# Oil and Gas News Briefs Compiled by Larry Persily July 16, 2018

### Exxon boosts size of Mozambique LNG; plans decision in 2019

(Bloomberg; July 12) - ExxonMobil will expand its proposed Rovuma liquefied natural gas project in Mozambique to cut production costs as the partners prepare to book the plant's gas supply and formally tap lenders this fall, the company said. Exxon took charge of the project's onshore operations after a \$2.8 billion deal with Italy's Eni last year, adding to its LNG ventures in Qatar, Papua New Guinea, Russia, and the U.S.

Exxon now aims to build the world's biggest liquefaction units — outside of those in Qatar — in Mozambique's remote north, shelving former operator Eni's more modest blueprint in pursuit of cost savings to boost returns on investment. "The larger train design will lower the unit cost of the Rovuma LNG project and ensure a competitive new supply for the global LNG market," Exxon spokeswoman Julie King said.

Under plans submitted to the government this week, Exxon's first two liquefaction trains would each produce 7.6 million tonnes per year, with a 2024 start-up. Eni had planned 5-million-tonne units. Offshore Area 4 holds 85 trillion cubic feet of gas. Exxon's move to super-size the trains meant it had to renegotiate a resource-sharing deal Eni struck in 2015 with rival LNG developer Anadarko, which owns the neighboring Area 1 license, sources said. A geologically porous section of Area 4 straddles Area 1. The companies negotiated a new operating plan, which was presented to the government for approval.

The two projects plan to take final investment decisions in 2019. Anadarko plans to raise \$14 billion to \$15 billion from banks and export credit agencies as it lines up long-term sales deals with buyers in China, Asia and Europe to guarantee the loans. Exxon will finance a larger share of costs from its own pockets as well as drawing on project partners, including Eni, Korea Gas, and China National Petroleum Corp., sources said.

# FERC asks help in dealing with backlog of LNG project reviews

(Bloomberg; July 12) - Federal approval of projects to export U.S. natural gas could be delayed by 18 months as the top energy regulator struggles with a backlog of permit requests, according to people familiar with the issue. The Federal Energy Regulatory Commission is notifying some developers of multibillion-dollar liquefied natural gas plants of a 12- to 18-month delay in environmental reviews, the sources said. That could affect the commercial viability of several ventures vying for a spot in the global market.

FERC Chairman Kevin McIntyre is keen to hire private contractors for the first time to help work through LNG reviews. Two weeks ago the agency sent letters to nine LNG developers requesting they "consider providing a third-party contractor to assist" FERC staff in their reviews — specifically to evaluate fire-safety protections. The Alaska Gasline Development Corp. received one of the letters. FERC is scheduled to release the Alaska project's draft environmental impact statement in March 2019.

The surge in applications for new export projects is testament to the American shale-gas boom. The U.S. has two major LNG export facilities in operation today, with four more set to start up by the end of 2019. Another four have received all of their major regulatory permits and are awaiting the final go-ahead from their developers. More than a dozen others are seeking FERC approval.

Paul Varello, president of Commonwealth LNG, which wants to build an LNG terminal in Louisiana, has pressed FERC to broaden the contractor plan and find ways to speed up reviews. "They know they have an issue and need to find a way to fix it," he said. On July 11, FERC Commissioner Neil Chatterjee took to Twitter to offer possible solutions, including increasing pay for staffers in a bid to retain them or opening a Houston office.

### **China expands gas storage capacity**

(Platts; July 13) - The expansion of underground gas storage in northeast China could ease distribution bottlenecks for the country's winter demand centers and help stabilize seasonal demand and price fluctuations in Asian LNG markets. China's growing LNG consumption, driven by coal-to-gas conversion and the nation's industrial recovery, has tightened Asian LNG fundamentals, with the Platts marker averaging \$9 per million Btu in first-half 2018, up from \$6.30 a year ago but down from January's high of \$11.70.

The country's biggest underground gas storage is being built by a subsidiary of state-owned China National Petroleum Corp., on the bank of Bohai Bay, a strategic location and home to a gas pipeline network that connects China's heavily industrialized neighboring regions of Beijing, Tianjin, and Hebei province, local media reported July 11. The underground gas storage being built at the Liaohe oil field will have total capacity of 700 billion cubic feet of natural gas. That's nearly half of China's existing gas storage capacity across more than two dozen sites.

Liaohe Oil Field Co. built China's first large-scale underground gas storage depository, Shuang 6, by using its abandoned gas field at Panjin in the northeastern Liaoning province. Liaohe oil field has 28 abandoned gas reservoirs with proven gas storage capacity, said Shi Zhongren, a company executive in charge of storage. China has accelerated the construction of underground gas storage facilities near major cities and beside major gas pipelines.

