

Oil and Gas News Briefs

Compiled by Larry Persily

April 3, 2017

Initial Yamal LNG cargoes will be sold on spot market

(Platts; March 30) - Russia's Yamal LNG Arctic project, expected to start up later this year, plans to start deliveries under its long-term contracts in 2018 while initial cargoes will be sold on the spot market, Novatek CEO Leonid Mikhelson said March 30. "The project participants will enter the spot market with initial volumes, and will sell these volumes where the market is best," Mikhelson told reporters. Novatek plans to launch Yamal's first liquefaction train this year, with two more going online in 2018 and 2019.

The first LNG tanker is to leave port on the Kara Sea the second half of the year, but it's hard to give a more precise timeline as plant testing continues, Mikhelson said. Novatek holds a 50.1 percent stake in the project, with its three liquefaction trains each capable of producing 5.5 million metric tons per year of LNG. France's Total owns 20 percent, as does China National Petroleum Corp. China's Silk Road Fund owns 9.9 percent.

Key shareholders arrived in the port city on March 30 for the formal welcoming of the first icebreaking tanker for transporting Yamal's output. The 985-foot-long ship, currently the largest icebreaking tanker in the world, can move through ice almost 7 feet thick. The Arc7 tanker is the first of 15 planned to carry gas from the \$27 billion project.

Yamal LNG has nearly fully contracted its entire output, "90 percent or maybe even 100 percent of which will go to the Asia-Pacific region," Mikhelson said. Despite a well-supplied LNG market, Yamal has a competitive advantage due to low production costs, its owners said. Novatek Chief Financial Officer Mark Gyetway has estimated total cost of feedstock gas, liquefaction and shipping at slightly under \$3 per million Btu.

Russian LNG developer talks of a second Arctic export terminal

(Reuters; March 29) - Russia may produce more than 70 million tonnes of liquefied natural gas per year in its remote Arctic regions, the head of gas producer Novatek said March 29. "The Gydan and Yamal peninsulas have a vast resource base that allows the production of over 70 million tonnes (of LNG); it is comparable to LNG production in Qatar," Leonid Mikhelson, the head and co-owner of Novatek said at a conference.

Novatek — on the list of Russian companies sanctioned by the West for Moscow's role in the Ukraine crisis — plans its first Yamal LNG shipments by December. That project has been under construction almost four years. Mikhelson said initial construction of a second plant, Arctic LNG-2, would be completed 2022-2023, though work has not yet

started. That plant would liquefy gas from the Gydan Peninsula — the province next to where Gazprom, the world's largest gas producer, also holds gas deposits.

Mickelson said he was willing to forge an alliance with Gazprom to produce gas in the Arctic. Output at the Arctic LNG-2 plant would be the same as Yamal LNG, 16.5 million tons per year from three liquefaction trains. Novatek would sell as much as 49 percent in Arctic LNG-2 to foreign investors, but that would depend on the amount of funds new shareholders would provide and the LNG volumes they would buy, Mikhelson said.

Petronas loading first cargo from floating LNG production unit

(Reuters; March 30) - Malaysia's Petronas is about to export the world's first liquefied natural gas produced from a floating production unit, according to shipping data and people familiar with the matter, beating rivals like Shell in a race that has cost developers billions of dollars. The Petronas Floating LNG Satu (PFLNG Satu), sitting off the coast of Bintulu on Malaysia's Borneo Island, is currently loading up the LNG tanker Seri Camellia, according to trade sources and shipping data of Thomson Reuters Eikon.

Traders with knowledge of the matter said that PFLNG Satu's first export cargo was heading for South Korea. Petronas declined to comment. The Satu facility, estimated to have cost as much as \$10 billion, arrived in the waters late last year, preparing for first operations. At 1,200 feet long, the production, liquefaction and storage vessel can produce 1.2 million metric tons of LNG per year.

Shell is building a 1,600-foot-long floating LNG production facility for work off the Australia coast, capable of three times the production as the Petronas unit. The Shell venture has been plagued by construction delays, allowing Petronas to become the first company to produce LNG from a floating production unit. The huge capital costs have led some to question whether FLNG units on this scale will be ordered again in future.

First export from Train 3 at Sabine Pass expected in June

(Natural Gas Intelligence; March 31) - Cheniere Energy said March 31 that Train 3 of the Sabine Pass liquefaction project in Cameron Parish, LA, is substantially complete and commissioning has concluded. Contractor Bechtel Oil, Gas and Chemicals is turning over custody of the production unit to Cheniere. Earlier this month the Federal Energy Regulatory Commission approved commencement of operations at Train 3.

Under a sale-and-purchase agreement with Korea Gas, the date of first commercial delivery from Train 3 is expected in June, starting the clock on Cheniere's 20-year contract with Korea Gas. Cheniere plans to construct up to six liquefaction trains at Sabine Pass. The first export cargo from Train 1 left the terminal in February 2016.

Train 4 is in the commissioning process; Train 5 is under construction. Each train has the capacity to make about 4.5 million metric tons of LNG per year.

