

# Oil and Gas News Briefs

## Compiled by Larry Persily

### October 25, 2018

#### **Rosneft, Exxon could decide next year on Russian LNG project**

(Reuters; Oct. 23) - Russia's Rosneft and ExxonMobil plan to build a liquefied natural gas plant in a consortium with Indian and Japanese partners, spreading the estimated \$15 billion cost, sources said. The companies — Rosneft, Exxon, Japan's SODECO, and India's ONGC Videsh — are partners in the Russian Far East offshore Sakhalin-1 fields that will supply the gas. Sakhalin-1 has been producing oil since 2005 — currently averaging 300,000 barrels a day — while reinjecting most of the gas underground.

As well as spreading costs among more stakeholders, the broader partnership may mitigate sanctions risk. Initially, Rosneft and Exxon unveiled plans to build the LNG project in 2013. But it has failed to materialize for many reasons, including international sanctions against Moscow for its role in the Ukraine conflict. LNG production itself is not subject to sanctions, but Russian companies have limited access to financial markets.

Two sources — one person close to Exxon and a high-ranking Rosneft executive — said both firms are committed to carrying out the LNG project within the framework of the Sakhalin-1 agreement, which is led by Exxon at 30 percent, Rosneft at 20 percent and the rest split between SODECO (30 percent) and ONGC Videsh (20 percent). “No one is interested in financing such a project alone,” the source close to Exxon said.

The source close to Exxon said a decision whether to go ahead with the LNG project is expected in 2019. Production would begin in 2025. Initial capacity is planned for 6 million tonnes per year. Currently, Russia has two operating LNG export projects: Novatek's Yamal in the Arctic and Gazprom's Sakhalin-2 on the same island as Sakhalin-1. Gazprom wants to expand Sakhalin-2 but lacks sufficient proven reserves and was hoping to strike a deal with Rosneft/Exxon to process their gas at Sakhalin-2.

#### **Saudis willing to invest in Arctic LNG, Russian official says**

(Kallanish Energy; Oct. 24) - Saudi Arabia is willing to put some \$5 billion into Russia's \$25 billion liquefied natural gas project Arctic LNG-2, Russian Direct Investment Fund CEO Kirill Dmitriev said Oct. 23. “The Saudi energy minister has announced the possibility of investing around \$5 billion in the Arctic LNG 2 project,” Dmitriev told Russian TV channel Rossiya 24. Novatek, which is leading the development, has said it plans to make an investment decision next year and start production in 2023.

The plant would be built on the Gydan Peninsula in northwest Siberia, just east of Yamal LNG, Russia's first Arctic LNG project, which started production in December 2017. Novatek is the lead on the \$27 billion Yamal venture which, at full capacity, will be able to produce 16.5 million tonnes per year. Arctic LNG-2 is planned for 19.8 million tonnes. France's Total, a 20 percent partner in Yamal, has taken a 10 percent stake in Arctic LNG-2. Saudi Arabia had not confirmed its role in the project as of Oct. 24.

Korea Gas is also likely to join the Arctic project, following a memorandum of understanding signed with Novatek in June for collaboration and development of future LNG opportunities, including signing on as an investor.

### **Qatar on track to expand its LNG capacity 43% by 2024**

(S&P Global Platts; Oct. 24) - Qatar, the world's largest LNG producer, is on track to expand its production capacity by about 43 percent to 110 million tonnes per year, Minister of Energy and Industry Mohammad Bin Saleh Al-Sada said at the LNG Producer-Consumer Conference in Nagoya, Japan, on Oct. 22. Qatar's liquefaction capacity has held at 77 million tonnes per year since 2010, when the country had a moratorium on any expansion while it looked at the market and studied its gas reserves.

Qatar had initially planned to boost its capacity to 100 million tonnes after lifting the moratorium in 2017 on new development of its offshore North Field. Qatar Petroleum later decided to boost that number to 110 million tonnes. The rapid expansion will allow Qatar to maintain its spot as the world's top LNG exporter despite competition from Australia, which expects to reach 88 million tonnes per year of nameplate LNG capacity when all of its projects reach full capacity. Qatar is targeting 2024 for its new capacity.

Qatar's plans to increase its LNG production will help meet the forecasted shortage in global LNG supply starting by the mid-2020s due to emerging market demand growth, Al-Sada said. "Without new investment, the continuous growth of the LNG trade could result in a tight market by 2023," according to the Paris-based International Energy Agency. "Owing to the long lead time of such projects, investment decisions need to be taken in the next few years to ensure adequate supply through the 2020s," the IEA said.

