# Oil and Gas News Briefs Compiled by Larry Persily May 16, 2019

#### Mozambique authorizes Exxon/Eni LNG project

(Houston Chronicle; May 14) - ExxonMobil and Italy's Eni said May 14 that the Mozambique government has authorized development of the multibillion-dollar Rovuma LNG project. Rovuma would liquefy gas produced from three offshore reservoirs for export worldwide. ExxonMobil bought half of Eni's stake in the project two years ago for \$2.8 billion, adding to its slate of planned LNG projects in Qatar, Papua New Guinea, Russia, and the United States. Exxon will lead the construction of the Rovuma terminal.

"The development plan approval marks another significant step toward a final investment decision later this year," said Liam Mallon, president of ExxonMobil upstream. The Rovuma venture is one of two major LNG projects in Mozambique expected to begin construction later this year. The other is Anadarko Petroleum's Mozambique LNG, but Occidental Petroleum is in the process of buying Anadarko and, in turn, selling Anadarko's Africa assets to French energy major Total for \$8.8 billion.

As for the Rovuma project, Exxon and Eni already have purchase agreements covering the full output capacity of 15 million tonnes a year from the first two liquefaction units. In addition to Exxon and Eni, other owners include China National Petroleum Corp., which owns 20 percent, and three at 10 percent each: Portugal's Galp Group, Korea Gas, and Mozambique's national energy company. Separately, Eni is building the Coral South floating LNG project for Mozambique, at 3.4 million tonnes a year with a 2022 start-up.

## Sempra's Cameron LNG in Louisiana starts production

(Reuters; May 14) - Sempra Energy said May 14 the first liquefaction train at its \$10 billion Cameron liquefied natural gas export terminal in Hackberry, Louisiana, has started production. Cameron is the fourth big LNG export facility to enter service in the Lower 48 states, keeping the United States on track to become the third-biggest LNG exporter in the world in 2019 behind Qatar and Australia.

The LNG carrier Marvel Crane, chartered by a unit of Mitsui, is heading across the Atlantic Ocean to pick up the first cargo at Cameron, according to shipping data firm Kpler. The first three liquefaction trains at Cameron will produce about 12 million tonnes of LNG per year, roughly 1.7 billion cubic feet a day of gas. Sempra has said it expects the second and third trains to enter service in the first and second quarters of 2020.

Cameron is owned by affiliates of Sempra, Total, Mitsui, and Japan LNG Investment, a joint venture of Mitsubishi and Nippon Yusen Kabushiki Kaisha (NYK). Sempra holds 50.2 percent of Cameron and has a long-term goal of exporting 45 million tonnes per year of North American LNG. It is developing a two-train expansion at Cameron, the Port Arthur LNG export terminal in Texas and is looking to add export facilities in two phases at its existing Costa Azul LNG import terminal in Baja California in Mexico.

## Unresolved U.S-China trade war could help rival LNG suppliers

(Reuters' columnist; May 13) - China's decision to hike import duties on U.S. liquefied natural gas means very little for the market in the short term but has the potential to deliver outsized consequences the longer it remains in place. As part of its latest round of retaliatory tariffs on U.S. imports, Beijing increased the duty on LNG shipments from 10 percent to 25 percent. This will make it even more uneconomic for Chinese buyers to purchase LNG cargoes from the United States.

There are certain to be longer-term consequences from the fastest-growing LNG market effectively locking out the world's fastest-growing supplier. Much of the new LNG coming onstream this year and next is based in the United States, as companies rush to take advantage of the plentiful and cheap supplies of gas delivered by the nation's shale boom. But if the trade war continues for several years, it's likely that some projects will struggle to secure the necessary financing to reach a final investment decision.

The longer the tariff war continues, the more the United States will hand advantages to new rival producers in countries such as Russia and Mozambique, while also helping to make the business case for existing major producers such as Qatar and Australia. The trade dispute could hurt the one area where U.S. exports were actually growing rapidly and working to reduce the deficit that the United States has with China.

## China's tariff on U.S. LNG could negate boost from faster permitting

(S&P Global Platts; May 13) - The promise of a surge of new U.S. LNG export development thanks to government efforts to speed up permitting is threatened now that China has retaliated for Washington's escalating trade war with Beijing. On one hand, easing regulatory burdens means developers of new liquefaction facilities can get approval to build quicker, but, on the other hand, they may not secure financing for the billions of dollars in construction costs if tariffs prevent buyers from signing contracts.

