# Oil and Gas News Briefs Compiled by Larry Persily September 5, 2022

# Shortage of fracking equipment and crews holds down oil production

(Bloomberg; Sept. 2) - In a dusty corner of Oklahoma, close to where Erle Halliburton founded his eponymous oil services empire 103 years ago, a group of workers shows why U.S. oil production growth has been underwhelming in spite of a price boom. This particular Halliburton crew is busy cannibalizing older frack pumps — the powerful, truck-mounted engines that help to squeeze hydrocarbons out of shale rock — to meet the high demand for gear in oil fields. It's hectic work, and currently extremely profitable.

Halliburton and its competitors are choosing this path — reconditioning existing equipment — over significant investment in new manufacturing for a reason. The oil services sector, much like the exploration and production companies it serves, is scarred by the severity of the previous industry downturn that's only just receding, and it's keen to avoid repeating the experience that included painful layoffs and downsizing.

Such caution means there's simply not enough hardware to satisfy demand in the U.S. shale patch. The shortage of frack pumps, combined with a dearth of crews to operate them and sky-high prices for steel pipe, is calling into question U.S. explorers' ability to meet production forecasts this year. U.S. oil output tumbled in the early months of the pandemic and hasn't yet returned to pre-COVID levels despite a rebound in prices.

Even before COVID, U.S. shale was seeing a shakeout after years of break-neck growth had added to an oil glut. Frack fleets were scrapped en masse. As well as the shortage of equipment, the estimated 264 fracking crews operating now in U.S. oil fields is 42% below 2018 levels, said industry research firm Lium.

# Oil and gas leasing at historic low under Biden administration

(The Wall Street Journal; Sept. 4) - The Biden administration has leased fewer acres for oil and gas drilling offshore and on federal land than any other administration in its early stages dating back to the end of World War II, according to a Wall Street Journal analysis. President Joe Biden's Interior Department leased 126,228 acres through Aug. 20, his first 19 months in office, the analysis found. No other president since Richard Nixon in 1969-70 leased out fewer than 4.4 million acres at this stage in his first term.

Biden pledged to stop drilling on federal lands as a candidate, saying the nation needs to transition to clean energy. He softened his stance as oil prices soared following Russia's invasion of Ukraine — calling for boosting oil supplies to ease runaway

inflation — but he has nonetheless spurned a leasing program that for decades has been a go-to asset for presidents looking to raise U.S. energy production.

"The president said he was going to stop leasing. And he's been remarkably successful," said David Bernhardt, an energy lawyer and former Interior secretary in the Trump administration. The program had already been in a long decline as oil and gas companies shied away from offshore drilling and federal lands amid the boom in fracking shale, mostly on private lands. Under Biden's stewardship the decline has quickened, with leasing down 97% from the first 19 months of his predecessor's term.

The Inflation Reduction Act, signed into law by Biden on Aug. 16, requires the Interior Department to offer at least 2 million acres of federal land and 60 million offshore acres to oil and gas producers every year for the next decade. Those requirements must be met for an administration to permit some wind-power and solar-power development. The Interior Department said it is committed to abiding by terms of the law.

#### EPA denies permit for large-scale, offshore Texas oil export terminal

(Texas Tribune; Sept. 2) - The Environmental Protection Agency denied a permit this week for an offshore oil export terminal near Corpus Christi, Texas, because it would have allowed massive amounts of emissions — reversing course after the agency under the Trump administration had moved the project ahead. It's a setback for the Bluewater Texas Terminal, which would export up to approximately 384 million barrels of crude per year on large tankers — it would be the biggest oil export facility off the Texas coast.

The project is a partnership between energy companies Phillips 66 and Trafigura. Oil produced in Texas would flow 21 nautical miles through an underwater pipeline from Corpus Christi to the terminal. Floating hoses connected to the offshore platform would transfer the oil to tankers. Because the export facility would be in the ocean away from the coast, there is more space for larger ships, said Victor Flatt, co-director of the Environment, Energy, and Natural Resources Center at the University of Houston.

The emissions would have come primarily from gases escaping into the atmosphere from the large hoses that connect to the ships. Now the EPA said it wants the company to revise its permit to include better pollution controls — which could include flaring the gases rather than allowing them to vent — or withdraw the application. The EPA under the Trump administration decided that Bluewater's terminal was exempt from rules that require pollution controls on marine vessel-loading operations. Opponents argued that the exemption was unreasonable. The EPA has now reversed its previous decision.

