

Oil and Gas News Briefs

Compiled by Larry Persily

October 15, 2018

Tokyo Gas not looking to sign up for more U.S. LNG

(Reuters; Oct. 11) - Tokyo Gas is not considering purchasing more U.S. liquefied natural gas as it seeks to diversify its procurement portfolio, company president Takashi Uchida told reporters Oct. 11. The company started receiving LNG from Dominion Energy's Cove Point export terminal in Maryland earlier this year under a long-term deal, and also has agreements to buy LNG from Sempra's Cameron project in Louisiana, which is expected to start shipping next year.

Following recent agreements to buy LNG from Mozambique and Canada, Tokyo Gas is beginning to fulfill its need for the fuel in the 2020s, Uchida said. The utility would look to further diversify its procurement by seeking non-U.S. LNG supplies, he said.

Tokyo Gas signs agreement with LNG Canada partner Mitsubishi

(S&P Global Platts; Oct. 11) - Japanese utility Tokyo Gas on Oct. 9 said it has signed a heads of agreement with Diamond Gas International, the trading arm of Mitsubishi Corp., to purchase 600,000 tonnes of LNG per year from the Shell-led LNG Canada project. LNG Canada, which last week reached a final investment decision to proceed, will have an initial capacity of 14 million tonnes per year. Under the agreement, Tokyo Gas will take gas for 13 years, starting in 2026, with flexibility where it can deliver its cargoes. The non-binding agreement is a run-up to a final contract between parties.

Each of the five partners in the Kitimat, British Columbia, project will market its own share of the output. Shell has a 40 percent stake, Malaysia's Petronas has 25 percent, PetroChina is at 15 percent, Mitsubishi has 15 percent and Korea Gas has 5 percent. The Tokyo Gas agreement covers about 30 percent of Mitsubishi's share of production. Diamond Gas started operations in September 2013 to market LNG from projects in the U.S. and Canada where Mitsubishi holds equity stakes, to conduct short-term LNG trading and optimization, and to develop new gas business in emerging markets.

Japanese electric utility signs contract for Mozambique LNG

(S&P Global Platts; Oct. 15) - Japan's Tohoku Electric said Oct. 15 it has signed a 15-year sales-and-purchase agreement to buy up to 280,000 tonnes per year of LNG from the Anadarko-led Mozambique project, marking the utility's first long-term procurement

of the fuel from Africa. Tohoku Electric said it expects deliveries to start when the project comes on stream in the early 2020s.

Tohoku Electric said its Mozambique LNG contract has some flexibility in its volumes, allowing changes depending on its LNG supply-and-demand balance. The sales-and-purchase agreement follows a heads of agreement last December. Anadarko said in September that it remains on target for a final investment decision for the first two liquefaction trains of the Mozambique LNG project in the first half of 2019. Construction is expected to start by the end of 2019, with first LNG by 2023. The initial phase would have capacity of 12.88 million tonnes of LNG per year.

Anadarko holds a 26.5 percent stake in the project. Its partners include Japan's Mitsui and oil-and-gas companies from India and Mozambique. Gas from offshore fields will feed an onshore LNG plant.

Korea Gas will take its entire 5% stake in LNG Canada output

(Reuters; Oct. 12) - South Korea's state-run Korea Gas will import 700,000 tonnes per year of liquefied natural gas from the Shell-led LNG Canada project starting in 2024, with the deal lasting 40 years, a KOGAS vice president said Oct. 12. The volume represents the company's entire share of the project in Kitimat, British Columbia.

KOGAS, which holds a 5 percent share of the C\$31 billion venture, said last week it would invest about \$660 million equity in the project. Company senior executive vice president Lim Jong-kook said the venture provides that each partner supplies the feed gas for its share of output, and each will market and price the LNG independently. In addition to KOGAS at 5 percent, project leader Shell holds 40 percent, Malaysia's Petronas is at 25 percent, with PetroChina and Mitsubishi at 15 percent each.

"We can also resell part of the volume to a third-party, depending on LNG supply conditions in South Korea," Lim said. Shell has said work will start immediately on the project. First gas is expected before 2025.

