

# Oil and Gas News Briefs

## Compiled by Larry Persily

### June 18, 2018

#### **Tokyo Gas, U.K. buyer sign with Anadarko for Mozambique LNG**

(Reuters; June 15) - Britain's Centrica and Japan's Tokyo Gas aim to buy liquefied natural gas from Anadarko Petroleum's \$20 billion project in Mozambique, the first joint-procurement deal designed to diversify supply risks facing both buyers in their respective markets. The deal also brings Anadarko one step closer to constructing its East African LNG project as it corrals \$14 billion to \$15 billion from banks and export credit agencies for financing the gas development in Mozambique's remote north.

Lenders are requiring Anadarko to sign up long-term sales deals for at least 8.1 million tonnes of the project's initial phase of 12.88 million tonnes annual output to guarantee project revenues. The preliminary agreement between Centrica and Tokyo Gas for 2.6 million tonnes of LNG a year brings Anadarko's total supply tally to 7.7 million tonnes, via a mix of binding and non-binding deals. A final investment decision on the project is anticipated this year, and the terminal could start production in the early- to mid-2020s.

How much each company will buy has not yet been decided, said Tokyo Gas Executive Officer Takashi Higo. The LNG will be priced based on multiple unidentified indexes; the companies did not give details. Centrica's purchases will likely be linked to Britain's National Balancing Point gas trading hub and Tokyo Gas will pay a price linked to a basket of crude oil grades, sources said. "The transaction represents the first long-term off-take agreement from Africa for both Tokyo Gas and Centrica, in line with ongoing efforts to further diversify their respective portfolios of LNG sources," Centrica said.

#### **Conoco awards design contracts for new Australian LNG gas supply**

(Reuters; June 17) - ConocoPhillips has awarded three engineering contracts for design of the Barossa gas project intended to add supply for its Darwin LNG export plant for more than 20 years, the firm said June 17. Barossa is an offshore gas and condensate project in Australia's territorial waters in the Timor Sea, 186 miles from the northern city of Darwin. ConocoPhillips will make a final investment decision at the end of next year. It did not reveal the value of the contracts.

The Darwin plant, majority-owned and operated by ConocoPhillips, is a joint venture with Japanese firms Tokyo Electric and Chubu Electric. It started production in 2006, with an LNG capacity of 3.6 million tonnes a year. Barossa is the first stage of the Barossa-Caldita proposal, accepted by Australia's offshore oil and gas regulator in March, and would involve a floating ship producing from six wells.

Japan's Mitsui Ocean Development & Engineering Co. was awarded a contract to help design the floating, production, storage, and offloading ship. A consortium of Korean shipbuilder Samsung Heavy Industries and TechnipFMC won a design contract for the same vessel. Conoco will pick a design after the final investment decision. INTECSEA, a subsidiary of WorleyParsons, was awarded a contract to design subsea infrastructure and a new 160-mile to 180-mile pipeline to carry gas to Conoco's existing pipeline. Conoco is Barossa's operator and owns 37.5 percent, with partners SK E&S Australia, part of South Korea's SK Group, 37.5 percent; and Australia's Santos, 25 percent.

## **China's tariffs on U.S. goods target oil and propane, not LNG**

(Platts; June 17) - The trade war between the U.S. and China escalated June 16 with China threatening an additional 25 percent tariff on \$50 billion worth of U.S. goods in response to President Donald Trump's decision to place tariffs on Chinese imports. Tariffs on \$34 billion worth of U.S. agricultural products, cars, and marine products are due to take effect July 6. Duties on \$16 billion of U.S. goods, including crude, liquefied petroleum gas (LPG), gasoline, naphtha, fuel oil, and natural gas, will come later.

Liquefied natural gas, demand for which is rising in China, was not on the list. However, the Australian Financial Review reported that China declared earlier agreements to buy more U.S. farm products and natural gas were now "invalid" following the breakdown in goodwill between the two countries. Oil is expected to see the biggest hit as Chinese buyers, both state-owned and private, have been ramping up their U.S. crude imports.

China's U.S. crude imports in first quarter rose to an average 316,770 barrels per day, eight times the volume of a year earlier. China accounted for 23 percent of U.S. crude exports in March. LPG is expected to face the second biggest impact as U.S. supplies accounted for 22.4 percent of China's propane imports and 6.4 percent of butane imports in the first quarter. China included natural gas on the list for higher import tariffs, but LNG was exempt. China imports no natural gas from the U.S. but is on track to become the largest buyer of U.S. LNG this year. China has imported nearly 1.25 million tonnes of LNG from the U.S. in 2018 to date — versus 1.61 million tonnes in all of 2017.

