Oil and Gas News Briefs Compiled by Larry Persily September 12, 2022

Too many variables make it hard to forecast oil prices

(Wall Street Journal; Sept. 11) - Another turbulent week in oil markets carried crude prices to their lowest point since January, with thin trading and a blurry outlook for supply and demand driving a fitful 30% decline from this year's highs. A 5.9% gain since Sept. 7 notwithstanding, the main U.S. oil benchmark has shed about \$35 a barrel since peaking above \$122 three months ago. West Texas Intermediate closed Sept. 9 at \$86.79. Brent crude futures, the primary international price gauge, ended at \$92.84.

Much like what happened on the way up early this year, the decline has been intensified by heightened volatility and diminished liquidity in the futures markets. Traders and analysts said that a large number of variables — including China's Covid-19 lockdowns and the future for Russia's shunned barrels — has made it unusually difficult to anticipate prices. Bank of America Securities analysts laid out cases in a recent note to clients for prices to both rise and fall by as much as \$20 in the next few months. "There is simply too much uncertainty around fundamentals going into the winter," they wrote.

Other examples of uncertainty looming over the market include how long the Biden administration will dip into the U.S. Strategic Petroleum Reserve to boost domestic supply, whether sky-high natural gas prices in Europe will prompt utilities to burn more oil instead, and to what degree the Organization of the Petroleum Exporting Countries and its market allies are willing to throttle back output to support prices. And a renewed nuclear deal between the U.S. and Iran could bring Iranian oil back to the market.

U.K. to issue new North Sea oil and gas leases, lift ban on fracking

(Reuters; Sept. 8) - British Prime Minister Liz Truss' plans to spur new North Sea oil and gas output and lift a ban on fracking will test investor appetite for fossil fuel projects, but are unlikely to ease the current energy crunch. Truss, who took office Sept. 6, has made Britain's energy security a central pillar of her new government's objectives as the country faces soaring energy bills. On Sept. 8, she announced a cap on consumer energy bills for two years and plans to funnel billions into propping up power companies.

A new round for more than 100 oil and gas North Sea exploration licenses will be announced next week as part of the wider plans, Truss said. Truss also said she would lift a moratorium on fracking, which involves extracting shale gas from rocks by breaking them up with water and chemicals at high pressure, a practice that has faced fierce local opposition in the U.K. after causing earth tremors. But none of these measures will

have an immediate impact. It typically takes five to 10 years from exploration until oil and gas is produced from a new field, requiring a significant investment commitment.

Investment in new oil and gas projects in the aging North Sea basin has slowed in recent years, with Britain committed to a legally binding target to meet net-zero emissions in 2050. Several oil and gas majors are in the midst of diversifying their companies to meet energy transition goals and cut their own emission footprints.

China buys spot LNG cargoes from Russia at steep discount

(Bloomberg; Sept. 7) - China is lapping up liquefied natural gas shipments from Russia on the cheap. The Sakhalin-2 LNG export plant in Russia's Far East sold several shipments to China for delivery through December at nearly half the current spot price in a tender that closed this week, according to traders with knowledge of the matter. Even so, global prices have soared so much that the project can profit from those sales.

The move is beneficial for both countries — China is able to secure cheaper supply and resell shipments from more expensive exporters to utilities in Europe and Asia, while Russia can continue selling fuel at a profit. Japan and South Korea, traditionally the top destinations for Sakhalin LNG, have stopped buying spot shipments from the plant since Russia invaded Ukraine. The operator of Sakhalin-2 is primarily owned by Gazprom, and was recently redomiciled to Russia after a decree by President Vladimir Putin. The move forced Shell to abandon its 27.5% stake in the project for nothing.

"Russian supply is still making its way into the market, just with a reorganization of trade flows via market participants who don't take issue with accepting Russian cargoes," said Saul Kavonic, an energy analyst at Credit Suisse. "It appears China is happy to take Russian LNG cargoes at discounts, swapping out alternative supply that can then be directed to Europe at higher prices." China's LNG imports from Russia surged to the highest level in at least two years in August. Meanwhile, deliveries from the U.S. to China have slumped as importers divert their cargoes to Europe at a hefty profit.