'Price the single most important factor' for Korea Gas LNG contracts

(S&P Global Platts; Oct. 12) - South Korea's state-run Korea Gas has started preparations for new supply contracts to replace expiring contracts and has sought to diversify its LNG supply sources beyond the Middle East and Southeast Asia, a company vice president said Oct. 12. "We are now tapping the market for new term contracts," KOGAS senior executive vice president Lim Jong-Kook said at an energy forum in Seoul.

Two long-term contracts for a total of 3 million tonnes per year expired in 2018 — 2 million tonnes from Malaysia's MLNG II project and 1 million from Brunei's BLNG. A 30-year contract with Indonesia's Badak project under which KOGAS had imported 1 million tonnes per year expired late last year. Seven more long-term contracts totaling more than 17 million tonnes are scheduled to expire before 2030, including deals with Qatar's Rasgas, Oman, and Yemen.

KOGAS, the world's third-largest LNG buyer, imported 33.06 million tonnes last year, mostly under 15 term contracts. The company has been watching market conditions closely because global LNG demand is expected to grow, driven by increasing consumption in China and India. "Price is the single most important factor for new term contracts," Lim said. "We will push to join hands with other buyers for greater bargaining power, while seeking to reduce risks of LNG import prices linked to crude oil prices."

Global fleet of LNG carriers grows to record size

(Houston Chronicle; Oct. 10) - The global fleet of liquefied natural gas carriers is slated for record growth this year as LNG becomes easier to trade and U.S. exports ramp up. Shippers, traders, and energy companies are expected to take delivery of more than 70 new LNG carriers in 2018, according to a report by S&P Global Platts. In addition, fleet owners ordered 28 large carriers during the first seven months of the year, compared to only 26 in 2016 and 2017 combined.

The growth is largely driven by gas demand in China and other Asian countries where environmental concerns have forced a shift away from coal-burning power generation. In the U.S., two LNG export terminals are in operation with four more under construction and even more in various planning stages.

The surge in supply and demand, the Platts report said, is helping to create a more transparent LNG market similar to oil and other commodity markets. It noted that long-term LNG contracts are giving way to shorter, more flexible deals, with nearly a third of global sales conducted on a spot or short-term basis. Traders, as a result, are taking a larger role in the marketplace, helping drive demand for new ships.

Novatek announces gas find to feed second Arctic LNG project

(The Maritime Executive; Oct. 10) - Russian gas producer and LNG exporter Novatek announced Oct. 10 that it has found a major new gas field in the Gulf of Ob, just off the Yamal Peninsula in the Russian Arctic. The new North-Obskoye field has estimated reserves of more than 11 trillion cubic feet of natural gas. "The discovery of significant

hydrocarbon reserves at the North-Obokoye field is an important starting point for one of our future LNG projects in the Arctic region,” said Novatek chairman Leonid Mikhelson.

“The favorable geographical location of the field, its huge resource base, and our accumulated LNG experience are important prerequisites to successfully implement this new LNG project,” Mikhelson said. If the results are proven, the field will provide a major boost for Novatek's proposed \$25 billion Arctic LNG-2 project, located just across the Gulf of Ob from its \$27 billion Yamal LNG terminal that went online in December 2017.

French oil major Total has agreed to take a 10 percent interest in the Arctic LNG-2 project, paralleling its early investment in Yamal. If the plan receives a positive final investment decision and proceeds on schedule, it would begin production in late 2023. Though it will draw on the 70 tcf of gas reserves available from the onshore Utrenneye gas field, the North-Obokoye find greatly increases the area's potential.

PetroChina boosts pipeline gas imports

(Reuters; Oct. 11) - China's largest oil and gas group PetroChina plans to operate its three pipeline gas receiving terminals at full capacity and boost purchases from the spot market to meet a demand spike this winter, according to a report on an official government website Oct. 11. For the first eight months of 2018, PetroChina's pipeline gas imports, primarily sourced from Turkmenistan, reached 1.2 trillion cubic feet — more than 4.9 billion cubic feet per day — according to the report. Pipeline gas imports from Myanmar totaled about 106 bcf in the January-to-August period.

