

# **Oil and Gas News Briefs**

## **Compiled by Larry Persily**

### **July 20, 2017**

#### **U.S. LNG exporters could lose money for years, analysts say**

(Bloomberg; July 18) - Plans for more U.S. liquefied natural gas exports have multiplied as a global supply glut has developed, raising the prospect that some exporters may lose money for several years. Analysts say the surplus also increases the likelihood that some contracts could be renegotiated, some projects may be delayed long enough to get past the oversupply period, and some plans may never come to fruition at all.

Fast growth in global LNG demand should eliminate the surplus in five or six years, so there could be reason to delay projects and become part of the next supply wave, analysts told Bloomberg. But until then, markets — rather than lawmakers, regulators or activists — will pose obstacles to profitable exports. "Margins are going to be squeezed for years," said Kenneth Grant, of Compass Lexecon, a subsidiary of FTI Consulting.

About 70 percent of global LNG is consumed in Asia where, currently, spot-market prices are about \$5.50 per million Btu. LNG from the U.S. delivered to Asia, however, costs \$8 to \$9, taking into account the cost of the gas, liquefaction and transportation. "Buying LNG at these prices is a guarantee of losing money," said Fereidun Fesharaki, chairman of global energy consultancy FGE.

While several U.S. projects are under construction, U.S. LNG is only being shipped from Cheniere Energy's plant in Louisiana, and customers are struggling over price. GAIL (India), one of the customers, reportedly wants to renegotiate its contract. The pressure for renegotiations may build as top LNG traders see the growing risk of losses. Some buyers, Fesharaki said, especially the national oil companies of some LNG-consuming countries, may walk away from deals and trigger legal battles if they can't renegotiate.

#### **Price competition holding back Canada's LNG export hopes**

(CBC News Canada; July 19) - A report from the National Energy Board calls Canada a "late entrant" to the global liquefied natural gas market, and says the next several years will be critical to development of any of the export projects proposed for Canada's Pacific and Atlantic coasts. The report looked at changing global LNG market dynamics, including low prices and fierce competition for buyers, acknowledging that Canada produces more natural gas than it needs to meet domestic demand.

While the U.S. had previously been a market for surplus Canadian gas, demand for Canadian exports has dwindled as American shale gas production has increased. Mark

Jaccard, an energy economist with Simon Fraser University in British Columbia, said the failure of Canada's LNG export industry to get started has little to do with timing. "It isn't a question of timing, it's a question of who is cheaper," he said. "You can try to take credit for something, but the markets are really going to determine what happens."

Jaccard said that when former B.C. Premier Christy Clark first began pitching LNG projects in 2013, prices in Japan were \$12 per million Btu — triple the price for gas in North America. But as the number of cheap energy options for Asia increased, those competitive Canadian prices proved short-lived — a fact that Jaccard said many energy economists had predicted at the time. "You have a lot of options for natural gas ... and it's still the case today," he said. "Whether you'd gone in any earlier, you'd still be relatively uncompetitive compared to a whole bunch of options for East Asia."

### **Novatek selects contractors for second Russian LNG project**

(Reuters; July 17) - Russian gas producer Novatek is expected to select Italy's Saipem to build offshore platforms for its second liquefied natural gas facility in the Arctic, four sources said. Novatek is drawing up plans to build the plant, known as Arctic LNG 2, on the Gydan Peninsula that juts into the Kara Sea. It would be just east of the Yamal Peninsula, where Novatek and its French and Chinese partners are building a \$27 billion LNG export project, which is scheduled to go online late this year.

"(Saipem) is expected to become a subcontracting party for the Technip-Linde-NIPIGas consortium," a source said. TechnipFMC is an international energy industry contractor based in Paris, London and Houston. Linde is a German industrial gas company. NIPIGas is the Russian Research and Design Institute for Gas Processing. A source familiar with the details confirmed that Saipem was expected to work as a subcontractor to build the liquefaction units, which will be installed atop massive gravity-based concrete platforms near the coast held in place on the seabed with ballast.