<u>High prices cut into China's demand for LNG imports</u>

(S&P Global; Sept. 9) - High LNG spot prices have dampened China's buying interest, forcing purchasers to increasingly rely on domestic production, lower-priced imported pipeline gas or other sources of energy such as coal to meet demand, industry sources said. However, winter could lift LNG imports, which fell 20% year-on-year in the first six months of the year. "There is a huge disconnect. ... If we import, we will be making huge losses," a Chinese importer said, adding that the spread between domestic gas prices and international LNG costs has been running as wide as \$40 per million Btu.

The benchmark for spot LNG prices in Northeast Asia averaged \$57.85 over Aug. 16 to Sept. 7, while trucked LNG in North China sold at about \$17.50 on Sept. 7, sources said. Beijing Gas, a local government-owned gas distributor, will likely postpone the operation of its newly built 3 million-tonne-per-year Tianjin LNG terminal in North China due to high LNG prices, a source said. Storage levels at some terminals in North China are about 70% of capacity. Sinopec and CNOOC will likely buy less LNG for winter than a year ago due to high LNG prices, sources close to the two companies said.

PetroChina, China's largest natural gas producer, produced about 2.25 trillion cubic feet of gas in first-half 2022, up 4.4% year-on-year, accounting for 58.2% of China's total gas production, data from the company and the National Bureau of Statistics showed. China's pipeline gas imports are estimated to have risen about 10.8% year on year to 1.26 tcf in the first seven months of 2022, accounting for 42% of the country's total inflows, the rest being LNG, according to S&P Global Commodity Insights calculations.

Traders, utilities park LNG at sea to prepare for winter demand

(Bloomberg; Sept. 8) - Energy traders and utilities are storing more liquefied natural gas at sea, an unusual move to hoard supply for winter as the market faces a shortage. Energy-starved utilities in Europe are parking LNG off the coast in a scramble to replace Russian pipeline gas this winter. They can't unload the gas to onshore storage because terminals are maxed out, and so are choosing to pay to keep the ship nearby. Importers in Asia and South America have also jumped on floating storage, seeking extra supply.

At the same time, traders are looking to profit by storing LNG and cashing in when prices spike during the winter. LNG volumes in so-called floating storage globally hit 1.4 million tonnes on Sept. 2, the most in two years, according to energy intelligence firm Kpler. The strategy, used frequently for oil, is rare for LNG because the liquid fuel slowly evaporates in the ships, making long periods of storage challenging. That illustrates the lengths that gas importers will go to in order to ensure they have enough fuel this winter.

There are at least nine vessels storing LNG in the ocean, according to Bloomberg and Kpler data. Natural gas prices in Europe and Asia are trading at a record high for this time of year as Russia curbs supply to key customers, intensifying competition for LNG shipments. The demand for ships globally is driving freight rates higher, and traders say they still have room to climb. "We would expect there to be more floating storage," said Oystein Kalleklev, chief executive officer of shipowner Flex LNG Management."

U.S. LNG exports booming, production not rising as fast

(Reuters; Sept. 9) - America's natural gas market was largely disconnected from the world for decades. Transportation limits meant U.S. prices reflected local demand and

supply only. But the industry's infrastructure has changed, and it means that U.S. natural gas is going global. That will continue to have an effect on domestic prices. After starting exports from the Lower 48 states in 2016, the U.S. is now the world's largest LNG exporter, with new construction to push export capacity 40% higher by 2025.

But the demand for U.S. gas outside of the states has risen faster than production. Between June 2019 and June of this year, LNG exports more than doubled. Meanwhile, gas production only increased 7%, according to the U.S. Energy Information Administration. As a result, LNG exports now take up more than 11% of America's production of gas, or about double what it was in 2019.

The result is easily seen in the commodity's costs. Prices this summer are the highest they've been since 2008. The spot price of benchmark Henry Hub natural gas is \$7.85 per million Btu on Sept. 7, over three times as high as prices averaged in September 2019. The U.S. gas boom, however, could eventually fizzle. Some lawmakers and domestic users have pushed for export limits to lower prices. Big producers like Qatar are also increasing export capacity substantially. And environmental concerns could eventually dent demand as solar, wind, and nuclear power capabilities ramp up.

