Oil and Gas News Briefs Compiled by Larry Persily March 2, 2017

Canadian shale gas will go out as LNG from Louisiana plant

(Bloomberg; Feb. 28) - Canada's first exports of liquefied natural gas may soon be heading overseas — from a port in Louisiana. A year ago, Cheniere Energy built an LNG export terminal along Louisiana's coast and became the only company shipping U.S. shale gas by tanker. Now it's looking for supplies to send abroad from as far away as the Montney shale play, straddling Canada's Alberta and British Columbia provinces.

"We're able to build a portfolio of supply from domestic gas producers and take full advantage of the cost-competitive basins across the U.S.," Cheniere's chief commercial officer, Anatol Feygin, said in a call with investors on Feb. 28. "In fact, it doesn't stop at the U.S., as we recently entered into our first supply deal to receive Montney gas." The deal underscores the great lengths Canada's gas explorers have to go to get their fuel to market as they face escalating competition from U.S. shale producers at home.

While several LNG export terminals have been proposed on Canada's West Coast, it will be years before any are up and running. In some ways, Cheniere is doing what environmentalists feared the Keystone XL oil pipeline would do: Bring Canada's energy resources into the U.S. only to export them from the Gulf Coast. "This is a great potential outlet" for Canada, Madeline Jowdy, senior director of global gas and LNG at Pira Energy Group in New York, said of the deal with Cheniere. LNG export projects in Canada "look like they are going to be a long time coming, if ever, in my opinion."

<u>Iran believes its gas reserves are 'attractive' to investors</u>

(Financial Tribune; Iran; Feb. 25) - Iran is hard at work gaining a foothold in the global energy market, and it is not letting President Donald Trump's confrontational tone stop it from trying. Political rhetoric is unlikely to turn into tangible impediments for Iran's ambition to join Russia and Norway in the ranks of major gas exporters, said Deputy Oil Minister Amirhossein Zamaninia. Iran has about \$7 trillion worth of gas reserves sitting underground, and its doors are open to those willing to help it cash in on the fortune.

Zamaninia thinks those sorts of figures mean the business case is too tempting for the world to pass up. Iran may need as much as \$100 billion to develop its gas business, but estimates vary widely. Majors from Shell to Total agreed to assess Iran's oil and gas fields last year, but no production deals have been signed. Total plans to sign a contract if Iran respects an international nuclear treaty and if the U.S. sticks to it, Total CEO Patrick Pouyanne said. Austria's OMV has said Iran's gas market is "a big opportunity."

"There are concerns and the international capital is scarce, but our projects and our environment are so attractive that we don't think we will face a great deal of difficulty," Zamaninia said in an interview last week at the CWC Iran LNG & Gas Summit in Frankfurt. "We don't think that President Donald Trump's administration will pose a big problem in this department, in the oil and gas business." Iran has an estimated 1,200 trillion cubic feet of gas reserves.

Total reportedly looking at investment in Iran LNG

(Reuters; Feb. 27) - Total is in talks to buy a multibillion-dollar stake in Iran's partly built liquefied natural gas export facility, Iran LNG, seeking to unlock the country's vast gas reserves. The French major — the first of its peers to strike deals in Iran after sanctions — seeks entry into Iran LNG at a discount to the pre-sanctions price in exchange for reviving the stalled project, two sources said. A third source confirmed Total was in the running for a stake, alongside several other majors, but any deal was still a ways off.

"Iran is trying to revamp its oil and gas projects, and the abandoned LNG plant is one of them," the third source added. Iran shares the world's biggest gas field with Qatar, which has used the reserves to build over a dozen giant liquefaction units to chill gas into a liquid for export on ships — a move Iran is keen to replicate. The Iranian part of the field, known as South Pars, contains almost 500 trillion cubic feet of gas, according to the Pars Oil and Gas Co. website.

Iran aims to grow its gas output six-fold by 2018 from pre-sanction levels of 2012. But it has no ability to make LNG for export. Total is looking to commit \$2 billion to develop the 11th phase of the South Pars field this summer — with the output available to feed Iran LNG — though that investment hinges on the renewal of U.S. sanction waivers. An additional deal for a stake in Iran LNG would likely face similar hurdles. Work on Iran LNG stopped in 2012 when sanctions blocked the import of liquefaction technology.

