

# Oil and Gas News Briefs

## Compiled by Larry Persily

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#### **Cheniere will start LNG deliveries in August to Total, U.K.'s Centrica**

(S&P Global Platts; March 8) - Cheniere Energy will begin making commercial deliveries in August under long-term offtake contracts with Britain's Centrica and France's Total now that it has achieved substantial completion of the fifth liquefaction train at its Sabine Pass LNG export terminal in Louisiana, the company said March 8. The biggest U.S. LNG exporter has been ramping up production at Sabine Pass and its terminal near Corpus Christi, Texas, amid increased competition for liquefaction services.

The number of U.S. LNG export terminals in operation is expected to double by the end of 2019, and more than a dozen more LNG projects are being promoted. Cheniere for its part has been aggressively pursuing new long-term supply agreements with buyers in Europe and Asia to solidify its market position. Cheniere is currently operating five trains at Sabine Pass — with a total capacity of 22.5 million tonnes of LNG per year — and is nearing a final investment decision on a sixth train there. At Corpus Christi it is operating one train and building two more, each at 4.5 million tonnes annual capacity.

In a statement announcing substantial completion of Sabine Pass Train 5, Cheniere said commissioning was complete and contractor Bechtel had turned over custody and control of the unit. The offtake agreements tied to that train with Centrica and Total were signed in 2012 and 2013. Centrica agreed to a 20-year deal to purchase 1.75 million tonnes of LNG per year from Cheniere upon the start-up of Sabine Pass Train 5. Total agreed to a 20-year deal to buy about 2 million tonnes a year upon the start of Train 5.

#### **European Union will work to boost U.S. LNG imports**

(S&P Global Platts; March 8) - The European Union will work to double its U.S. LNG imports to at least 280 billion cubic feet of gas per year over the next four years and seek to make the U.S. a major gas supplier to Europe longer term, the European Commission (EC) said March 8. The EU is the world's second-biggest gas market after the U.S., and already imports 70 percent of its gas with Russia its biggest supplier. The 280 bcf a year would fill about 80 to 90 liquefied natural gas carriers.

Imports are expected to rise as the EU's domestic output declines, and the EC is keen to diversify suppliers to avoid overreliance on Russia. "U.S. LNG, if priced competitively, can play an increasing role in EU gas supply, enhancing diversification and EU energy security," it said. The EU imported from the U.S. about 116 bcf of gas

as LNG in 2018, up 50 percent from 2017. Total EU gas demand in 2017 was 17.3 trillion cubic feet, according to European Commission data. Even if the EU reaches its target of U.S. gas imports, it would represent just 1.5 percent of that total gas demand.

### **Texas project developer offers to sell LNG priced against Brent crude**

(Reuters; March 6) - NextDecade is offering to supply liquefied natural gas linked to global oil prices as one of several pricing options for potential customers of its proposed LNG export terminal in Texas. It's the first U.S.-based project to offer LNG linked to the global oil benchmark price of Brent, a company official said. LNG linked to oil prices is the norm for most suppliers outside the U.S. NextDecade is offering multiple pricing options for its \$17.3 billion Rio Grande LNG project, said CEO Matthew Schatzman.

The company also is offering to sell LNG linked to the U.S. natural gas benchmark Henry Hub price, Europe's gas price benchmark and the S&P Global Platts Japan-Korea Marker price, Schatzman said at the LNGA 2019 conference in Singapore. Several U.S. LNG export projects are vying for financing amid an already crowded market, and developers are competing to offer pricing options to potential offtakers.

### **Texas developer leases land for proposed Rio Grande LNG**

(Houston Chronicle; March 7) – NextDecade's proposed \$15 billion Rio Grande LNG export terminal in Brownsville, Texas, took a step forward after leasing nearly 1,000 acres of land along the waterway. The Brownsville Navigation District awarded Rio Grande LNG a 30-year lease for 984 acres of land along the north shore of the Brownsville Ship Channel on March 6. Financial terms were not immediately available.