### Service companies optimistic Shell-led LNG Canada will go ahead

(World Oil; July 12) - The prospects for a massive gas export plant on Canada's Pacific Coast are looking bright, according to executives of service companies that would have a hand in supporting the development. LNG Canada, the Shell-led group that is considering building a C\$40 billion liquefied natural gas terminal in Kitimat, B.C., is giving every indication that it's planning to approve the project, the service company executives said at a panel in Calgary on July 11.

"All the actions that they're doing, including (Malaysia's) Petronas buying into the plant, and the contracts and everything else that they're doing, really indicate they're very close," said Dale Dusterhoft, CEO of Trican Well Service. "They're just going through the list and ticking all the boxes." Dusterhoft said his company would likely see increased demand for its pressure-pumping rigs if the project is built and drillers need to increase gas production to supply the export project.

Those views were echoed by Horizon North Logistics Chief Financial Officer Scott Matson, whose company would build the worker camps for construction and plant operations. "If you think back three, four years ago when we all had LNG euphoria, that there was a slew of projects ahead of us, we certainly didn't see any boxes being ticked to the same degree they are today," Matson said. "Our view is that the flag in the ground was Petronas buying in. We have a hard time believing they would spend an ounce of time, energy or a dollar unless they had a clean line of sight to the project going ahead."

### LNG a contentious issue for B.C. governing coalition

(The Globe and Mail; Canada; July 13) - Over the past year, B.C.'s Green Party has voted in lockstep with the New Democratic Party on every piece of legislation that has come into effect: 50 bills over two sessions. Despite Green Party Leader Andrew Weaver's occasional criticism of his governing partner, no Green Party lawmaker has ever voted against a New Democratic Party bill. That record reflects the pact reached last year between the two parties that allowed the NDP to be sworn into government.

But the agreement could face its toughest challenge yet in the coming months when differences between the two parties over liquefied natural gas come into sharper focus. Those differences will be an opportunity for the anti-fossil fuel Greens to demonstrate their clout and their independence as part of the governing arrangement. "LNG will be a test," said Michael Prince, a professor of social policy at the University of Victoria.

As part of the deal for last year's coalition, the Greens are to be consulted on policy. Differences on LNG have been one of the most contentious issues. "LNG is a sticking point," said Sonia Furstenau, a Green Party lawmaker. "We have indicated that we don't support their [NDP] proposed tax break regime for LNG. We don't think that

increasing subsidies for the fossil fuel industry is the direction any government should be going," she said. The two parties are talking about possible solutions to the LNG standoff.

### Housing market heats up as Kitimat, B.C., awaits LNG decision

(CBC News; Canada; July 11) - With fewer than 50 houses on the market — most of them with offers from buyers — there's a buzz in Kitimat real estate, but real estate agent Shannon Dos Santos said there's an eerie silence on precisely who is shopping in the British Columbia coastal city. "Very, very quiet with what they say. We know where they could be coming from and what they could potentially be coming for, but there is not a lot of chatter," she said. "I find it almost eerily quiet."

Dos Santos said the potential buyers are looking for high-end homes as an investment decision is pending on the Shell-led multibillion-dollar liquefied natural gas project in Kitimat. "There are a lot of top-notch people coming in and sitting and inquiring and not necessarily going out and looking at the inventory, just getting an idea of the lay of the land and where potential developments might be and price points, where they are."

The Shell-led consortium is expected to make a final investment decision later this year. Last week, Houston-based Civeo Corp. was awarded contracts to supply temporary work camps at four locations along the proposed gas pipeline from Dawson Creek, B.C., to the west coast, on the condition that the LNG Canada terminal is built. Analysts saw this as a sign that the project is headed toward a positive investment decision.

# **OPEC president advises Canada to invest in pipelines**

(Reuters; July 10) - The president of OPEC urged Canada on July 10 to invest in more infrastructure to move oil and gas, or risk watching investment flow to the United States. "If you don't have the major infrastructure, investors are going to go to your neighbor, where infrastructure is not an issue," said OPEC President Suhail al-Mazrouei. "Act and act quickly if you want to retain those investors. I am being frank because I want to be a true friend to the Canadians. ... I don't want them to lose opportunities."

Insufficient oil pipeline capacity has deepened the discount that Canada's heavy crude has to accept from U.S. refiners. The Canadian government agreed in May to buy the Trans Mountain oil pipeline and its expansion project from Kinder Morgan for C\$4.5 billion (US\$3.4 billion), highlighting the lengths deemed necessary in Canada to overcome stiff local and environmental opposition to such projects. The government will finish the expansion project and then look to sell the line.