The impact of those competing forces was brought into focus on May 13 when China raised tariffs on U.S. LNG to 25 percent from 10 percent, effective June 1. "China tariffs on U.S. LNG are definitely not a good thing for the U.S. LNG export business, either for existing projects or for future ones, as they will obviously raise the cost of LNG imports

from the U.S. and, as a result, make them less competitive," said Madeline Jowdy, S&P Global Platts Analytics senior director for global gas and LNG.

## China's 25% tariff dampens prospects for U.S. LNG projects

(Reuters; May 14) - China said May 13 it would raise tariffs on liquefied natural gas imports from the United States to 25 percent from 10 percent effective June 1 — along with other additional levies on U.S. goods — in a move that could further reduce U.S. LNG shipments to the world's fastest growing importer of the fuel. So far this year, only two U.S. LNG cargoes have gone to China, versus 14 during the first four months of 2018 before the start of the 10-month trade war.

Between February 2016, when LNG exports started from Louisiana, and July 2018, when the trade war started, China was the third-biggest buyer of U.S. LNG. So far this year, China is not even in the top 15. "I expect they will have a hard time landing a tanker carrying U.S. LNG in China if they impose a 25 percent tariff on it," said Jack Weixel, senior director at IHS Markit's PointLogic analytics arm.

Stephen Comstock, a director at the American Petroleum Institute, which represents the oil and gas industry, said the retaliatory tariffs "dampen the prospects for the growing U.S. LNG investment, hurt U.S. workers, and benefit America's foreign competitors." U.S. sales had already been affected by a 60 percent collapse in Japan-Korea Marker (JKM) LNG prices since September. "Weaker JKM spot prices in Asia already killed most of the commercial reasoning for U.S. sales to China. The tariff is the knockout blow," said Ira Joseph, head of global gas and power analytics at S&P Global Platts.

# Columnist argues that China's gas demand far from certain

(Asia Times columnist; May 14) - China's rapidly growing market is without doubt one of the most coveted destinations for exporters of liquefied natural gas. In pursuit of wealth and power, LNG producers from the four corners of the globe are all keen to compete for a slice of the pie. However, contrary to popular belief, China might not end up becoming the LNG-guzzling giant many have prophesied. This could have a major impact on the global market as a supply glut might lead to a collapse of LNG prices.

It could be argued that China's future LNG demand will by and large be determined by a combination of domestic factors and broader trends in the global gas market. China's gas demand will depend not only on the country's economic growth, but also on Beijing's success in implementing its costly and heavily subsidized coal-to-gas switch. Second, gas extracted from shale formations could prove to be a wild card in boosting the country's domestic production. China sits on top of the world's largest shale gas reserves, yet Beijing has faced serious difficulties of harnessing its full shale potential.

Third, China's demand for LNG imports will also depend on its imports of piped gas from Turkmenistan, Uzbekistan, Kazakhstan, and Myanmar. More importantly, in late 2019 the US\$55 billion Power of Siberia pipeline from Russia will be completed and will reach its maximum operational capacity of more than 3 billion cubic feet of gas per day in a few years. It is far from certain that China will become the LNG-devouring giant that "sucks gas out of the global market," as one Wall Street Journal headline once put it.

# Small LNG project in British Columbia targets 2023 start-up

(Reuters; May 14) - Woodfibre LNG said May 14 it plans to make a formal decision on its proposed C\$1.4 billion-C\$1.8 billion liquefied natural gas export terminal in British Columbia later this year, with the facility expected to be operational by 2023. That could make the Woodfibre plant the first LNG export facility in Canada. The C\$40 billion Shell-led LNG Canada project under construction in Kitimat, B.C., is not expected to enter service until 2024.

Woodfibre said it is targeting a final investment decision this summer on the project, planned for a former pulp mill site about 30 miles north of Vancouver. The project is owned by Singapore-based Royal Golden Eagle's Pacific Oil and Gas subsidiary. In a joint announcement this week, Pacific Oil & Gas said it has struck a cash deal to buy Canbriam Energy, which produces gas from the prolific Montney geological formation in northeastern British Columbia. Financial details were not disclosed.

