Oil and Gas News Briefs Compiled by Larry Persily November 27, 2019

Qatar decides to expand LNG capacity 64% to 126 million tonnes

(S&P Global Platts; Nov. 25) - Qatar plans to hike its LNG production capacity by 64 percent over the next seven years with new expansions to its giant North Field in a move set to reassert its current position as the world's top LNG exporter. State-owned Qatar Petroleum said it expects capacity to rise to 126 million tonnes per year by 2027 as it starts engineering work on two additional "mega trains," escalating an already ambitious expansion plan in an increasingly competitive global market.

Qatar Petroleum had previously announced its intent to raise LNG production capacity to 110 million tonnes per year from the current level of 77 million tonnes. Qatar Petroleum CEO Saad al-Kaabi, who also serves as Qatar's energy minister, said new studies have boosted its reserves in the North Field — the world's largest natural gas deposit — which will enable a new LNG facility in the north of the country. The field is now estimated to hold 1,760 trillion cubic feet of gas, in addition to 70 billion barrels of condensates, as well as significant quantities of propane, ethane, and helium, he said.

The company will commence engineering work on the two new LNG trains with a combined capacity of 16 million tonnes per year, adding to the four new trains already planned. The North Field has supported Qatar's position as the world's biggest LNG exporter for years with shipments averaging more than 10 billion cubic feet of gas per day. But a raft of recent LNG projects in Australia mean Qatar will likely temporarily lose its crown as the top LNG supplier next year. Qatar's gas extraction costs are some of the lowest in the world. QP did not disclose the cost of expansion.

Global LNG oversupply could force curtailment of U.S. output

(Bloomberg; Nov. 24) - A global glut of natural gas has gotten so massive that U.S. exporters could soon face their worst-case scenario: Halting shipments to get supply and demand back in balance. Prices for the heating and power-plant fuel may collapse in Europe and Asia next year to levels that would force U.S. liquefied natural gas suppliers to curb output, Citigroup said in a note to clients last week. Morgan Stanley sees as much as 2.7 billion cubic feet a day of U.S. gas exports curtailed around the second or third quarter. That's about half the volume now being sent abroad.

China's demand for U.S. LNG has plunged amid the trade war, while Europe's natural gas storage is almost full and LNG tankers carrying the fuel are taking unusually long journeys in search of better prices. That's created a "toxic witch's brew" that's making it

harder to find a home for American exports, according to Madeline Jowdy, senior director of global gas and LNG for S&P Global Platts in New York.

"It's also a harbinger of bigger troubles ahead for U.S. exporters in the second quarter of next year, when global demand is at its weakest point and the U.S. will have even more volumes to place" as more export capacity starts up, Jowdy said in an email. Capping LNG production is an extreme measure, but the idea is gaining traction as new terminals from the U.S. to Australia unleash exports faster than demand can catch up. Gas for near-term delivery in Asia has lost half its value in the past 14 months.

Curtailments can happen when LNG customers refuse to load cargoes because prices are too low to cover the cost of the gas and shipping and still turn a profit. Even so, they are contractually obligated to pay the reservation fee at the liquefaction plant, generally about \$3 per million Btu, even if they do not take any gas — it's called "take or pay."

Power of Siberia gas line to China likely to start service Dec. 2

(Bloomberg; Nov. 25) - Russia is pivoting its energy business to the east. The world's largest exporter of natural gas has built an enormous pipeline running from Siberia to feed China's insatiable energy appetite. The new conduit, called the Power of Siberia, is part of a plan by Russian President Vladimir Putin to reduce his country's dependence on gas markets in Europe and tap into the fast-growing economies of Asia.

For China, whose domestic energy production can't keep up with demand, the pipeline offers a vital new source of supply. Russian producer Gazprom started filling the line with gas in October, and the official launch is likely to happen Dec. 2, when Putin and Chinese President Xi Jinping may appear in a joint video link at a ceremony to mark the occasion, according to Kremlin spokesman Dmitry Peskov.

Gazprom plans to start with deliveries at about 350 million cubic feet of gas per day and reach peak capacity in 2025 at 10 times that volume. Russia may eventually expand the system to the west, allowing Siberian gas to serve more of China. Gazprom in 2014 signed a \$400 billion deal to supply gas for 30 years to China National Petroleum Corp. It's the Russian company's biggest ever contract.

Russian pipeline gas will supplement output from China's domestic fields and could be cheaper than LNG. The two countries are already talking about a second link, known as Power of Siberia 2, which would serve the industrial areas on China's East Coast.

African Development Bank will help finance Mozambique LNG

(Bloomberg; Nov. 26) - Total's Mozambique liquefied natural gas project will get a \$400 million loan from the African Development Bank, adding to its list of backers as the East African nation works to establish a new industry. The bank joins a global syndicate of commercial banks, development finance institutions and export credit agencies to provide financing for the project, the ADB said Nov. 26. Mozambique is counting on the \$23 billion LNG project to revive its economy after struggling to service its debts.

