# Oil and Gas News Briefs Compiled by Larry Persily June 5, 2017

#### Eni confirms go-ahead for offshore Mozambique LNG project

(Reuters; June 1) - Italian energy company Eni signed an \$8 billion deal June 1 to develop a gas field off the coast of Mozambique, the first of a series of projects that could transform the poor African nation into a major energy supplier to Asia. Developing the Coral South field, discovered in May 2012 and operated by Eni, requires building six subsea wells connected to a floating facility capable of producing about 3.4 million tonnes of liquefied natural gas per year, Eni said. Exports are expected to start in 2022.

The Coral South field contains about 16 trillion cubic feet of gas. The field lies in the Rovuma Basin, with estimated reserves of about 85 tcf. Mozambican authorities approved the project's development plan in February 2016, and eight months later Eni signed a 20-year deal to supply BP with the project's entire LNG output. The floating LNG production platform will be built in South Korea by a consortium led by Samsung Heavy. The group includes France's Technip and Japan's JGC.

Partners in the development include China National Petroleum Corp., Korea Gas and Mozambique's state-run Empresa Nacional de Hidrocarbonetos. Eni said project finance [debt] would fund 60 percent of the cost of building the LNG facility. The financing agreement has been subscribed by 15 major international banks and guaranteed by five export credit agencies. U.S. firm Anadarko is planning its own separate onshore LNG project in northern Mozambique, also to be fed by the country's vast offshore reserves.

## Saudi-led move against Qatar will not affect LNG cargoes to Asia

(Bloomberg; June 5) - Qatar, the world's biggest seller of liquefied natural gas, can still access shipping routes to deliver oil and gas to buyers after Saudi Arabia and other neighboring states barred the emirate from exporting through their territorial waters. State producer Qatargas told Japan's JERA Co. that it would keep supplying LNG as normal in spite of the Saudi-led severing of diplomatic ties with Qatar, said a JERA spokesman. JERA is Japan's biggest buyer of Qatari LNG under long-term contracts.

The escalation of tensions in the energy-rich Persian Gulf probably won't disrupt LNG supplies to Qatar's main customers in Asia, said Robin Mills, head of Dubai-based consultant Qamar Energy. "In principle, Qatar should still be able to export via its own waters, Iran and Oman," Mills said. Saudi Arabia and three allied countries — Egypt, Bahrain and the United Arab Emirates — cut ties with Qatar on June 5, escalating a crisis that started over the emirate's relationship with Iran, a Saudi rival in the region.

Qatar exported 80 million tons of LNG last year, or 30 percent of global supply. Staterun Qatar Petroleum, the world's fourth-largest oil and gas producer, has only five Mideast customers for its gas — Kuwait, Oman, Jordan, the U.A.E. and Egypt. LNG exports to these countries comprised about 10 percent of Qatar's shipments in 2016. "I presume LNG exports to the U.A.E. will stop," Qamar Energy's Mills said. "The U.A.E. will have to use other suppliers, but there are plenty of cargoes around at the moment."

"I cannot see this impacting exports of Qatari LNG outside the Arab world at all and it won't likely impact LNG and gas pipeline exports within the Arab world either," said Morten Frisch, an independent LNG and gas industry consultant.

#### LNG sellers offer shorter terms, more pricing options to win orders

(Bloomberg; June 1) - One of the stodgier corners of the energy industry is getting more relaxed. Liquefied natural gas sellers, which once did business almost entirely on long-term, oil-linked contracts, are offering shorter deals, more pricing options, unrestricted shipping terms and in some cases are even willing to invest in the infrastructure their buyers need to import the fuel. "In the past we could just produce LNG and sell it to power generators," Jean-Pierre Mateille of Total Gas & Power said June 1 at the Platts LNG & Natural Gas Markets Asia conference in Singapore.