Under the lease, Rio Grande LNG has two options to renew and extend the lease for periods of 10 years each. Hours before the Brownsville Navigation District meeting, NextDecade filed its end-of-year earnings where the company reported closing 2018 with a \$43.5 million loss and no revenue. The Houston company expects a decision on its application from the Federal Energy Regulatory Commission in July. The developer also is looking to sign firm sales contracts, financing and a construction contractor.

With no plants in operation, NextDecade has been funded by investors — similar to other LNG developers waiting on permit decisions. A filing with the U.S. Securities and Exchange Commission shows that the company has \$3.2 million cash on hand and \$72 million in a short-term cash management fund. As one of three LNG export terminals proposed for the Port of Brownsville, Rio Grande LNG faces stiff opposition from a coalition of shrimpers, fishermen, environmentalists, neighbors, and communities.

## **Oregon LNG project says it has non-binding sales agreements**

(Reuters; March 7) – The proposed Jordan Cove liquefied natural gas project in Oregon has signed non-binding sales agreements for volumes exceeding the terminal's planned capacity, a senior company official said March 7. The developer now has initial contracts to sell about 11 million tonnes of LNG per year to buyers, said Stuart Taylor, senior vice president of marketing and new ventures for Calgary-based Pembina Pipeline, owner of the project. Plant capacity is planned for 7.5 million tonnes a year.

“There is a good chance that some of it (the sales volume) is Chinese,” Taylor said on the sidelines of the LNGA 2019 conference in Singapore, when asked if any of the potential buyers included Chinese companies. He said the company expects to convert some of the deals into binding contracts in a few months. “They take time, and we are in detailed negotiations exchanging drafts of the agreements ... and then we will lock agreements down,” he said.

In addition to looking for customers and equity investors, the developer of the \$10 billion Jordan Cove LNG project at Coos Bay, Oregon, hopes the Federal Energy Regulatory Commission finishes its review of the application to construct and operate the liquefaction plant and 229-mile pipeline across the state before the end of the year.

## **U.S. developer looks to China to build LNG production vessels**

(Reuters; March 7) - Plans to construct a series of floating liquefied natural gas production vessels in China for use in the United States are moving ahead despite trade tension between the countries, an executive with the developers said March 7. The Delfin LNG project 50 miles offshore Louisiana would be the first of its kind for the U.S., and would produce up to 13 million tonnes per year for export. China also could provide funding and buy some of the project's output, the executive said.

The project could ultimately utilize up to four floating LNG production vessels moored together and fed by undersea pipelines. “We can also work on the financing in China. Basically, we can look at a ‘China Inc.’ deal,” said Wouter Pastoor, chief operating officer at partner Delfin Midstream. Houston-based Delfin has signed a memorandum of understanding to supply 3 million tonnes of LNG per year to China Gas Holdings, one of China's most active city gas distributors.

After reviewing shipyards in Asia, Delfin is working with a Chinese shipyard on plans to convert existing LNG carriers into production vessels. The Delfin LNG partners are targeting a final investment decision for the project by the end of the year and the first LNG production in the second half of 2023.

## **Maritime industry opposes Jones Act waiver for U.S. LNG deliveries**

(S&P Global Platts; March 7) – The maritime industry pushed back against proposals to waive federal restrictions to allow shipments of U.S. LNG to Puerto Rico or elsewhere in the United States, warning Congress this week that such steps would hurt the maritime sector and national security. Calls have surfaced to ship LNG from the growing U.S. gas export sector to New England, where constrained pipeline infrastructure has contributed to tight supplies during the winter. And in December, Puerto Rico asked for a 10-year waiver of Jones Act restrictions in order to bring in U.S. LNG on foreign-flagged tankers.