## **China plays it smart by threatening tariffs on U.S. energy exports**

(Reuters columnist; June 18) - China's threat to impose tariffs on U.S. crude oil, certain refined products and coal is possibly the only sign of clear thinking in the increasingly muddled escalating trade dispute with the administration of President Donald Trump. It was also curious that the list of potential targets for China's customs duties included natural gas in its gaseous form, but not as liquefied natural gas. China imports zero gaseous natural gas from the United States but is a major buyer of its seaborne LNG.

China's threat to impose tariffs on energy imports makes sense from two perspectives. The first is that in economic terms it's generally best to put tariffs on goods you can substitute relatively easily from other suppliers. The second is that if the aim of your tariffs is to inflict pain on the other country, it's best to target them where they can do the most damage to the economy — or the politicians who are promoting the trade war.

It's clear that China would be able to source crude oil, refined products, and coal from other countries. China has become a major buyer of U.S. oil, importing about 319,000 barrels per day in the first five months of 2018. This makes it an important customer for the booming shale industry. However, U.S. crude supplies to China account for only about 3.5 percent of the country's daily imports, meaning that China will find it easier to replace U.S. oil imports than U.S. producers will find it to get new customers.

Looking at LNG, even though it is excluded so far, China has put doubt in the minds of investors thinking of putting capital into new U.S. LNG projects. China has probably calculated it can take the pain from a trade conflict longer than Trump can, or at least longer than the U.S. economy, companies, and workers will be prepared to tolerate.

### **[Russia's Far East LNG project looks for more gas to feed expansion](#)**

(Upstream Online; June 15) - Delays in securing access to long-term supplies of third-party gas are slowing plans to add a third liquefaction train at the Sakhalin-2 LNG project in Russia's Far East. Operator Sakhalin Energy Investments — headed by Gazprom, with Shell as its main partner — achieved a milestone last year by increasing liquefied natural gas production from the two existing trains to 11.5 million tonnes from the project's initial projected capacity of 9.6 million tonnes per year, commercial director Andrey Okhotkin told the Russian LNG Congress in Moscow last week.

However, the debottlenecking effort to boost output has further limited the ability to underpin a final investment decision on the third train with existing gas resources, as more volumes need to be allocated to the higher production rates from the first two units. Gas for the plant, which started up as Russia's first LNG export plant in 2009, is being produced at the Lunkoye field off Sakhalin Island's northeast coast, and attempts to identify potential new gas reservoirs within its acreage have proved unsuccessful.

Okhtokin said the operator could strike a deal with ExxonMobil/Rosneft for supply from their neighboring Sakhalin-1 oil and gas development, which would be the fastest option because of its existing onshore and offshore infrastructure and because some of its gas is being pumped back into reservoirs due to lack of demand. But those talks have been running for several years without much progress. The option of taking gas from other Gazprom offshore fields is a more distant solution. Meanwhile, Okhotkin said buyers in South Korea, Japan, and Taiwan have indicated interest in signing up for the third train.

## **Australia LNG plant operators look to expand feedstock supplies**

(Upstream Online; June 14) - The next batch of offshore gas field developments is taking shape in Australia, where operators are eyeing opportunities to provide feedstock gas for existing and new liquefied natural gas trains. The scenario for new offshore projects has changed rapidly in the past half year with the improvement in both the oil price and global LNG demand. This time last year there were no obvious new field developments in Australia — on the contrary, there were project deferrals.

Now, however, the ConocoPhillips-led Barossa project is starting front-end engineering and design, the Woodside-led Scarborough development is targeting the start of FEED in early 2019, and the huge Browse complex is aiming to enter FEED at the tail end of next year. In addition, there are fields such as Crux, Cash-Maple, and Petrel-Tern that are the subject of field development studies, while a host of other significant gas discoveries off western and northern Australia are waiting in the queue.

There are 11 LNG trains in Australia, with two more to start this year at Ichthys and one at Prelude. Plant operators say the challenge, and opportunity, is to keep those trains at 100 percent production over the next 30-plus years. The new-field projects that are best positioned to proceed are those run by companies that also operate LNG facilities, and the plant operators are moving with conviction. Conoco aims to sanction Barossa next year and be ready for first LNG in 2023 or 2024.