#### Germany announces \$65 billion package to ease energy crisis

(The Wall Street Journal; Sept. 4) - Germany unveiled its third energy crisis relief package this year to shield consumers from soaring prices over the winter, a day after Russia indefinitely suspended gas deliveries to Europe's largest economy. The new measures — worth 65 billion euros (\$64.7 billion) — had been flagged before Russian gas giant Gazprom cut deliveries this weekend via its Nord Stream natural gas pipeline.

The package represents Berlin's latest attempt to shield Germany from the fallout of Russia's economic war on the West and rising inflation in general. "Russia is no longer a reliable supplier of energy," German Chancellor Olaf Scholz said on Sept. 4 as he unveiled the package. The measures include a price cap on electricity; a cut in the value-added tax on natural gas; postponement of a rise in carbon emissions prices for one year; and one-off payments to pensioners and students to help with energy bills.

The package also includes tax changes to prevent income taxes from rising with inflation and government assistance for energy-intensive industries as well as a raft of other, smaller measures targeting low-income earners, commuters, families and others. To finance the measures, the government said it would implement an internationally agreed minimum corporate tax rate, which it said would raise billions in the coming years, and would seek a European-wide special tax on companies that earn exceptionally high profits from the current volatility in energy markets.

#### Cutoff of Russian gas increases inevitability of rationing in Europe

(Bloomberg; Sept. 4) - Energy rationing in Europe this winter is starting to look all but inevitable, particularly after Russia's Gazprom decided not to turn back on the crucial Nord Stream pipeline after maintenance. Storage is filling up and new sources of gas are being procured. But Klaus Mueller, president of Germany's Federal Network Agency energy regulator, has warned that even if gas storage reaches 95% full, there would only be enough for 2½ months of demand if Russia switched off flows.

"The EU is now in the red zone as further demand destruction needs to take place," said Thierry Bros, a professor in international energy at Sciences Po in Paris. He estimates an additional 3% of gas demand needs to be cut. The European Union has already created a voluntary 15% demand reduction target for gas, with the option of making it obligatory if needed. As energy ministers prepare for a meeting on Sept. 9, steps that seemed unthinkable before are now likely to be considered, sources said.

Germany has its own emergency plan mapped out. The last stage — yet to be enacted — includes rationing. Europe's politicians have been bracing for the prospect of supply cuts for weeks, and scrambling to find ways to cut demand. The European Commission warned in July that an unusually cold winter or lower gas imports from alternative sources would boost the risk of "further drastic reductions." Asia and Europe compete

for liquefied natural gas, and if winter is particularly cold in both regions there's a risk gas in European storage could run out toward the end of winter.

#### Europe says Russia using gas as a weapon after Gazprom halts flow

(Bloomberg; Sept. 2) - Europe was plunged deeper into crisis as Russia's Gazprom again halted its key gas pipeline indefinitely, a move decried by European politicians as an attempt to use energy as a weapon. Hours after the Group of Seven leaders agreed to implement a price cap on Russian oil, Gazprom reversed its plan to resume flows through the Nord Stream pipeline. It was meant to open again on Sept. 3 after maintenance, but the company said a mechanical fault had been discovered.

Europe's politicians have been bracing for the prospect of supply cuts for weeks and are scrambling to find ways to cut demand. With industry already shutting down and the euro sliding, the latest move only adds to the sense of urgency. The European Union said Gazprom was acting on "fallacious pretenses." Siemens Energy, which makes the pipeline's turbines, said what Gazprom had found didn't justify cutting the gas, a view shared by Germany's grid agency. There was no comment from the Kremlin.

"Use of gas as a weapon will not change the resolve of the EU," European Council President Charles Michel said on Twitter. With gas prices four times higher than a year ago, the EU is considering unprecedented interventions in the energy market, including price caps, reducing power demand and windfall taxes on profits. Germany, which for decades has built up a dependency on cheap Russian gas, is trying to retool its energy policy in just weeks to protect its economy. It may keep nuclear plants running in what would be a dramatic U-turn, and is working on starting up liquefied natural gas imports.

# Almost 60% of U.S. LNG cargoes in August went to Europe

(S&P Global; Sept. 2) - Nearly 60% of U.S. LNG cargoes delivered in August landed in Europe as the continent filled up storage to prepare for peak winter demand amid ongoing reductions in Russian pipeline gas, an S&P Global Commodity Insights analysis showed. That trend could continue, with the Nord Stream gas pipeline from Russia to Germany offline indefinitely due to what Moscow claimed Sept. 2 was an oil leak detected in a turbine during scheduled maintenance.

In August, France was the top destination of U.S. LNG for the second month in a row, receiving 15 cargoes, followed by Spain with 10 cargoes, South Korea and the Netherlands each with eight, and Japan, Taiwan, Greece and Argentina each with four, S&P Global data showed. Some 48 of the 84 U.S. LNG cargoes that were delivered in August landed in Europe.