In May, Novatek signed an agreement with Technip, Linde and NIPIGas to design and develop the facilities for Arctic LNG 2. The fact that Novatek has chosen four main contractors suggests it is serious about the project, which is expected to start operating in the early 2020s. One source said Novatek would start drilling its first exploratory gas wells in 2018. Sources said Novatek could build the structures offsite and deliver them to the Gydan Peninsula at a lower cost than its on-site construction at Yamal.

### **Partners cancel plan for new gas-fired power plants in Japan**

(LNG World News; July 18) - Japan's biggest city gas supplier and LNG importer, Tokyo Gas, and the country's largest oil exploration company, JXTG Nippon Oil & Energy Corp., have cancelled a plan to build two additional natural gas-fired power units at their

jointly operated Kawasaki power plant. The two companies submitted the plan back in 2015 to add the two generators with a capacity of 550 megawatts each, with a planned start-up in 2021.

The two gas-fired generators currently operating at the Kawasaki site between Tokyo and Yokohama produce about 840 megawatts of electricity in total. The companies said in a joint statement July 14 that they have decided to cancel the expansion plans due to a lack of economic feasibility amid growing competition after the liberalization of Japan's retail power market in April last year.

JXTG has a 51 percent stake in the joint venture, while the Tokyo Gas share is 49 percent. In addition to its global oil and gas interests, JXTG is an import and refining company and manufactures and sells petroleum products

### **Exxon drops plans to develop 46 tcf gas field offshore Indonesia**

(Reuters; July 17) - The Indonesian unit of ExxonMobil on July 18 said it "no longer wishes to continue further discussions or activity" involving the country's East Natuna natural gas block, believed to hold one of the world's largest reserves of untapped gas. The firm's vice president of public and government affairs Erwin Maryoto said the decision was taken after completing a "technology and market review." Exxon's exit likely means further delays in developing a field that was first discovered in the 1970s.

Difficulties with the field have included contract disputes and the remoteness of the block, which is on the southern edge of the South China Sea. The East Natuna field holds approximately 46 trillion cubic feet of recoverable gas resources, according to Exxon, although it comes with a carbon dioxide content of more than 70 percent — which increases the cost of extracting usable fuel.

State energy firm Pertamina had expected to sign a production-sharing contract with Exxon and Thailand's PTTEP for the project last year. In its letter to the Indonesian government, Exxon said developing the block would be "uneconomical for the company under current terms," said Wiratmaja Puja, director general of oil and gas at the energy ministry. Developing the project under current terms would make its gas too expensive, at about \$10 to \$15 per million Btu, Puja estimated. In the past, Pertamina has said that developing the East Natuna project could cost up to \$40 billion.

### **China invests heavily in wind and coal power plants in Pakistan**

(Reuters; July 17) - Pakistan is beginning to reap the benefits of Chinese investment in its renewable energy infrastructure, with the opening of the first wind power project built as part of the huge China-Pakistan Economic Corridor that is aimed at overhauling the

country's transport and energy systems. The nearly 50-megawatt wind farm is located on more than 680 acres of land in Jhimpir, near the shores of the picturesque Keenjhar Lake, about two hours drive from the city of Karachi.

Jhimpir is part of the Gharo-Jhimpir Wind Corridor in Sindh province, a 110-mile stretch of coastal land that the Pakistan Meteorological Department says has the potential to produce 11,000 megawatts of electricity through wind power. The corridor is home to Pakistan's earliest wind project, which began in 2009 with just a few turbines and was upgraded to 56 megawatts by 2012. The new wind farm, which opened last month, was developed with financing from the Industrial and Commercial Bank of China.

Pakistan and China have signed about \$57 billion of energy and infrastructure projects under the China-Pakistan Economic Corridor. Most of this investment is going toward coal-fired power plants — including the 1,320-megawatt Sahiwal plant in Punjab that started up this month — fueled by imported coal and by coal mines in Pakistan's Thar Desert. The China-Pakistan pact aims to boost energy production in Pakistan to reduce shortages that lead to regular power outages.