Financial close on the loan is expected in the first half of 2020, the ADB said. French major Total operates the project with a 26.5 percent interest, after snapping up Anadarko Petroleum's African assets earlier this year. A final investment decision was announced in June, and production is expected by 2024, Total said in September.

The project includes development of offshore gas fields and a two-unit liquefaction plant with capacity of 12.8 million tonnes a year. The site will eventually have as many as eight LNG units, Total CEO Patrick Pouyanne said last month.

Algeria loses pipeline gas sales to Europe in oversupplied market

(Bloomberg; Nov. 23) - Algeria's natural gas pipeline exports to Europe are getting squeezed by cheaper Russian supplies and a global abundance of liquefied natural gas. European clients of Sonatrach have "greatly reduced their demand" for gas from Algeria, resulting in a 25 percent drop the level of sales expected this year, said Ahmed El-Hachemi Mazighi, vice president of marketing at the state-owned energy company.

Algeria is the third-biggest gas supplier to Europe. Its lower pipeline exports are evidence of how new LNG supplies from the U.S., Australia, and Russia are overwhelming the market and driving down prices. That's reduced the competitiveness of the North African country's pipeline gas contracts, which are mostly tied to oil prices, according to the energy consultancy Wood Mackenzie.

To compensate for the lost pipeline gas sales, Sonatrach has turned more of its gas into LNG and is selling those cargoes on the global spot market for immediate delivery, Mazighi said. It's the first time that spot sales represented 30 percent of the company's LNG exports. Sonatrach's LNG sales are set to top 175 billion cubic feet of gas this year (more than 3.6 million tonnes of LNG), a "historical record" over the past 20 years and filling almost 60 cargoes. More than half of the company's LNG has been sold in Asia.

Winter LNG prices in Asia down 43% from a year ago

(Nikkei Asian Review; Nov. 25) - The price of liquefied natural gas has plunged 43 percent from a year ago as supply has outstripped demand, and analysts said there's little room for an uptick in the near future given strong competition and a slowing global economy. Despite the prospect of winter weather boosting demand, spot LNG prices in Asia have fallen to around \$5.70 per million Btu from over \$10 in the same period last year. This is in large part due to new production in the U.S., Australia, and elsewhere. Spot-market LNG prices were even higher in winter 2014, at nearly \$20.

While new LNG production capacity has been coming online in the U.S., Australia, and Russia, the global economy is losing steam in the face of U.S.-China trade frictions. Demand for electricity from large customers is slowing, putting the brakes on LNG demand growth. This has led to a rise in inventories among importers such as some European countries and China. Spot prices in Asia fell to a three-year low of around \$4 in the summer when demand from households was weak.

Japan's Kyushu Electric posted a loss of 13 billion yen (\$120 million) in the first half of this year due to high LNG inventory. Low demand for electricity prompted the company to resell LNG, but at a lower price than what it paid for the gas. "If LNG prices remain low for long, development projects could come to a halt," Yasuo Ryoki, an adviser to Osaka Gas, said at the FT Commodities Global Summit on Nov. 1 in Tokyo.

China's October LNG imports down 11.5% on several factors

(S&P Global Platts; Nov. 26) - China's imports of LNG fell 11.5 percent year on year to 4.04 million tonnes in October, S&P Global Platts calculations based on latest customs data showed Nov. 26. Market sources attributed the decline to a domestic economic slowdown, a long shutdown at PetroChina's Rudong LNG import terminal, the relaxation of China's coal-to-gas switching policies and stricter emission restrictions, and lower industrial activity during the country's 70th National Day holiday in early October.

Over January-October, China imported 47.43 million tonnes of LNG, up 14.2 percent on the year, the customs data showed. Australia remained the top LNG supplier to China over January-October, at 22.8 million tonnes, up 24.2 percent on year. China imported 2.48 million tonnes of gas via pipeline in October, down 8.1 percent from a year earlier, the data showed. The government sets the guidance price for city-gate gas prices, which is typically lower than the import cost. Market sources said importers were striving to reduce contract volumes as a result to cut their losses.

October is typically a high-demand month due to gas storage restocking and firm baseload industrial and city gas demand, but this has not been the case this year due to weak industrial activity and the lack of demand to refill inventories, according to S&P Global Platts Asia LNG analytics manager Jeff Moore.

Chevron waits for improved market before expanding Australia LNG

(Australian Financial Review; Nov. 25) - A decade on from its commitment to build the massive Gorgon LNG project in Western Australia, Chevron's new Australian head Al Williams said the U.S. major is looking to add production to its Australian portfolio, which also includes the large Wheatstone project. "With all five Chevron-operated LNG trains running reliably, we're focusing on finding opportunities to incrementally add production and enhance reliability," Williams told The Australian Financial Review.