## **Chevron starts up second train at Wheatstone LNG**

(Platts; June 15) - Chevron's Western Australia Wheatstone LNG project has started production from its second train, the company said June 15. The first train started production last October. At full capacity, the two-train plant will be capable of 8.9 million tonnes per year of LNG. With start-up of the second train, Chevron is the operator of five LNG trains in Australia. Through its interest in Wheatstone, Gorgon, and the North West Shelf Project, the company has 15.8 million tonnes of LNG production capacity.

The Chevron-operated US\$34 billion Wheatstone project is a joint venture between the Australian subsidiaries of Chevron (64.14 percent), Kuwait Foreign Petroleum Exploration (13.4 percent), Australia's Woodside Petroleum (13 percent), and Kyushu Electric (1.46 percent), together with PE Wheatstone, partly owned by Japan's JERA (8 percent). Wheatstone is located about 8 miles west of Onslow and processes natural gas from the Chevron-operated Wheatstone and Lago offshore fields.

## **Shared pipeline might serve next round of Australia LNG expansion**

(Reuters; June 14) - After spending billions of dollars developing Australia's vast gas reserves, U.S. major Chevron and local firm Woodside Petroleum are at odds over the pace and timing of the next leg of expansion. The issue comes down to how quickly to build a shared infrastructure system that would include a major pipeline for moving gas from mammoth new offshore fields owned by various companies in northwest Australia.

Woodside wants to take the lead, pushing to build the line soon so it can go ahead with its \$11 billion Scarborough development, the only new gas field in the region primed for a final investment decision by 2020. Chevron would prefer to spend more time planning and building such a system, which it says could be led by it or other companies. Firms with stakes in the region's gas fields will need to decide which option to pursue within the next 18 months to ensure untapped gas reserves are available ahead of an LNG supply shortfall that some industry analysts see emerging from around 2022.

Chevron has not put a cost estimate on its infrastructure plan, saying it depends on how big the line is and how many fields it links. Until now, all 10 of Australia's LNG developments have been built as separate megaprojects, with the owners constructing pipelines and LNG plants dedicated to their own fields. Critics say that has wasted huge amounts of money as infrastructure has been duplicated, and that sharing — such as a pipeline — could lower expansion costs.

## **Novatek talking with Chinese about next Arctic LNG project**

(The Barents Observer; Norway; June 14) – Russian natural gas producer Novatek is gaining growing support for its latest Arctic initiative. Its proposed Arctic LNG-2 project looks set to win investment from China, as Russia's Energy Minister Aleksandr Novak confirmed that talks are being held with the Chinese. His comment was made during last week's summit of the Shanghai Cooperation Organization in Qingdao, China.

Novatek has struck a deal with French energy major Total to take 10 percent of the \$25.5 billion project. Total and the Chinese already are partners with Novatek in its \$27 billion Yamal LNG project, which started loading cargoes in December. Arctic LNG-2 is based on the resources of the Utrennoye gas field, a deposit of 56 trillion cubic feet on the eastern shore of the Gulf of Ob. Novatek wants to take a final investment decision on Arctic LNG-2 next year and start production in 2023.

“Our rich resource base in the Yamal and Gydan peninsulas provides unprecedented opportunities for participation in huge LNG projects, which will deliver LNG with competitive prices to key consumer markets,” Novatek CEO Leonid Mikhelson said after the deal with Total.

## [Russia-to-Korea gas pipeline could come back into play](#)

(Bloomberg; June 14) - The idea of building a natural gas pipeline from the Russian Far East to South Korea has been around since the 1990s. From 2008 to 2011, as Russia's gas giant, Gazprom, was building a pipeline to Vladivostok on the Pacific coast, the company signed a memorandum of understanding with North Korea and a framework agreement with Korea Gas to extend the line south. It went nowhere, primarily because of the politics around North Korea's bid to build up its nuclear and missile programs.

With North Korea's relations with the U.S., South Korea, and China now on the mend, and South Korea trying to reduce its dependence on coal and nuclear power, the pipeline would seem an obvious piece of economic diplomacy. The government in Seoul, at least, seems interested in bringing the proposal back to life. Getting the North Koreans involved in such a project could "serve as a catalyst that helps ease geopolitical tensions in the region," said South Korea Foreign Minister Kang Kyung-wha.

But many obstacles stand in the way. Impoverished, unpredictable, and with a history of flouting international law, North Korea would make a high-risk partner for something as capital-intensive as a pipeline. Even at the height of optimism about the project in 2012, when Gazprom announced it was ready to start work, a report by a Russian energy academic warned that "Russia cannot provide its South Korean counterparts with reliable guarantees of safe delivery" because it lacked "real influence" over Pyongyang.

