

Oil and Gas News Briefs

Compiled by Larry Persily

July 11, 2019

Arctic LNG ‘an absolute priority’ for Russian government

(Oilprice.com; July 9) – The fact that Russian President Vladimir Putin shared in the recent announcement of Japanese investment in the Arctic LNG-2 project underlines just how important the Arctic is to Russia as a source of vast new oil and gas resources and the accretion of further geopolitical influence, akin to the game-changing U.S. shale industry. Russia’s development of its Arctic gas resources is centered on the Yamal Peninsula and led principally by Novatek, but further developments are in the offing from Gazprom and Gazprom Neft, even in the face of current and future U.S. sanctions.

“The Arctic is an absolute priority for the government, aimed at bringing Russia’s LNG standing in the world market into line with its status as a global gas superpower,” said Leonid Mikhleson, CEO of Novatek, Russia’s largest privately owned gas producer. U.S. sanctions imposed after Russia took over Crimea in 2014 only made Putin more determined that the Arctic LNG program would not fail. Moscow not only initially bankrolled Novatek’s first LNG project, Yamal, with money directly from the state budget, but later supported it by selling bonds for the venture. Yamal started up in 2017.

Novatek has received a federal patent for its Arctic Cascade gas liquefaction technology that capitalizes on the colder ambient temperature to maximize energy efficiency during the liquefaction process. It’s the first patented liquefaction technology using equipment produced only by Russian manufacturers. The overall goal of Novatek is to localize the fabrication and construction of liquefaction trains and modules to decrease the overall cost of liquefaction and develop a technological base within Russia, so that Arctic LNG operations are not subject to the whims of other countries and future sanctions.

Mozambique postpones raising money for its share of LNG project

(Bloomberg; July 9) - Mozambique has put on hold plans to raise funds for its share of the Anadarko-led \$20 billion liquefied natural gas project, as the government tries to limit its debt following a default three years ago. Empresa Nacional de Hidrocarbonetos (ENH), the national oil company, will revive its efforts to raise \$2.3 billion for the project probably later in the year after Anadarko starts work, said Empresa Nacional CEO Omar Mitha. That will help reduce risk and result in better terms, he said.

“We’ll go back to the market to seek funding” when conditions become more attractive, Mitha said. The LNG project, at 12.88 million tonnes annual capacity, could help the

economy of one of the world's poorest countries. It could also help the government recover from a debt scandal that forced it to restructure bonds. Each partner, including ENH, is pursuing its own path to fund its equity share, Anadarko said in a response to questions. Though Anadarko started the development, Occidental Petroleum is buying the company but will sell Anadarko's Africa assets to France's Total.

The government has approved a guarantee for ENH to raise the funds, said a Finance Ministry spokesman. Approvals related to sovereign debt became more rigorous in Mozambique after the International Monetary Fund in 2016 discovered the government had failed to declare \$1.2 billion of loans. The government's debt profile probably made it difficult for ENH to raise money from the global markets, even with a sovereign guarantee for the debt, said Darias Jonker, Africa Director at Eurasia Group.

State of Oregon criticizes draft federal EIS for LNG project

(The Oregonian; July 9) - State regulators sharply criticized a federal environmental analysis that supports construction of a proposed \$10 billion liquefied natural gas export project in Coos Bay and feeder pipeline that would stretch across much of southern Oregon. July 5 was the final day of public comment for the federal draft environmental impact statement on the controversial project. The state submitted a nearly 250-page critique of the analysis of the Jordan Cove LNG terminal and pipeline.

Multiple state agencies said they had identified information gaps, analytical errors and other deficiencies in the analysis by staff at the Federal Energy Regulatory Commission. Their overall conclusion was that the study was insufficient to support the staff's conclusion that most of the project's environmental impacts could be reduced to "less-than-significant" levels through mitigation efforts.

The state Department of Environmental Quality disputed FERC staff's conclusion that the project would not result in significant impacts on water resources, calling it "inaccurate and inconsistent with DEQ's recent review of the project's impacts on state water quality." Calgary-based Pembina Pipeline is proposing to build a processing and shipping terminal in Coos Bay to liquefy natural gas and export it to Asia. The terminal would be fed by a 229-mile, 36-inch diameter pipeline running from an interstate pipeline hub in Klamath County to the LNG terminal in Coos Bay.

Papua New Guinea review of LNG deal expected within weeks

(Australian Financial Review; July 9) - Papua New Guinea's new government will decide within weeks whether to amend a multibillion-dollar natural gas project agreement, said Petroleum Minister Kerenga Kua. In his first interview with the foreign media since being appointed to the ministry last month, Kua said the government review of the

Papua LNG agreement — a project led by France's Total — will be completed in two to three weeks.

