$2.66 per a year ago. Utilities across the country recover gas and electricity supply costs by charging more to customers, driving prices sharply higher this winter even after a year of steady increases. Utilities must receive regulatory approval to raise rates, but it is generally standard practice for regulators to allow them to recoup higher fuel and supply costs from their customers.

France now willing to talk about gas pipeline from Spain

(Bloomberg; March 16) - France is willing to resume talks with Spain about building a gas pipeline connecting the two countries as Europe races to reduce its dependence on Russian gas. France, which has long resisted Spanish calls to build the link, is now willing to discuss the viability of the so-called Midcat pipeline if Madrid officially requests

it, said Jean-Michel Casa, French ambassador in Madrid. Spain has about a quarter of Europe's LNG regasification capacity.

"Now that the underlying situation has changed, is it necessary to talk about Midcat? Let's talk," Casa said in an interview with Spanish newspaper La Vanguardia. Spanish Prime Minister Pedro Sanchez could take the opportunity to discuss the project with President Emmanuel Macron in an upcoming visit to Paris, Casa said.

In 2019, energy regulators from both countries rejected the investment proposal for the central section of the Midcat line crossing through the Pyrenees, disappointing leaders in Spain and Portugal that for years had pushed for the project to bolster energy links with the rest of Europe. The Iberian Peninsula has only marginal gas connections to the rest of Europe. The energy crisis unleashed by the war in Ukraine has put the pipeline back in focus. The pipeline could help substitute Russian gas by allowing Algerian gas to flow into Europe as well bolstering liquefied natural gas imports through Spain.

Dutch stick with plan to close largest gas field

(Reuters; March 14) - The Netherlands on March 14 said output from the Groningen gas field would be a last option to secure its energy needs in the wake of Russia's invasion of Ukraine, as it cut its production forecast for the field this year. Extraction in the year to the end of September is now expected to total 162 billion cubic feet, the government said in a letter to parliament, versus an outlook for 270 bcf in January. A main source of Europe's gas for decades, the field operated by a joint venture of Shell and ExxonMobil hit peak output of 3.1 trillion cubic feet in 1976 and was still close to 1 tcf five years ago.

The Dutch state announced in 2019 that Groningen gas production would end by October 2022 to limit seismic risks in the region, with gas only to be extracted thereafter in the event of extreme weather or unforeseen circumstances. "We continue to stress that the Groningen field will only be an option of last resort, to guarantee supply of energy to households," the government said

The government said this week it would stick to its plan to shut down the field completely in 2023 or 2024, depending on how fast gas reserves can be filled with imported supplies of the low-calorific gas typical of Groningen. It said that in order to limit dependence on Russian fuels it will look to increase its capacity to import liquefied natural gas. For this, it could expand an existing LNG terminal in Rotterdam or build a new floating facility in the Groningen province, the government said.

Dutch may change mind about gas field shutdown to help Ukraine

(Reuters; March 16) - Images of bombed-out hospitals and apartment buildings across Ukraine reminded Jannie and Bert Schrage of their home country during World War II. Then the retired couple, who live in the north of the Netherlands, realized they had a resource to help slow President Vladimir Putin's campaign — natural gas. The Schrages live above the Groningen gas field, Europe's largest. They have been opposing gas production since earthquakes started to force them out of their homes a decade ago.

Now, like a majority of those polled in their province, they say that if it would help Ukraine, they may allow more gas to be pumped out. "I never thought the words would come out of my mouth," said Bert Schrage, a former teaching assistant at Groningen University, standing near a Ukrainian flag placed in his windowsill. The Schrages' house, a prefabricated building from 1997, had to be demolished and rebuilt last year after it was declared unsafe due to quakes triggered by gas extraction.

Residents across the region have been campaigning for years for the gas field to be shuttered. "Putin managed to change my mind," said Schrage. The Groningen field still contains roughly 16 trillion cubic feet of recoverable gas. It has heated Dutch homes, generated electricity and powered industry in the Netherlands and beyond for half a century. Between 2000-2018, the Netherlands exported 202 billion euros (\$221 billion) worth of gas to Germany, Belgium and France, according to Statistics Netherlands.

The government said in a statement on March 14 it still aims to permanently close the field as soon as possible, or in 2023 or 2024. But it said new uncertainty, "partly due to the Russian invasion of Ukraine," meant Groningen gas may be needed as a last resort.

Shell working to obtain regulatory approval to restart Prelude LNG

(Sydney Morning Herald; March 14) - Shell has put its case to Australia's offshore safety regulator to resume production from its troubled floating Prelude LNG facility three months after a series of power failures sent the \$20 billion showpiece into a series of dangerous blackouts. Shell and its partners have lost the capacity to produce 3.6 million tonnes of LNG a year just as global gas prices skyrocket due to doubts over continued supply from Russia. Prelude was built in South Korea and towed to Australia.

In early December, the world's largest vessel moored about 300 miles offshore Western Australia was plunged into chaos by cascading failures of power and life support systems. Shell's investigation into problems on its 1,600-foot-long facility is in response to directions from the National Offshore Petroleum Safety and Environmental Management Authority that must be completed before Prelude resumes production.

In a confidential early March report obtained by Western Australia Today, Shell outlined 42 actions it will take to make the Prelude safe. Power problems began on Dec. 2 when

a fire broke out in a room housing a battery backup system. Shell's investigation was unable to determine the exact nature of the failure, so the company plans to address all the possible causes it identified. Shell must convince regulators it can safely operate essential power and services before resuming production.

Thailand faces gas supply squeeze as domestic production in decline

(Reuters; March 16) - A global energy crunch is sending liquefied natural gas prices skyward, but Thailand needs to ramp up its purchases to offset a steep production fall at its largest gas field and as sanctions threaten gas supplies from Myanmar. The Southeast Asian country has little choice but to join the scramble for alternative gas supplies at a time European demand is rising. Buyers there are rushing to secure cargoes to replace Russian gas and LNG as the Ukraine war intensifies.

The shortfall for Thailand, a net oil and gas importer which last year relied on imports for nearly 75% of its electricity, crude oil, coal and natural gas needs, could become more onerous as prices continue to soar. Thailand's deficit is largely due to sharply lower output from the offshore Erawan field, which provides the lion's share of the country's gas needs. Threats of further U.S. sanctions on Myanmar following a military coup have also cast uncertainty over gas imports from the longtime supplier.

PTT Exploration and Production, a unit of state-owned PTT, is due to take over the Erawan gas field from Chevron in April. About a quarter of Thailand's natural gas needs used to come from the Erawan field, which is expected to produce less than a fifth of its capacity next month. When Chevron exits, production could be as low as 200 million cubic feet per day of gas. In 2019, the field produced 1.2 billion cubic feet per day.