Australia continues to grapple with debate over oil and gas profits tax

(The West Australian; Feb. 26) - Australia is coming to the end of a \$200 billion LNG investment boom, but an analysis from an oil and gas industry group indicates that the largest project, Chevron's \$US54 billion Gorgon LNG, will not pay anything under the country's profits-based tax if low prices persist. For an oil price of \$US60 a barrel, the industry group's analysis shows no tax payments. If the price hits \$80, Gorgon would not pay any profits tax until 2028, after which it would pay about \$1.7 billion a year.

The government levies a petroleum resources rent tax on the profits from oil and gas production in Australia. But there are growing concerns that the capital-cost recovery

provisions of the tax, coupled with low prices for LNG, will result in minimal tax revenue. Though onshore gas production pays royalties, with the resource tax on profits, most offshore production is only taxed on its profits. Australia's LNG projects fed by offshore gas fields — Gorgon, Pluto, Wheatstone and Ichthys — are the focus of the tax debate.

The resource tax is levied at 40 percent of a project's taxable profit after all capital costs are recovered. In addition, the deductions for capital costs increase in value each year to compensate the producer for the risk — or delay — in recovering its full costs. Australia's Treasurer Scott Morrison in November launched an inquiry to "better protect Australia's revenue base and ensure that companies are paying the right amount of tax on their activities in Australia." The inquiry's report is due in April.

Bangladesh LNG importer asks for government subsidy

(Platts; Feb. 28) – Bangladesh's state-owned oil and gas company, Petrobangla, is asking \$1.4 billion from the government to help pay for liquefied natural gas imports in 2018, almost 80 percent of the estimated cost of the imports. "We sought the funding from the government as a subsidy, as we would not be able to realize the LNG import costs through sales to consumers in the domestic market," Petrobangla's LNG chief Mohammed Quamrumman said Feb. 28.

The country's domestic price of gas is \$2.50 to \$3 per thousand cubic feet, much lower than international market prices, Quamrumman said. Petrobangla has estimated the total cost of LNG imports at around \$1.8 billion per year starting in 2018 when Bangladesh's first floating receiving, storage and regasification unit is expected to be ready. The vessel will have an initial handling capacity of about 500 million cubic feet of gas per day, expandable to 700 million cubic feet.

Petrobangla is looking to LNG imports to help meet rising domestic demand for gas, Quamrumman said. Its funding request is pending at the Ministry of Finance.

Gazprom relies on huge reserves, low costs to maintain market share

(Bloomberg; Feb. 28) - Russia will keep Europe hooked on its natural gas for years to come, using its huge reserves and lower production costs in Siberia to maintain attractive prices, according to state-run Gazprom. The Russian exporter, which supplied 34 percent of the European Union's gas last year, sees its market share holding or rising slightly to about 35 percent by 2025 as production shrinks in the 28-member EU, Gazprom board member Oleg Aksyutin told investors in Singapore on Feb. 28.

"Europe was, is and will remain Gazprom's priority market," Deputy Chief Executive Officer Alexander Medvedev said at the same event. "We can't see yet who else could

offer European customers gas that's as affordable." Europe has sought to reduce its dependence on the Kremlin-backed company as tensions with Ukraine, which hosts major pipelines, have raised concerns about the security of Russian gas supplies.

Gazprom has spare production capacity to tap and is expanding its gas transportation network to remain competitive. Its sales provide more than 10 percent of Russia's overall exports. Gazprom's prices in Europe, which fell to a 12-year low last year, may recover to a range of \$180 to \$190 per 1,000 cubic meters this year (\$5.10 to \$5.40 per 1,000 cubic feet), compared with \$167 in 2016, Medvedev said.

Russia so far withstands competition from LNG in Europe

(Bloomberg; Feb. 28) - Europe has wanted to wean itself from Russian gas ever since supplies from its neighbor dropped during freezing weather in 2009. Almost a decade later, however, the region has never been more dependent. Gazprom, Russia's staterun pipeline gas export monopoly, shipped a record volume to the European Union last year and accounts for about 34 percent of the EU's fuel. Russia will remain the biggest source of supply through 2035, Shell said last week, echoing BP from a month earlier.