### **Big Oil starts to wonder if natural gas demand will peak**

(Bloomberg; July 17) - Talk to a Big Oil executive these days, and chances are they'll steer the conversation toward natural gas. "In 20 years, we will not be known as oil and gas companies, but as gas and oil companies," Patrick Pouyanne, CEO of French giant Total, told a conference in Russia last month. Pouyanne and his peers have pitched gas as a bridge between a fossil-fuel past and a carbon-free future. Gas emits less pollution than oil and can be burned to produce the power that will be needed for electric cars.

But with the cost of renewable technologies falling sharply, some are warning that the outlook may not be so rosy. Forecasters are beginning to talk about peak gas demand, spurred by the growth of alternative power supplies, in the same breath as peak oil demand, caused by the gradual demise of the internal combustion engine. In a long-term outlook published last month, Bloomberg New Energy Finance predicted that gas market share in global power generation will drop from 23 percent in 2016 to 16 percent by 2040, and that gas-fired power generation capacity will start to decline after 2031.

"Wind and solar are just getting too cheap, too fast" for gas to play a transitional role, said Seb Henbest, lead author of the Bloomberg report. BP has highlighted "risks to gas demand" as a key uncertainty, including the possibility that consumption plateaus by 2035, "squeezed out by non-fossil fuels." The gas industry, based on multibillion-dollar pipelines and LNG export plants, has decades-long investment cycles and decisions made today rely on rising demand until the middle of the century. The energy transition is "fundamentally a force that cannot be stopped," Shell CEO Ben van

Beurden said last month. “It is both policy and public sentiment, but also technology that is driving it.”

## **China looks to Arctic for resource riches**

(Newsweek; July 14) - China wants resources to support its growing population, and the Arctic, with its untapped potential, offers opportunities to mine natural resources. China’s lack of geographical presence in the Arctic has not stopped it from laying out its Belt and Road Initiative, a massive infrastructure project encompassing 60 countries and designed to boost the global economy and link China with the world by sea, land and rail. Now the rest of the world knows that China is staking a claim on the Arctic.

The Arctic is one of the most resource-rich regions in the world. Oil, gas and ores are all available for the taking, and not all countries give their word to international treaties. Up to 20 percent of the Earth’s resource reserves can be found in the Arctic, and it’s one of the world’s least-populated areas — just 4 million people live above the Arctic Circle. The Arctic is the 21st century’s equivalent of the Wild West.

As scientific expeditions reveal how many resources can be found, competition is heating up and China is throwing itself into the race to the North. President Xi Jinping’s trips to Finland, Alaska and Iceland in May are no coincidence, said Damien Degeorges, an Arctic consultant. China has been interested in the Arctic since the 1990s. “They’ve expressed interest … in oil, gas, fishing and shortened shipping routes,” said Mark Eades, of the Foreign Policy Institute in Washington D.C.

## **Canadian LNG coming to India, says oil and gas minister**

(Calgary Herald; July 18) - At a recent groundbreaking ceremony for construction of a liquefied natural gas import terminal on India’s East Coast, that country’s oil and gas minister said Canada would be a source of the facility’s LNG. The announcement comes amid long-standing frustrations for those who want to see Canadian gas reach new international markets with an LNG export industry.

Jeremy McCrea, an analyst with Raymond James, called the signal a “slightly encouraging sign” for proposed exports from British Columbia. The state-owned Indian Oil Corp. and two partners are building the terminal at India’s Dhamra port to bring in LNG from overseas markets. It would import up to 5 million tonnes of LNG a year — roughly the equivalent of 240 billion cubic feet of gas. Start-up is expected by 2021. Dharmendra Pradhan, India’s minister for oil and gas, said at the event that the terminal would import LNG from Qatar, the U.S., Iran and Canada. He didn’t name the Canadian project, but Indian Oil owns a 10 percent stake in Pacific Northwest LNG, a proposed terminal in British Columbia led by Malaysia’s Petronas. McCrea said

Petronas “doesn’t appear to have any immediate plans” to begin construction. Still, indications from India’s government that Canada will be a source of LNG is a “slightly encouraging sign that maybe the project has more life to it than more industry pundits would believe.”