Prompting this shift is a glut of production capacity coming online from Australia to the U.S. that has driven down spot prices by about 70 percent since February 2014. With LNG in abundant supply, buyers have a stronger hand in contract negotiations and are balking at signing the kinds of deals that have traditionally underpinned projects. No company has sanctioned a major new greenfield LNG development since late 2013.

Energy giants are hoping more amenable terms will entice customers to sign up for supplies, guaranteeing future cash flow to finance multibillion-dollar liquefaction plants. In the future, banks may be able to finance projects based on a combination of shorter contracts and an understanding that producers will be able to sell cargoes through spot deals as LNG markets becomes more liquid, said Luca Tonello, deputy general manager and head of project finance for Asia investment banking at Sumitomo Mitsui Banking Corp. At the moment, banks still require traditional long-term deals, he said.

## BP approves \$500 million project to boost gas production in Trinidad

(Reuters; June 2) - BP has given the go-ahead for its \$500 million Angelin offshore gas field development in Trinidad and Tobago to help offset declining production in one of the company's main hubs. Drilling at the Angelin field, almost 40 miles off the southeast

coast of Trinidad in a water depth of about 210 feet, is set to begin third quarter 2018. First gas is expected in the first quarter of 2019, BP said in a statement.

The development, the first major offshore project the London-based oil and gas company has approved this year, will cost about \$500 million, a company spokesman said. The project includes four wells with a production capacity of about 600 million cubic feet of gas a day that will be tied into the Serrette platform via 13 miles of new pipeline. The gas will be sold into the domestic market or exported via the Atlantic liquefied natural gas terminal, which has operated in the country since 1999.

BP also announced it had made two significant gas discoveries with the Savannah and Macadamia exploration wells offshore Trinidad that unlocked some 2 trillion cubic feet of gas. BP's production in Trinidad has been in steady decline over the past few years, falling from 461,000 barrels of oil equivalent per day in 2010 to 309,000 barrels of oil equivalent in 2016, according to Biraj Borkhataria, analyst at RBC Capital Markets. The country accounts for nearly 10 percent of BP's global production.

#### South Korea's new president plans move to gas and renewables

(Reuters; June 4) - A proposed U-turn by South Korea's new government would put the environment at the center of the country's energy policy, shifting one of the world's staunchest supporters of coal and nuclear power toward natural gas and renewables. If implemented, the ambitious plans by the world's fourth-biggest coal importer and No. 2 liquefied natural gas buyer will have a big impact on energy producers as LNG imports could jump more than 50 percent by 2030, while coal imports could peak by 2018.

But experts warn that any move to halt construction of new coal and nuclear plants could threaten energy security, spark claims for massive compensation and push up electricity prices. The plan by the administration of President Moon Jae-in would move a notable laggard in renewables toward green energy, answering public concerns over air quality and nuclear safety. "The government can't neglect people's demands, and in the long term it's right to pursue clean and safe energy. But there will be many challenges," said Sonn Yang-Hoon, economics professor at Incheon National University.

South Korea gets 70 percent of its electricity from coal and nuclear, and offers tax benefits to both to ensure abundant electricity at affordable prices. "Currently, taxes are imposed on gas for power generation, and we plan to correct the skewed tax system by seeking to levy environmental taxes on coal and nuclear," said Paik Ungyu, an energy engineering professor at Hanyang University who advises Moon on energy policy. The government hopes to boost gas-fired power from 18 percent now to 27 percent by 2030.

Permian Basin gas output could grow to 12.5 bcf a day by 2020

(Wall Street Journal; May 30) - The oil-rich Permian Basin is emerging as a major source of natural gas, a development that could deepen an existing U.S. supply glut and pressure gas prices for years. The West Texas region has become the most prolific spot for horizontal oil drilling and fracking. The new oil wells also produce gas, making it a nearly free byproduct that companies can sell on top of the more-sought-after crude.