The EU has had its heart set on diversifying supplies with liquefied natural gas delivered from the U.S. But so far, those shipments have failed to materialize amid a lack of firm contracts and higher prices elsewhere in the world. Overall, LNG cargoes to Europe, led by Qatar, were stagnant last year. Gazprom may face greater competition from LNG this summer, however, as its oil-linked prices become less attractive relative to market rates, according to London-based analysts from Energy Aspects to BMI Research.

More LNG will arrive in Europe by mid-year as new plants start producing the fuel in the U.S. and Australia, increasing supply options for customers. And Russia's oil-linked gas prices will become more expensive after last year's 52 percent gain in crude. Still, the company has means to remain competitive. After adjusting its contracts, Gazprom has diluted the influence of oil prices in favor of linking to Europe's traded gas markets. That means its prices will adjust if an inflow of gas from elsewhere depresses the market.

Gazprom seeks listing on Hong Kong stock exchange

(Bloomberg; Feb. 28) - It's a long-distance relationship that's never really taken off. Executives from Gazprom in Moscow flew thousands of miles east this week to Singapore and Hong Kong for the first time since 2015 in a bid to drum up interest in the world's largest natural gas producer. Even after last year's commodities rally and a revival in Russian stocks, Asian money managers have yet to be persuaded that Gazprom is worth adding to their investment portfolio.

"It's still not our choice," said Alex Wong, a fund manager at Ample Capital in Hong Kong. "Investors actually don't know much about Gazprom, or most of the Russian companies." Gazprom is weighing a possible share placement at a major Asian stock exchange, Deputy Chief Executive Officer Andrey Kruglov told investors in Singapore on Feb. 28, without elaborating.

The state-controlled producer joined the Singapore stock exchange in 2014. For the past three years it has also targeted a listing in Hong Kong. The Singapore listing was secondary and raised no funds, with executives seeing it more as good for the company's image. Given Gazprom's strategy for boosting sales to Asia, getting a listing closer to one of its main customers and financiers "seems to make sense," said Hao Hong, chief strategist at Bank of Communications International Holdings in Hong Kong.

Kinder Morgan sells 49% stake in Georgia LNG project

(Houston Chronicle; Feb. 28) - Houston's Kinder Morgan said Feb. 28 it will sell a 49 percent stake in its liquefied natural gas export project in Georgia for \$555 million to the EIG Global Energy Partners private-equity firm. Kinder Morgan started construction on its nearly \$2 billion Elba Island LNG export project in November, and CEO Steve Kean has long indicated he was seeking a financial partner to help bear the cost burden.

Shell originally owned a 49 percent share, but pulled out almost two years ago. Shell is still helping fund the project through a 20-year contract to purchase all of the plant's output. Elba Island, which is near Savannah, Ga., is the smallest of six U.S. LNG export projects under construction, but it's moving along quickly because it's an expansion of an LNG import facility built in the 1970s. The project is scheduled to begin exports in late 2018, with full operations in early 2019.

At full capacity, the modular-design plant would be capable of producing 2.5 million tonnes of LNG per year, one-eighth the volume of the country's largest LNG projects. EIG will make an up-front cash payment of \$385 million, with further payments totaling \$170 million. Founded in 1982, "EIG has been one of the leading providers of institutional capital to the global energy industry," according to the company's website. "EIG has invested more than \$23 billion ... in 36 countries." Kinder Morgan operates 84,000 miles of liquids and natural gas pipelines, along with 155 transfer terminals.

Gas line opponents in Pennsylvania learn from Standing Rock protest

(PennLive; Mechanicsburg, PA; Feb. 27) - Mark Clatterbuck watched footage of the North Dakota oil pipeline protest camp shutdown from his home in Lancaster County, Pa. He'd gone to Standing Rock last year and been there during a violent clash between protesters and security personnel that helped thrust the protest into the

international spotlight. He's also spent years fighting a natural gas pipeline project in his own backyard, one set to cross through 10 Pennsylvania counties and 180 miles.

For Clatterbuck and activists like him, Standing Rock was a watershed moment, he said, and its lessons are being taken home. Just last week, Clatterbuck helped oversee the beginnings of an encampment on an Amish farm in Lancaster County, atop the route of the proposed pipeline he's spent years working to stop. He says hundreds of people have also signed pledges "committing to civil disobedience to protect our homes, farms and properties" once pipeline construction begins.