With Russian gas supplies sharply reduced, Europe has been snapping up U.S. LNG in recent months to help bolster its inventories ahead of winter. The continent recently reached its storage target early, temporarily easing fears about a winter gas supply crunch. The Sept. 2 disclosure by Russia's Gazprom about Nord Stream's flow cutoff, however, changed the supply outlook.

# Shell will get nothing for its 27.5% stake in Russian LNG project

(Bloomberg; Sept. 1) – Shell will walk away from Russia's Sakhalin-2 liquefied natural gas project with nothing after President Vladimir Putin transferred the major facility to a new operating company. Shell's decision is the latest indication that Putin won't allow international energy companies to realize big financial gains as they exit Russia over the invasion of Ukraine. Putin has also issued a decree that blocks ExxonMobil from selling its interest in the Sakhalin-1 oil project until the end of the year.

Shell had already written off the \$1.6 billion value of its 27.5% stake in Sakhalin-2 earlier this year. The terminal has been operating since 2009. Shell has a contract to receive LNG cargoes from the facility, and is currently assessing "options in line with applicable legal requirements and agreements" as the venture is transferred to the new operator, according to the company. Shell said it still will be able to meet commitments to supply customers with LNG, regardless whether it takes any gas from Sakhalin-2.

The other foreign participants in Sakhalin-2, Japan's Mitsui and Mitsubishi, have already agreed to transfer their stakes of 12.5% and 10%, respectively, to the newly established company. The remaining partner, Russia's state-run gas giant Gazprom, holds 50% of the current venture. Shell's decision not to join the new Sakhalin-2 operating company is in line with the push by European governments to lessen economic ties with Russia.

# India buying record number of Russian oil cargoes

(Bloomberg; Aug. 31) - India has pushed into a corner of the Russian oil market once dominated by China, taking a record number of shipments of a Far Eastern grade as the fallout from Moscow's invasion of Ukraine reshapes trade flows. Six vessels hauling Russian crude known as ESPO were headed to refiners in India in August, according to traders and shipbrokers. That's the highest number of cargoes purchased by India since the stream was introduced, and accounts almost one-fifth of available monthly cargoes.

"ESPO crude is now becoming a steady flow for India, a country that wasn't a big fan of the variety for years," said Emma Li, analyst at Vortexa. "The voyage to India will take longer, but the shipments might continue as long as the price stays attractive and there aren't real sanctions blocking the trade." India has emerged as a key buyer of Russian energy in the wake of the invasion, scooping up millions of barrels of discounted crude shunned by Europe and the U.S.

As the conflict has dragged on, the third-largest oil importer first ramped up purchases of the flagship Urals crude, which loads from the western part of Russia, and is now competing for ESPO, a distillate-rich grade that comes from the east and was typically favored by China. The ESPO shipments going to India are cheaper than the nation's usual Middle Eastern grades, and will likely displace some flows from Saudi Arabia and Abu Dhabi, the traders and shipbrokers said. A recent dip in purchases by China's Sinopec freed up some volumes, enabling Indian buyers to swoop in, they said.

# **OPEC+ reverses small production boost from last month**

(Associated Press; Sept. 5) - OPEC and allied oil-producing countries, including Russia, cut their supplies to the global economy by 100,000 barrels per day, underlining their unhappiness with prices that have sagged because of recession fears. The decision Sept. 5 by energy ministers means the cut for October rolls back the mostly symbolic increase of the same amount in September. The move follows a statement last month from Saudi Arabia's energy minister that the group could reduce output at any time.

Meanwhile, worries about slumping demand have helped send prices down from June peaks of over \$120 per barrel, cutting into the windfall for OPEC+ countries but proving a blessing for drivers in the U.S. as pump prices have eased. The energy minsters said in a statement that the September increase was only for that one month, and that the group could meet again at any time to address market developments. Despite the targets, several OPEC+ members are falling short of production numbers this year.

Other factors are lurking that could influence the price of oil. The Group of Seven major democracies plan to impose a price cap on imports of Russian oil, though the price level for the cap has not been set. A deal between Western countries and Iran to limit Iran's nuclear program could ease sanctions and see more than 1 million barrels of Iranian oil return to the market in coming months. However, tensions between the U.S. and Iran appear to have risen in recent days: Iran seized two U.S. Navy drones in the Red Sea.