The Jones Act requires cargo moved between U.S. ports to be transported on vessels that are U.S.-flagged, U.S.-built and U.S.-crewed. It is strongly defended by the maritime sector and its allies in Congress. No LNG carriers have been built in U.S. shipyards since the 1970s.

The intermittency of the U.S. domestic gas market's need for LNG cargoes, combined with the high cost of building vessels in U.S. shipyards, have made it cost-prohibitive to build and operate U.S.-flagged vessels. Though foreign carriers are available, the Jones Act prohibits the use of foreign ships to deliver LNG from U.S. Gulf or East coast export terminals to U.S. ports. Supporters of a Jones Act waiver said it could reduce fuel costs for U.S. consumers, while the maritime industry testified it would hurt their business.

## **U.S. company a leader in floating LNG import terminals**

(Houston Chronicle; March 7) - U.S. companies are racing to build multibillion-dollar export terminals to ship liquefied natural gas to markets around the world amid surging demand for the cleaner-burning fuel. But one U.S. company is taking a different path to capitalize on the LNG boom. Excelerate Energy owns and operates offshore import terminals from Boston to Bangladesh, and is sticking to that strategy.

Founded in 2003 and backed by Oklahoma billionaire George Kaiser, privately held Excelerate specializes in offshore import terminals that use a special type of LNG carrier known as floating storage and regasification units, or FSRUs. The ships are mobile plants that convert LNG back to its gaseous form, which is then fed into an underwater pipeline to bring it to shore for distribution to power plants and homes.

In New England, where a lack of pipeline capacity creates shortages during the winter, Excelerate has owned and operated the Northeast Gateway offshore terminal since 2008. FSRUs are a small share of the global fleet of LNG carriers but are expected to increase. Of 474 LNG tankers in the world, about 24 have regasification capabilities. That could climb to as many as 40 by 2025, according to consulting firm Accenture.

FSRUs have advantages over onshore import plants, starting with costs. Building an onshore regasification plant costs \$274 for each tonne of import capacity, according to the International Gas Union. A floating unit costs \$129 per tonne of annual capacity. The floating plants also have more flexibility, meaning they can easily move to markets where demand and prices are highest. But the FSRUs also have higher operating costs.

### **Asia spot-market LNG price falls 11<sup>th</sup> week in a row, down to \$5.70**

(Reuters; March 8) - Asia spot-market prices for liquefied natural gas dropped this week for the 11th week in a row and have now lost more than 30 percent in value since the start of the year. Prices for April delivery to Northeast Asia are estimated at \$5.70 per million Btu, \$0.30 below last week as weak demand hits the market. That is the first time that prices have fallen below \$6 since August 2017, according to Reuters data.

In addition to mild weather, oversupply on the market is evident as none of the outages or maintenance closures at LNG export terminals this year have provided support for higher prices.

### **Partners find way to get past government review of Arctic LNG-2 deal**

(Reuters; March 7) - Russia's Novatek found a way to expedite French energy major Total's acquisition of a stake in the proposed Arctic LNG-2 project, Interfax news agency reported March 7. The deal allowed Total to buy a 10 percent stake from Novatek in the \$25 billion project without needing the approval of Russian government agencies that monitor foreign investment, though the workaround was itself approved by Russian officials.

In recent years, foreign investments in strategically important Russian industries and companies must be approved by the Russian government if the foreign-owned stake is above 25 percent. Total's acquisition of a stake in Arctic LNG-2, when combined with its existing 19.4 percent in Novatek itself, would have exceeded this mark and triggered a need for approval, said Igor Artemyev, head of Russia's Federal Anti-monopoly Service.

So, the parties developed a workaround, which Artemyev's agency approved, that brought Total's stake below the 25 percent mark and meant referral to the government commission was not required. The workaround required Novatek to pledge 15 percent of its own shares in Arctic LNG-2 to Sberbank as collateral for a credit line. With Sberbank's name now on some of Novatek's shares, Total's stake in the company was considered to have shrunk. "As long as these shares continue to be held as collateral

... everything is fine,” Artemyev said. But once the shares are returned by Sberbank to Novatek, Total’s deal will have to be reviewed by the government, Artemyev said.