## **Kansai Electric could start taking U.S. LNG by end of year**

(Nikkei Asian Review; July 19) - Kansai Electric will soon start using liquefied natural gas from the United States to generate electricity, diversifying its sources of the fuel as lingering nuclear reactor shutdowns force it to think longer term. Starting as early as the end of this year, Kansai Electric will purchase 800,000 tonnes of LNG per year from the Cove Point facility under construction in Maryland. The contract extends for 20 years. Next spring, the Japanese utility will begin buying 400,000 tonnes per year from a plant in Louisiana, also for a term of 20 years.

The 1.2 million tonnes equal more than 12 percent of Kansai Electric's total annual imports. About half of its LNG imports last year came from Australia. However, because of weak market conditions and its own uncertain needs, the utility may resell the U.S. gas to European energy companies. Contracts for its Australian and Middle Eastern purchases prohibit such resales, but its U.S. contracts include no such restrictions.

The liberalization of Japan's retail electricity market has fired up competition among power providers. Osaka-based Kansai Electric's sales fell to a 26-year low in fiscal 2016. Still, with no clear prospect of restarting some of its mainstay nuclear power plants, the utility is bracing itself for continued dependency on fossil fuels. Other Japanese utilities are also ramping up imports of U.S. shale gas, with contracts to take cargoes from plants in Louisiana, Texas and Maryland.

## **Partner expects Papua New Guinea LNG expansion plans ready by fall**

(Papua New Guinea Today; July 19) - Oil Search and its partners ExxonMobil and French giant Total are pushing to have their new plan to expand liquefied natural gas production in Papua New Guinea ready by October, when a new government should be in place. Oil Search said July 18 that Exxon, which operates the PNG LNG project and the P'nyang gas field, along with Total, which operates the Elk-Antelope project, have examined "various development concepts for the Elk-Antelope and P'nyang gas fields."

"Oil Search believes the most likely development is based on the construction of two LNG expansion trains at the PNG LNG plant site, thereby utilizing existing downstream infrastructure, using the existing gas resources in the Elk-Antelope and P'nyang fields," Oil Search CEO Peter Botten said. But with local and national elections in full swing in

Papua New Guinea, the partners will be working toward presenting their "aligned view" to the new government.

"We believe that LNG expansion will be a key focus for the new government, which will be seeking to see a development move forward in a timely manner," he said. Oil Search is the largest oil and gas exploration and development company in Papua New Guinea. The two-train LNG plant there started operations in 2014, with a nameplate capacity of 6.9 million tonnes per year — though it has exceeded that by 20 percent much of this year. In addition to Oil Search and Exxon, other partners are from Australia and Japan.

### **Qatar, Norwegian company team up on floating LNG import terminals**

(Reuters; July 19) - Qatar Gas Transport Co. and Norwegian shipping company Hoegh LNG have embarked on a joint project to open new markets for Qatar to sell its liquefied natural gas delivered to floating import terminals. Hoegh, a developer of floating LNG import terminals, expects to start work on the project in a matter of months, its CEO, Sveinung Stohle, told Reuters.

Stohle said Hoegh LNG and Qatar Gas Transport are evaluating countries in which they could establish a floating terminal. He named South America and Southeast Asia as attractive prospects. Qatar, the world's largest LNG producer, faces tough competition for global market share as new suppliers from Australia and the United States ramp up exports. With large supply deals with Japan expiring early in the next decade, Qatar will need to stimulate fresh demand for its LNG.

"The whole strategy behind this agreement is to find new markets," Stohle said. The floating receiving, storage and regasification units are useful for developing countries seeking access to cheap gas on tight budgets. Floating LNG terminals have shaved years off the time needed for new customers to access supply and are also cheaper than traditional land-based facilities. A total of 40 floating import terminal projects exist in varying stages of development across the globe.