# Developer proposes LNG export terminal near Philadelphia

(Natural Gas Intelligence; Aug. 31) - An East Coast LNG export terminal that would tap into vast amounts of feed gas from the Appalachian Basin is aiming to prefile with federal regulators by the end of the year and reach a final investment decision by 2024. The terminal, proposed for 7.2 million tonnes per year, would be built at a yet-to-bedetermined site along the Delaware River near Philadelphia. It could produce the first LNG by 2028, said Franc James, founder and CEO of Penn America Energy Holdings. James acknowledged, however, that the \$6 billion-plus Penn LNG project faces an uphill battle in the Northeast, where environmental opposition has stymied energy infrastructure. "I'm from Pennsylvania, so that's probably why I gravitated toward developing this project," he said. "We're in a state, regardless of political party, that's enjoyed a history of energy. … We think if you build it in the Northeast, Pennsylvania is likely the only place to build a terminal." The project would target the European market.

James said his New York City-based company has moved beyond the proof of concept stage and is currently working on commercialization, permitting and engineering. James said the terminal can be easily supplied by existing pipelines — the venture would only need to build a connector to those pipelines, he said. Delaware Riverkeeper Network leader Maya van Rossum said the group is watching the Penn LNG project closely and said it's wrong for the river, the environment and the world. "We will be taking all steps, including legal, as necessary to prevent this travesty from being able to advance."

#### California Legislature adopts new setbacks for oil and gas wells

(Los Angeles Times; Aug. 31) - After years of failed attempts to impose health and safety buffer zones around new oil and gas wells in California, state lawmakers on Aug. 31 sent a bill to the governor for his signature that would require setbacks between production sites and residential neighborhoods and other sensitive areas. The bill is a major part of a package of climate legislation that Gov. Gavin Newsom pledged to bolster the state's environmental policies.

"It's a long-standing and glaring example of environmental racism," said bill sponsor state Sen. Lena Gonzalez. "Research shows, of course, that people of color, Black, brown and Indigenous people suffer the greatest consequences of this toxic proximity and these are the same communities that have oil production in their backyards."

The legislation prohibits the California Geologic Energy Management Division from approving a new well within 3,200 feet of a "sensitive receptor," defined as a residence, education resource, community resource, health care facility, dormitory or any building open to the public. Similar efforts have failed to gain traction in the state Legislature in the past, succumbing to tough opposition from the petroleum industry and trade unions.

#### **Opponents argue in court against Texas LNG project wetlands permit**

(Courthouse News Service; Aug. 31) - An attorney for the Sierra Club told a federal appeals court on Aug. 31 that the U.S. Army Corps of Engineers should not have approved a permit for a liquefied natural gas facility in Texas that allows filling wetlands.

Thomas Gosselin said the Corps has also not been straightforward about how long the Rio Grande Valley wetlands would continue to be affected.

"The Army Corps failed to chart the impacts and timeline," the attorney said. The Sierra Club along with fishermen and other environmentalists filed a petition for review with the court last fall after the Army Corps issued a permit for the proposed Rio Grande LNG export terminal in southern Texas. The groups argue the permit "falls short of legal requirements to avoid and compensate for impacts to wetlands." The project, led by Houston-based NextDecade, would export LNG from the port of Brownsville.

The Sierra Club, Save RGV From LNG and Shrimpers and Fishermen of the RGV claim in their petition to the New Orleans-based 5<sup>th</sup> U.S. Circuit Court of Appeals that the Corps' approval for the project violated the Clean Water Act because it will result in the destruction of hundreds of acres of wetlands. Arguing on behalf of the Corps, Justice Department attorney Rebecca Jaffe said the agency did its due diligence and concluded that the permit was the "least environmentally damaging practical alternative."

# U.N. report criticizes Shell-funded cleanup in Nigeria

(Bloomberg; Aug. 31) - In the more than a quarter century since Shell left Ogoniland in southern Nigeria, oil has continued to ooze from dormant wellheads and active pipelines, leaving the 386-square-mile kingdom's wetlands shimmering with a greasy rainbow sheen. Its once-lush mangroves are coated in crude, well-water smelling of benzene and farmlands charred and barren. So when the \$1 billion Ogoniland cleanup began in 2019, backed by Shell's funding pledge and support from the United Nations, it was heralded as the most ambitious initiative of its kind anywhere in the world.

But now, U.N. environmental program documents indicate that the project — far from being exemplary — is making one of the Earth's most polluted regions even dirtier. "We had hoped that the Ogoniland cleanup process would set the standard for the cleanup that will have to take place in the Niger Delta as a whole," said Mike Karikpo, an Ogoni attorney with Friends of the Earth International. "But we've not seen any impact."