Natural gas supply strain on Europe could last until at least 2025

(Bloomberg; Sept. 7) - While European politicians are focusing on the region's survival this winter, next year could be worse. The loss of Russian gas supplies will cause reserves to be depleted faster when temperatures drop in the coming months and make the process of preparing for following heating seasons even more difficult. With no quick fix available, the strain is set to last until at least 2025, according to energy executives.

"Europe could have an even bigger problem next winter," Niek Den Hollander, chief commercial officer at German energy giant Uniper, said in an interview at the Gastech conference in Milan this week. "It is possible that nations won't be able to fill up storage sites next summer as much as we have managed to do this year." With Europe facing a smaller pool of available gas, markets will remain tight for the foreseeable future. "We will get back to a more normal situation, but it will take time," said Helge Haugane, senior vice president at Norwegian energy company Equinor.

The standoff puts pressure on Europe's leaders to diversify sources. Norway is now the main provider of Europe's gas, but it doesn't have capacity to fully offset supplies from Russia. Other nearby suppliers such as Azerbaijan and Algeria face similar bottlenecks. LNG, which can be carried by ship from far-away producers such as the U.S. and Qatar, is a promising option, but global production is tight and increasing capacity takes at least three years, according to Colin Parfitt, vice president at Chevron. Meanwhile, Europe has to fight with Asia for the existing LNG volumes for the next couple of years.

Germany signs LNG deals even as it sticks with carbon-neutral target

(Bloomberg; Sept. 9) - Germany's energy crunch is forcing it to sign fossil fuel contracts that last decades as the country balances keeping the lights on and homes heated against meeting environmental targets. Energy providers from Uniper to RWE have signed long-term agreements with liquefied natural gas suppliers, especially in the U.S., with more deals expected. Until now, utilities had shied away from the 15- to 20-year contracts, wary of the commitment to an energy source that emits carbon and methane.

"There are a lot of transactions that are in the works with us and with other parties that are at various stages," said Michael Sabel, CEO of Venture Global LNG, the U.S. supplier that signed a 20-year pact with German utility EnbW earlier this year. The turnaround highlights Europe's energy dilemma. As Russia throttles gas supplies to the continent in a move that threatens to push the region into recession, the only options for rapid replacement are fuels that risk upending the path to becoming carbon neutral.

Across Europe, governments are fast-tracking the use of floating LNG import terminals that take a fraction of the time to set up than their onshore versions. Germany, which used to get more than a half of its gas via pipelines from Russia, is now chartering five of the floating storage and regasification units and two more that will be privately rented. Three are slated to start this winter. Even so, Germany is sticking to its climate objectives. The country wants to become carbon neutral by 2045, and the government aims to generate all the nation's electricity from renewable sources by 2035.

Spain will restart LNG import terminal that could help serve Germany

(Bloomberg; Sept. 8) - Spain expects a liquefied natural gas import facility that it is reviving after a decade of being idle will help ease an unprecedented energy crunch in Germany. The Iberian nation, which already has six operating LNG import terminals, plans to restart the El Musel regasification plant in January. It will allow traders to bring in fuel, store it in tanks onsite and, when required, potentially transport it by ships to LNG terminals that Germany is setting up. The El Musel project was mothballed as soon as it was constructed 10 years ago because of a lack of demand.

"Our priority now is to try to expand as much as possible our capabilities to export gas to the rest of Europe, taking advantage from the very strong gas infrastructure that we've got," said Arturo Gonzalo Aizpiri, CEO at the Spanish gas network operator Enagas. Germany, traditionally heavily reliant on Russian gas, is among the worst affected in Europe as an energy crisis heightens the risk of drastic rationing, economic recession and social unrest. Germany will start as many as three fast-tracked floating LNG import terminals this winter, but more are needed to ensure sufficient supply.