### **Australians brought gas supply problem on themselves**

(Reuters’ columnist; March 6) - Australia has painted itself into a corner with its natural gas industry and faces the stark reality that there are no easy choices to solve the dual dilemma of a looming supply crunch and higher prices. It sounds counter-intuitive and somewhat bizarre that a country that in 2019 will export nearly 80 million tonnes of LNG finds that the best solution to its domestic supply squeeze is to start importing cargoes of the same fuel. There was acknowledgement at this week’s Australian Domestic Gas Outlook event that LNG imports are likely the “least worst option,” as one delegate said.

In tracing the story of how Australia reached this point, a tale emerges of poor policymaking, overly ambitious LNG projects and a failure of gas users to realize that the market dynamics were permanently shifting. Much of the blame for the domestic gas problem has settled on three LNG export plants built in Queensland state over the past seven years that tripled the amount of gas needed in the eastern Australia market.

At the same time that exports ramped up, cheap offshore gas from Australia’s southern coast was declining after providing low-cost fuel for residents and industry for more than 40 years. Though new offshore fields are planned, the gas will be more expensive from the harder-to-reach fields. Meanwhile, mounting environmental and farmers opposition to onshore gas development has led to bans and moratoriums on projects in New South Wales and Victoria states, Australia’s most populous and most industrialized regions. The players have mainly spent the past few years pointing fingers at each other, rather than looking for solutions that have more than a snowball’s chance in hell of working.

### **Pakistan’s LNG demand could more than triple within five years**

(Reuters; March 6) - Pakistan’s demand for liquefied natural gas could more than triple in the next three to five years, the chief executive of Pakistan LNG said March 6. Last year, Pakistan imported nearly 7 million tonnes of LNG, data from Refinitiv Eikon shows. This year, that could grow to as high as 15 million tonnes and to up to 25 million to 30 million tonnes over the next three to five years, said Adnan Gilani, managing director and chief executive of Pakistan LNG.

Pakistan LNG is a state-owned company that buys LNG on the international market to supply the domestic market. Both of the country’s existing LNG import terminals are currently nearly fully utilized. Final investment decisions on two more import terminals are expected this year. Pakistan’s two import terminals have a regasification capacity of

1.2 billion to 1.3 billion cubic feet of gas per day, or about 9 million to 10 million tonnes of LNG a year, according to Gilani's presentation at an LNG conference in Singapore.

Pakistan is expected to negotiate a few more long-term contracts to import LNG, Gilani said. The country is facing a serious energy crisis with repeated blackouts and gas supply outages that led to the sacking of the heads of two of its main gas distribution utilities in January.

### **PetroChina reports success in test drilling at shale gas well**

(Reuters; March 7) - PetroChina reports high volumes of gas at a shale exploration well in the southwestern Chinese province of Sichuan, with output of almost 50 million cubic feet per day in test drilling, the state-run People's Daily reported March 7. The Lu-203 well in the Chuannan block was an appraisal well drilled to 13,100 feet. PetroChina also drilled a 5,000-foot-long horizontal well. It's a typical high-pressure well and the first one with daily gas flow exceeding 35 million cubic feet, the paper reported.

The exploration work by PetroChina's Southwest Oil and Gas unit based in the city of Chengdu marks the state giant's stepped-up efforts to boost shale gas production in the region. PetroChina is playing catch-up in shale gas drilling against domestic rival Sinopec, which has been leading the push on the unconventional fuel. The country's producers are working to increase domestic gas production to help meet China's growing demand for the cleaner-burning fuel.

