Oil and Gas News Briefs Compiled by Larry Persily September 25, 2017

First liquefaction train at Yamal LNG set to start up in November

(LNG World News; Sept. 21) - Russia's largest independent natural gas producer, Novatek, is set to start up the first liquefaction train at its Yamal LNG project in the Russian Arctic in November. The three-train Yamal plant, designed to produce about 16.5 million tonnes of LNG per year, will liquefy natural gas from the South Tambey field on the Yamal Peninsula in Russia's West Siberia.

The \$27 billion project is being built in three phases, with liquefaction trains scheduled for start-up in 2017, 2018 and 2019. Novatek is the operator and holds a 50.1 percent stake in Yamal LNG. China National Petroleum Corp. and Total of France each have a 20 percent stake, while China's Silk Road Fund has a 9.9 percent share. Yamal will be Russia's second LNG export terminal. The two-train Sakhalin-2 LNG plant opened in the Russian Far East in 2009. Novatek already is talking about building another liquefaction plant in the Arctic near Yamal.

LNG developer in Oregon makes second application to FERC

(Bloomberg; Sept. 21) - The developer of a liquefied natural gas export terminal in Coos Bay, Ore., is giving it another shot. Calgary-based Veresen said Sept. 21 it had applied to the Federal Energy Regulatory Commission for the \$10 billion Jordan Cove LNG project to ship gas to Asia. FERC denied the application last year, saying Veresen failed to prove the project was needed. Without customers for the LNG, the risk of damage and disruption to property owners along the pipeline path took precedence, FERC ruled.

As part of its latest request, the company has proposed route changes for the 230-mile pipeline that would feed the terminal and has eliminated plans for a 420-megawatt power plant. Both changes are intended to quell opposition to the project. Veresen also has told FERC that it is in "advanced" negotiations with a third LNG buyer in Japan, and that two preliminary agreements with LNG customers were being finalized, showing that there is demand for the gas.

Veresen is asking FERC to issue the draft environmental impact statement in 2018, with a commission decision by the end of 2018. The developer said it hopes to make a final investment decision in 2019 and begin exporting gas to Asian markets by 2024.

B.C. mayor not giving up on LNG project; analysts say it's possible

(Financial Post; Canada; Sept. 21) - Despite two major liquefied natural gas project cancellations recently on Canada's West Coast, the mayor of Kitimat, B.C., is still confident at least one development will be built in his town — and even some of the more pessimistic analysts are starting to agree. "We're still extremely positive," Kitimat Mayor Phil Germuth said of the prospects for an LNG project. Kitimat, and its northern neighbor Prince Rupert, B.C., have been hoping for an LNG project for several years.

"I've always said 'no way' to greenfield B.C. LNG, and I've changed my mind," said Dan Tsubuchi, a long-time gas analyst and principal at Stream Asset Financial Management in Calgary. Tsubuchi published research Sept. 20 that said global LNG markets are already coming back into balance because there is currently no surplus of LNG cargoes looking for a home in places like Europe. He also cited China's plan to generate 15 percent of its electricity from gas by 2030 as a "game changer" for global gas markets, which would create an undersupply of LNG two to three years earlier than expected.

"And if so ... there is a higher probability than ever" for a positive investment decision by the Shell-led LNG Canada project in Kitimat in 2018, Tsubuchi said. Similarly, analysts at Bernstein Research note that LNG demand has grown 12 percent year-over-year and further growth would lead to projects being sanctioned in Canada. "Everything depends on what buyers want, and projects in Mozambique and Canada cannot be ruled out given interests from buyers in further supply diversification," the analysts wrote.

China steps up crackdown on air polluters

(Reuters; Sept. 20) - China will halt major projects in regions with high levels of air pollution, the official Xinhua news agency reported Sept. 20, underscoring an environmental crackdown that is starting to hit business around the country. Chinese authorities will roll out a new pollution alert system for regions ranging from the cleanest "green non-alert zones" to the most severe "red zones," where the environment and natural resources are severely strained.

"For red-alert areas, government authorities will stop granting approval on relevant projects," Xinhua reported, citing a document from the State Council, China's cabinet. "(Meanwhile), enterprises causing severe environmental and resource destruction will face punishment, including fines, production restrictions and shutdowns." Regions will also be categorized as "overloading," "near overloading" or "not overloading," depending on the level of strain on their environmental and resource capacity.

China's war on pollution has ramped up steeply this year, rattling the country's ports, commodities markets and factories across the country's smog-affected north. Even firms in higher-tech sectors like autos have started to take a hit. Xinhua added that owners of polluting firms or slack local officials would be held accountable for any

environmental damage and could be prosecuted for criminal liability. Green zone areas, however, could be financially rewarded.