El Musel's first storage tank will become operational in January, and the second in March, Gonzalo Aizpiri said in an interview at the Gastech conference in Milan, where

his company tested market interest for gas supply from Spain's terminals. The reexported gas is likely to mainly head to Germany, he said. If the German floating storage LNG units are going to be extremely busy, "probably it would be useful for them to have this intermediate storage capacity in our plants," he said.

First floating LNG import terminals are setting up in Dutch port

(Bloomberg; Sept. 7) - Two floating liquefied natural gas import terminals are setting up in a Dutch port, the first in a wave of the specialized tankers that Europe is banking on to ease the worst energy crunch in decades. The Golar Igloo and the Eemshaven LNG are currently berthed together in the northern seaport of Eemshaven. Both are floating storage and regasification units, or FSRUs, designed to convert the fuel transported on seagoing vessels into gas that can be pumped into onshore networks.

The ships' arrival before winter will be crucial in helping Europe through a deepening fuel crisis after Russia slashed gas deliveries in retaliation for sanctions imposed over its invasion of Ukraine. FSRUs are typically moored near shore. An arriving carrier transfers LNG to the unit, which stores and turns the cargo into high-pressure gas to feed into the grid. The vessels tend to be faster, cheaper and more environmentally friendly to develop than an onshore terminal, though their capacity is much lower.

The vessels' popularity is spreading. Germany, which used to get more than a half of its gas via pipelines from Russia, is chartering five FSRUs through the government and two more that will be privately rented. Three of the ships are slated to start this winter. Italy, France and the Baltic countries are also planning or investigating such terminals. In Eemshaven, a commissioning LNG cargo will be delivered Sept. 8 to prepare the facility for its first commercial shipment mid-September. Both of the FSRUs are rented for five years, and together are expected to receive about 18 LNG cargoes by Dec. 31.

Opponents challenge expansion of Cheniere's Texas LNG plant

(Natural Gas Intelligence; Sept. 9) - Environmental groups are challenging FERC's approval to extend the construction deadline for Cheniere Energy's third expansion of the Corpus Christi LNG terminal in South Texas as the battle over natural gas infrastructure projects continues. The Sierra Club and Public Citizen filed a petition with the U.S. Court of Appeals for the District of Columbia.

The plaintiffs asked for a review into the Federal Energy Regulatory Commission's decision giving Cheniere until June 30, 2027, to bring the expansion online. The groups argued FERC "acted unlawfully" and asked the court to revisit the extension with "extensive new information." The third expansion of the plant, sanctioned by the

company in June, would add seven midscale liquefaction trains, boosting the plant's capacity by 10 million tonnes per year to 25 million tonnes.

Proposed LNG terminal in NJ wins 3-year extension to start work

(WHYY public radio; Philadelphia; Sept. 9) - The Delaware River Basin Commission on Sept. 8 approved a three-year permit extension for a controversial project to build New Jersey's first terminal for exporting liquefied natural gas along the Delaware River. The extended permit gives Delaware River Partners, an affiliate of New Fortress Energy, until June 2025 to build a dock on the Delaware River in Gibbstown, New Jersey.

The project, which involves dredging a portion of the Delaware River, would enable the company to transport LNG by truck and/or rail along the Delaware River from Pennsylvania's Marcellus Shale to Gibbstown, and export gas overseas. Delaware River Partners is still seeking approval from the U.S. Pipeline and Hazardous Materials Safety Administration to extend a permit that allows them to transport LNG by rail.

The building of an LNG terminal has sparked concern from environmental and civic groups and residents who say exporting LNG would pollute the air and water, and could destroy homes in the event of an explosion. More than 100,000 signatures against the project have been submitted to the river commission, according to the environmental advocacy group Delaware Riverkeeper Network. The group appealed the project in 2019, but commissioners gave the project final approval in December 2020. Following a second appeal, the case is now in federal court, awaiting a ruling.

Judge reinstates contested drilling lease near Indian reservation

(Associated Press; Sept. 9) - A federal judge Sept. 9 ordered the Biden administration to reinstate a drilling lease that has been in dispute for decades on land near the Blackfeet Indian Reservation considered sacred to Native American tribes in the U.S. and Canada. The 10-square-mile oil and gas lease in the Badger-Two Medicine area of northwestern Montana was issued in 1982. It was cancelled in 2016 under then-Interior Secretary Sally Jewell, at the request of the Blackfoot tribes and conservation groups.