The companies said the transaction will result in a "well-capitalized" entity able to grow current Canbriam production of about 200 million cubic feet per day of gas, including 6,000 barrels per day of associated natural gas liquids. Woodfibre is licensed to export 2.1 million tonnes of liquefied natural gas per year for 40 years, or about 275 million cubic feet of gas per day. Woodfibre has a preliminary agreement with a unit of China National Offshore Oil Corp. for the potential offtake of LNG starting in 2023.

## Oversupplied LNG market could turn around by 2022-2023

(LNG Industry; May 13) - Recent years have seen rapid growth in the global market for liquefied natural gas with volumes up 10 percent in 2018. This growth is set to continue in the years ahead, according to a new forecast from Bloomberg New Energy Finance (BNEF). However, growth rates of LNG exports and imports are seen moving out of sync for 2019-2023, with export supply increasing faster than imports in 2019, putting downward pressure on prices, and import demand outstripping exports in 2022-2023.

BNEF's Global LNG Outlook 2019-2023 forecasts LNG supply jumping by 33 million tonnes per year in 2019, reaching a record 358 million tonnes with the U.S. Gulf Coast,

Australia, and Russia commissioning or expanding production. Meanwhile, "structural" LNG demand, or weather-neutral demand at current LNG prices, is expected to rise by half as much as the new supply — 17 million tonnes this year — due mostly to additional purchases for power generation and heating in Europe and Asia.

"This year's expected excess supply of 16 million tonnes will be hard for the market to absorb, unless we get a dose of 'wild demand' for either a hotter summer or colder winter in North Asia or Europe," said Ashish Sethia, head of commodities at BNEF. The prospect of short-term oversupply is not deterring investors. A further seven multibillion-dollar LNG export projects, including three in Louisiana and two in Mozambique, are close to final investment decision and likely to put extra supply into post-2023 markets.

## Lack of gas may force cutback to LNG production in Trinidad

(Argus Media; May 13) - BP and Shell may shut in 20 percent of the capacity of Trinidad and Tobago's Atlantic gas liquefaction complex because of a shortage of natural gas feedstock for the plant, which can make 14.8 million tonnes of LNG a year at full capacity. BP, the main shareholder in Train 1, said that infill drilling had failed to deliver at forecast levels to ensure supply after 2019.

"Recent disappointing results from our infill drilling programs have had a material impact on our forecasted production, especially in 2020 and 2021," BP said May 11. "This means there are challenges to our supply of gas to Train 1 after 2019." Infill drilling is used to increase production from existing fields. The announcement is a blow to Atlantic, which was a liquefaction pioneer in 1999. Since 2017, the Caribbean country's domestic gas production has been rebounding, boosting supply to Atlantic LNG.

However, the failure of the infill project indicates that the recovery may be short-lived. The other three liquefaction trains at the Atlantic facility will not be affected by the deficit in gas production, BP said. BP and Shell are the leading shareholders in the four-train complex on the southwestern coast of Trinidad. Minority partners are China's sovereign wealth fund unit Summer Soca and Trinidad's state-owned gas company. BP is Trinidad's largest gas producer, at 2.124 billion cubic of gas per day in February.

## End to Nova Scotia offshore gas does little to boost LNG imports

(CBC News; Canada; May 15) - The general manager of Canaport LNG said the end of natural gas production offshore Nova Scotia has done little to boost production at his Saint John import facility. "We were hoping to see more business, to tell you the truth," said Javiar Azagra. "We thought it was going to be more opportunities for us to bring more gas but actually it didn't happen."

After almost two decades, gas supplies have run out at the Nova Scotia fields at Cape Sable Island and Deep Panuke. Production ended Jan. 1. That left Corridor Resources the only gas producer in the Maritimes, but consultant Todd MacDonald of Energy Atlantica said Corridor can supply less than 0.5 percent of the region's gas demand. The remainder is being met largely through U.S. and Alberta suppliers, MacDonald said, with gas arriving through the Maritimes and Northeast pipeline via Maine.

Existing long-term contracts held by gas customers may be part of the reason Canaport LNG picked up little new import business when offshore Nova Scotia gas vanished from the marketplace. Repsol is a parent company to Canaport LNG. Separate from the local market in Nova Scotia, the terminal imports LNG, regasifies the fuel and sends it by pipeline into New England to help meet peak winter demand. The terminal accepted seven LNG cargoes last year.