Japan's electric utilities will start competing with gas companies

(Reuters; March 31) - Electric utilities are poised to steam into Japan's city retail gas market, with the over-\$20-billion-a-year sector opening April 1 to companies beyond the regional gas firms that have typically piped the commodity into homes around the country. The liberalization comes in the wake of similar moves in the nation's electricity market, with the government looking to dismantle the final barrier to cross-ownership for an energy sector in turmoil since the 2011 Fukushima nuclear disaster.

Increased competition in Japan's retail gas market could boost the number of firms looking to purchase liquefied natural gas in what is already the world's top LNG buyer. The former electric monopolies will be pushing to win a chunk of the country's city gas markets to compensate for the 3 million (5 percent) of power customers they lost to gas and other suppliers in the 11 months since electricity markets were fully liberalized.

"We have lost many retail power customers, but we can launch a hard strike (into the retail gas market)," said Michio Sato, a managing director at the retail energy unit of Tokyo Electric. Electricity utilities have few options for expansion except for overseas business or domestic gas as power demand is in gradual decline, Sato said. Tokyo Electric has already nabbed a contract that was previously held by gas giant Tokyo Gas. It has signed a deal to supply 240,000 tonnes of LNG a year to Nippon Gas.

B.C. signs benefits agreement with First Nation for LNG project

(Globe and Mail; Canada; March 30) - The Kitselas First Nation has signed a key benefits agreement with the B.C. government, making it the third Tsimshian group to formally back a major project to export liquefied natural gas from the Port of Prince Rupert. Government and Indigenous leaders said March 30 that having the deal in place will help Pacific NorthWest LNG's decision-making process as it ponders whether to press ahead with building a multibillion-dollar LNG export terminal on Lelu Island.

Joe Bevan, the elected chief of the Kitselas, announced the agreement March 30 during a Vancouver news conference with B.C. Aboriginal Relations Minister John Rustad. According to the benefits agreement between the Kitselas and B.C. government, the First Nation will receive payments totaling \$13.35 million and 3,000 acres of land.

The Pacific NorthWest LNG consortium led by Malaysia's Petronas is reviewing various aspects of its design plans, including the possibility of constructing a dock on Ridley Island instead of Lelu Island to avoid critical salmon habitat near Lelu. The partners are

expected to make a final investment decision later this year. Wan Badrul Hisham, Pacific NorthWest LNG's chief project officer, said the consortium already has its own benefits agreement in place with the Kitselas. Rustad said the B.C. government is working toward benefits agreements with all six Tsimshian groups.

Australia LNG partners may want compensation if exports limited

(Australian Financial Review; March 27) - The theory that investors in LNG projects in Queensland, Australia, may want compensation if they are forced to divert gas into the local market was strengthened after Santos CEO Kevin Gallagher said the Gladstone LNG project partners had a right for their investment to be protected. "The issue of compensation needs to be addressed" if the government intercedes to direct gas from the \$US18.5 billion LNG export venture to supply the domestic market, he said.

Approvals for the Gladstone LNG project contain no limit to the amount of gas the partners can take from the domestic market beyond their own production, even though the venture said in its environmental impact statement that it "has no direct implications for domestic gas prices" and would not be diverting gas from local to export markets. Rising domestic natural gas prices on Australia's East Coast have coincided with start-up of three large-scale LNG export plants in Queensland, competing for supply.

In addition to Australia's Santos, partners in Gladstone LNG include French major Total and LNG buyers Petronas and Korea Gas. Credit Suisse has suggested compensation could come from the federal government's Northern Australian Infrastructure Fund. Credit Suisse has calculated that Total would see the greatest loss if the venture was unable to export gas that it has sourced from the domestic market and was limited to shipping LNG sourced from gas only from its own acreage.

Gas pipeline opposition builds in Pennsylvania

(Wall Street Journal; March 31) - As energy companies ramp up efforts to move a glut of natural gas with new pipelines in Pennsylvania and beyond, they are encountering stiffening resistance from property owners and activists. Residents and activists have set up an encampment on Ellen Gerhart's property in Huntingdon, Pa., where the 61-year-old has been fighting against the 350-mile Mariner East 2 pipeline. A hundred miles to the east, a bigger encampment in Lancaster dubbed "The Stand" is going up in a cornfield in the heart of Amish farm country to oppose a different pipeline.

In both cases, the pipeline builders say they have tried to accommodate landowners and avoid clashes by rerouting sections. As the disputes rage, officials say the need for new pipeline capacity is acute in Pennsylvania, where fracking in the Marcellus Shale has created an oversupply of gas, depressing prices and hampering development.

A task force formed by Pennsylvania Gov. Tom Wolf concluded last year that more pipelines are needed to move gas inside and beyond Pennsylvania. In February, the Federal Energy Regulatory Commission approved four major pipelines in the state, the nation's No. 2 gas producer behind Texas. A majority of Pennsylvania residents support gas development, according to several statewide polls conducted in the past five years.