### **Japan's largest oil and gas producer starts up its first LNG project**

(Wall Street Journal; Oct. 23) - Japan's top oil and gas producer, Inpex Corp., has begun shipping liquefied natural gas from its \$40 billion project off the coast of Australia, a long-delayed milestone in Tokyo's push to secure more sources of fuel. Inpex said Oct. 23 it sent the first LNG shipment to Japan from the Ichthys project, the biggest single overseas investment by resource-poor Japan.

Originally slated to cost \$34 billion with a 2016 start-up — and hit by overruns and delays — Ichthys comprises an offshore gas field, a 553-mile pipeline and onshore liquefaction facilities in Darwin. The project is expected to increase its production to 8.9 million tonnes a year over the next two to three years. That is the equivalent to about 10 percent of Japan's current LNG imports. Production of liquid petroleum gas and condensate, a high-value liquid, is projected to peak at about 150,000 barrels a day.

While about 70 percent of Ichthys LNG is contracted to Japanese buyers, supply from the project could help relieve some pressure in a tightening Asian market, smarting from China's decision last month to levy a 10 percent tariff on U.S. LNG. The Japanese government is the largest shareholder of Inpex with a nearly one-fifth stake. Inpex owns 62.245 percent of Ichthys, with France's Total at 30 percent, five Japanese power and gas utilities holding a combined 5.13 percent, and Taiwan's CPC Corp. at 2.65 percent.

### Last of seven Australian LNG projects gets ready for start-up

(Bloomberg; Oct. 23) - And then there was one. Australia's nine-year, \$200 billion boom in liquefied natural gas still has a final debut in the works: Shell's Prelude, floating 124 miles off its northwest coast. It will be the last of the projects in the investment cycle to start up after Japan's Inpex Corp. shipped its maiden cargo from Ichthys LNG on Oct. 22. Shell's Prelude is among seven export projects in gas-rich Australia sanctioned since 2009 by global energy giants including Chevron and ExxonMobil, as well as regional big hitters such as Australia's Woodside Petroleum and Malaysia's Petronas.

The market might not have to wait long before Prelude gets in the game. It received a second cool-down cargo two weeks ago, a possible indication it's getting ready for start-up. Korea Gas, a minority owner in the venture, said in August the plant would be in full commercial production by the end of December. Shell, which said as recently as July that the project is on target to start this year, declined to comment. Annual production capacity is planned at 3.6 million tonnes. Shell has not disclosed a final price tag.

Unlike other LNG projects during the Australia boom, Prelude wasn't built on solid ground. Instead, all of the equipment — from power generation to gas processing to liquefaction — is housed on a 1,600-foot-long floating platform the size of six aircraft carriers connected to wells 820 feet below the ocean surface. "The scale of this, and the complexity of this — there is no other comparable project," said Neil Beveridge, an analyst with Sanford C. Bernstein & Co. in Hong Kong. Shell owns 67.5 percent, with Inpex at 17.5 percent, Korea Gas at 10 percent, and Taiwan's CPC Corp. at 5 percent.

## **Australia LNG producer will work with Chinese importer**

(Reuters; Oct. 22) - Australia's Woodside Petroleum said Oct. 22 it had signed an agreement to work with China's privately owned ENN Group on potential business opportunities that could boost demand for Woodside's liquefied natural gas. The agreement comes as Australian companies scent opportunities to expand their LNG sales to China after Beijing imposed a 10 percent tariff on U.S. LNG imports in a trade war. Woodside holds stakes in two LNG export projects in Australia.

Australia's Santos has a similar tie-up with ENN, which is also its top shareholder. Woodside said the agreement was signed in the Chinese coastal city of Zhoushan, where ENN recently opened an LNG import terminal. ENN said the agreement with Woodside is an "intent to cooperate." ENN is exploring "more extensive cooperation with LNG supply chain partners" globally following the launch of the Zhoushan terminal and the growth of its gas business, the company said.

## **CNOOC boosts volume and term of LNG buy from Total**

(Reuters; Oct. 21) - French energy group Total and China National Offshore Oil Corp. have strengthened their existing partnership in the liquefied natural gas sector to boost the volume, the companies said Oct. 22. Total and CNOOC said they have agreed to increase the contract volume from 1 million tonnes per year to 1.5 million tonnes, sourced from Total's global portfolio, and have extended the contract to 20 years.