## [Europe increasingly interested in imported gas](#)

(Financial Times; London; June 14) - The Beast from the East cold snap that gripped northwest Europe this year provided a sharp reminder of the fragility of energy supplies. As temperatures plunged and demand soared, European traders were scrambling for natural gas. The Arctic-like freeze was an illustration of the continuing importance of gas in the energy supply mix at a time when renewable power is growing.

Europe is not alone. The latest BP Energy Outlook report forecasts that gas will grow globally much faster than either oil or coal to 2040. Several factors — from increasing levels of industrialization and power demand, to continued switching from coal to gas — will drive that growth. Energy consultancy Wood Mackenzie expects demand for gas to increase globally by 1.9 percent a year up to 2025, when it will fall to 1.3 to 1.4 percent a year growth up to 2035 as demand, especially in the power sector, starts to decline.

Wood Mackenzie expects that Europe will become increasingly interested in LNG as its domestic supplies decline. The much-heralded shale gas boom in eastern Europe of a few years ago, which held out hopes of a new source of supply, has not materialized. In the U.K., efforts to commercialize deposits have been held up by opposition to hydraulic fracturing. "It will be difficult to replicate the U.S. shale boom in Europe because of

population density, environmental concerns and different systems of property rights,” said Simon Virley, the head of energy and natural resources at consultancy KPMG.

### **Petronas ready to delivery partial loads of LNG to smaller buyers**

(Platts; June 14) - Malaysia's state-owned Petronas for the first time has delivered an LNG cargo using break-bulking ship-to-ship transfer, a method of splitting large cargoes into smaller shipments. Petronas' move is significant for the small-scale LNG market that requires transportation infrastructure to meet the needs of several small gas consumers in dispersed and inaccessible areas like the islands of Southeast Asia.

Distributing LNG to scattered terminals and receiving stations is a challenge for existing supply chains, as they have traditionally catered to large-scale utilities and built LNG carriers that are only getting bigger like Qatar's Q-Max and Q-Flex ships. Today's Asian buyers prefer to grow their LNG business gradually by importing smaller cargoes, moving away from the traditional mode of long-term supplies over a specific term, said Ahmad Adly Alias, Petronas' vice president of LNG marketing and trading.

Petronas said the ship-to-ship transfer strengthened its portfolio and can be offered in a market where non-traditional buyers may face operational constraints at their terminals. A cargo from Malaysia LNG's Bintulu facility on the island of Borneo was transferred from the Seri Bijaksana, a Malaysia-flagged LNG carrier, to the Lucia Ambition, a much smaller Panama-flagged vessel. The cargo on the Lucia Ambition and the remaining cargo from Seri Bijaksana will subsequently be delivered to separate buyers.

### **Croatia moves ahead with first LNG import terminal**

(Reuters; June 14) - Croatia passed a law on June 14 to enable construction of a liquefied natural gas import terminal, part of a European Union drive to diversify away from Russian gas imports. The terminal, which will be built on the island of Krk in the northern Adriatic Sea, will be partly funded by the EU but has been criticized by environmental groups and local councils.

Environmentalists said ahead of the vote that they would stage protests and may ask the court to rule if the law is in line with the constitution. The project will be built in two stages, with a floating terminal followed by an onshore facility. The head of the company behind the project, LNG Hrvatska, recently said the cost of the floating terminal had been cut to US\$290 million and its capacity scaled down to ensure profitability.

The law was supported by 77 lawmakers in Croatia's 151 seat-parliament. The terminal would supply gas to countries in eastern and central Europe, regions heavily dependent

on Russian gas. Capacity at the floating terminal would be about 250 million cubic feet of gas per day.

### **'The Chalk' could be next big U.S. oil-and-gas play**

(Bloomberg; June 14) - The next frontier for U.S. oil's resurgence may come on familiar terrain. The Austin Chalk, a 650-mile underground highway of rock that runs along the Gulf Coast, is garnering new attention this year, with drillers including ConocoPhillips and EOG Resources trumpeting efforts in an area the industry largely wrote off 20 years ago. The latest sign of life came last week, as private-equity giant Blackstone Group sold royalty rights in the region for more than \$400 million.

Explorers are betting the kind of drilling techniques that led to a boom in U.S. shale can also work on the more unpredictable rock in the Austin Chalk. The geological formation stretches from the Mexico-Texas border, through central Louisiana and into Mississippi. As the name suggests, it's a river of underground chalk — soaked with oil and gas. Explorers have been tapping "The Chalk" since the 1930s, and some of the fracking and horizontal drilling techniques that powered the U.S. oil resurgence were pioneered here.