### **Egypt wants to boost gas production and end LNG imports next year**

(Reuters; July 17) - Three recently discovered major gas fields are expected to raise Egypt's natural gas output by 50 percent in 2018 and 100 percent in 2020, the petroleum ministry said. "The fields of Zohr, North Alexandria and Nooros are among the most important projects that will increase natural gas production ... and will contribute to (Egypt's) natural gas self-sufficiency by the end of 2018," Petroleum Minister Tarek El Molla said in a statement, which set out the production forecasts.

Egypt's gas output rose to about 5.1 billion cubic feet per day in 2017 from 4.4 bcf in 2016 with the start of production from the first phase of BP's North Alexandria project. Egypt is seeking to speed up production from the recently discovered fields, with an eye to halting imports of liquefied natural gas by 2019. Once an exporter, Egypt has become an importer after domestic output failed to keep pace with rising demand. The country's two LNG export terminals stopped shipments by 2014, with imports starting in 2015.

The three large projects, which include the mammoth Zohr Mediterranean gas field discovered by Italy's Eni last year, are expected to collectively bring an additional 4.6 bcf of gas per day online by the start of 2019. Eni began production at Nooros, its Nile Delta offshore field, in September 2015. Egypt is in talks with its LNG suppliers to defer contracted shipments this year and aims to cut back on purchases in 2018, as surging domestic gas production pushes back demand for costly foreign imports.

### **Producer partners announce big investment in Argentine shale gas**

(Reuters; July 18) - Argentina's state-run oil firm YPF, France's Total, Argentina-based Wintershall Energía and BP unit Pan American Energy announced a \$1.15 billion joint investment July 18 to increase shale gas production in Argentina. The investment is the largest project-specific announcement since March in Vaca Muerta, one of the world's largest shale formations, as Argentine President Mauricio Macri's government tries to reduce reliance on gas imports that have strained the country's finances.

The provincial government in Neuquen, where Vaca Muerta is located, has agreed to split the Aguada Pichana area into two parts and is combining it with the Aguada de Castro area. Total will operate the eastern part of Aguada Pichana with a 41 percent stake, where 48 horizontal wells will be drilled through 2021. Pan American will operate the western part as well as Aguada de Castro with a 45 percent stake and plans to drill 24 horizontal wells. Vaca Muerta contains 308 trillion cubic feet of shale gas and 16.2 billion barrels of shale oil, according to the U.S. Energy Information Administration.

The investments will double gas production in the area to almost 160 million cubic feet per day, said Neuquen Gov. Omar Gutierrez. Pan American director Marcos Bulgheroni said lower logistics costs are still needed, but "development of Vaca Muerta is on a path of no return." The partners had already invested \$500 million between 2014 and 2016. In March, Argentina's Tecpetrol said it would invest \$2.3 billion in the Vaca Muerta shale fields through 2019, marking the biggest announcement for the formation in years.

## **India's largest LNG importer hopes pipeline will boost use of terminal**

(Bloomberg; July 18) – India's Petronet LNG sees a lifeline for its money-losing Kochi liquefied natural gas import terminal by 2019 if it can increase its use. The only LNG terminal in southern India is operating at about 10 percent of its capacity of 5 million tonnes a year, said Finance Director R.K. Garg. Use could quadruple to 2 million tonnes a year after a 683-mile gas pipeline, built by state-run utility GAIL India and connecting consumers such as Mangalore Refinery & Petrochemicals, is completed in late 2018.

"After the pipeline is completed, definitely there will be more demand," Garg said. The terminal has been mostly idle since its 2013 start-up as GAIL could not complete its Kochi-Mangalore pipeline because of resistance from land owners. GAIL restarted work after Prime Minister Narendra Modi's government, which aims to build almost 10,000 miles of new gas pipelines, prodded provincial governments to resolve the disputes.

The stranded plant has been a drag on Petronet's profits. The company is India's biggest importer of LNG. A fourfold jump in use would help make the terminal profitable, said Dhaval Joshi, an analyst with Emkay Global Financial Services.

