Oil and Gas News Briefs Compiled by Larry Persily June 11, 2018

Total accepts political risks in its quest for gas projects

(Wall Street Journal; June 5) - French oil giant Total has long had an appetite for politically risky deals. Now, it's tapping resources in Russia and other tricky spots across the globe to become one of the world's biggest natural gas suppliers. Total last month doubled down on Russia by buying a 10 percent stake in Russian gas producer Novatek's \$26 billion proposed Arctic LNG project. Total already holds a 20 percent stake in Novatek's first Arctic gas project, Yamal LNG. Novatek has been under U.S. sanctions since 2014 that were imposed in response to Russia's annexation of Crimea.

Total also made a bold move to raise its profile in Iran, agreeing in 2016 to join a \$5 billion project to develop a massive gas field in Iran after the United States and five other world powers lifted sanctions on Iran. The risk became apparent after the U.S. reimposed sanctions on Iran last month. CEO Patrick Pouyanné said his company would likely have to abandon the Iran deal, but that the Russian project would help offset the lost opportunity. "I am not a politician, I am the head of a commercial company," Pouyanné said in Russia last month. "We continue to be bold."

"Total has a very pragmatic view toward risk," said Valentina Kretzschmar, a director at U.K.-based consultancy Wood Mackenzie. "What is driving Total is really access to low-cost, long-lived resources, and both Russia and Iran tick those boxes." Total is betting especially on gas projects. The company sees global appetite for liquefied natural gas growing 5 percent a year between 2015 and 2025. By contrast, oil demand is expected to rise only by an average 1 percent annually over the next five years.

Nigeria LNG expansion decision expected later this year

(Bloomberg; June 6) - On an island just off the coast of Nigeria, hundreds of engineers work around the clock to produce liquefied natural gas at a plant that started up in 1999. Operator Nigeria LNG Ltd. said it will decide later this year whether to invest more than \$10 billion to boost capacity by 40 percent. That would allow the Bonny Island terminal to export as much as 30 million tonnes of LNG per year to markets in Europe and Asia.

Nigeria LNG's shareholders — Shell, Total, Eni, and Nigerian National Petroleum Corp. — must weigh the benefits of expanding their profitable LNG venture against the threat of higher taxes, pipeline vandalism in the Niger River delta, and volatile gas prices. Those concerns have already delayed the expansion project, and further interruptions

will increase the risk that Africa's biggest oil producer misses the global transition to cleaner fuels and a chance to reduce its stuttering economy's reliance on crude.

Last year the West African nation was the world's fourth-biggest LNG exporter behind Qatar, Australia, and Malaysia, according to data compiled by Bloomberg. But it faces growing competition from the U.S., Russia, and Mozambique in a market where demand is set to double by 2030, according to Sanford C. Bernstein & Co. The project would include construction of two new liquefaction trains; the terminal currently has six trains. Guaranteeing enough throughput for the new, larger trains at Bonny Island will require gas-producer investment to increase supply and improve security, according to NLNG.

Tight LNG market in 2018 will ease with new supplies in 2019

(TradeWinds; June 7) - Due to high seasonal demand in Asia, global LNG supply will remain tight into the coming winter period despite new production coming onstream, energy consultancy Wood Mackenzie said in its second-quarter LNG outlook report. More supply will come to the market next year. "LNG supply growth in 2018 slows a little, adding 27 million tonnes, before accelerating again in 2019 to add 41 million tonnes in 2019," said vice president for global gas and LNG Massimo Di Odoardo.

Wood Mackenzie forecasts that over the coming winter LNG prices in northern Asia will trade again at oil parity, equivalent to US\$12 per million Btu. Record demand from China absorbed a large part of the additional 33 million tonnes of new LNG supply in 2017, Di Odoardo said. A market shift will come in summer 2019, he said. The Asian market will be sufficiently supplied with Pacific LNG supply, resulting in more cargoes going to Europe, but at lower prices.

Texas will have to allow more flaring, or constrain gas production

(Bloomberg; June 8) - Texas is facing a question that's pitting the state's economy against its environment, and oil drillers against each other. With natural gas pipelines in the Permian Basin reaching 98 percent capacity, Texas is weighing whether to loosen strict state regulations that limit flaring, the process used by drillers to burn off excess gas pumped up along with their oil. The limit now for individual wells is 45 days. After that, without a rarely granted exemption, the gas must be piped away or the well closed.

Shut wells mean less revenue for companies and the state at a time when oil prices and production are surging while regional gas prices are in a tailspin. Ending or expanding the flaring cap solves the problem. But it also gives drillers who haven't paid for space on existing pipes a competitive edge over those who have, and certainly could spark

environmental protests. "This is not a simple thing we're talking about," said Ryan Sitton of the Texas Railroad Commission, which oversees the West Texas oil fields.