Gas production in the Permian is likely to triple by 2020 from its 2010 levels, analysts say. The region is poised to rival new output from the Appalachian Marcellus Shale, the biggest gas-producing region in the United States. Permian output is expected to reach 12.5 billion cubic feet a day by the end of 2020, says energy investment bank Tudor Pickering Holt & Co. in Houston. All that fresh output could send gas prices back down to historic lows next year, said Brandon Blossman, an analyst at Tudor Pickering. Permian "producers are concerned they can't get rid of it," he said.

Businesses and investment firms are earmarking billions of dollars for new pipeline links to take away gas so that Permian drillers can keep pumping oil. Nationwide, oil wells are expected to generate an additional 9 billion cubic feet a day of gas over the next several years, nearly covering all new projected demand, according to estimates from Tudor Pickering and Macquarie Group. Many analysts expect the increasing supply to keep international prices low, too, as the U.S. becomes more of a global supplier.

#### New B.C. governing coalition worries oil and gas industry

(Calgary Herald columnist; June 1) - The fallout from the British Columbia election continues to grab the attention of Canada's oil patch, and it's not about to let go easily. The incoming government — led by the New Democratic Party's John Horgan and backed by the B.C. Greens under Andrew Weaver — wants to employ every tool available to stop the Trans Mountain oil sands pipeline expansion and block "the transportation of raw bitumen through our province" from Alberta.

The coalition also promises to increase the province's existing carbon tax by \$5 a tonne each year, starting next April, and expand it to cover fugitive emissions. As the political pact between the parties is scrutinized, the oil and gas industry worries the policies will increase uncertainty, repel investment and frustrate Alberta's goal to improve export market access to the Pacific coast. Robert Zakresky, CEO of junior producer Leucrotta Exploration, said his company expects to invest additional capital in northeast B.C. this year, but will wait to see how the situation unfolds.

"We were planning on putting another about \$30 million to \$50 million of drilling capital on the B.C. side, and now we're looking at possibly deferring and/or moving some of that into Alberta," he said. Like many in the oil patch, Zakresky is dismayed by the B.C. coalition's talk of using "every tool" to block a pipeline that has gone through regulatory

hearings and has federal approval. Industry also wants to learn how the new climate strategy will affect its operations and what direction the province will take on fracking.

## U.S. Energy Department approves LNG exports from floating terminal

(Bloomberg; June 1) - The first floating terminal proposed to export liquefied natural gas out of the Gulf of Mexico has been cleared by U.S. regulators to send LNG overseas. Fairwood Peninsula Energy's Delfin project gained Energy Department approval June 1 to export up to 1.8 billion cubic feet of gas a day to countries that don't have free-trade agreements with the U.S. Fairwood, led by Frederick Jones, who helped found the trading firm that became Glencore, plans to start up operations at the terminal in 2020.

The floating loading operation would be built about 50 miles offshore from the Louisiana coast. It would have capacity to export 13 million metric tons a year, according to the company's website. Gas would be piped to the offshore facility for liquefaction, storage and loading aboard tankers. The project developer is a consortium of U.S., India and Singapore partners. The developer has not announced a final investment decision.

The Delfin project stands to unleash even more of America's shale gas into a global market that's already grappling with an expanding supply glut. Delfin is the only U.S. LNG terminal proposed that doesn't require approval from the Federal Energy Regulatory Commission because it's being built offshore. It instead needs clearance from the Maritime Administration, which it has received, and the U.S. Coast Guard.

## <u>Japan's LNG buyers expand trading operations home and abroad</u>

(Reuters; June 2) - Japan's biggest buyers of liquefied natural gas are boosting their trading offices for the fuel at home and overseas as they deal with excess supplies, a Reuters survey showed. Japan is the world's biggest LNG buyer and takes in about a third of global cargoes. Many of the country's buyers have too much gas under contract but have won more flexible terms of late, allowing them to resell cargoes to third parties.