## Once a major gas supplier, the Netherlands will become net importer

(Bloomberg; May 12) - In the Netherlands, once Europe's largest gas supplier, one of the big questions is how to deal with declining production and increasing reliance on imports. For the energy traders, utility executives, and analysts gathering in Amsterdam this week for the Flame Conference, the Netherlands epitomizes the European energy security situation. Whether through pipelines from Russia or northern Africa or by ship, more imported gas will be needed for Europe's power plants, businesses, and homes.

"The Netherlands is set to become a definitive net importer of natural gas," said Carlos Torres, a vice president at Rystad Energy, a Norwegian energy research company. The Groningen field, once Europe's largest, is being phased out and will be closed by 2030 as the Dutch government seeks to limit earthquakes triggered by gas drilling. Production is forecast to fall to less than half the nation's requirements in the year through October and will be just a third of its peak, according to Bloomberg New Energy Finance.

That output decline comes as the European Union needs more gas to compensate for the retirement of coal and nuclear power plants. But the source of gas is a political issue, with Russia supplying about 40 percent of the European Union's fuel and building a controversial new pipeline into the region. LNG, too, is playing a bigger role in Europe. The Gate LNG import terminal in Rotterdam has seen renewed interest and could hit full capacity by the end of the year after years of being underused, Torres said.

#### U.S. shale oil plays expected to set new record at 8.49 million barrels

(Reuters; May 13) - U.S. oil output from seven major shale formations is expected to rise by about 83,000 barrels per day in June to a new peak of about 8.49 million barrels

per day, the U.S. Energy Information Administration said in its monthly drilling productivity report May 13. One of the largest changes is forecast in the Permian Basin of Texas and New Mexico, where output is expected to climb by 56,000 barrels to a new record of about 4.17 million barrels per day in June.

In North Dakota's Bakken region, production is expected to jump by 16,000 barrels to a record of 1.42 million barrels per day, while in the Eagle Ford output is expected to slide a tiny fraction to 1.43 million. Production increases particularly from the Permian and Bakken have helped make the United States the biggest oil producer in the world, ahead of Saudi Arabia and Russia.

Major oil companies like ExxonMobil and Chevron are boosting their presence in shale, particularly in the Permian. Separately, U.S. gas output was projected to increase to a record 80.7 billion cubic feet per day in June, the EIA said. That's up 0.9 bcf a day over the May forecast and marks a fifth consecutive monthly increase. A year ago in June, output was 68.2 bcf a day. Output in Appalachia in Pennsylvania, West Virginia, and Ohio, the nation's biggest shale gas play, was set to hit a record 32.1 bcf a day in June.

## Permian's West Texas Light destined for export markets

(Bloomberg; May 14) - Exports of the Permian Basin's newest kind of oil are set to jump as production surges, exceeding the appetite of U.S. refiners. Sales of the new grade, known as West Texas Light, began in September, as explorers sought to separate out increasingly lighter and less sulfurous crude bubbling up from wells in West Texas and New Mexico so it wouldn't lessen the quality of benchmark West Texas Intermediate. WTL supply is now over 500,000 barrels a day, nearly a four-fold jump from last year.

While some of that is staying close by, most will need to be exported as U.S. refiners may reach a limit soon. Since many of the biggest refineries have invested billions of dollars in upgrades over the years and are set up to run the heaviest, dirtiest oil, there's only a certain amount of light oil they can handle. WTL shipments overseas began in February and have neared 1.42 million barrels through this month. Most was sent to the Netherlands and the rest to Canada, while none has headed to Asia so far.

Renewed U.S.-led sanctions on Iran could provide an opportunity. Buyers of Iranian condensates such as South Korea might consider WTL, said Jonathan Aronson, analyst for Cornerstone Marcro in New York. WTL is being marketed to Asian buyers for refining and petrochemical use, according to a report by analysts at Macquarie Capital. Currently, the grade is trading at \$1 to \$1.50 a barrel under WTI Midland, compared with a \$2.50 discount last month, according to people familiar with the matter.

## Argentina's YPF shifts focus to shale development

(S&P Global Platts; May 10) - YPF, the largest oil and gas producer in Argentina, is focusing on shale oil for production growth as a glut slows natural gas output, managers at the state-backed company said May 10. The shift is aimed at reversing an expected 3 percent decline in YPF's overall output this year. "We have shifted our focus to accelerating our shale oil developments" in Vaca Muerta, the country's largest shale play, said Sergio Giorgi, vice president of strategy and business development.