The most recent boom came in the 1990s, but since then the region's been eclipsed by more profitable shale plays. The Energy Department estimated in April that The Chalk holds about 4.1 billion barrels of crude, 18 trillion cubic feet of gas and 1 billion barrels of gas liquids that are technically recoverable. But the history is its wells start strong and decline quickly, consultant Wood Mackenzie said. In Louisiana, EOG's experience suggests wells may cost about \$10 million each, Wood Mackenzie said. That's more than double the cost of some Eagle Ford wells, a hurdle drillers will have to overcome.

### **Exxon determined to stick with what it knows — oil and gas**

(Bloomberg; June 15) - In the late 19th century, electric lighting all but ended demand for kerosene, then the biggest product made from petroleum. Oil magnate John D. Rockefeller, the forefather of ExxonMobil, was unmoved, seeing any price dip as a chance to buy up competitors. "We must try and not lose our nerve when the market gets to the bottom as some people almost always do," the founder of Standard Oil instructed his management in 1884. "We will surely make a mistake if we do not buy."

More than 130 years later, with renewable energy growing and electric vehicles threatening the future of gasoline-powered cars, the strategy of Exxon, Standard Oil's biggest successor, is largely the same: double down on oil. Speaking at his second Exxon annual meeting as CEO in late May, Darren Woods used the kerosene story as an example of how the company adapts over time. Woods in an interview said the company's investment dollars will follow Rockefeller's bet-on-what-you-know mantra.



Though most of Big Oil is restraining spending, in part because of uncertainty over the future of energy markets, Exxon plans to boost expenditures every year through 2025. It wants to invest a total of more than \$200 billion, almost all on traditional oil and gas megaprojects. The company has no plans to follow rivals into wind, solar or battery storage. “It’s about finding the advantaged barrels, the profitable barrels, the barrels that we’d be happy with, irrespective of where we’re at in the price cycle,” Woods said.

The key areas of focus are offshore oil drilling in Brazil and Guyana, producing and exporting liquefied natural gas in Mozambique and Papua New Guinea, and shale oil and gas production in the U.S. Permian Basin. But the risk is that Exxon gets caught on the wrong side of history, producing fossil fuels that consumers don’t need, that governments don’t want, and that are a major cause of climate change.

### **Colorado battles over minimum spacing distance for new wells**

(The Associated Press; June 13) – A Colorado oil and gas advocacy group has warned that taxpayers could face billions of dollars in compensation claims if voters approve tough new restrictions on where wells can be drilled. The measure’s backers dispute the claim and accuse the group of using scare tactics. The Colorado Alliance of Mineral and Royalty Owners wants to kill a proposal that would increase minimum spacing between new wells and occupied buildings to 2,500 feet. The current minimum is 500 feet.

The primary backer, Colorado Rising, has until Aug. 6 to submit nearly 98,500 signatures to get the measure on the ballot. The dispute is the latest skirmish in Colorado’s long-running battle over who should regulate the oil and gas industry and how much. Technological advances including hydraulic fracturing and directional drilling spurred an oil and gas boom in Colorado, but they also roused strong vocal opposition because many drilling rigs and wells have been placed near schools and houses.

If tighter spacing rules keep oil and gas in the ground, owners could file compensation claims against state and local governments, the royalty group said June 12. The group pointed to the provision in the U.S. Constitution that says private property cannot be taken for public use “without just compensation.” Government tax revenue would also suffer, the group said. The requirement would apply only to new wells. “It very explicitly states new oil and gas development,” said a volunteer organizer backing the initiative.

### **Cruise line orders fifth billion-dollar LNG-fueled ship**

(Cruise Industry News; June 14) - MSC Cruises and STX France signed an order June 14 for construction of a fifth Meraviglia class cruise ship equipped with dual-fuel engines

designed to run on liquefied natural gas. The newest ship is due for delivery in 2023. MSC is adding 13 ships to its fleet between 2017 and 2026, including the five LNG-powered ships — each at a cost of about \$1 billion. The announcement was made at the STX Saint-Nazaire shipyard, where three MSC ships are under construction.

MSC Cruises was founded in Italy and now headquartered in Switzerland. It is the world's fourth-largest cruise line. Larger cruise operators, including Carnival, Royal Caribbean and Disney, also have ordered new ships capable of running on LNG.