"We are delighted to strengthen our partnership with CNOOC to expand our presence in the Chinese LNG market, which grew by 50 percent over the first half of 2018 and will continue to drive the increase of LNG demand over the next decade," said Philippe Sauquet, Total's Gas, Renewables & Power president.

## **Despite move to gas, China's coal consumption is rising**

(Reuters; Oct. 23) - Despite an unprecedented surge of investment in alternative energies, together with caps on coal use and the establishment of "no-coal zones" throughout the country, China's overall coal consumption and production are again rising. China has made efforts to cut the share of coal in its energy use, and it already has met a 2020 target to cut the amount of carbon dioxide it emits per unit of growth.

But the absolute volumes of both coal and CO<sup>2</sup> remain by far the world's highest — and are set to rise. Big coal-producing regions have been under pressure to cap capacity, and the state promised to shut in 500 million tonnes of annual production between 2016 and 2020. It also banned the import and use of lower-quality coal. But despite closing uneconomical pits, official annual production capacity rose to 3.491 billion tonnes by the

end of June, up from 3.41 billion tonnes a year earlier, the National Energy Administration said this month. Another 976 million tonnes were under construction.

And while provinces such as Hebei and Shandong have set targets to cut coal use and convert heating systems to cleaner natural gas, others are still approving new coal-fired power plants. Coal-fired power has remained the cheapest and most readily available option for several local governments, with many already struggling to find enough gas to supply local houses with heat. According to the China Electricity Council, China added 38.55 gigawatts of coal-fired power capacity in 2017 alone, down 1.42 gigawatts compared with 2016 but still more than the country's entire nuclear reactor fleet.

### **LNG Canada CEO says China's tariffs will hurt U.S. LNG hopefuls**

(Reuters; Oct. 21) - LNG Canada challenged U.S. liquefied natural gas projects Oct. 22, saying many could end up "dead in the water" as long as China keeps its tariff on U.S. imports of the fuel as part of the trade war between the countries. China in September set a 10 percent tariff on U.S. LNG as part of an escalating trade war between the world's two biggest economies. Shell and its partners this month gave the go-ahead for the C\$40 billion LNG Canada project, which is expected to start exports in 2025.

Speaking at an industry event in Nagoya, Japan, on Oct. 22, LNG Canada CEO Andy Calitz said Chinese tariffs on U.S. LNG will make U.S. gas less competitive. "The world has become so competitive that if we are to face a 10 percent surcharge tariff on LNG, then as far as I'm concerned, you're dead in the water. So, I'm very happy to be in Canada," he told Reuters.

LNG Canada will have the advantage of being closer to North Asian consumer hubs than U.S. Gulf Coast terminals, saving freight costs, while also avoiding Panama Canal transit fees. Being competitive in China is essential, as it is the world's fastest growing LNG market. Calitz said China will overtake Japan as the world's No. 1 LNG importer "within the next 24 months." China's gas consumption in 2017 rose 14.8 percent from the previous year and is expected to grow an additional 40 percent by 2020, Guo Zhi, general economist at China's National Energy Administration, said at the event.

### **FERC issues final EIS for Louisiana LNG project**

(S&P Global Platts; Oct. 22) - Venture Global LNG's proposed Calcasieu Pass terminal in Louisiana and related pipeline infrastructure received a final environmental impact statement from Federal Energy Regulatory Commission staff in a key step for the export project ahead of a targeted construction start in early 2019. The positive review issued Oct. 22 to Venture Global Calcasieu Pass had been expected after FERC staff in June released the project's draft environmental impact statement.

The findings of the final EIS were in line with the earlier review. The full commission will use the findings in its decision on the project application. FERC staff found that while the project would do some harm to the environment, "all of these impacts would be reduced to less-than-significant levels" by mitigation measures. The plant would liquefy natural gas and export up to 10 million tonnes of LNG per year.

The Calcasieu Pass Project, which would be built on a 930-acre site in Cameron Parish, Louisiana, would include two LNG storage tanks, two berthing docks, and a 1,500-foot-by-3,000-foot turning basin adjacent to the Calcasieu River Ship Channel. Venture Global has signed several long-term agreements with buyers of LNG production capacity in recent months. Venture Global Calcasieu Pass applied to FERC in September 2015. The developer hopes to make an investment decision next year.