Sitton said he is meeting with producers and hopes to have a decision within six months. Multiple gas pipelines crisscross the Permian, with a total capacity of 8.1 billion cubic feet a day. But as the price of crude has risen, so has oil production, and the gas associated with that boom had filled up all but 2 percent of pipeline capacity as of the end of April, according to RBN Energy. Analysts at Rystad Energy suggests oil output may grow 10 percent more by the end of 2018, outpacing pipeline capacity.

The region is "ground zero for the oversupply caused by associated gas production," said John Kilduff, a partner at Again Capital in New York. Gas prices "could certainly go to zero," he said. Relief in on the way, with as much as 10.5 bcf a day of new pipelines proposed or being built. But the bulk of it won't arrive until late next year or in 2020.

Pennsylvania adopts tighter emissions standards for gas wells

(Pittsburgh Post-Gazette; June 7) - New shale gas wells in Pennsylvania will have to meet tighter permit conditions that directly control emissions of the greenhouse gas methane for the first time, the state announced June 7 as it released final versions of contentious air quality permits that had been under development for two years. The two general permits will apply to new gas wells tapping the Marcellus and Utica shales, and new compression and processing stations built along pipelines.

Department of Environmental Protection Secretary Patrick McDonnell said the permits "are some of the first in the nation to comprehensively address methane emissions from all equipment and processes, and they also address other types of air pollution that contribute to poor air quality." Methane is the second-most prevalent greenhouse gas released from human activities after carbon dioxide, but it is more potent than CO2 at trapping heat in the atmosphere over the short term.

The new well site permit will supplement an updated permit exemption process that Pennsylvania has been using since 2013 to indirectly manage air pollution from wells without requiring companies to get air permits before beginning construction. Early drafts of the permits drew criticism from industry and leaders of the Republican-controlled Legislature, who said the proposed requirements were obstructive. An array of conservation groups applauded the state's June 7 announcement. The Environmental Defense Fund said the state's rules will surpass federal requirements.

Nova Scotia LNG project would be a big source of greenhouse gases

(The Herald; Halifax, Nova Scotia; June 8) - Judy Burke and Victor Preeper are neighbors to a 300-acre moonscape of dug-up forest — and they couldn't be happier about it. "If it creates one job and keeps one family here, then I say it is a good thing," Burke said. Earlier this spring, Goldboro LNG grubbed the large swath near the couple's home in Drum Head, Guysborough County, Nova Scotia, where it proposes to build a \$10 billion liquefied natural gas export facility. The company is promising a "soft final investment decision" by the end of the summer and a hard one sometime next year.

For the handful of year-round residents of Drum Head and nearby Goldboro, it's a question of economic opportunity versus a drastic modification to their quiet way of life. For Nova Scotians, it's a broader question. According to its environmental assessment, which was approved, the LNG facility would produce nearly 3.8 million tonnes of greenhouse gas annually — more than both of Nova Scotia's pulp mills combined. The new facility would reverse this province's gains toward reducing its emissions.

Goldboro LNG has signed a purchase agreement with German electrical utility Uniper for half the 10 million tonnes of liquefied natural gas the proposed plant would produce annually. One of Goldboro LNG's ace cards is a loan guarantee from the German government for as much as half the cost of building its facility.

China pays highest price for coal since 2012 to fuel power plants

(Bloomberg; June 8) - Prices of Australian coal are at the highest level since 2012 after surging 24 percent since mid-April to \$112.05 a metric ton on June 7 as China maintains robust demand for the power plant fuel during unseasonably hot weather. Despite measures imposed by China to cool soaring coal prices, international miners are on a roll after a five-year downturn that shuttered mines and cost jobs.

China's power producers have been challenged by extreme weather in 2018, from a cold snap in January to a heat wave in May, draining their coal stockpiles. The nation has boosted coal imports by 8.2 percent to 121 million tons in the first five months this year, even as policy makers imposed restrictions on some shipments. Australian cargoes bound for China jumped to an all-time high in April.

The rally is proving to be a headache for Chinese authorities. The government has put in place a string of measures, including boosting output from efficient domestic mines, to try and rein in prices with little success so far. Benchmark prices at Qinhuangdao port are trading well above a target of 570 yuan a ton (about US\$89), which officials have reportedly set with a June 10 deadline in mind.