Japanese trading houses are also boosting their operations in anticipation of more supplies flowing into Asia as Australian and U.S. LNG projects start up in the coming years. Mitsui & Co. plans to expand its LNG trading operations in Singapore as demand for the cleaner fuel spurs more spot transactions in Asia, a senior executive told Reuter. Among the other Japanese buyers with overseas offices, JERA Co., a LNG-purchasing joint-venture of Japanese utilities, opened an office in Houston about a year ago. Osaka Gas also has a trading office in Houston, along with London and Singapore.

#### Mitsui will expand its LNG trading operation

(Reuters; June 2) - Japan's Mitsui & Co. plans to expand its liquefied natural gas trading operation as demand for the fuel spurs more spot transactions in Asia, an executive told Reuters. The move comes amid a big shift in the market in Asia, which takes in about 70 percent of global shipments of LNG, with traders and end users increasing their ability to trade in anticipation of a supply influx from Australian and U.S. projects.

Utilities such as Tokyo Gas and Kansai Electric that often tie up with Mitsui and other Japanese trading houses are expanding trading operations after winning more flexible terms on contracts, allowing them to resell excess LNG cargoes, something unheard of only a few years ago. "We are going to reinforce our LNG team at our energy trading unit in Singapore as LNG spot trading is on the rise," Hiroyuki Kato, executive vice president of Mitsui & Co., said June 1.

The unit has about 70 staff, mainly focusing on oil, but it will increase the number of LNG traders in the next few years from only a few now, Kato said. Mitsui traded 2.8 million tonnes of LNG in the fiscal year that ended March 31, but will receive more supplies next year when the Cameron LNG project in Louisiana starts operations. The Japanese company has signed up to take 4 million tonnes of LNG annually from the project, with some of it tied up in term contracts and the rest available to trade.

## Many Pennsylvania communities lack zoning for shale development

(Pittsburgh Post-Gazette; May 29) - A map of shale gas wells in Western Pennsylvania shows thousands of sites all around Allegheny County and only a relative few within its borders. Given its sweet spot in the still developing Marcellus Shale gas field, Allegheny County won't always be the doughnut hole. Sooner or later, as the shale gas industry rebounds from its three-year slump, the county will become a bullseye.

But Doug Shields, a former Pittsburgh councilman and outreach liaison for Food & Water Watch, a national advocacy organization for healthy food and clean water, said many of the county's municipalities are not ready. Shields said his review of zoning ordinances in 130 Allegheny County municipalities found 56 with no zoning ordinance specific to oil and gas drilling and development, while 30 have zoning rules that are outdated because they don't follow either state law or recent court decisions, or both.

Of the 56 municipalities without zoning for oil and gas development, 31 already have acreage leased for gas extraction within their borders, according to the Allegheny County Lease Mapping Project. That map shows that of Allegheny County's 467,000 acres, 63,000 acres, or about 13 percent of the county's area, is leased for oil and gas extraction, and the industry has easements and right-of-ways on another 5 percent of the land. The leased land is located in 85 of the county's 130 municipalities.

#### Quebec LNG producer ready to deliver to Vermont, if there is a market

(VT Digger; May 31) - The Quebec-based parent company of Vermont Gas Systems, which recently completed a natural gas pipeline in Vermont, is now offering another fuel option to businesses in the state: liquefied natural gas delivered by tanker truck. Gaz Metro — Quebec's largest natural gas distributor — has tripled production at a liquefied natural gas facility in Montreal. The company also owns Green Mountain Power, Vermont's largest electric distribution utility.

The Quebec government invested \$50 million in the \$118 million plant expansion, which tripled production capacity to 9 billion cubic feet of gas a year. Gaz Metro completed the expansion in late April, after two years of planning and construction. The new output is meant to serve Quebec's heavy industries in the province's northern reaches. The Quebec government plans to continue expanding its gas distribution networks for both economic reasons and environmental benefits of LNG compared to other fossil fuels.