The state energy giant also has stepped up winter drilling at domestic fields. Its largest gas field will pump a record 1.34 tcf of gas this year. PetroChina supplies 70 percent of the country's total gas production. The company also is boosting LNG imports to meet rising demand.

CNOOC boosts LNG import capacity to meet growing demand

(China Daily; Oct. 13) - China National Offshore Oil Corp. said Oct. 12 it would bolster its liquefied natural gas storage facilities to ensure adequate supplies of the clean fuel to northern parts of the country this winter. CNOOC already has enlarged the capacity of its LNG terminal in Tianjin with an additional storage tank. The tank can supply gas for the 15 million Tianjin residents for 45 days and help ensure sufficient supply in northern parts of the country, said Wang Xiaogang, managing director of the Tianjin LNG project.

CNOOC, which built the country's first LNG terminal in 2006, operates nine terminals nationwide, among which only the Tianjin terminal is located in the north. The facility is

operating at full capacity. CNOOC's ninth LNG terminal entered operation in Shenzhen in early August with a receiving capacity of 4 million tonnes per year. The company has stepped up construction of its LNG infrastructure in recent years while diversifying its overseas LNG sources to ensure sufficient gas to meet the nation's increasing demand.

The company has vowed to use trucks to move LNG from its receiving terminals in southern China to ease gas shortages in the north, if necessary, against the backdrop of the central government's efforts to minimize pollution and encourage higher gas usage to replace coal for heating in winter. China's gas consumption grew 15 percent in the first half of 2018 from a year earlier, which led to a 50 percent surge in LNG imports, pushing them to a historic high of 24 million tonnes in the first half of 2018.

Japan still relies on coal-fired power

(Japan Times; Oct. 9) - Japan may be feeling the effects of global warming more than ever with the series of natural disasters that hit the archipelago this summer, but this resource-poor country is sticking with a lot of coal-fired energy that emits more than double the carbon dioxide generated by liquefied natural gas-fueled plants. To meet its pledge to the world in the landmark 2015 Paris climate accord, Japan aims to achieve a 26 percent cut in greenhouse-gas emissions by fiscal 2030 from the fiscal 2013 level.

The government has drawn a lot of criticism from in and outside the country for going against the international trend to move away from coal. In November 2017, Japan was embarrassed by winning a "Fossil of the Day Award" for its failure to make sufficient efforts to tackle climate change. The award's organizer, the Climate Action Network, said: "Japan, together with the U.S. administration, is still trying to promote nuclear and coal, which hinders efforts for expanding renewable energy in developing countries.

Coal-fired plants provided 32.3 percent of Japan's total electricity in fiscal 2016, whereas natural gas stood at 42.2 percent. Japan has around 90 coal power plants and companies were planning to build 30 more with a total capacity of 16,730 megawatts as of March. Coal plants that generate less than 112.5 megawatts do not need to go through the government assessment process.

Future of coal-fired power depends a lot on China

(Reuters columnist; Oct. 9) - Coal-fired power has to end by 2050 to save the planet. That bold sentiment is likely to set much of the political, social and economic agenda for decades, but in the end it will come down to China. The U.N. Intergovernmental Panel on Climate Change (IPCC) said in a report Oct. 8 that "unprecedented" changes will have to take place to limit the rise in the Earth's temperature to 2.7 degrees Fahrenheit, warning of devastating weather events if the target is exceeded.

In order to achieve the goal, the IPCC said coal burning would have to drop to between zero and 2 percent by 2050. While coal has long been the bogeyman of climate activists, the IPCC has effectively thrown down the gauntlet and given world leaders a little over 30 years to phase it out entirely. Initial reaction to the IPCC report has been predictable, with supporters of renewable energy cheering it and backers of fossil fuels resorting to the familiar arguments that somehow the science is either wrong or a hoax.

Australia's Environment Minister Melissa Price said on Oct. 9 the IPCC was "drawing a long bow" by calling for an end to coal by 2050. She touted new technologies as a way of saving the polluting fuel. Australia is the world's largest exporter of coal and relies on the fuel for more than 70 percent of its electricity generation. But the key to the IPCC target is China, and to a lesser extent the rest of developing Asia. China is the world's largest producer, consumer, and importer of coal, and any genuine attempt to remove coal from the world's energy mix by 2050 will require massive commitment from Beijing.

