Oil and Gas News Briefs Compiled by Larry Persily May 11, 2023

Saudis say blue hydrogen not viable, may turn to LNG exports instead

(Bloomberg; May 9) - Saudi Aramco is weighing exports of liquefied natural gas instead of blue hydrogen, as talks with potential buyers of the latter fuel prove tough. The world's biggest oil company is investing billions of dollars in gas production. Its priority is to meet rising demand for gas within Saudi Arabia and then use what's left over to convert into blue hydrogen, a fuel seen as important for the energy transition because the carbon emitted when it's made is to be captured, not vented into the atmosphere.

Yet existing technology means it could cost the equivalent of around \$250 a barrel of oil, Aramco's chief executive officer said on May 9. "It is very difficult to identify any off-take agreement in Europe" for blue hydrogen, Amin Nasser said on a call with analysts. "Even the customers in Japan and Korea are waiting for government incentives. Until they get these incentives, it'll be costly for them to pursue that blue hydrogen."

Saudi Arabia won't make a final investment decision to build hydrogen export facilities without first signing supply deals. "This is a very expensive program," Nasser said. "It's a lot of capital and you need customers. So we will not sanction a project without securing an off-take agreement." The kingdom has some of the world's biggest gas reserves but barely exploited them in the past.

U.S. energy company sees large potential in green hydrogen

(Wall Street Journal; May 9) - NextEra Energy grew into a clean-energy powerhouse by investing early in wind and solar farms. Now it is staking its growth on hydrogen, a much-hyped energy source with unproven economics. The strategy is a huge bet for the Florida-based business, which is now the most valuable power company in the U.S. The company sees the potential to invest over \$20 billion in so-called green hydrogen after passage of the Inflation Reduction Act, which provides significant federal tax credits.

There is a limited market for green hydrogen currently, and NextEra hopes the new law, coupled with an increasing push to cut carbon emissions, will create supply and demand. Despite the risks, it is a familiar playbook for NextEra, which grew from a regional utility by capitalizing on tax credits that spurred the build-out of wind and solar farms. NextEra is placing its wager as it becomes increasingly challenging to develop renewable energy. Federal and local permitting for such projects is time-consuming, supply-chain snarls have slowed progress, and opposition is mounting in communities.

Green hydrogen — produced using renewable energy to split water molecules in a process known as electrolysis — has for years been touted as a carbon-free fuel that can help reduce emissions across a range of industries. But only a fraction of hydrogen produced in the U.S. is green as a result of cost and technology hurdles that some say might continue to stymie the fuel's adoption even with federal support. Green hydrogen production doesn't yet exist at scale, and its high costs will fall only after the build-out of large projects, creating a chicken-and-egg challenge for developers.

Report counts 14,000 unplugged wells in U.S. Gulf of Mexico

(Bloomberg; May 9) - In the roughly 160 years since Edwin Drake drilled the first U.S. oil well in the hills of northwestern Pennsylvania, more than 4.5 million oil and gas wells have followed. When active, wells are known to create environmental hazards that include methane emissions, air pollution and cancer risks for nearby humans. Many of those risks remain even after the drilling stops, which makes the fate of spent wells critically important. But the most common solution — capping oil wells, a process also known as plugging and abandoning — is also an expensive one.

In U.S. Gulf of Mexico waters, there are 14,000 unplugged, non-producing offshore and coastal wells, according to a study by researchers at the University of California at Davis and Louisiana State University and published May 9 in the journal Nature Energy. The study estimates that capping just those wells would cost more than \$30 billion.

Unplugged, non-producing wells can continue to release "things that in large quantities are not good for ecosystems or human health," said Mark Agerton, an assistant professor of agricultural and resource economics at the University of California at Davis and co-author of the study. Companies that own the wells are supposed to plug them at the end of their useful life, though exact rules vary depending on the state. In practice, though, plugging often doesn't happen. Some companies leave inactive wells idle in the hopes of recommissioning them later; others transfer ownership or simply walk away.

Offshore wells in federal waters do have one important regulatory backstop: If the owner of a well in those waters goes bankrupt, the responsibility for plugging and abandoning the well reverts to the previous owner. The study found that almost 90% of the offshore wells it identified in U.S. Gulf federal waters currently or previously belonged to giants including Chevron, Shell, ExxonMobil, ConocoPhillips, BP, TotalEnergies and Eni.

Norway may impose new tax on onshore wind farms

(Bloomberg; May 10) - As the U.S. and European Union throw billions at building out the industry needed for the transition to a low-carbon economy, Norway is spooking investors by proposing to slap taxes on wind farms. Norway's government is boosting

select taxes as the cost of pensions, health services and care for the elderly outpace revenues. Salmon farmers, wind turbine owners and hydropower producers are being asked to pay up for using the country's fjords and mountains in a sweeping overhaul that has also targeted the wealthy.