"The good news is that our shale oil production growth is offsetting the conventional production decline, and we expect this trend to continue," said Ignacio Rostagno, manager of investor relations. YPF is running six shale oil pilots and expects to go into full-scale development on two of them in 2020 and 2021. Meanwhile, a surge in gas production over the past few years, led by Vaca Muerta, has created a glut of supply, forcing YPF and other companies to slow production and even temporarily shut wells.

To mitigate the fluctuations, YPF is limiting gas output to what it believes it can sell near term, and ramping up pipeline gas export deals to sell what cannot be consumed domestically. In addition, about 90 million cubic feet of gas per day will be exported through a floating liquefaction terminal it has under a 10-year lease and is now testing. "All is aligned to start liquefying and selling by the third quarter of this year," Giorgi said.

#### Canada split between green agenda and resource jobs

(Bloomberg; May 9) - Vancouver is the wellspring of Canadian environmentalism — and the heart of its climate dilemma. British Columbia's premier city prides itself on its green bona fides: It's is the birthplace of Greenpeace, it ushered in Canada's most successful carbon tax, and it's governed by a coalition that includes Green Party lawmakers. Less celebrated is Vancouver's status as a major hub for coal and oil exports. That paradox is an example of how Canada's climate ambitions bump up against its reality as one of the world's top crude producers, coal exporters, and per-capita emitters of carbon.

Canada is split over how to square the nation's vast resource wealth with action to cut greenhouse gas emissions. Prime Minister Justin Trudeau has pushed a green agenda only to see political opposition mount. The more he insists "the environment and the economy go hand in hand," the more both sides feel betrayed. With elections due this fall, his attempts at having it both ways threaten to derail his bid for a second term.

The Canadian divide is apparent in places like Sparwood, B.C., population 3,500, Canada's de facto coal capital. There are five mines near the town. About five times a day, a coal train runs to Vancouver for export. Canada produces thermal coal for power generation and metallurgical coal to make steel. While Trudeau is pressing to phase out coal-fired power generation by 2030, Canada remains a major exporter of metallurgical coal. As long as you need steel, Sparwood's mayor said, you will need the coal from his town and workers will continue earning wages that can exceed C\$100,000 a year.

#### New Norwegian cruise ship can run on battery power

(Australian Financial Review; May 13) - Norwegian cruise company Hurtigruten will begin sailing its newest ship in June, the groundbreaking hybrid-powered Roald Amundsen. Named after the famous Norwegian polar pioneer, the ship is a collaboration between Norwegian yacht designer Espen Øino, Sweden's Tilburg Design and Rolls-Royce Marine. The eco-minded 459-foot-long Roald Amundsen can accommodate 530 passengers and can sail with electric propulsion for 15 to 30 minutes on battery power.

It is notable for its reduction in fuel consumption and carbon dioxide emissions. The vessel cost more than US\$220 million and was built at Norway's Kleven yards. It's the world's first ice-class hybrid-powered expedition ship, and two sister ships will follow in 2020 and 2021. Hurtigruten also is rebuilding its existing ships to run on a combination of large battery packs, liquefied natural gas, and liquefied biogas made from organic waste including dead fish, Daniel Skjeldam, CEO of Hurtigruten told an audience at the Sustainability Summit last month in Sydney.

#### Lack of oil pipeline capacity limits mergers, takeovers in Canada

(Bloomberg; May 13) - While the \$38 billion takeover of Anadarko Petroleum has been seen as a potential catalyst for a wave of U.S. oil industry consolidation, the market for deals in Canada remains frigid, with few potentials on the horizon. There have been 14 announced offers for Canadian exploration and production assets for a total value of \$31 million this year through May 10, according to data compiled by Bloomberg. That's a sliver of the 33 deals with a total value of \$3.6 billion in the same period a year earlier.

It's an even more minuscule amount when compared to the U.S., where there were 84 announced deals with a total value of \$91.4 billion this year through May 10. The freeze in Canada can be traced largely to the country's inability to get new pipelines built, which has weighed on local heavy-crude prices, said Stephanie Stimpson, a partner at law firm Torys in Calgary, who works on mergers and acquisitions.

That pipeline pinch prompted Alberta's government to order an unprecedented production curtailment late last year, adding another layer of unpredictability that's making companies hesitant to pull the trigger on deals, she said. "There's just been so much volatility and uncertainty that parties have gone on hold," Stimpson said. With the curtailment program still in effect and no new pipelines expected to be built this year, there's little indication the market will improve in the near term, Stimpson said.