### **Australian LNG producer sees shift to shorter-term deals**

(S&P Global Platts; March 8) - Australia's largest LNG producer Woodside Petroleum is planning to replace its expiring long-term sales contracts with "far more flexible" deals of three to five years duration, CEO Peter Coleman said this week. Nearly two-thirds of the company's long-term contracts — totaling about 11 million tonnes per year — from the Woodside-operated North West Shelf and Pluto LNG export plants in Western Australia are due to expire by 2025.

These volumes are largely contracted with Japanese power and gas utilities, which have been at the forefront of global efforts to drive flexibility in LNG supply, as market liquidity grows. The volume that Woodside plans to allocate to spot trading next decade will be unchanged at around 10 percent, Coleman said in an interview with S&P Global Platts at the LNG Supplies for Asian Markets summit, held in Singapore this week. "We prefer short-term versus spot. ... three to five years works better for us," Coleman said.

To develop new gas supplies, however, Woodside will look to secure 10- to 15-year deals, Coleman said, though replicating the terms of its legacy contracts, based on

restricted destination and oil-linked prices, may prove more difficult as buyers are heading in the opposite direction. "Buyers are trying to dictate terms that make it very difficult to ... sanction major projects," he said. Growing market liquidity means buyers are more comfortable that there will be flexible, cost-competitive gas available, so they are less keen on long-term supply deals, which is shifting the risk from buyers to sellers.

## **Vietnam could get second LNG import terminal**

(Nikkei Asian Review; March 9) - Vietnam's Petrolimex has unveiled plans to open its first liquefied natural gas import terminal, following in the footsteps of fellow state-run energy group PetroVietnam, which has plans to build its own LNG import terminal, as the pair work to diversify energy supplies to fend off a chronic power shortage in the Southeast Asian country. "We will put our efforts into the LNG business as a new area for growth," said Petrolimex Chairman Pham Van Thanh.

Petrolimex, formally known as Vietnam National Petroleum Group, controls about half of Vietnam's gas stations. The company had sought to diversify by building the country's third oil refinery, at a cost of around \$4.5 billion. But Petrolimex was forced to give up on the project last fall after the government, concerned about excess capacity, balked at providing financial support. Now Petrolimex will focus on building an LNG import terminal in the southern coastal province of Khan Hoa.

The LNG will be supplied to a gas-fired power plant to be built nearby by Vietnam Electricity. By the time the plant is up and running in the late 2020s, it will supply 6,000 megawatts of energy. The investment in the terminal and power plant could reach \$3.6 billion. This follows PetroVietnam's plans to build Vietnam's first LNG terminal at the southern port of Thi Vai. Winning bids for the project will be finalized this month. Construction could begin as soon as this year with start-up in 2023 at the earliest.

## **Norwegian wealth fund looks to reduce oil-and-gas investments**

(Wall Street Journal; March 8) - Norway's \$1 trillion sovereign wealth fund has taken a major step toward selling off some of its substantial holdings in oil-and-gas companies, a move to shield the oil-rich nation from the risk of permanently lower crude prices. The Norwegian finance ministry has proposed that the fund remove energy exploration and production companies from its portfolio, following a 2017 recommendation made by the central bank, which uses the fund to invest the proceeds of the country's oil industry.

Norway built its wealth on crude through its massive North Sea oil fields. But the country faces a world where oil demand and prices may be on a lasting decline and has decided that its economy is too tethered to the price of crude. The Scandinavian country joins some of the world's biggest oil producers, including Saudi Arabia and

Russia, which are scrambling to diversify their dependence on petroleum-based wealth in the face of rising renewable energy use and efforts to reduce greenhouse-gas emissions.

Global demand for oil is expected to peak in 2030, according to Equinor, Norway's state-backed oil company. "The oil price drop in 2016 reminded us how vulnerable we are to those kinds of changes," said Henrik Asheim, a lawmaker for Norway's center-right Conservative Party. "It's not a debate about climate, it's about financial risk." Oil and gas equities make up about 6 percent of the Norwegian wealth fund's investments. The proposal does not encompass all energy companies with only around 20 percent of the fund's oil and gas holdings included.