Aquaculture companies were left unimpressed by the final proposal for their industry, even after outcry from companies saw it dialed back. That has left wind power firms on tenterhooks over their fate, and so far they don't like what they see. A proposed 40% tax on revenues from onshore wind parks has the potential to bankrupt projects and drive investors away, according to a KPMG report. That would be disastrous at a time when the country needs to add 40 terawatts of green power by the end of the decade to avoid an energy shortfall as factories and smelters move from gas to electricity.

"This cannot be achieved without extensive construction of onshore wind," BlackRock Infrastructure Director Fredrik Norell and public policy analyst Jonathan Boyle said in a March 14 letter to authorities. The tax "throws the economics of wind power in Norway into doubt" and will "seriously damage investor's confidence in Norway as a stable business environment and discourage new investments." Offshore wind farms, which so far don't face the same taxes as onshore, don't arouse similar opposition from locals. The overhaul comes as other nations are rolling out the carpet to attract green projects.

U.S. gas production up, domestic demand down, LNG exports up

(Reuters; May 9) - U.S. natural gas production will rise to a record high in 2023, while demand will fall, the U.S. Energy Information Administration said in its Short-Term Energy Outlook on May 9. EIA projected dry gas production will rise to 101.09 billion cubic feet per day in 2023 and 101.24 bcf per day in 2024 from a record 98.13 bcf in 2022. The agency also projected domestic gas consumption would fall to 87.54 bcf per day in 2023 and 86.05 bcf in 2024 from a record 88.53 bcf per day in 2022, with growing liquefied natural gas exports taking more of the U.S. production.

The agency forecast that average U.S. LNG exports would reach 12.11 bcf per day in 2023 and 12.73 bcf in 2024, up from a record 10.59 bcf in 2022.

If the forecast is correct, 2024 would be the first time that output rises for four years in a row since 2015. It would also be the first time that demand declines for two years in a row since 2006. As gas demand eases and power producers burn less coal, the EIA has projected carbon dioxide emissions from fossil fuels would fall from 4.964 billion tonnes in 2022 to 4.83 billion tonnes in 2023 and 4.807 billion tonnes in 2024. That compares with 4.58 billion tonnes in 2020, which was the lowest since 1983 because the pandemic-depressed demand for energy.

LNG at sea climbs to highest level in years

(Bloomberg; May 10) - Liquefied natural gas stored on ships has jumped to seasonal records in a sign of stalling demand for the fuel despite a months-long plunge to cheaper prices. European benchmark futures steadied near the lowest levels since the summer of 2021 on May 10 after sliding by about a quarter since the end of March. With Europe's main heating season over and hot weather still to take hold, gas consumption is subdued for now and there's no rush to unload idle fuel from tankers.

The volume of LNG that has stayed on the water for more than 20 days topped 3.4 million tonnes earlier this week, according to data compiled by Bloomberg going back to 2017 — the highest level for this time of year. That's more than 50 standard-sized LNG carriers, many of which have reduced their sailing speed. It's also close to the all-time high reached in May 2020 when energy demand collapsed at the start of the pandemic.

The trend indicates there's more gas available in the market than current demand. Similar levels of on-water storage are usually seen in the run-up to winter, not in spring when countries start to build inventories at lower prices ahead of the colder months.

Asia spot-market LNG below \$10, lowest in two years

(S&P Global; May 8) - Persistently weak demand is continuing in the LNG spot market, where consumers have ample supply, where competing fuels prove to be cheaper and where an absence of significant supply shocks have dragged Asian LNG prices to the lowest level in two years. Platts assessed the Japan Korea Marker for June at \$9.882 per million Btu on May 5, S&P Global Commodity Insights data showed.

China's spot demand for LNG has been below expectations to date in 2023 as it continues to utilize coal and renewable energy to meet its requirements. However, with the price below \$10, market participants expect Chinese spot demand to firm up to take advantage of softer prices. A trader based in the Middle East said there was currently no momentum in Chinese buying, but sooner or later it would come.

"I think overall industrial demand is not back yet, so gas storage remains ample," the source added. The forward curve for the Japan Korea Marker suggests that weakness in LNG prices will continue, with the August derivative price assessed at \$11.125 and September derivative at \$12.425 on May 5 at Singapore close.

Tax change will require Australia LNG developers to pay more

(Bloomberg; May 6) - Offshore liquefied natural gas producers in Australia will be required to pay more tax starting in July as the government seeks to take a larger share

of booming energy-sector profits. The government on May 6 said it's expecting to generate an additional A\$2.4 billion (US\$1.6 billion) in revenue through 2027 by winding back tax concessions for energy companies. The new policy comes amid an evaluation of the Petroleum Resource Rent Tax, which covers the country's massive LNG export sector and has faced widespread criticism.