There have been efforts to declare the area a national monument or make it a cultural heritage area, and tribal leaders have bitterly opposed drilling in recent decades. But U.S. District Judge Richard Leon said Jewell lacked the authority to withdraw the lease so many years after it was sold and after several prior studies had examined the environmental and other impacts of drilling in the area.

He ordered Interior Department officials to reinstate the lease and issue a drilling permit to Solenex, the Louisiana company that holds the lease. Leon issued a similar order in

2018 that was later overturned on appeal. "It is time to put an end to this interminable, and insufferable, bureaucratic chess match," Leon wrote in his 36-page decision. The Blackfeet had intervened in the case on the side of the government, and tribal Historic Preservation Officer John Murray said the fight against drilling would continue.

Judge sides with Indigenous group but rejects pipeline shutdown

(The Canadian Press; Sept. 8) - The Line 5 pipeline has won a stay of execution in Wisconsin, where a federal judge sided with an Indigenous group's complaint but stopped short of ordering the cross-border energy link shut down entirely. The Bad River Band of the Lake Superior Chippewa was within its rights to revoke permission in 2013 for the pipeline to cross its territory, Court Judge William Conley said in a Sept. 7 decision. The line moves up to 540,000 barrels a day of light crude and gas liquids.

Pipeline owner Calgary-based Enbridge should have known that its 1992 agreement with the band would not by itself be a guarantee of Line 5's continued operation, Conley ruled. But he denied an injunction to shut down the line, citing the risk of "widespread economic consequences" and "significant public and foreign policy implications." Conley also found that the band is entitled to financial compensation from Enbridge.

The judge acknowledged the decision last month by Canadian Foreign Affairs Minister Melanie Joly to invoke a 1977 Canada-U.S. energy transit treaty, a move designed to prevent closure of the line that moves Canadian products across the Great Lakes region. Conley also noted that Enbridge has been working on rerouting the line around Bad River territory. Line 5 has been under legal siege in Wisconsin and Michigan for the better part of the past three years. Business groups and chambers of commerce on both sides of the border, provincial governments and Ottawa have rallied behind Enbridge in its effort to portray Line 5's survival as mission-critical for energy security.

<u>Australian court hearing looks at Indigenous case against Santos</u>

(The Wall Street Journal; Sept. 8) - An Indigenous clan leader on the Tiwi Islands off northern Australia stretched his arms and stomped his feet as the chants of other Tiwi people filled the forest. A few steps away, waves lapped a beach where sea turtles lay eggs. The sacred dance, called the turtle dance, is usually performed at funerals. This time, Dennis Tipakalippa danced before an Australian federal judge during a rare court hearing held in the island wilderness. Tipakalippa, supported by his clan, is suing to stop energy producer Santos from drilling for natural gas about 85 miles offshore.

Whatever the judge decides, lawyers, Indigenous people and activists say the court's willingness to travel and listen to communities are signs that Australian institutions are increasingly taking the concerns and heritage of Indigenous people into account. To

many, the hearing signals progress in a country trying to come to terms with its past treatment of Indigenous people.

The judge has the authority to invalidate regulatory approval of the drilling. The \$3.6 billion Barossa project aims to pipe gas produced near the Tiwi Islands to an existing terminal in Darwin, where it would be liquefied for LNG export. The case, which centers on whether Tipakalippa's clan was properly consulted, is one of several recent disputes in which companies face pressure to respond to concerns of Indigenous people.

Alina Leikin, with the nonprofit Environmental Defenders Office, which is representing Tipakalippa, said the case could set a benchmark for what consultation is needed with Indigenous communities. If Santos loses, it may need to reapply for regulatory approval.

Chevron pays Australia taxes, now that it has used up deductions

(Australian Financial Review; Sept. 8) - Chevron is bracing for a 25-fold increase in its Australian income tax bill this year to about A\$3.7 billion after finally exhausting all its tax deductions, although its highly lucrative LNG ventures in Western Australia are "years away" from paying Petroleum Resource Rent Tax. Mark Hatfield, the head of Chevron's business in Australia, said it would start paying monthly federal income tax instalments of about \$110 million after using up allowances and deductions that meant it paid no company taxes for seven years and only \$149 million for all of calendar 2021.