Companies bid over \$800 million for prospects offshore Brazil

(Wall Street Journal; June 7) - The world's largest energy companies lined up June 7 for a major auction of coveted Brazilian oil fields, even as the government rolled back some market-friendly policies that would have made its oil industry more competitive. Bidders offered more than \$800 million — plus large shares of so-called profit oil — to Brazil's government for the right to explore three blocks in the Campos and Santos basins, thought to hold about 14 billion barrels of oil.

A consortium formed by ExxonMobil, Statoil Brasil — a unit of Norway's Equinor — and Portugal's Petrogal won the largest block, known as Uirapuru, with a \$679.4 million signing bonus — plus 75.4 percent of profit oil after recovering their costs, an offer more than double the minimum bid. Brazil's state-controlled Petrobras exercised its right to be the operating partner in the block, with a 30 percent share of the consortium.

It was the government's fourth auction for areas in the pre-salt region of southeastern Brazil where as much as 100 billion barrels of crude are believed to be locked under salt layers deep under the seabed. The reserves were discovered in 2006. Some analysts have warned that high bids for the blocks pose risks for oil companies. "High interest for the pre-salt is leading to very risky bets," said Juliana Miguez of energy consultancy Wood Mackenzie. She warned projects could become unprofitable if production doesn't turn out as expected, "but based on pre-salt estimates, they are feasible."

Maritime pollution rules could hit high-sulfur Canadian oil

(The Canadian Press; June 7) - Canada's 's oil sands industry, hard hit by a price storm this year, could be sailing into a pricing typhoon stirred up by new fuel standards for the international shipping industry. The International Maritime Organization's tighter emission rules, dubbed IMO 2020, are set to take effect Jan. 1, 2020, resulting in the sulfur-content limit of bunker fuel on ships dropping from 3.5 percent to just 0.5 percent.

The switch is expected to wallop prices for heavy oil containing high levels of sulfur — exactly the kind of the raw bitumen that makes up about half of Canada's 4.4 million barrels per day of production. "It's bad news for any producers of heavy, sour crude oil," said Martin Tallett, president of Massachusetts-based oil market research firm EnSys Energy. Canada's energy industry already faced a widening spread between Canadian heavy crude prices compared with West Texas Intermediate.

The new marine shipping rules could double or even triple the discount on Canadian heavy, pushing it potentially much wider than the US\$30-a-barrel discount producers encountered earlier this year, Tallett said. Most bunker fuel burned on ships is derived from the residue that remains after the more valuable light fuels such as gasoline and diesel have been removed from crude oil in a refinery. Under the new rules, ships will

have to either switch to alternative fuels, which could include marine gas oil, liquefied natural gas or biofuels, or install scrubbers to remove sulfur from exhaust gas.

Japan eases rules for loans on overseas infrastructure projects

(Nikkei Asian Review; June 8) - Japan will offer generous loan terms to more businesses with an eye toward its 2020 target of 30 trillion yen (US\$272 billion) in infrastructure exports — three times the levels of 2010. Japan currently provides yendenominated loans with interest rates as low as 0.1 percent if the money is used for projects in low- and middle-income countries, but only to ventures more than 50 percent-owned by Japanese companies. A new policy announced June 7 expands this to businesses where Japanese companies have stakes as low as 20 percent.

The change likely will give Japanese enterprises a better shot at exporting to places like Africa, where Indian companies historically have a major presence in the infrastructure market. More Japanese corporations working with Indian partners could tap aid from the revised government program. The loan program will also be broadened to Japanese suppliers of components for assembly by foreign vendors.

Japan has been working to strengthen public-private partnerships with China, the U.S., and India. With China, it has created a joint committee for high-level economic talks. Meanwhile, Japan and the U.S. are collaborating to boost infrastructure exports to Asia, especially in the infrastructure needed to export American shale gas to the region.

Production cutback accelerates at Dutch gas field

(Reuters; June 7) - Production at the Groningen gas field could be reduced to under 420 billion cubic feet per year by October 2020, faster than planned, the Dutch economic affairs minister wrote to parliament June 7. The huge gas field started production 55 years ago. Output was projected to drop from its current cap of 760 bcf per year within four to five years under plans announced by Prime Minister Mark Rutte in March aimed at ending production at Groningen by 2030 due to the damaging earthquakes it causes.

But that goal is likely to be reached earlier, Minister Eric Wiebes wrote, as measures to reduce demand for Groningen gas have made promising progress in recent months. Extra capacity to convert high-caloric imported gas to the low-caloric gas needed for the Dutch distribution network and switching large industrial users off Groningen gas could cut production to less than 420 bcf by 2021, Wiebes said.

Output peaked at about 3.5 trillion cubic feet per year in the 1960s but has been in decline, more so this decade as geologists have linked gas production to earthquakes, prompting the Dutch government to move toward a total shutdown of the field.