The revamp will bring forward revenue from the PRRT, adding about A\$600 million to the coming federal budget year which starts July 1 and which is widely expected to deliver a small surplus — the first in 15 years. The new rules include limiting taxable deductions as a way of addressing an undervaluation of gas under PRRT. The tax has been attacked over how producers can offset development costs against taxes even as they report record profits. An initial report in 2017 concluded that the design likely resulted in significant undervaluation of the taxable gas in vertically integrated projects.

"These sensible changes see the offshore LNG industry pay more tax, sooner. They also deliver a fairer return to the Australian people from the resources they own," Australia's treasurer said. Compared to other gas-exporting nations, Australia gathers little tax revenue from its oil and gas, in part because project developers are able to recover tens of billions of dollars in costs — including construction cost overruns — before paying the PRRT. The changes that start July 1 would see more revenue collected earlier to address near-term budget pressures.

Hong Kong receives first-ever cargo of imported LNG

(Bloomberg; May 8) - Hong Kong received its first-ever shipment of liquefied natural gas amid a wider push to reduce reliance on coal. An LNG vessel carrying the cargo arrived in the city on May 6 to support commissioning work for an offshore import terminal commencing this week, according to a spokesperson from CLP Holdings, which supplies electricity to the territory.

The rapid decline in LNG prices is rekindling plans from Hong Kong to Vietnam to begin importing the fuel. Hong Kong had hoped to start importing the fuel sooner, but its plans were delayed by COVID-19 and then last year's global energy shortages. Coal provides almost a quarter of Hong Kong's electricity mix, and authorities have previously set an interim target to cease using coal for daily electricity by 2035.

Companies sign up for Europe's new joint gas-buying program

(Reuters; May 4) - More than 60 companies have submitted demands to buy gas through the European Union's plan for joint purchases, with the bloc aiming for the first deals to be signed within months. The EU is launching a joint gas-buying structure to

help fill gas storage ahead of winter and avoid a repeat of the record-high energy prices and fears of shortages in Europe last year after Russia slashed gas deliveries.

In the program's first round, which closed May 4, 65 companies registered to jointly buy gas, EU Commission Vice President Maros Sefcovic said. In total, 101 firms have now registered interest either as buyers or sellers — an initial response that Sefcovic said "exceeded our expectations." The program aims to improve gas market access for smaller companies while also taming energy prices for energy-intensive industries like fertilizer and steel producers.

Almost 20 of the 101 companies have also signed up as intermediaries to represent multiple smaller firms that want to pool their demand. EU officials have said some large energy firms had expressed reluctance to take part, questioning what incentive they had to join as they can already negotiate their own gas deals at competitive prices.

No guarantee European Union joint gas-buying plan will work

(Bloomberg; May 9) - The world will soon find out whether natural gas traders will be able to work together for the greater good. The European Union is in the midst of its first-ever joint gas purchase, a plan born from last year's energy crisis to make sure storage is filled without extreme price spikes. It's still unclear, however, whether the region's top importers, such as Germany's Uniper or France's Engie, will use the mechanism or exactly how much (if any) procurement will happen.

Similarly, government officials in Japan and South Korea recently discussed buying fuel together to help tame costs. But past joint efforts to procure gas by North Asian countries have stalled. Buyers in Japan, South Korea and China signed a deal in 2017 to explore cooperating on LNG trading. Nothing happened. Japan's JERA and Korea Gas signed a similar agreement last month. Traders at both companies aren't very optimistic it will translate into concrete action to work together in the near term since there is logistical and political red tape.

Joint procurement makes a lot of sense on paper. By working together, companies can enhance purchasing power and reduce competition that can quickly spiral into bidding wars. In reality, it's been far more challenging. Gas buyers have built cutthroat trading desks that tend to favor profit (and bonuses) over lending a helping hand to rivals.

German utility may pull out of LNG import terminal project

(Bloomberg; May 10) – German energy company RWE is drawing up plans to pull out of a controversial liquefied natural gas project on the Baltic Sea island of Ruegen, deterred by political rows including over the location of the project. The utility had been lined up

to start building infrastructure for a floating import terminal at the end of last month, but a lack of agreement between local and federal officials who are stalling on key decisions about the facility is causing RWE to consider exiting the project, according to people familiar with the matter who asked not to be identified as the matter is private.

Germany has embraced LNG as way to fill the energy gap after Russia cut pipeline supplies in the wake of its invasion of Ukraine. Three floating terminals are already operational, with six potentially in place by the end of this year and plans underway for a seventh. There are concerns among some lobby groups that the nation is building too many LNG terminals, wasting money and locking in fossil fuels for longer.