Chevron built both the US\$54 billion Gorgon and US\$34 billion Wheatstone LNG plants with expansion in mind, but is awaiting more favorable market conditions to consider adding more capacity. In particular, the Wheatstone plant, near Onslow, has space laid out at the site for an additional three trains beyond the two in operation, while other facilities at the site were also designed with five LNG trains in mind.

Williams confirmed that Chevron is putting the near-term emphasis on "debottlenecking" capacity to squeeze out more production, rather than an expansion. Gorgon and Wheatstone have a total capacity of 24.5 million tonnes a year.

Abundant Pennsylvania natural gas goes to Japan

(WHYY; Philadelphia; Nov. 26) - At the busy Port of Yokohama, near Tokyo, large oceangoing vessels carry new cars from Japanese factories to a global market. But one product the Japanese have always had to import is energy, and it's clear from the port traffic how much energy the country needs. Tankers full of coal, liquefied petroleum gas, and liquefied natural gas sail in from all over the world, including from Pennsylvania.

Since spring 2018, shale gas from Pennsylvania has been shipped out of an LNG export terminal on Chesapeake Bay to 20 different countries. Most of those ships went to Japan. The abundant drilling of Pennsylvania's Marcellus and Utica Shale has created a glut of natural gas and driven down prices. In the past 12 years, shale gas producers drilled more than 12,000 fracked gas wells in northeastern, central, and southwestern Pennsylvania. The price of that overproduction means Pennsylvania's gas sells at about \$2.30 per million Btu. In 2008, before the shale gas boom, prices averaged almost \$9. Producers eager to find new markets now ship gas overseas.

Exports won't necessarily force the price back up to 2008 levels, said Ira Joseph, head of gas and power analytics of S&P Global Platts, but they will prevent further dips. Five U.S. LNG export terminals have come online since 2016, including the Cove Point plant in Maryland. Another 16 have been approved and eight are pending approval by the Federal Energy Regulatory Commission. The U.S. is now the world's third-largest LNG exporter behind Qatar and Australia. Japan is the world's largest importer of LNG.

Legal challenge ties up state permit for proposed Texas LNG project

(Houston Chronicle; Nov. 22) - Houston liquefied natural gas company Texas LNG has landed a federal permit for its proposed export terminal at the Port of Brownsville but its state permit remains tied up in a legal process that may take at least another four months to sort out. After more than three years of review, the Federal Energy Regulatory Commission on Nov. 21 granted Texas LNG a permit authorizing the plant to produce up to 4 million tonnes per year.

Before construction can begin, the company must secure customers, financing and obtain permits from nearly a dozen state and federal agencies. But Texas LNG may not be able to obtain its air pollution permit from the Texas Commission on Environmental Quality until March. With the project facing opposition from the City of Port Isabel and residents from the nearby community of Laguna Heights, a panel of judges with the Texas State Office of Administrative Hearings will review the state air pollution permit.

The judges heard testimony from both sides Nov. 20-21 and have until Feb. 24 to make a ruling. Erin Gaines, an attorney with Texas Rio Grande Legal Aid representing Laguna Heights residents concerned about air pollution from the plant, said state officials performed a "rubber stamp review" of the Texas LNG application. "We provided proof that there were better technologies to control source emissions," Gaines said.

LNG trader agrees to boost offtake from proposed Louisiana project

(Bloomberg; Nov. 25) – Geneva-based Gunvor, a global LNG trading and marketing firm, has agreed to double the maximum amount of liquefied natural gas it plans to buy from a proposed \$4 billion export project in Louisiana and said it will recruit additional customers for the terminal. The trading firm will take as much as 3 million tonnes of LNG per year from Commonwealth LNG, the Houston-based developer said Nov. 25.

Gunvor will also market the remaining volumes from the facility, which will be able to produce about 8.4 million tonnes a year. Commonwealth wants to make a final investment decision in 2021 and begin exports in the second quarter of 2024. The pact is unique in that it allows Commonwealth to shift the burden of finding buyers to a third-party marketer. LNG developers need to sign up enough customers to secure financing, and competition is intensifying amid growing supplies from projects worldwide.

Commonwealth LNG is seeking permission from the Federal Energy Regulatory Commission to build the export terminal at the mouth of the Calcasieu Ship Channel on the Gulf of Mexico in Louisiana. The Commonwealth announcement comes less than a week after FERC officials approved permits for four LNG export terminal projects in Texas. Although the four projects have obtained permits, they still need to land contracts for their production and secure financing for the multibillion-dollar projects.