### **Canadian regulators consider challenge to LNG project pipeline**

(The Canadian Press; Oct. 22) – Canada’s National Energy Board will consider a jurisdictional challenge of a pipeline approval that is a key component in a C\$40 billion liquefied natural gas export facility in British Columbia. The regulator said it will accept submissions until Oct. 29 from challenger Mike Sawyer, the provincial and federal governments, and other parties on whether the 416-mile pipeline should be considered a federal project or left to the province to regulate.

If it is under federal control, it will need National Energy Board approval to proceed, rendering insufficient the pipeline’s approval by the British Columbia Oil and Gas Commission. LNG Canada announced earlier this month that it was going ahead with its project in Kitimat on B.C.’s coast, with the pipeline delivering gas from the northeast corner of the province. In his jurisdictional challenge, which was filed in July, Sawyer argues that because TransCanada would operate the new pipeline and the connected Nova Gas Transmission System together, they are in fact a single federal undertaking.

In its reply, TransCanada accuses Sawyer of pursuing a “vexatious” litigation designed to frustrate gas development in British Columbia, further charging it’s not a coincidence that his complaint was made as the project was finally proceeding, not years ago when it was approved by provincial regulators. TransCanada said it was disappointed with the NEB’s decision, but believes “the facts pertaining to this project will support a strong case of continued provincial regulation of the pipeline.”

### **Smaller LNG project in B.C. expects decision early 2019**

(Reuters; Oct. 23) - A small liquefied natural gas project north of Vancouver is poised to move to construction in the first quarter of 2019, adding momentum to Canada’s efforts to become a significant LNG exporter. The C\$1.6 billion (US\$1.2 billion) Woodfibre

LNG project, backed by Indonesian billionaire Sukanto Tanoto's RGE Group, would be Canada's second LNG terminal to get the go-ahead from developers, following approval of the Shell-led C\$40 billion LNG Canada project in Kitimat, B.C., earlier this month.

"We're hoping to move to a notice to proceed to construction in Q1 (of 2019)," Woodfibre LNG President David Keane said Oct. 23. It's a relatively small project at 2.1 million tonnes per year. It was given the go-ahead in 2016, but then delayed as the company worked through several issues. Once a decision is made, construction will take roughly five years.

Keane said the project is working with engineering contractor KBR on reducing costs and awaiting a November decision on its request for a waiver from Canada's federal import tariffs on fabricated steel components used for LNG liquefaction units. "We've been very clear as an industry that there is no capability in Canada to build these large, complex modules," he said. "We feel that the federal government will be fair." Woodfibre has sold 100 percent of its first-phase output and financing is in place, Keane said.

### **Pipeline outage drives down prices for Canadian gas to 8 cents**

(Bloomberg; Oct. 22) - Natural gas prices in Western Canada continued their freefall as Enbridge targeted a mid-November restart for a ruptured pipeline that cut off supplies to businesses, homes, and oil refineries. Gas at Alberta's pricing hub dropped to a five-month low on Oct. 19, according to data compiled by Bloomberg. Enbridge said in an update that it expects the 36-inch pipeline that burst two weeks ago to be operating at 80 percent of capacity when it returns to service next month.

In the meantime, Enbridge will continue pumping gas through a smaller line in the same right of way as the pipe that exploded. The pipe outage is hitting one of the cheapest markets for gas in North America — so cheap that sometimes the intraday fuel price falls below zero. Canadian gas has been pummeled by competition from U.S. shale gas supply and a dearth of pipelines and export terminals to carry the fuel to major markets.

With one less conduit to move Western Canadian gas to customers south of the border, AECO spot prices fell to 8 U.S. cents per million Btu on Oct. 19, the lowest close since May 4. The record low in Bloomberg data stretching back to 1999 was 2.6 U.S. cents in September 2017. Once Enbridge restarts most of line, the system is expected to move between 900 million and 1.3 billion cubic feet of gas a day through the rest of the winter.

## **LNG developer opts not to buy Toshiba's capacity at Texas project**

(S&P Global Platts; Oct. 19) - Tellurian has taken itself out of the running to buy Toshiba's 20-year tolling commitment at the Freeport LNG export terminal — under construction in Texas — as it focuses instead on developing its own export facility in Louisiana, a source said Oct. 19. Tellurian had considered taking the Freeport capacity as a bridge until its Driftwood project starts up in 2023. Construction delays at Freeport raised the risk of moving forward with a deal to take Toshiba's capacity, the person said.