The Ruegen terminal is well placed to make use of the now-defunct Nord Stream gas pipeline network but has drawn criticism from locals and environmentalists. Last month Chancellor Olaf Scholz and Economy Minister Robert Habeck met with protesters but have said they still intend to move ahead with the project. If RWE pulls out, the government will look for another developer to step in to get the site operational by next winter, according to a person familiar with the matter.

Shell decides to sell its stake in controversial North Sea field

(BBC; May 5) - Shell is selling its stake in the controversial Cambo oil field. At an estimated 800 million barrels of oil equivalent, the project is the second-largest undeveloped oil and gas discovery in the U.K.'s North Sea. The oil major is looking for a buyer for its 30% holding in the field. Cambo has been the focal point of protests by climate and environmental activists, and Shell has been rumored for months to be looking for someone to take its stake. The remaining 70% is owned by Ithaca Energy. Shell's senior vice president of U.K. Upstream, Simon Roddy, said, "Following an internal review, we have decided to sell our 30% working interest in Cambo."

Export volumes contradict Russian pledge to cut oil production

(Bloomberg; May 9) - Russian crude oil flows to international markets show little sign of ebbing even as Moscow's threatened output cut stretches into a third month. Four-week average seaborne shipments, which smooth out some of the volatility in weekly numbers, rose in the period to May 5 to the highest since Bloomberg began tracking them in detail at the start of 2022. With almost all Russia's crude going to China and India, volumes to Asia also hit a new high.

The combined volume of Russian crude on vessels heading to China and India plus smaller flows to Turkey and quantities on ships that haven't yet shown a final destination rose for a fourth week to reach a record 3.55 million barrels a day in the latest four-week period. Historical patterns suggest that most of the vessels currently identified as

"Unknown Asia" destinations and heading for the Suez Canal will end up in India, while those loaded onto very large crude carriers off the north coast of Morocco or, more recently, in the Atlantic Ocean, will head to China.

Several of Russia's OPEC+ partners have joined it in making production cuts starting this month to try to stabilize weak oil markets. Moscow may have to work hard to convince them that it has actually implemented its own reduction.

Oil industry may be interested in exploring offshore Somalia

(S&P Global; May 9) - There has been renewed interest in exploration plays in Somalia, one of the final frontiers for global oil and gas development, with energy security back on the political agenda in the East African country following years of conflict and instability. International oil companies including Chevron, Eni, ExxonMobil and Shell began exploring in Somalia in the 1950s but bolted when the country erupted in civil war in 1991. Today, though, Houston-based Coastline Exploration is leading a renewed charge, having acquired seven offshore blocks from Somalia's government in 2022.

The U.S. minnow is entertaining farm-in proposals for its wildcat plays in the country, CEO Richard Anderson told S&P Global Commodity Insights. Coastline, which paid \$7 million for the blocks, will begin 3D seismic in November, Anderson said, with a view to drilling in mid-2025. Meanwhile ExxonMobil and Shell were said to be considering a return to Somalia, which sits on a vital international shipping chokepoint. In March 2020, the petroleum ministry agreed to an initial road map with the two companies.

The Russian invasion of Ukraine has prompted discussions of energy resources in Africa. Meanwhile major oil and gas discoveries in Mozambique, Tanzania and Uganda have whet investors' appetites for East African hydrocarbons. Still, analysts say both a burgeoning oil sector and new ports could be targets for Al Shabab militants who control large tracts of land in Somalia.

Wildfires force shutdown of some oil and gas production in Alberta

(Bloomberg; May 8) - Wildfires raging across western Canada forced the evacuation of 30,000 residents and cut at least 234,000 barrels a day of oil and gas production as companies shut down wells and pipelines. A total of 100 blazes were burning May 8, with about a quarter classified as out of control. The province of Alberta declared a state of emergency, and evacuation orders were issued for communities, including some less than 62 miles from the provincial capital of Edmonton.

The fires are striking Canada's main natural gas production region, including the prolific Montney and Duvernay formations, an area studded with wells and processing plants

and crisscrossed by pipelines. The region also is a major center for light-oil production, and the disruptions have sent prices for some local grades of crude surging.

Wildfires are one of the most dramatic signs of climate change, with extreme heat and long-lasting drought creating conditions for infernos. Large areas of British Columbia, Alberta and Saskatchewan were gripped by drought through March, according to the North American Drought Monitor. Slightly more than 44% of Alberta was experiencing drought, the monitor said on April 22. One community under evacuation order as of May 7 was Fox Creek, a major center for light-oil and gas drillers.