Jamaica expects 45% of power from LNG by 2019

(Jamaica Observer; Sept. 20) - Jamaica Public Service says that by June 2019, 45 percent of the energy it supplies to the country will come from burning cheaper, cleaner liquefied natural gas to generate electricity. By then, the power company's Old Harbour and Jamaica Aluminium Co. (Jamalco) plants will come on stream to join the Bogue facility in St James, which received its first LNG shipment in October 2016.

"That is going to leave us with about 40 percent fossil fuel and 15 percent renewable," said JPS Regional Director for Western Jamaica T'Shura Gibbs. She noted that the renewables will be from solar, wind and hydropower, "which are also a growing part of the energy mix." Jamaica is reducing its consumption of diesel for power generation.

JPS in August signed a power-purchase agreement with U.S.-based New Fortress Energy for construction of a 94-megawatt power plant on the grounds of the Jamalco bauxite operations in Clarendon. New Fortress will also supply the 190-megawatt gasfired power plant being developed in Old Harbour, St. Catherine. The use of LNG in the local energy mix is in keeping with the government's drive for cheaper, cleaner energy.

TransCanada wins OK for lower pipeline tariff to help gas producers

(Globe and Mail; Canada; Sept. 21) - TransCanada has received the go-ahead for a key pipeline shipping deal, boosting the fortunes of Western Canadian gas producers hit by weak prices and new competition from shale deposits in the United States. Earlier this year, TransCanada signed up 23 companies to ship about 1.5 billion cubic feet of gas per day at a discounted rate of about 75 cents per 1,000 cubic feet from Alberta to southwestern Ontario on its cross-country mainline — less than half the current rate.

Deliveries are set to begin Nov. 1. following National Energy Board approval Sept. 21. The lower fees were seen as critical for Western Canadian producers facing heightened competition from shale gas in the key markets of Ontario, Quebec and the northeastern United States. Virginia-based consultancy ICF estimated the lower tolls would result in \$650 million in annual savings for Western Canada's producers. In return for the lower pipeline tariffs, producers signed up for additional volumes under long-term contracts.

Gas demand could grow if Gazprom fights back with lower prices

(Financial Times columnist; London; Sept. 22) - Russia's gas exports to Europe have been going from strength to strength of late. Already holding more than a third of the European market after last year's record-setting exports, Russia's state-owned Gazprom is on pace to easily break that record this year. However, the good times are unlikely to last very long as the company's position in Europe will soon be challenged by rising flows of liquefied natural gas.

How the company reacts to that challenge could have big implications for the European gas market and the price consumers pay. The source of Gazprom's discomfort will be rapidly growing LNG output over the next five years, primarily from Australia and the U.S. The resulting wave of excess LNG is expected to head to Europe, drawn by the region's huge gas market and its surplus of import capacity.

As the largest single gas provider to Europe, Gazprom will be the producer most directly affected by the jump in competition. However, with low marginal costs and significant excess production and export capacity, Gazprom is also the rare producer that does not necessarily have to be a price-taker. Many observers expect that Gazprom will use its low marginal cost to engage in a price war to defend its share of the European market.

In addition, an aggressive low-price defense of the European market by Gazprom could eventually lead to substantial volume gains, not so much by chasing out the odd spot load of LNG, but rather by incentivizing higher gas demand in Europe and further afield.

Petrochemical makers invest billions in U.S. Gulf Coast plants

(Houston Chronicle; Sept. 21) - The newly merged DowDuPont said Sept. 21 it's opening its new ethylene and plastics plants in Freeport, Texas, making the nation's largest chemical giant the first to start up a major ethylene complex along the Texas coast. The complex is the crown jewel of the old Dow Chemical's \$6 billion expansion on the Gulf Coast. It includes a massive ethane cracker that separates a component of natural gas liquids called ethane, which in turn will provide the feedstock for 1.5 million metric tons a year of ethylene, the most common building block of plastics.

A large portion of an additional \$4 billion enlargement will go toward expanding the plant to 2 million metric tons a year, making it the world's largest ethylene production plant. Dow is also building additional plastics facilities in Texas and Louisiana. The Freeport ethylene project adds to a petrochemical boom along the Gulf Coast, where chemical and plastic makers can take advantage of cheap and ample gas, the feedstock for their products. The growing demand for plastics is mostly coming from Asia, primarily China.

Chevron Phillips Chemical and ExxonMobil are both completing 1.5-million-metric-ton ethane crackers in the Baytown area. Houston's Occidental Petroleum and Mexichem

opened an ethane cracker plant earlier this year outside of Corpus Christi, but it's a much smaller facility. The Dow facilities are expected to reach full operating capacity before the end of this year.