Toshiba is interested in offloading its U.S. LNG business amid concerns about financial losses. The unlocking of vast reserves of cheap U.S. natural gas during the shale revolution during the early part of this decade encouraged Asian buyers, such as Japan's Toshiba, to secure LNG capacity from Gulf Coast facilities. In September 2013, Toshiba signed a binding agreement with Freeport for 2.2 million tonnes per year of LNG from the Quintana Island facility upon completion of the third liquefaction train.

More than five years later, Freeport has yet to start up its first train. Earlier this year, the expected commercial start-up for the terminal's first train was pushed back to Sept. 1, 2019, a roughly nine-month delay. Because of delays, Tellurian was "not comfortable" Train 3 was "going to be available for any period of time" that Tellurian would need it, the source said. Meanwhile, Tellurian said it is on track for a final investment decision in the first half of 2019 for its Driftwood LNG project of up to 27.6 million tonnes per year.

## **Japan encourages removing resale restrictions from LNG contracts**

(Reuters; Oct. 22) - Japan's trade ministry on Oct. 22 spelled out ways that buyers and sellers of liquefied natural gas can rework supply contracts to remove restrictions on the resale of cargoes, which Japan last year said were anti-competitive. Japan's anti-monopoly watchdog ruled in June last year that all new LNG contracts should allow unrestricted resale of the fuel, marking a step toward liberalizing the market in Asia.

But global LNG suppliers have been slow to revise their contracts for Japanese buyers. Japan's trade ministry presented its "model diversion clause" for supply contracts at an annual conference in Nagoya this week. The suggested language follows the lack of action on renegotiating contracts following last year's ruling. Buyers in Japan, the world's biggest LNG importer, have long complained that the destination clauses restrict resale. They want the leeway to resell surplus cargoes but the clauses prevent it.

"No one has struck out a destination clause on the basis of the ruling, as far as I'm aware," one lawyer who has spent decades involved in LNG contract negotiations told Reuters at the conference. The trade ministry's model clause for LNG sale-and-purchase contracts spells out contractual arrangements for cargo diversions, including

delivery specifications and profit sharing or compensation arrangements. The restrictive clauses are rarely included in new contracts, the LNG lawyer said.

### **Japan touts its spending to promote LNG demand**

(Reuters; Oct. 21) - The Japanese government and private companies have spent \$4 billion in the past year on liquefied natural gas projects, mainly in Asia and across the supply chain, to help spur demand for the fuel, the country's trade minister said Oct. 22. Hiroshige Seko, speaking at the annual LNG Producer-Consumer Conference in Nagoya, said Japan has offered training to 200 people from 15 countries to develop a labor force to work in the LNG supply chain.

Seko announced a year ago that Japan would offer \$10 billion to support projects jointly sponsored by private enterprise and the government to supply LNG or build LNG infrastructure in Asia and develop a labor force of 500 people for projects in gas producing and consuming countries. The financing will go toward upstream, midstream and downstream LNG projects in Asia and other countries to spur LNG demand.

The initiative came after Seko and U.S. Energy Secretary Rick Perry agreed in June 2017 that the countries would work together to expand the LNG market in Asia, with the expansion of Asian LNG markets to create more demand for rising U.S. LNG exports.

### **Japan, EU will work to build a more flexible LNG market**

(Nikkei Asian Review; Oct. 22) - Japan and the European Union are set to collaborate on developing a framework to promote stable procurement of liquefied natural gas, in a bid to establish a more flexible market. LNG purchases are typically made on long-term contracts, often extending more than 20 years. However, the practice has led to rigidity in the market. The proposed framework would allow for greater flexibility and enable the gas to be allocated in cases of unexpected shortfalls.

Japan's Minister of Economy, Trade and Industry Hiroshige Seko announced the plans in Nagoya on Oct. 22, at a conference of ministers and corporate executives from gas producing and consuming countries. The Paris-based International Energy Agency will also take part in coordinating efforts, Seko said. The goal is to develop a system to track LNG among participating countries, from cargo status to reserve levels at terminals, and to allocate from the total when countries face emergencies such as natural disasters.

Such a network already exists within the EU, enabling the public and private sectors to supply the resource throughout the bloc via natural gas pipelines. Tokyo envisions applying a similar system to the global market, and will also consider partnering with

South Korea, China, and other consumers. LNG contracts often forbid reselling of the gas without the seller's consent. Japan and Europe will together push for the easing of such destination clauses that ban buyers from selling the fuel to third-parties.