Gerhart has been arrested three times trying to stop the pipeline from crossing her property, and her 29-year-old daughter climbed a tree last year to try to stop workers from clearing right-of-way. Gerhart and other protesters say they have no quarrel with people who earn a living in the pipeline business. Their concern is largely with the way the companies use eminent domain to force landowners to make way for the pipelines.

Federal court case has major implications for interstate pipelines

(Philadelphia Inquirer; March 26) - Maple syrup output is down this year at Cathy and Tom Holleran's Susquehanna County, Pa., farm — not just due to weird winter weather disrupting the seasonal flow of sap. Last year, a gas pipeline developer obtained an easement across land owned by Cathy Holleran's family, over their objections. While U.S. marshals kept protesters at bay, workers cleared a 100-foot-wide swath for the line through their land, wiping out about 3 acres of trees, many of them productive maples.

Then something unexpected happened: New York state regulators denied permits for the 124-mile project and stopped it dead in its tracks. Now, a year later, the Constitution Pipeline connecting Pennsylvania's gas fields with New York state is still not built. On the Hollerans' land, a path of rotting timber lies untouched beneath the snow, as if a storm passed through. The fate of the \$925 million pipeline awaits a decision by the U.S. Court of Appeals for the Second Circuit, which heard arguments in November.

The pipeline developer says the Federal Energy Regulatory Commission's 2014 approval limits the state's authority, and that New York's denial of the permits was arbitrary, capricious and politically motivated. The court's ruling, expected in the next few months, could have nationwide implications for interstate pipeline projects, which have become battlegrounds for climate-change activists seeking to slow the growth of fossil-fuel development. Though the pipeline secured permits in Pennsylvania, where state policy has been more accommodating, it ran into stiff opposition in New York.

Maine finds LNG storage not likely 'cost beneficial'

(Natural Gas Intelligence; March 30) - In a draft order yet to be finalized, Maine Public Utilities Commission staff argue for the rejection of all proposed liquefied natural gas storage options recently presented to regulators. The commission last year issued a

request for proposals for LNG storage in accordance with a new state law that authorized it to direct one or more of Maine's transmission and distribution utilities, gas utilities or natural gas pipeline utilities to execute a storage contract.

The idea was that LNG storage capacity could help reduce winter price spikes for natural gas. But the draft order says none of the LNG storage proposals met the test under the law: commercially reasonable, in the public interest, enhance LNG storage in the region, significantly affect peak pricing, and “reasonably likely to be cost beneficial to utility ratepayers.” Additionally, the draft order said eight of the 11 proposals may exceed the statutory spending cap for such a project.

'The Apple of oil' uses iSteer app to direct drilling

(Wall Street Journal; March 30) - Using a proprietary app called iSteer, Brian Tapp, a geologist for EOG Resources, dashed off instructions to a drilling rig 100 miles away from his Texas office. The tool is among the reasons the little-known company says it pumps more oil from the continental U.S. than ExxonMobil — or any other producer. A rig worker received Tapp's iPhone alert and tweaked a drill bit's trajectory thousands of feet underground, to land more squarely in a sweet spot of rock filled with crude.

U.S. shale drillers transformed the energy industry over the past decade with hydraulic fracturing and horizontal drilling, in the early days using brute force to unleash a torrent of oil and gas that altered the world of oil-producing nations and triggered a global glut. Now, with oil currently trading near \$50 a barrel, these producers are trying to unleash fracking 2.0, the next step in the technological transformation of the sector that is aimed at extracting oil even faster and less expensively to eke out profits at those prices.

This new phase could be as significant as the original revolution. EOG, with its longtime focus on low-cost production, is the producer many hope to emulate, thanks to the iSteer app and dozens of other homegrown innovations. Dubbed the “Apple of oil” by one analyst, EOG now drills horizontal wells in West Texas more than a mile long in 20 days, down from 38 days in 2014. EOG uses iSteer to help navigate through rock thousands of feet underground, landing in identified layers with more precision. A device behind the drill bit transmits information — including depth and direction but also readings to identify types of rock and the presence of gas — to a geologist at the office.

Dakota Access oil line already looking to expand capacity

(GreenWire; March 31) - The company that controls the Dakota Access pipeline is looking to push even more oil into the line, days after the project carried its first crude.

Energy Transfer Partners started signing up new customers for the line March 30 in a process known as an open season, the company said. Customers can pay to ship oil to Patoka, Ill., where it can be sold to refineries or transferred to other pipelines.

They also can move oil down a combination of Energy Transfer pipelines to Nederland, Texas, near the Gulf of Mexico. The news release didn't specify how much additional capacity was for sale. Energy Transfer has previously said it could expand the project to 570,000 barrels a day, from an initial capacity of more than 470,000 barrels a day.

The additional capacity could be lucrative for Energy Transfer, said Andy Lipow, a Houston-based oil consultant. The company can add capacity to the line by simply upgrading its pumps. The 1,172-mile pipeline can carry more than half the oil produced in North Dakota's Bakken Shale field, maybe making the field more competitive. Oil in North Dakota has been selling for as much as \$10 a barrel less than the national benchmark because there are few pipelines that connect the state to refining centers.