Mazrouei was speaking in Calgary at an investor conference. Mazrouei, the United Arab Emirates' energy minister, also singled out Canada's low-priced natural gas. Much of it is produced in landlocked Alberta, and the country lacks a liquefied natural gas export project to get the gas to market. "The solution is LNG and pipelines to export that natural gas," Mazrouei said. "If you provide optionality for the gas, it's going to fix itself."

#### Report says Canadian LNG could be too costly for market

(Natural Gas Intelligence; July 13) - Formidable cost obstacles confront British Columbia's plans to break into global liquefied natural gas markets, while export proposals in Nova Scotia face even higher hurdles, according to the Canadian Energy Research Institute. Supply costs exceed Asian and European spot market prices, a CERI study released July 12 said. The Competitive Analysis of Canadian LNG offers a sobering 125-page statistical look at projects on the northern Pacific and Atlantic coasts.

CERI, an industry and government-supported independent agency, painted its Canadian LNG portrait with economic modeling. No inside knowledge is revealed about projects that have aroused B.C. and Alberta industry optimism. In CERI's model as of May, the cost of landing LNG from B.C. and Alberta tight gas and shale formations on the spot market in Japan would have been US\$8.35 per million Btu — about US80 cents more than the going price at the time.

Export projects on the East Coast would sink far deeper into the red because bans against tapping unconventional gas with horizontal drilling and hydraulic fracturing in Nova Scotia, New Brunswick, and Quebec eliminate potential nearby supplies, CERI said. The bans force the Atlantic projects to rely on gas from B.C., Alberta, and the U.S. via long, roundabout delivery paths through multiple pipelines. As of this spring, costs of LNG made in Nova Scotia from Western Canada or the Marcellus Shale gas would have topped US\$11, exceeding the European benchmark by about \$4, CERI estimated.

Long-term LNG contract prices are not much more forgiving. The industry standard index has become leaner because growing LNG supplies have enabled buyers to cut the cost of 1 million Btu of gas to 11.5 percent of a barrel of oil, down from 14.5 percent. "Western Canada LNG will need an oil price of approximately US\$80 per barrel or more over the life of the project to break even under long-term contracts," researchers said.

# Gazprom announces large Arctic gas development

(The Barents Observer; Norway; July 13) - More natural gas from the Yamal Peninsula will be piped toward European buyers as Gazprom starts development of Kharasavey, one of the company's biggest Arctic fields. The decision to develop the field was taken

during Gazprom CEO Aleksey Miller's visit to the Yamal-Nenets region this week. The company said field development and pipeline construction work would start in 2019 and be completed in 2023.

The Kharasavey field holds about 70 trillion cubic feet of gas, and production could reach 3 billion cubic feet per day. Parts of the field are located offshore in the Kara Sea. Preparations are underway and housing quarters for project workers are already on site in Bovanenkovo, Gazprom said. A total of 1.5 million tons of construction materials will be shipped to the site, with summer deliveries by ship and winter cargoes by rail.

When the new fields is in operation after 2023, Gazprom's total gas production in the Yamal Peninsula will average about 14.5 bcf a day, with everything going out westbound by pipe. Kharasavey has long been planned to be next in line of Gazprom's projects in the region, but development has repeatedly been postponed.

### Financing troubles delay small LNG project in Equatorial Guinea

(Platts; July 12) – U.K.-based Ophir Energy has opted to defer the start of capital spending for its planned Fortuna floating LNG export facility offshore Equatorial Guinea to 2019, the company said July 12. The \$2 billion project would produce 2.2 million tonnes of LNG per year. In a trading update, Ophir said company capital spending for 2018 had been reduced, "predominately with the deferral of Fortuna spend to 2019," signaling further delays to the project.

Fortuna LNG had been widely expected to progress to a final investment decision as early as 2016, but difficulties in securing financing have seen the decision repeatedly delayed, including failed plans to obtain financing from Chinese banks. Equatorial Guinea's Energy Minister Gabriel Obiang Lima in late May warned Ophir that time was "running out" to reach an investment decision. Ophir interim CEO Alan Booth said July 12 the company was "especially conscious" that its license expires at the end of 2018.

The project was dealt another major blow in May when U.S.-based oil field services giant Schlumberger walked away from its role in Fortuna LNG. Ophir said talks continue with potential lenders. "We are in active discussions to secure a partner and the status of the financing and timing of FID will become clear in the coming months." Ophir had hoped to produce first gas in 2022, but that timeline is now likely to slip further.