Louisiana shrimpers blame LNG project dredging for poor harvest

(KPLC TV; Lake Charles, LA; Nov. 25) - LNG may be king, but Cameron fishermen would like to still be able to make a living shrimping this time of year in Gulf waters. They say a favorite shrimping spot is no good this year due to dredging for construction of Venture Global's Calcasieu Pass LNG project. The \$4.25 billion development is scheduled to start liquefying natural gas for export in 2022.

Shrimper Ronald Gaspard says the situation poses a drastic financial hardship. "Somebody just needs to do something because prime time from now to right past Christmas, that's the place to be. You could catch a thousand boxes, not necessarily all right there. But you could catch a thousand boxes for the season and you see, right now we're looking at no boxes," Gaspard said.

He and other fishermen say the problem is because of dredging west of Cameron at the jetties to create a berthing area and two loading docks for Calcasieu Pass. Fishermen like Phillip Dyson say if they try to fish, their nets come up full of salt grass and the shrimp are covered with mud. "What they're doing, they're messing up our trawling, where we trawl at. If they're going to pump the spoil there, pump it on the beach where they'll save the beach. All they're doing is fouling everything up," Dyson said.

U.S. oil production growth has contributed to falling prices

(Financial Times commentary; London; Nov. 24) - In September, according to the latest figures produced by the U.S. Energy Information Administration, the U.S. exported more oil than it imported for the first time in the 70 years since recordkeeping began. The technology of fracking has led to the development first of shale gas and then of oil from shale rocks, raising total U.S. oil production to an estimated 12.8 million barrels a day for November — up by more than 3 million barrels per day in just three years.

Total U.S. production now exceeds that of Saudi Arabia and Russia. The shale boom has given new life to the U.S. oil industry and brought a wave of economic activity to the shale-producing regions — particularly in Texas and North Dakota. And the burden of oil imports has been removed from the U.S. trade imbalance.

Fourteen years ago, the U.S. was a net importer of 12.6 million barrels of oil per day and trillions of cubic feet of gas a year. Next year, according to the outlook from the EIA, exports will average 750,000 barrels of oil and 6.4 billion cubic feet per day of gas. But the growth of shale production has had more impact outside the U.S. than within.

The fact that the country has been increasing its own oil output by 1 million barrels per day each year has led directly to the fall in world prices of the past five years.

Alberta asks federal government to help pay for abandoned wells

(Calgary Herald columnist; Nov. 26) – Alberta Premier Jason Kenney wants Ottawa's help — and some money as well — to deal with the growing number of abandoned oil and gas wells in the province, while creating jobs in the process. In a letter sent Nov. 25 to Canadian Finance Minister Bill Morneau, Alberta is seeking federal assistance to "accelerate the reclamation of abandoned oil and gas wells."

"Ultimately, we would like funding from the federal government to assist us as a province in cleaning up our orphan wells," Alberta Finance Minister Travis Toews told reporters at the provincial legislature. "It would create jobs in much-needed regions of the province." Toews didn't put a price tag on the request but noted Alberta's Orphan Well Association is facing a growing backlog of wells that require downhole wellbore abandonment and surface reclamation but don't have an active owner to pick up the bill.

The tab is falling to the nonprofit association, which is funded by an industry levy. The pitch is being made as the number of orphan wells has ballooned in Alberta in the wake of a five-year industry downturn. According to the Orphan Well Association, there were 3,406 orphan wells slated for abandonment at the beginning of this month, almost a five-fold jump since March 2015. The count continues to grow, even as the industry's funding to the association has climbed to \$60 million in 2019 from \$15 million in 2014.

Germany pushes for more zero-carbon fuels

(Reuters; Nov. 26) - Germany's gas industry aims to build power-to-gas capacity of five gigawatts over the next five years, and 40 gigawatts by 2050, as it seeks to develop zero-carbon fuels for homes, factories and vehicles, industry group DVGW said on Nov. 26. The target comes as policymakers aim to unveil a hydrogen strategy by year-end to help decarbonize Germany's fossil fuel-based gas system toward the use of hydrogen derived from water and biogas from crops and waste — turning excess power into gas.

Currently Germany is home to around 40 small power-to-gas pilot projects. These harness surplus green power, mainly from wind, to carry out electrolysis, splitting water into oxygen and hydrogen to produce zero-carbon fuel. The biggest projects so far measure just 6 megawatts, equivalent to around 60 car engines. The 5-gigawatt size planned over the next five years would be equivalent to five nuclear power stations.

"Readying future energies such as green gas and hydrogen for usage in mobility, industry and heating are the most effective contribution to reach climate targets," said

Thomas Huewener, DVGW deputy president at Open Grid Europe, Germany's biggest gas pipeline operator. Pipeline operators said they expect the gas pipeline network can operate with hydrogen comprising up to 10 percent of its fuel flow without major modification, and 20 percent with some modifications, up from less than 2 percent now.