### **German port cities compete for country's first LNG import terminal**

(Bloomberg; Oct. 22) - Downstream from Hamburg, two small Elbe River ports are competing to build Germany's first liquefied natural gas import terminal and help shake up Europe's biggest gas market. Hugging opposite banks of the river before it arcs into the North Sea, Stade and Brunsbuettel are battling for federal approval and hundreds of millions of euros in investment. The government may announce a winner next year.

Both sites tout their advantages, but the main winner will be Germany, said Oliver Grundmann, Stade's constituency lawmaker from Chancellor Angela Merkel's Christian Democrats. Other sites also are being considered, such as a Baltic Sea port. "The strategic relevance of diversifying our gas supplies via LNG is, I hope, by now a given," Grundmann said. "The big question is who can build it fast and run it cost-effectively."

Pressure by President Donald Trump on Germany to dump its support for Russia's Nord Stream 2 gas pipeline in favor of U.S. shale gas is a boon to German ports jockeying to become an LNG hub. Government aid is seen as critical to the project's finance, enabling the winner to speed up construction. Gas supplies to Germany from the rest of Europe are drying up, boosting Russia's position as the primary source for industry, power plants and heating. Russia provided 45 percent of Germany's imports in 2017.

### **U.S. short of terminal capacity to handle growing oil export trade**

(Wall Street Journal; Oct. 21) - As pipeline bottlenecks crimp the U.S. shale boom, some companies are racing to address the next potential constraint on oil output: the terminals to export crude to foreign markets. Oil exports have been a key release valve for U.S. producers in the three years since Congress lifted a longtime ban on overseas crude sales. Exports averaged 2.1 million barrels a day in September and are projected to approach 4 million barrels within two years, according to S&P Global Platts Analytics.

Yet a surge of crude from prolific West Texas wells, which has already pushed regional pipeline networks to capacity and made it more expensive for some companies to move their oil to market, could next challenge port infrastructure. Existing U.S. shipping terminals are ill-equipped to handle the growing load — only one terminal can fully accommodate the giant tankers used to ship oil to Asia and Europe. That has at least four companies planning new or expanded terminals to load up the big ships.

The terminals can cost more than a billion dollars to build, and some experts believe there won't be sufficient long-term demand for all of the facilities. So companies are racing to complete projects quickly to ensure success. Long-term relief is set to arrive next year with new pipelines to move crude to the coast. But until then, congested docks and waterways could hamper export growth and depress regional oil prices. "Infrastructure takes a lot more time than the market typically expects," said J. Alexander Blackman, an executive at Houston-based trading company Standard Delta.

## **Alberta pushes Canadian government to increase oil by rail**

(Calgary Herald; Oct. 22) - Alberta's government will push Ottawa to increase capacity for moving oil by rail as one means of tackling the steep price differential that Canadian producers receive for their oil versus U.S. crude and other supplies, Alberta Premier Rachel Notley said Oct. 22. Calling it a "short- to medium-term" solution, Notley said the federal government needs to look at what it can do to close the widening differential, such as "increasing the efficiency and availability of rail capacity to move our products."

Following a meeting with energy industry leaders, Notley told reporters: "We need more cars. We need to order more locomotives in order to get more cars onto rail. That's the bottom line." The shortage of pipeline capacity to reach export markets is driving Canadian producers to put more oil in rail tank cars. "There are some other ideas out there but I think rail is one of the most immediate," Notley said. "What we know is that storage is becoming less and less available and so we're looking at other ideas as well."

The price difference between West Texas Intermediate and Western Canadian Select heavy oil sat close to \$45 a barrel Oct. 19, with WTI trading at close to \$70 a barrel. Notley said something has to change to boost the price for Canadian oil. "We are calling on (the federal government) ... to do that and we will be engaging with them in terms of the different options that they have at their disposal." Meanwhile, Alberta will continue pressing for more pipeline capacity to move its oil production to higher-value markets.

## **Oil production resumes at Norman Wells in Canada's Far North**

(The Canadian Press; Oct. 22) - The restart of crude oil production at Imperial Oil's Norman Wells oil field after a two-year shutdown means both economic optimism and cleaner air for the 800 or so residents of the remote town in Canada's Northwest Territories. "Obviously, a producing plant is going to require people and that creates employment, creates activity in our community," interim town manager Darren Flynn said. "So we're absolutely delighted that they're back on line."