Clatterbuck and his wife Malinda have spent years relentlessly drumming up a local opposition. Since it was first proposed in February 2014, the \$3 billion Atlantic Sunrise Pipeline designed to move Marcellus Shale gas from northeastern Pennsylvania as far south as Alabama has come under fire from critics over eminent domain objections and concerns about the potential impacts on waterways, property values and historic sites. The Federal Energy Regulatory Commission approved the pipeline Feb. 3, with the developer just waiting on final state and federal permits before starting construction.

Enbridge now at 66,000 miles of pipelines with takeover of Spectra

(EnergyWire; Feb. 28) - Oil and gas pipeline giant Enbridge is now the dominant energy transportation and storage company in North America after finalizing its buyout of Spectra Energy Partners. The Calgary-based company swallowed up Spectra in a deal worth an estimated \$28 billion after sailing through antitrust scrutiny in the United States and Canada. Before the buyout, Enbridge had 17,500 miles of liquids pipelines and 34,000 miles of natural gas pipelines. By acquiring Spectra, Enbridge added some 15,000 miles of additional pipeline infrastructure.

Enbridge had to meet terms tied to offshore pipeline holdings to satisfy the U.S. Federal Trade Commission. Regulators feared reduced competition for energy transport from three major gas producing areas in the Gulf of Mexico. But the rise of onshore shale gas has greatly diminished the Gulf's importance to the North American gas market and its impact on natural gas prices. With the acquisition of Spectra, Enbridge has acquired significant pipeline capacity in the Marcellus Shale, the dominant gas play in North America and one that's poised to become even larger. The transaction closed Feb. 27.

U.S. shale oil production moves higher as OPEC cuts back

(Bloomberg; Feb. 27) - OPEC's Nov. 30 output agreement to cut production by 1.2 million barrels a day may have put a floor under oil prices, but it has also awakened U.S. shale. Exploration and production companies have added 77 rigs this year as of Feb. 24, according to the latest figures from Baker Hughes, while U.S shale production

is forecast to reach about 4.87 million barrels a day in March, according to the Energy Information Administration's latest drilling report. That's the highest since May 2016.

Estimates of just how much shale will be added over this year range from as high as 900,000 barrels a day by Macquarie and Rystad Energy to a more modest 400,000 barrels a day by JP Morgan Asset Management. Companies are also gaining more access to capital. "The combination of a collapse in the cost of borrowing and increased hedging opportunities following the latest price rally has put U.S. shale oil producers back in business," said Ole Hansen, chief commodity strategist at Saxo Bank.

Booming shale production isn't the only problem for OPEC. Crude stockpiles in the U.S. hit 518.6 million barrels in the week ended Feb. 17, according to the EIA. This is the highest level since the EIA began compiling weekly data in 1982. Total U.S. crude production isn't slowing down either. Since September, output from all sources has been rising at an average rate of 93,000 barrels a day, according to Bloomberg Oil Strategist Julian Lee, and is now back above 9 million barrels a day.

Canadian rules for companies to value oil reserves look longer term

(Calgary Herald columnist; Feb. 24) – Oil patch observers were buzzing after a recent ExxonMobil filing with the U.S Securities and Exchange Commission showed the company wrote down the value of its oil and natural gas reserves by 19 percent. A write-down of this magnitude — which included 3.5 billion barrels at Imperial Oil's Kearl oil sands project and 200 million barrels at Cold Lake, also in Alberta — has not been seen in at least a decade. Yet it's no reason to start playing This is the End.

Exxon's adjusted valuation is the result of SEC rules that require companies to value their reserves based on the average commodity price for the calendar year, with prices taken on the first day of every month and averaged through the year. The exercise essentially demonstrates that the reserves, on a historical basis, are considered uneconomic because the cost to produce them exceeds the price.

Canadian rules allow companies to use a price forecast that stretches over seven to 10 years when valuing their reserves. The U.S. method is akin to driving down the highway while looking in the rearview mirror. Canada's approach is fixed on the future. U.S. companies can revalue their reserves when prices recover, but the effect is to create a lot of noise that isn't useful to making long-term investment decisions. That's particularly true in the oil sands, where investment decisions are made over long time horizons.