Oil majors, private-equity funds see opportunities in North Sea

(Wall Street Journal; Sept. 19) - For more than a decade, the North Sea's once-booming oil sector was mired in decline. Against the odds, it has emerged as an unlikely bright spot in today's stormy global energy industry. Investors have sunk more than \$16 billion so far this year into European deals for assets mostly located in the North Sea, a flurry that far outstrips energy-deal activity in all but U.S. shale country and Canada's oil sands, according to Edinburgh-based consulting firm Wood Mackenzie.

The biggest deal came last month, with Total's \$5 billion purchase of A.P. Moeller-Maersk's North Sea-focused oil-and-gas business. The deal was a sign that major oil companies are still willing to invest significant amounts in the region, where confidence is reviving as oil prices stabilize and costs come down. Many are refocusing on new areas. Private-equity funds are buying up aging assets and infrastructure, seeing opportunity in operations that have become marginal for some of the bigger players.

Shell is planning to spend up to \$1 billion a year in the North Sea in the coming years, while BP expects to double its production there by 2020. At its peak around 2000, the North Sea produced oil in amounts similar to Saudi Arabia, but output has fallen by about 34 percent since then, a trajectory that only recently began to reverse. BP has slashed its average production costs in the North Sea from a peak of over \$30 a barrel in 2014 to less than \$15 a barrel at present. By the end of the decade, the company expects that to come down to below \$12 a barrel, BP CEO Bob Dudley said last week.

Lower-priced U.S. oil attractive to overseas buyers

(Wall Street Journal; Sept. 21) - U.S. oil is trading at its biggest discount to the global price in two years, helping extend a boom in exports of crude from American shale fields to refiners in Europe and Asia. After Hurricane Harvey hammered the Gulf Coast last month, the price of U.S. crude sank to as much as \$6.30 a barrel below its European counterpart, Brent — the widest gap since August 2015. Harvey has passed, but analysts say the storm will reshape global crude flows for months.

The spread between U.S. oil and Brent, the international benchmark, at \$5.88 on Sept. 21, is key in determining when it's profitable to ship U.S. oil overseas. A difference of at least \$4 makes it attractive for refiners in China or South Korea to buy from producers in Texas and North Dakota, said R.T. Dukes, with energy consultants Wood Mackenzie.

U.S. and global oil prices had drifted apart in August and then widened during Harvey's peak as a quarter of U.S. refining capacity was offline and demand for U.S. oil dwindled.

Occidental Petroleum, a major U.S. exporter and large producer in the Permian Basin of West Texas, is shipping more crude than ever as lower U.S. prices boost demand for oil from the Permian. The company recently struck new deals with customers in South Korea, India, China and countries in Southeast Asia, said Cynthia Walker, an Occidental senior vice president. In recent years, the rise of the highly productive and nimble U.S. shale industry has pushed down oil prices worldwide. Exports have become a relief valve for U.S. drillers that have continued to pump despite relatively low prices.

Russia overtakes Saudi Arabia as top oil supplier to China

(Reuters; Sept. 21) - Chinese refineries are gearing up to receive more Russian crude through an expanded Siberian pipeline network starting in January, likely cementing Russia's position as China's largest oil supplier in a close race with Saudi Arabia. The planned ramp-up in pipeline supplies agreed in contracts signed in 2013 illustrates the nip-and-tuck contest between the world's top oil exporters, Russia and Saudi Arabia, for dominance in the biggest crude importer, China.

Russia's top oil producer Rosneft said it is set to supply 600,000 barrels per day, a 50 percent increase from this year, after completion of the second East Siberia Pacific Ocean pipeline, which has a main spur to Chinese border town Mohe. Russia's higher pipeline sales will lift its total crude sales to China to new highs after the country overtook the Saudis for five months so far in 2017 as China's top supplier.

State oil firm PetroChina has designated three refineries in northeast China as the main receivers of Russian oil, with one undergoing an \$880 million upgrade. A PetroChina executive said seven plants in northeast China are already taking Russian oil, but once upgrade are complete, plants in Liaoyang, Dalian, and Jilin will be the main processors. "It's about boosting efficiency by dedicating these three plants to Russian oil."

Oklahoma Democrats, Republicans fight over oil tax rate

(The Oklahoman; Sept. 21) – After repeated calls to raise the tax rate on oil and gas production to 7 percent, Democrats in the Oklahoma House said they might next push for a statewide vote. Raising the tax rate is part of House Democrats' own budget plan, but despite pressure from both inside and outside the Capitol, Republican leadership has rejected those ideas. The state has faced a budget deficit the past three years.