## **LNG plant becomes a major issue in Tacoma city elections**

(Tacoma News Tribune; July 14) - In the first local election since President Donald Trump won a surprise victory last fall, candidates for office in Tacoma, Wash., are mounting campaigns that address national issues almost as much as they address local ones. A leading example in Tacoma: The \$310 million liquefied natural gas plant planned for the port. Plans for the facility have become a defining issue in city council and port commission races, thrust into the campaign discourse at almost every turn.

Tacoma's LNG issue is similar to national discussions of environmental opposition to shale gas produced with hydraulic fracturing, as well as recent high-profile protests of the Dakota Access oil line. The LNG plant is a local, and personal, concern for residents because of safety worries. In forums, on podcasts and at campaign events, candidates are asked again and again for their views on the gas liquefaction and storage plant — and whether they would try to stop it, despite the fact that construction is underway.

That the plant became an issue in the Aug. 1 primary should come as no surprise, said Bill Baarsma, a former mayor. What preceded the fervor was one of Tacoma's biggest political moments, he said: The fight against a methanol plant. Opponents sprang into action when a Chinese company came to the city with plans to build the world's biggest methanol plant. Amid the uproar, the project was canceled. "LNG and fossil fuels are top-of-mind issues," said Councilman Ryan Mello. "I think it's a proxy for folks' concern about climate, and it's the one tangible thing folks think they can influence locally, now."

## Proposed gas pipeline encounters opposition in Ohio

(GreenWire; July 17) - Promoters of the 255-mile Nexus gas pipeline say their project means "energy, jobs and a vibrant economy" as it pumps clean, cheap Appalachian gas to power plants in Ohio and Michigan that now burn coal. But for 74-year-old Tom West, the ballyhooed venture means heartbreak. The pipeline is expected to run through the former horse breeder's 5-acre property in northeastern Ohio, passing within 150 feet of the white Cape Cod house that he and his wife, Ruth, built more than 40 years ago.

"It's ruined our retirement," West said. "[My children] don't want to live on top of this pipeline. I don't want to live here." West lives on the border of Wayne and Medina counties — a Republican stronghold where President Trump romped in November. The \$2 billion pipeline that would move up to 1.5 billion cubic feet of gas per day is expected to be one of the first projects up for a Federal Energy Regulatory Commission vote after Trump's agency nominees are confirmed by the Senate.

Getting the project would be a big win for developers DTE Energy and pipeline company Enbridge. But West and others along the route worry about safety and property values. Many are fearful of losing their land to eminent domain. It's a political problem, just as much as it is a regulatory decision. "We're starting to build pipelines in places we haven't built them before," Republican strategist Mike McKenna said. "Eventually, we're going to bump up against the tea party guys, the right members of Congress, the right amount of pissed off. Until then, we'll keep muddling through."

## Questions increase as FERC continues to approve new gas pipelines

(National Public Radio; July 17) – They came one after another in 2015: plans for nearly a dozen interstate pipelines to move natural gas beneath rivers, mountains and people's yards. Like spokes on a wheel, they spread from Appalachia to markets in all directions. These new and expanded pipelines — comprising 2,500 miles of steel in all — would double the amount of gas that could flow out of Pennsylvania, Ohio and West Virginia. The cheap fuel will benefit consumers and manufacturers, the developers promise.

But some scientists warn that the rush to more fully tap the rich Marcellus and Utica shales is bad for a dangerously warming planet, extending the country's fossil-fuel habit by half a century. Industry consultants say there isn't even enough demand in the United States for all the gas that would come from this boost in production. And yet, five of the 11 pipelines already have been approved. The rest await a decision from the Federal Energy Regulatory Commission, which almost never says no.

FERC is charged with making sure new gas pipelines are in the public interest and have minimal impact. This is no small matter. Companies approved by FERC gain a

powerful tool: eminent domain, enabling them to proceed whether landowners agree or not. Only twice in the past 30 years has FERC rejected a pipeline out of hundreds proposed, according to an investigation by the Center for Public Integrity and StateImpact Pennsylvania, a partnership between NPR stations in Harrisburg and Philadelphia.