Gas pipeline to LNG Canada plant a \$6.2 billion project on its own

(Terrace Standard; Terrace, BC; Oct. 10) - While much of the attention is focused on the go-ahead for LNG Canada's multibillion-dollar plant in Kitimat, British Columbia, just how the gas will get to there is a mega-project on its own. Originally forecast at US\$4.8 billion when planning started in 2011, TransCanada's 416-mile Coastal GasLink pipeline from northeastern B.C. gas fields to Kitimat is now estimated at US\$6.2 billion, making it arguably the second largest private-sector expenditure in the province's history.

"The new \$6.2 billion costs are due to inflation from 2011 to 2018 dollars, scope changes and refinement [of capital expenditures]," said TransCanada official Terry Cunha. Construction of the 48-inch diameter line is expected to start next year at multiple locations along the route. "These segments will be constructed in an order that will accommodate for terrain, season and resource considerations," Cunha said. Construction camps will be set up along the route, with a workforce of about 2,500.

Earlier this year Coastal GasLink announced it had signed \$620 million in contracts with Indigenous businesses and contractors for the project. Also as part of its Indigenous consultation efforts, Coastal GasLink has signed economics benefits agreements with 20 First Nations that have traditional territory along the pipeline route. TransCanada is financing the construction on its own, with a payback coming from 25-year contracts with the companies which own the gas that will flow through the line to the LNG plant.

LNG Canada may give confidence for more projects to proceed

(Calgary Herald columnist; Oct. 11) - One and done, or more to come? Fresh off a decision by Shell and its partners to construct the country's first liquefied natural gas

export project in Kitimat, British Columbia, the energy industry is growing confident it will propel other Canadian LNG proposals to move ahead. The CEO of LNG Canada believes the positive final investment decision has given “a degree of comfort and encouragement” to similar proposals trying to make it across the finish line.

“There are a number of other projects in (the) advanced development stage and they will feel emboldened by what we have done,” Andy Calitz said Oct. 10 before speaking at the Energy Roundtable conference in Calgary. “Based on the understanding of the state of development of at least three other projects in B.C., I will not be surprised if there is one more FID.” Almost 20 LNG export projects have been proposed for Canada’s West Coast, though analysts expect most will not proceed.

“It’s good for Canada, good for investor confidence,” said Frank Cassulo, president of Chevron Canada, which has a joint-venture project in Kitimat with Australia’s Woodside Petroleum. Consultancy IHS Markit said the decision on LNG Canada could act “as a starting gun” for other gas projects to proceed. “We will see a renewal in liquefaction projects being approved globally. Whether or not Canada gets those projects is still a bit of an open question,” said Ian Archer, associate director of North American gas for IHS.

Pipeline delays push even more Canadian oil into rail tank cars

(Washington Post; Oct. 8) - For years, Canadians have heard a common refrain: If a new pipeline doesn’t materialize to get their oil to market, the oil will just travel a different way — by rail. It’s a trade-off that can inspire fear in a country where an oil-by-rail disaster killed 47 people just five years ago. But now the prediction appears to be coming true, as the volume of oil traveling by rail out of Canada to the United States has surged in the past few months as the country’s latest pipeline project foundered.

The delayed Alberta-to-British Columbia Trans Mountain pipeline project has led to increasing pessimism among oil producers and an increasing willingness to invest in rail capacity. That means Canadians are preparing for even higher oil-by-rail volumes over the next few years while sorting out how their fears stack up against reality. “It’s a storm that’s been brewing for a while,” said Kent Fellows, a University of Calgary economist.

The spike is dramatic. Before 2012, little oil was shipped by rail out of Canada. This past June, the country’s energy regulator announced a record-breaking average of 200,000 barrels per day by rail. The International Energy Agency estimates the average will reach 390,000 barrels per day in 2019. Several Canadian pipeline projects have failed in recent years with each defeat bringing more interest in rail transport.

This past spring Kinder Morgan pulled out of an expansion of the Trans Mountain pipeline. The federal government bought the project, only to see it halted by a court ruling that Indigenous communities hadn’t been adequately consulted. The government

said it will try again to get the project approved to boost exports from a coastal terminal. With rail volumes climbing, the government has hurried new safety measures into place.