House Democratic leader Scott Inman said Sept. 20 his members will file bills that would give lawmakers and the people a choice on the issue. Inman said his members' constituents have been loud and clear on raising the tax rate on oil and gas wells. "If they (Republicans) wanted to offer us 5 percent tomorrow, we would accept that deal. But if they choose not to, our constituents are demanding 7 percent," he said.

The question is whether the voting public would go along with the idea. Pat McFerron, a pollster who traditionally works for conservative causes and candidates, said there is reason to believe they would not. "They believe raising the gross production tax will cost jobs, and they don't want to pay that price." GOP leadership last session eventually raised one section of the gross production tax charged on older wells from 1 percent to 4 percent. Those sites, however, are usually well past their high-production days.

No agreement on how North Dakota handled shale oil boom

(Inforum; Fargo, ND; Sept. 20) - Imagine your city's population growing from 1,744 to nearly 7,500 in one year. That was Watford City, N.D., during the Bakken boom years, but the city was serving 10,000 to 15,000 people in the area, said Brent Sanford, the city's oil boom-era mayor. The shale oil boom was, by some estimates, supposed to last years. But a crash in prices in 2014 forced companies to pull out, halting most drilling.

It sent a ripple through the state, forcing legislators to cut spending from \$6 billion in the 2015-17 biennium to \$4.3 billion for 2017-19. Critics say North Dakota brought the deficit on itself, arguing it let development happen too fast and spent too much. North Dakota's economy is heavily dependent on commodities, said former Rep. Kenton Onstad, D-Parshall. As a resident in the thick of the Bakken, he said legislators knew prices could drop as he placed blame on the state for lowering oil and corporate taxes.

He also said the state should have slowed down oil development so it could prepare its infrastructure. "They didn't take that approach. It was wham, bam, bam, bam," he said. "The things that North Dakota did, we created a boom and bust." But Senate Majority Leader Rich Wardner, R-Dickinson, said the Legislature did well in spending during the boom and cutting after the downturn. He cited investing \$1.25 billion in schools, taking over county social services, spending nearly \$3 billion on road projects. Money also went for flood-control projects. A lot of the money spent on infrastructure were one-time expenditures. "For people who say we blew the money, I strongly disagree."

OPEC may wait until January for next production decision

(Reuters; Sept. 22) - OPEC and other oil producers are clearing a glut that has weighed on crude prices for three years and may wait until January before deciding whether to extend their output curbs beyond the first quarter of 2018, ministers said Sept. 22. The Organization of the Petroleum Exporting Countries, Russia and several other producers have cut production by about 1.8 million barrels per day since the start of 2017, helping lift oil prices by 15 percent in the past three months.

OPEC and its allies have been considering extending the deal beyond the end of March when it is due to expire. Russia's energy minister said no decision was expected before January, although other ministers suggested such a decision could be taken before the end of this year. Speaking after the Sept. 22 meeting of oil ministers in Vienna, Russian Energy Minister Alexander Novak said OPEC and the other producers need to continue working closely together well into 2018.

Benchmark Brent crude is now trading at more than \$56 a barrel, although it is still half the level it was in mid-2014. Kuwaiti Oil Minister Essam al-Marzouq, who chaired the meeting of the Joint Ministerial Monitoring Committee, said supply cuts were helping cut global crude inventories to their five-year average, OPEC's stated target.

OPEC production curbs start to draw down global storage levels

(Financial Post; Canada; Sept. 22) - The agreement between OPEC and its allies to curb oil production appears to be finally draining the great crude glut that has been sloshing around in storage tanks around the world and weighing on prices. Officials from the Organization of the Petroleum Exporting Countries and its allies met in Vienna on Sept. 22 and noted with some satisfaction that their agreement of curbing oil production by 1.8 million barrels per day till March 2018 is working — oil is being withdrawn from storage and global markets are moving toward equilibrium.

Elevated oil storage levels have hung over energy markets for the past few years, but the deal between OPEC and other oil producing countries that has been in effect for nine months is finally shrinking crude inventories around the world. In January, there were 340 million more barrels in storage in OPEC countries than the five-year average, but that fell to 209 million barrels in July, GMP FirstEnergy analyst Martin King said.

Data from the U.S. Energy Information Administration shows oil inventory levels in the United States trended upward from the time oil prices began to collapse in July 2014 and peaked at 535 million barrels in March 2017, but had declined to 473 million by the week of Sept.15. Bernstein Research analyst Neil Beveridge expects oil storage levels in OPEC countries, which are still overstocked, to reach normal levels by the end of 2018 if the cartel's member countries extend their agreement to cut production.