Speculation over the project agreement increased in late May, when Prime Minister Peter O'Neill resigned under growing pressure. His replacement, James Marape, and Kua had both been critical of the proposed Papua LNG development agreement leading up to the change of government. Together with a separate expansion of the 5-year-old Papua New Guinea LNG project, led by ExxonMobil, the two developments could total \$12 billion to \$14 billion in investment in the Pacific nation.

Kua said the internal inquiry into the Papua LNG agreement is focusing on two areas, including “that the potential revenue for the state has been maximized in the agreement.” Kua is meeting with key executives from the companies involved in the project this week. After the government had made a decision on the gas deal, it would move to review the "entire legislative framework" for the mining and petroleum sector, he said. "There is a commonly held belief in this country that Papua New Guinea's people are not getting enough out of these massive resource investment projects.”

Protestors rally in Bangladesh over natural gas price increase

(Reuters; July 7) - Bangladesh's Left Democratic Alliance led a protest July 7 against the government's increase in the price of natural gas that took effect last week. Almost all the opposition parties, including the country's largest opposition Bangladesh Nationalist Party, supported the protest. Activists blocked key intersections in the capital city of Dhaka and disrupted transport. Police temporarily detained some protestors.

The state-run Bangladesh Energy Regulatory Commission last week raised gas prices by 32.8 percent on average for all users effective July 1, the first day of the country's fiscal year. Khalequzz Zaman, secretary general of the Bangladesh Socialist Party, said if the government does not withdraw the decision that will most hurt the poor, its members will besiege the Ministry of Power, Energy and Mineral Resources July 14.

The business community is also protesting the decision to raise the price of gas, a critical input for industry. Rubana Huq, president of the Bangladesh Garment Manufacturers and Exporters Association, said the price increase will add 1 percent to his industry's production cost. “This may not sound much in terms of percentage, but for an industry struggling for every penny this will be another blow,” she said. Garment manufacturing is the backbone of Bangladesh's economy.

Opponents file in court against Tacoma LNG permit

(The News Tribune; Tacoma, WA: July 9) – The liquefied natural gas production and storage facility under construction at the Port of Tacoma, Washington, has faced a steady stream of critics and the fight now is moving into court. Advocates for a Cleaner Tacoma (ACT) filed against the state Department of Ecology in Thurston County Superior Court on July 9, seeking a judicial review of the agency’s issuance of water quality certification for the \$310 million project.

Project opponents argued in their filing that the department violated state law by issuing the certification without a full analysis of the facility’s emissions and other environmental effects. ACT, a nonprofit, says it is “committed to preserving, protecting and improving the quality of the air, water and land of Tacoma and surrounding communities.” It has taken an active role in opposing the LNG project, which includes an 8-million-gallon storage tank.

In addition to providing fuel for TOTE Maritime’s Alaska cargo vessels, which will be converted to burn LNG, the Puget Sound Energy terminal will serve residential and commercial customers with gas reserves during peak demand during cold weather. Project opponents include neighboring residents, environmentalists, the Puyallup Tribe, and most recently Washington Gov. Jay Inslee.

Home prices up 53% in Kitimat, B.C., after LNG project decision

(Terrace Standard; British Columbia; July 9) - The average price of a single-family home in Kitimat and Terrace, British Columbia, has soared over the past year as the effects of the massive Shell-led LNG Canada project in Kitimat begin to take hold. As of June 30, the average price of a Kitimat house was C\$392,128 compared to \$256,128 a year ago, a 53 percent jump, while the average price of a Terrace house has climbed to \$386,494 from \$321,985 over the same period, a 20 percent boost.

The numbers are not surprising to Kitimat Re/Max realtor Graham Pitzel, noting there was a flurry in sales last October immediately following the announcement from LNG Canada that it would proceed with its C\$40 billion liquefied natural gas project. “The market has slowed down to a steady state now, there are still some sales but not as crazy as we saw late last year,” Pitzel said.

At the same time, he said, there are several subdivisions being developed in Terrace and the same is going on in Kitimat although the emphasis there is on multi-family builds. Property investors are also focusing on a hot rental market with some four- to five-bedroom homes fetching anywhere from \$5,000 to \$6,000 a month.

Australia warns leases are at risk if gas project is not developed

(Forbes contributor; July 9) - Some of the world's biggest oil companies, including Shell and an arm of the Chinese government-controlled PetroChina, are at risk of forfeiting their investment in a proposed \$20 billion liquefied natural gas development in Australia. Other companies with a stake in the Browse gas fields include Mitsubishi and Mitsui of Japan, BP, and Australia's biggest pure oil and gas company, Woodside Petroleum.