Skyrocketing prices for LNG are also contributing to the surge in the tax liability of the company that has long been a prime target for critics of the LNG industry's scant contribution to taxation revenues despite reaping billions of dollars from the exploitation of Australian resources. "We had some tax deducts that made us tax negative for several years, and we've reversed all that," Hatfield said. "Now is when we finally get to profit some, and as we profit the commonwealth profits as well."

Chevron is among companies pushing back at calls from the Greens, the Grattan Institute and others for a windfall tax to be levied on oil and gas producers that are enjoying near-record prices for LNG exports amid a global crunch in gas supplies exacerbated by Russia's invasion of Ukraine. Hatfield said Australia effectively already has a windfall profits tax in the form of the production tax, which would kick in once the huge Gorgon and Wheatstone LNG ventures — which had a combined construction cost of about A\$130 billion after costs overruns — had recouped their initial investment.

India may need to import more coal to meet power demand

(Bloomberg; Sept. 9) - Energy officials in India are considering whether further coal imports may be needed to avoid any fresh squeeze on the nation's power supply.

Stockpiles of the fossil fuel at power plants have fallen about 11% since mid-August, meaning utilities have an average of 10 days supply, well below required levels of more than three weeks. Coal helps produce about 70% of India's electricity. Coal-fired power generation jumped almost 16% in the first week of September from a year earlier, as warmer weather in several parts of the country lifted demand for cooling.

"We are watching the situation anxiously," Power and Renewable Energy Minister Raj Kumar Singh said. "Availability of power for the common man is non-negotiable." Power plants must maintain adequate stockpiles and import supply if needed, even though the nation's longer-term policy is to limit purchases from overseas, he said Sept. 8. India is seeking to avoid any repeat of 2021's coal crunch, the worst in years and triggered by a prolonged monsoon season which flooded coal mines and choked shipments.

Shortage of LNG carriers drives up charter rates

(S&P Global; Sept. 7) - A lack of adequate liquefied natural gas tankers due to surging demand for the fuel particularly from Europe is set to spur another spike in LNG costs and lead to higher charter rates, industry sources said. "Short-term charter vessels are still available scantily, but long-term is not. There's not enough supply (of LNG carriers)," an industry source said.

Gas demand has been strong, with Asia and Europe competing for cargoes and looking for supplies from the U.S. and Qatar because of restricted Russian availability. LNG carrier charter rates are expected to increase further heading into winter on the back of longer-haul trips needed to bring more volumes into Asia as demand picks up, said Jeff Moore, manager of LNG Analytics Asia at S&P Global. A broker said spot charter rates in the Pacific could touch \$400,000 a day for a round-trip voyage in winter.

"New ships being added in the medium term could help mitigate some of the charterrate price spikes, but in the immediate future prices are still expected to pick up as these take time to build," Moore said. About 286 LNG carriers are on order globally through 2028, with 165 ships slated for delivery over 2024-2025, industry sources said.

Global oil demand to grow with more gas-to-oil switching

(S&P Global Platts; Sept. 7) - Global oil demand from gas-to-oil switching could jump by more than 80% over the next six months after soaring prices for natural gas push more power producers, refiners and industrial users to burn fuel oil and other liquid fuels, according to estimates by Platts Analytics. The big customers will account for 633,000 barrels per day of incremental liquids demand in the first quarter of 2023, compared to around 350,000 of incremental demand in Q3 2022, Platts Analytics estimated.

On a Btu-equivalent basis, benchmark Europe gas and Asian LNG prices currently stand five to six times higher than high-sulfur fuel oil values, incentivizing widespread gas-to-oil switching at sites capable of using the alternative fuel. Power generators lead the fuel switching in terms of the single biggest sector. "We know southern European countries are consuming more fuel oil due to switching away from gas," Rasool Barouni, head of refining economics at Platts Analytics, said.