North Dakota oil production hit record 1.27 million barrels a day

(Wall Street Journal; Oct. 9) - A shale play that was left for dead has come roaring back in 2018. The Bakken formation, which stretches from Montana to North Dakota, had long been considered by some in the energy industry to be played out. Now the region is experiencing a comeback, luring investors as crude prices have surged. Oil output in North Dakota has climbed to records this year, hitting 1.27 million barrels a day in July.

Several factors account for the Bakken's recent rise, said Pablo Prudencio, an analyst at energy consultancy Wood Mackenzie. U.S. oil futures surpassing \$70 a barrel have spurred more drilling across the country. Additionally, cheaper acreage and improved crude transportation have made the area more attractive than some other major shale fields. Namely, the Dakota Access Pipeline has made it cheaper to send crude to other parts of the country. Previously, much of the oil produced was transported by costly rail.

While the Permian basin in Texas has become known as the most prolific oil region in the U.S., constraints to getting crude out of the region and transporting it to market have damped enthusiasm for producers working there. Still, Bakken production is far from overtaking the Permian. Overall Bakken production averaged 1.3 million barrels a day in September 2018, compared with 3.4 million barrels a day in the Permian, according to the U.S. Energy Information Administration. The 4.7 million barrels a day from the two fields provided almost 45 percent of total U.S. oil production.

Saudi Aramco diversifies into refining, petrochemicals

(Bloomberg; Oct. 10) - As Saudi Arabia looks to its oil reserves to underwrite a record share sale, even the kingdom's crown prince is backing a push into the industry's less glamorous corners — refining and petrochemicals — to ensure crude keeps paying the bills. State-run Saudi Aramco is working on more than \$100 billion of refining and chemical projects, according to Bloomberg calculations. A pledge to invest in a \$9 billion complex with Total is just the latest step in this expansion.

The world's top oil exporter is seeking to transform its economy to diversify away from a decades-long reliance on crude. The crown prince is leading an effort to prepare Saudis for a day when electric cars, solar and wind power and better energy efficiency weaken the need for oil. "Saudi Arabia sees petrochemicals as a way to diversify," said Mustafa Ansari, of the Arab Petroleum Investments Corp. Demand for petrochemicals will rise faster than any other segment of the oil industry, said the International Energy Agency.

Aramco plans to use gases and fuels from its refineries to boost output of higher-value chemicals, CEO Amin Nasser said Oct. 8. The project with Total, for example, will produce raw materials and plastics for the medical, construction, and automotive industries, he said. Nasser is also responsible for Aramco's planned purchase of the government's majority stake in Saudi Basic Industries Corp., the Middle East's biggest chemical maker. The deal could be valued at about \$70 billion.

Chevron sells its last exploration license in Norway

(Bloomberg; Oct. 10) - Chevron is selling its last remaining oil exploration license in Norway, putting it one step closer to a full retreat from the aging North Sea basin as the U.S. major seeks higher returns elsewhere. Chevron's activity off Norway has been limited for years, but the decision to relinquish its last asset there again shows its reluctance to bet on mature regions such as northern Europe. The company is seeking to sell most of its U.K. fields and offloaded its only asset in Denmark in September.

Chevron has agreed to transfer its 20 percent stake in the PL859 license in the Barents Sea, off Norway's northern tip, to DNO ASA, according to a Sept. 28 letter from the Norwegian energy ministry obtained by Bloomberg. The deal, first reported by Upstream, "implies that Chevron Norge shuts down its operations in Norway and leaves the Norwegian shelf permanently," the ministry said in the letter. Chevron hasn't had any producing assets in Norway since it sold its stake in the Draugen oil field in 2014.

Yet, when the government opened up a new exploration area bordering Russian waters in 2016, Chevron secured a stake in the PL859 license. That permit held the biggest known remaining prospect off Norway — a rare opportunity to make a gigantic find in the region. But the prospect proved a disappointment last year when operator Equinor made an uncommercial gas discovery. Chevron is the first oil major to leave Norway altogether, though rivals have also scaled back their presence.