Selling LNG to Vermonters isn't part of Gaz Metro's business plan, said Martin Imbleau, a Gaz Métro senior vice president. The company has no clients in Vermont and "is not engaged in any discussions" with potential Vermont clients. "We don't think Vermont [is likely] to play a significant role" in the sale of the plant's expanded output, Imbleau said. Any LNG that Gaz Metro exports into the U.S. will probably serve large industrial clients, Imbleau said, including energy suppliers that would use it for peak-demand periods.

## Small British Columbia LNG supplier provides 'virtual pipeline'

(Business in Vancouver; May 23) - Later this year, when the natural gas supply for Trois-Rivières, Quebec, is temporarily shut off for pipeline maintenance, Cryopeak LNG Solutions will step in with its "virtual pipeline" to keep gas flowing to homes. The small British Columbia-based company uses liquefied natural gas tanker trucks, storage tanks and regasification equipment to provide natural gas where pipeline gas isn't available.

Cryopeak employs 15 people and operates a fleet of four LNG trucks and six trailers. It also has storage and regasification equipment that turns LNG back into gas, which can be used for heating or producing power in generators that would otherwise burn diesel — or pumped as LNG to fuel trucks. Founded in 2012 by Calum McClure, Cryopeak has capitalized on an emerging domestic market for LNG. McClure identified a niche for the fuel in transportation and power generation for remote, off-grid mines and communities.

Cryopeak gets its LNG from FortisBC's Tilbury Island plant — which is undergoing a \$400 million expansion — and hauls it by tanker truck to remote areas, where it is stored and regasified as needed. One of the customers is JDS Silver, a B.C. mining company that uses LNG instead of diesel to supply power to its Silvertip mine near the

Yukon Territory border. BC Hydro is also a customer and uses LNG for a demonstration project in Anahim Lake, which until recently got its power from diesel generators.

### **OPEC production deal cuts into oil tanker business**

(Wall Street Journal; May 30) - Last week's agreement by major oil exporters might or might not hit its target, but it will almost certainly cause collateral damage to an already-reeling industry: oil tankers. The companies that move crude around the world's oceans are fairly agnostic about the price of oil and even the amount in storage around the world. But when producers such as Saudi Arabia, Kuwait and the United Arab Emirates curtail output, it hurts ship owners' bottom lines at what may be the worst possible time.

Consider that of the 96 million barrels of crude that are consumed each day globally, only about a third ever gets on an oceangoing tanker. But Persian Gulf crude exports are nearly all moved that way. A good way to quantify demand for tankers is ton-mile demand — multiplying nautical miles traveled by deadweight tonnage of vessels. In April, the ton-mile demand from the Persian Gulf fell by nearly 11 percent compared with a year earlier, according to William Bennett, lead analyst for trade at VesselsValue.

The lag between ordering a new ship and delivery means that many more oil tankers are coming onto the market just when they are not needed. When the oil market was booming from 2013 to 2015, just 109 of the two biggest sizes of tankers were delivered. Tanker company Frontline estimates that the number will swell to 274 new ships between 2016 and 2018. The upshot is that rates are under pressure. The industry is banking on a turnaround in 2019 as new orders fall and older ships get scrapped.

## Marubeni joins coalition promoting LNG as marine fuel

(Platts; June 1) - Japan's Marubeni Corp. is the latest company to join SEA\LNG, a multi-sector industry coalition aiming to accelerate the widespread adoption of LNG as a marine fuel, SEA\LNG said in a statement May 31. This comes at a time when Japan, the world's largest LNG importer, is set to play a significant role in LNG bunkering as the marine industry turns to cleaner fuel options to comply with stricter environmental regulations, including the International Maritime Organization's 2020 global sulfur cap.

LNG far exceeds alternatives in terms of emissions reductions, as it emits zero sulfur oxides and virtually zero particulate matter. It can also emit 90 percent less nitrogen oxide than heavy marine fuel oil, according to SEA\LNG. Since its launch in July 2016, SEA\LNG's membership has expanded rapidly from 13 to 25 members, which comprise shipping companies, LNG suppliers, infrastructure providers, ship classification societies, downstream companies, major ports and original equipment manufacturers.