Discovered almost 50 years ago, the gas fields are in remote Indian Ocean waters off Australia's northwest coast. Despite containing an estimated 14 trillion cubic feet of gas and 390 million barrels of light crude, repeated development proposals have failed. The latest plan is to pipe the gas 560 miles to the existing North West Shelf LNG plant managed by Woodside with partners Chevron, BHP, Shell, BP, Mitsubishi, and Mitsui.

Different ownership structures at the two ends of the project is a problem: PetroChina is not a North West Shelf participant, while BHP and Chevron are not participants in the gas fields. Aligning the interests of the two groups has proved difficult for Woodside, the manager of both syndicates, and a source of increasing annoyance for the Australian government, which is keen to see the fields developed. Frustration with the delays has led to warnings from the agency in charge of oil and gas exploration and development that it's time to make a commitment or risk forfeiting the leases covering the gas fields.

FERC gives one-year extension for proposed offshore LNG project

(S&P Global Platts; July 8) - The Federal Energy Regulatory Commission on July 8 extended the authorization to build the onshore portion of the proposed deepwater Delfin LNG export project. FERC staff gave Delfin LNG a one-year extension to Sept. 28, 2020, to complete construction of the onshore facilities and put them into service. The Dallas-based developer had requested an extension of 3½ years.

FERC did not give a reason for choosing the shorter extension. Delfin LNG had described detailed engineering work and "the complexity of developing the necessary commercial arrangements" as the reasons why development has moved more slowly than expected. FERC's approval of the onshore facilities in September 2017 required Delfin LNG to make the facilities available for service within two years of the order, but in June the developer asked for an extension until March 28, 2023.

The onshore facilities would include metering, compression and piping infrastructure in Cameron Parish, Louisiana. The facilities would connect to floating vessels 50 miles off the coast of Louisiana that would liquefy gas for export. The project would include four floating liquefaction units capable of producing a total of 13 million tonnes per year of LNG. Delfin has secured major permits but has not signed up customers or made a

final investment decision. It would be the first such offshore liquefaction project in the U.S.

Qatar and Chevron Phillips look to build U.S. Gulf petrochemical plant

(Reuters; July 9) - Chevron Phillips Chemical and Qatar Petroleum signed an agreement July 9 to develop an \$8 billion petrochemical plant along the U.S. Gulf Coast, the second pact between the companies to build such plants in the past few weeks. The U.S. Gulf Coast II Petrochemical Project will include a 2-million-tonne-per-year ethylene cracker and two 1-million-tonne polyethylene units. The plant will mostly make hard plastics for everything from pill bottles to coolers to kayaks.

Chevron Phillips Chemical, a joint venture of Chevron and Phillips 66, will be the majority owner with a 51 percent share, with Qatar Petroleum at 49 percent. The companies expect a final investment decision no later than 2021 for the project, which has a target of starting in 2024. Mark Lashier, CEO of Chevron Phillips Chemical, said the plants would help fill demand for plastics from an expanding global middle class, which is expected to grow by 160 million people a year for at least the next decade.

Last month the companies announced they would build a petrochemical plant north of Doha in Ras Laffan Industrial City, Qatar, that will come online by 2025 and tap Qatar's North Field for natural gas feedstock. In February, Qatar Petroleum and ExxonMobil said they are investing in a \$10 billion project to build a liquefied natural gas plant in Texas, as companies race to meet global demand for the fuel.

Regulators say Cheniere cannot return LNG storage tanks to service

(Reuters; July 9) – U.S. energy and safety regulators told Cheniere Energy on July 9 that the company had to take several steps before the agencies would authorize the return to service of two liquefied natural gas storage tanks that leaked last year at the Sabine Pass LNG export terminal in Louisiana. The Pipeline and Hazardous Materials Safety Administration and Federal Energy Regulatory Commission told Cheniere that neither agency is prepared to authorize a return to service at this time.

Cheniere agreed in April 2018 to take certain corrective measures, but the agencies said in their filing that the company has “failed to comply” in some instances with requests to test equipment and provide documentation of the testing. PHMSA ordered Cheniere to shut two LNG storage tanks on Feb. 8, 2018, after plant workers on Jan. 22, 2018, discovered a 1- to 6-foot-long crack at one tank that leaked fuel into an outer layer. During the investigation of the Sabine site, PHMSA discovered a second tank had also experienced releases of LNG from the inner tank.

The agencies noted that PHMSA had previously conveyed its concern to Cheniere regarding premature filling of one tank with perlite, which is used to insulate LNG tanks. Some of the tasks the agencies said Cheniere would have to complete before allowing a return to service include a structural re-inspection of all LNG storage tanks at Sabine and installation of additional devices to detect leaks. There are five tanks at Sabine, each with the capacity to hold the equivalent of 3.4 billion cubic feet of gas as LNG.