In a scathing review of the Ogoniland cleanup efforts, led by Nigeria's Hydrocarbon Pollution Remediation Project, or Hyprep, the U.N. paints a picture of rampant mismanagement, incompetence, waste and lack of transparency. It highlights the haphazard storage of oil-soaked soil that lets chemicals seep into soil and creeks, contracts awarded to firms with little environmental cleanup experience and proposals for millions of dollars in unneeded work. Hyprep dismissed the U.N. criticism as "baseless, untrue and unfair." The Nigerian government didn't respond for comment.

Last year, Shell suffered defeats in two landmark overseas cases brought by Niger Delta communities. A January 2021 court ruling in the Hague ordered Shell's Nigerian unit to pay unspecified damages to farmers for oil spills that occurred more than 15

years ago. A few weeks later, the U.K. supreme court ruled that cases brought by the Bille community and the Ogale people in Ogoniland could be heard in English courts.

# South Korea looking to blend higher-Btu LPG into lower-value LNG

(S&P Global; Sept. 1) - South Korea will likely seek more liquefied petroleum gas in the coming months to blend into liquefied natural gas to boost the calorific or heating value of regasified LNG for use in heavy industries and utilities, trade sources said. The move is prompted by the steep rise in LNG prices on strong demand from Europe and as North Asian buyers gearing up for winter procurement amid limited supplies.

Last month in North Asia, Japan's JERA, South Korea's KOGAS and Taiwan's CPC the largest importers in their respective markets — were reportedly actively scouting the market for winter deliveries, starting from November. High spot LNG prices are causing end-users to look to alternative fuels for their energy needs, Jeff Moore, manager for LNG analytics in Asia at S&P Global Commodity Insights, said Aug. 31. Different LNG supplies come with different Btu values, which can make a difference for some users.

Market sources told S&P Global that over the next seven to eight months, South Korea could seek 80,000 to 100,000 tonnes per month of LPG, as consumers fret over rising prices for LPG, which is essentially propane and butane. LPG has a higher Btu value than natural gas, and blending in the propane/butane would raise the energy level of the LNG to the higher value needed by heavy industries and other users.

# Malaysia joins in on study of Argentine LNG export project

(Bloomberg; Sept. 1) - Argentina is taking preliminary steps to tap its potential for exporting liquefied natural gas, President Alberto Fernandez announced Sept. 1. YPF, the state-run oil company, signed a memorandum of understanding with Malaysia's Petronas to study the feasibility of building an LNG export terminal on the Atlantic coast. Given the high cost of the venture — around \$10 billion — the companies may seek to lure other partners, YPF Chairman Pablo Gonzalez said. The proposed project would also include a 373-mile pipeline out of Argentina's Vaca Muerta shale patch.

Despite having shale gas deposits to rival those that have made the U.S. a major LNG exporter, Argentina's shaky business climate has meant years of underinvestment in its gas industry, leaving it unable to meet domestic demand, never mind supply overseas markets. Argentina is struggling with a dire shortage of hard currency and is reliant on LNG imports during its winter months, and Russia's invasion of Ukraine, which has sent fuel prices skyrocketing, poses a severe risk to the country's economy.

But during Argentina's summer, the country becomes a net exporter of gas, at the same time as Europe's LNG demand peaks. The Ukraine war has boosted demand, creating even more of an opportunity for Argentine exports. "Argentina can see the train leaving the station and it wants to get on board," Fernandez said. But this project is far from coming together. Even if everything goes to plan, exports wouldn't begin for six years, YPF said. The study will require YPF and Petronas to spend tens of millions of dollars before coming to a final investment decision on the first phase at 5 million tonnes.

#### Second phase of gas development in Senegal will need \$5.5 billion

(Reuters; Sept. 1) - The second phase of Senegal's Greater Tortue Ahmeyim (GTA) gas project will need investments of around \$5 billion and could start in 2024 or 2025, Senegal's President Macky Sall said on Sept. 1. BP and U.S.-listed Kosmos Energy are leading the development of GTA and Yakaar-Teranga, Senegal's first natural gas projects. The first phase of GTA, which straddles the border between Senegal and Mauritania, is 80% complete and expected to start delivering gas by the end of 2023.

"In the Phase 2, that will come immediately after Phase 1, we expect to produce 5 million tonnes of (LNG)," compared to Phase 1 production at 2.5 million tonnes, Sall told a conference. A floating production, storage and offloading facility for Phase 1 is expected to sail from China to the site by the end of the year, BP Executive Vice President for Production and Operations Gordon Birrell told the same conference earlier on Sept. 1. BP is in discussions with Senegal and Mauritania about GTA's Phase 2 and other projects in the two West African countries, Birrell said without elaborating.