# **Heavy Chinese demand for coal drives up prices**

(CNBC; July 11) - The commodities sector has been hit by escalating global trade tensions, but coal is bucking that trend as China's demand for the fuel remains high.

Australian thermal coal prices have risen 40 percent this year so far, breaking through \$120 per metric ton for the first time since 2012. "We think the jump in the coal price has been a response to an unusually hot summer in China (more power needed for air conditioning) and solid economic growth in the first half of the year," said Caroline Bain, chief commodities economist at consultancy, Capital Economics.

The heatwave also dried up water reservoirs, hitting hydroelectricity output — a major source of renewable energy in China. Contributing to the coal supply crunch is a broad decline in domestic coal production in recent years due to the China's attempts to clean up its environment. All those factors contribute to greater demand for imported coal. Environmentalists are campaigning to end the use of coal — generally dirtier than other fuel sources such as natural gas — but demand for the commodity has held out so far.

That's even been true in China, where the government is rushing to clean up politically sensitive air pollution. BP said in its annual Statistical Review of World Energy that the share of coal used in power generation is 38 percent — practically unchanged from 1997. In China capacity for renewable energy and cleaner fuel like gas has not caught up with demand growth, particularly as hydropower plants have to wind down output due to weather conditions and gas infrastructure is not ready to take the demand load.

### **LNG** trading grows more transparent as market evolves

(Reuters; July 11) - Long dominated by deals struck in secret, the \$230 billion liquefied natural gas industry is slowly seeing light as traders push for more transparency in the booming market. Over the past two months, commodity price agency S&P Global Platts and Australia-based LNG trading marketplace Global LNG Exchange facilitated the first transparent physical trades in their platforms. It was the first time since Platts kicked off its Asian LNG price assessment that it has disclosed parties of a physical trade.

Pricing transparency is critical to boost liquidity in commodity markets but is often tough to do, particularly in cash contracts with participants wary about exposing trading positions. LNG producers prefer fixed, long-term contracts because they provide steady revenues needed to fund multibillion-dollar projects. But the trading landscape is slowly changing, as more market participants push for transparency and Japan's JERA, the world's biggest LNG buyer, and leading merchants like Vitol expand their trading desks.

Platts started publishing a daily Asian LNG price assessment in 2009. For the first time, it published last week the counterparties of one LNG trade for its pricing process. Perth-headquartered Global LNG Exchange, an online platform for physical cargoes launched in April 2017, has seen its members more than double to 44 from last December, most of them from Asia. On Tuesday CME Group said it will develop the first physically deliverable U.S. LNG futures contract on its New York Mercantile Exchange.

#### Former BP CEO reaffirms support for carbon tax

(Bloomberg column by John Browne; July 11) - Last month, Pope Francis hosted the chief executives of many of the biggest oil and gas companies, investors overseeing nearly \$10 trillion of capital, and many of the energy sector's leading thinkers and policy makers. We met to discuss ways of reducing climate-changing emissions of carbon dioxide and methane. The talks were marked by humility and pragmatic optimism.

It is premature to discount the ability of oil and gas companies to adapt. When I took over as CEO of BP in 1995 (through 2007), the industry invested almost nothing in renewable energy. Today the supermajors allocate more than \$4 billion a year to low-or zero-carbon energy. These giants have the resources to make large commitments. If they can redirect their organizations toward a new lower-carbon purpose, there is every reason to believe they can be active participants or even drivers of the energy transition.

To transform the pace and scale of investment, I have long advocated for a global price on carbon, most likely in the form of a consumption tax. This levy would need to be high enough to encourage the shift toward lower-carbon energy sources on the supply side, and to drive adoption and improvement of efficiency measures on the demand side. So far no pricing proposal has been able to achieve those goals. Implementation of a carbon tax without exemptions, and with measures to penalize countries that do not comply, will require courage and determination to face down vested interests.

# Gas company plans \$250 million peak-demand LNG plant in N.C.

(Duke Energy news; July 13) - Piedmont Natural Gas on July 13 announced plans to build and operate a \$250 million natural gas liquefaction and storage terminal in Robeson County, N.C., to provide gas during peak-use days. Piedmont is a subsidiary of Duke Energy.

The facility will include a storage tank with capacity to hold more than 800,000 gallons of LNG, equal to about 1 billion cubic feet of natural gas. Construction is expected to begin in the summer of 2019 with an estimated completion date in the summer of 2021. It will be the fourth such LNG peak-demand facility Piedmont owns and operates. The others are in Nashville, Tenn., Bentonville, N.C., and Huntersville, N.C.