Imperial announced Oct. 22 that a workforce of about 100 had restored oil operations, adding that it plans to gradually increase output to about 10,000 barrels per day — about the same level as before the shutdown in December 2016. Production was halted after slope stability concerns at the Mackenzie River crossing near Fort Simpson led Enbridge to suspend oil flow through the 540-mile pipeline that extends from Norman Wells into northern Alberta. Norman Wells started pumping oil in 1926.

After receiving regulatory approval, replacement work on a 1.5-mile section of the pipeline began in May and was completed in September. Imperial began shipping oil through the line from storage tanks last month. The resumption of production means Imperial will resume supplying the local utility with surplus electricity from its power plant. The Norman Wells plant is fueled by natural gas produced with the oil from its wells. The remote operation is more than 1,000 miles north of Calgary.

### **Crowley's new LNG-fueled cargo ship starts service**

(Florida Times-Union; Jacksonville; Oct. 20) - Fair winds greeted El Coqui — hailed as the future of maritime trade with its cleaner-burning liquefied natural gas engines — as she sailed Oct. 20 from Jacksonville bound for Puerto Rico. Crowley Maritime's newest cargo ship is among the world's first, and very few, combination container/roll-on-roll-off vessels powered primarily by LNG. Along with her sister ship, Taino, she will carry containers, motor vehicles, and equipment between the mainland U.S. and Puerto Rico.

The ship represents an investment of more than \$550 million. It is a cornerstone for the company's vision, said Tom Crowley, owner and CEO of the 126-year-old Jacksonville-based company. El Coqui is the first vessel built as part of Crowley's Commitment Class Project. It was built by VT Halter Marine, based in Pascagoula, Miss.

El Coqui is 720 feet long and can carry 26,500 deadweight tons. It's able to transport up to 2,400 20-foot-equivalent container units at a cruising speed of 22 knots. The vessel and her sister ship Taino, which is about to begin sea trials, were designed from the keel up especially for service between the mainland U.S. and Puerto Rico. Although primarily fueled by LNG, the ships also can operate on ultra-low sulfur diesel.

### **CH2M owner sells energy business to Australian firm**

(Bloomberg; Oct. 21) – Dallas-based Jacobs Engineering has agreed to sell its energy, chemicals, and resources unit to Australia's WorleyParsons for A\$3.3 billion to focus on its higher growth and margin aerospace and infrastructure businesses. The deal is expected to close in the first half of 2019. The deal is part of Jacobs' strategy to optimize its portfolio with a focus on higher-growth, higher-profit infrastructure and commercial projects, Jacobs CEO Steven Demetriou said in a Bloomberg TV interview.

By exiting the lower profit-margin energy business, Jacobs can seek more work on projects currently being prioritized by national governments and commercial clients, such as NASA's effort to go to Mars. WorleyParsons is buying the unit that includes Jacobs' work in petroleum, chemicals, and mining. Just last year, Jacobs purchased Denver-based CH2M, one of the energy industry's larger engineering firms. Jacobs paid \$2.85 billion.

### [One-day stop to fracking after 'micro' tremor at U.K. site](#)

(The Guardian; Oct. 23) - Fracking operations in Lancashire have been shut down after seismic activity was detected. The move came a little more than a week after the process was restarted in the U.K. for the first time since it was banned in 2011. Cuadrilla Resources, which is carrying out the operations at its Preston New Road site, confirmed it paused work Oct. 23 as a precaution because of the micro-seismic event, measured at a magnitude of 0.4 and within the limit allowed by U.K. authorities.

"This is an extremely low level of seismicity, far below what could possibly be felt at the surface but classed as an amber event as part of the traffic-light system in place for monitoring operational activity," the company said. "As such, we are required to reduce the rate we are pumping fracturing fluid once it has been detected. In fact, we have adopted extra caution and have stopped pumping for the day." The company planned to resume work the next day while it continues to monitor the site.

Campaigners have expressed concern that fracking, which involves injecting water, sand, and chemicals at high pressure into subterranean rocks to open up fissures and release oil or gas for extraction, causes earthquakes. After fracking restarted last week at the Cuadrilla work site, the British Geological Survey recorded a series of small tremors. The U.K. stopped all fracking in 2011 after two earthquakes, one reaching a magnitude of 2.3, were triggered in close proximity to the site of shale gas test drilling.