Cheniere moves to complete second LNG train at Corpus Christi

(Houston Chronicle; July 10) - Houston's Cheniere Energy and engineering and construction firm Bechtel have completed the first commissioning cargo of liquefied natural gas at Cheniere's second liquefaction train in Corpus Christi as the project gets closer to starting up full commercial operations. Cheniere confirmed July 9 that the second train had produced enough LNG to produce a first commissioning cargo, an important milestone as the production unit prepares for full operations later this year.

The Corpus Christi LNG project made history last year when a carrier left the dock on Dec. 11, carrying the first LNG exports from Texas. The terminal's third liquefaction unit is scheduled for completion in 2021. The three trains will bring the project to its full capacity of 13.5 million tonnes per year. Corpus Christi is Cheniere's second Gulf Coast LNG terminal. It started deliveries from its Sabine Pass, Louisiana, terminal in 2016.

Oversupply of U.S. propane drives price as low as 48 cents a gallon

(Wall Street Journal; July 9) – Oil and gas prices have had bad years, but neither can hold a candle to propane, which has lost half its value in the past 12 months. U.S. propane output has surged while domestic demand has been relatively flat and export terminals are overwhelmed. The price decline has been felt by producers but enjoyed by chemical manufacturers that use propane as a feedstock. If the trend holds, households heated with propane and farmers who use it to dry crops could see lower bills this autumn.

Propane recently traded for about 48 cents a gallon at the main U.S. trading hub in Mont Belvieu, Texas. The price was nearly a dollar this time a year ago. Retail propane prices, which are higher than those on commodity exchanges, vary throughout the country. In New York, they have fallen steadily since mid-March to \$2.829 a gallon. U.S. production last month hit a record at more than 2.1 million barrels a day, roughly double the volume produced in 2011, according to the U.S. Energy Information Administration.

The flood of propane is thanks to the shale boom. The fuel is a byproduct of drilling for oil and gas as well as refining crude. Wells drilled in the Permian Basin in West Texas are particularly prolific, spitting out as much as six gallons of propane for every 1,000 cubic feet of gas, said Matthew Taylor, a pipeline analyst for investment bank Tudor, Pickering, Holt & Co. Domestic demand hasn't kept pace with supply, so producers have been forced to deliver their output to foreign markets. The U.S. became a net exporter of propane in 2014 and is now the largest global supplier by far, according to the EIA. Exports reached a high in April, when 1.108 million barrels were sold abroad.

No easy answer to measuring methane emissions from leaks

(Financial Times; London; July 7) - Boom times for U.S. oil and gas have shone a new spotlight on an old problem: leaks of methane, a powerful greenhouse gas. Persistent leakage undercuts the claim that gas helps economies shift away from more polluting energy sources. While U.S. energy-related carbon dioxide emissions have declined as gas displaces coal at power plants, methane emitted by the oil and gas sectors has not.

As the energy industry and regulators attempt to rein in methane emissions at wells, pipes and processing plants, they are grappling over the best ways to measure them. The most notorious recent leak took place over four months in 2015-2016, when 5 billion cubic feet of gas seeped from underground storage in Los Angeles. But many leaks of the colorless, odorless gas are dispersed and sporadic and evade detection.

The U.S. Environmental Protection Agency estimates emissions at individual sites and then extrapolates the data to the entire country — a method with limitations, according to a 2018 government-sponsored study. Another approach uses sensors on aircraft, satellites and towers to estimate methane in the atmosphere. But the network of sites is sparse, according to the same 2018 study, and it can be difficult to trace emissions' sources. Another option is optical-imaging cameras that detect traces of gas. They can be mounted on drones, reducing the cost of visiting far-flung well sites.

Saudis award \$18 billion in contracts to boost oil capacity

(Bloomberg; July 9) - Saudi Aramco, the world's largest crude exporter, has awarded \$18 billion in contracts to boost output capacity at two offshore oil fields even as the kingdom and its OPEC partners restrict current production. Saudi Arabia's state oil company will add a combined 550,000 barrels a day of production capacity at its Marjan and Berri fields, it said July 9. It will raise capacity for natural gas output by 2.5 billion cubic feet a day. Aramco awarded 34 contracts, with half of them going to Saudi firms.

The statement did not specify when the Marjan or Berri projects would be completed. Aramco, known officially as Saudi Arabian Oil Co., plans to bring about 1 million barrels

a day of additional oil capacity online by 2023 in order to compensate for reductions at other fields. Aramco plans to maintain production capacity of 12 million barrels a day even though it regularly pumps about 10 million barrels daily.

Saudi Arabia, with the world's biggest reserves of conventional crude, has long drawn on its prolific deposits to help balance global markets. It seeks to keep some spare capacity ready and available in order to respond quickly to shortages. The Organization of Petroleum Exporting Countries and allies including Russia agreed this month to extend production cuts into 2020 to try to prop up prices amid surging U.S. supplies.