

Oil and Gas News Briefs

Compiled by Larry Persily

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U.S. LNG hopefuls, including Alaska, will head to China with Trump

(Reuters; Oct. 27) - U.S. gas exporters and traders are aiming to grab a bigger chunk of the growing business of selling gas to China, the world's third-largest buyer, when they join President Donald Trump and Commerce Secretary Wilbur Ross in China Nov. 8-10. But the talk may all be hot air if the U.S. suppliers can't compete with bargain prices and long-term deals of rivals Australia, Qatar and Malaysia. A list seen by Reuters shows that 10 of the firms that will travel with Ross and Trump are involved in energy and gas.

Among them are Cheniere Energy, owner of the first U.S. Gulf Coast LNG export terminal, and several LNG hopefuls promoting their projects, including the state-owned Alaska Gasline Development Corp., which told Reuters it had no comment. The list underscores the U.S. ambition to sell more of its excess gas abroad as the shale revolution overwhelms the North American market. China's appetite has soared as it embarks on an audacious bid to heat millions of homes across the north by gas for the first time this winter and switch tens of thousands of industrial boilers to the cleaner fuel.

"We're on the mission to talk to Chinese companies to get something signed up," said Frederick Jones, CEO of Delfin Midstream, which wants to anchor gas-liquefaction and storage vessels 50 miles off the coast of Louisiana. Delfin has no customers, but hopes to "showcase" the company to state-owned and large private companies in China.

A Chinese oil trading executive expects the delegation to yield several short-term supply deals. Uncertain when the global LNG market will bottom out, Chinese buyers are cautiously avoiding lining up new long-term contracts, but rather are looking at signing five-year or even shorter-term deals based on spot prices, sources said.

China looking at major investment in Texas oil pipeline, storage

(Bloomberg; Oct. 29) - One of the biggest deals the Trump administration is currently negotiating is a multibillion-dollar energy investment from Chinese oil and gas major Sinopec that would bring thousands of new jobs to hurricane-ravaged areas in Texas and the U.S. Virgin Islands. Many of the deals up for discussion during President Donald Trump's trade visit to China Nov. 8-10 — including the Sinopec investment — are expected to be nonbinding memorandums of understanding, not contracts.

Details of the project in the hurricane zones in Texas and the Virgin Islands are yet to be finalized, but Sinopec is expected to partner with ArcLight Capital, a Boston-based infrastructure investment firm, and Freepoint Commodities, a Connecticut commodity trading firm. The deal could be worth more than \$7 billion in investments in the U.S. The project would include construction of a 700-mile pipeline from the Permian oil field in western Texas to the Gulf Coast, as well as a storage facility there. The deal would still need final approval from officials in the U.S. and China.

First cargo from Russia's Yamal LNG will go to China

(Bloomberg; Oct. 26) - Russia's Yamal LNG, set to be the world's biggest Arctic producer of liquefied natural gas, plans to send its debut cargo to China as thanks for its support. The first recipient of the plant's fuel will be China National Petroleum Corp. as this "is obviously a very symbolic point," Mark Gyetvay, deputy chief executive officer of Moscow-based Novatek, the project's main shareholder, said Oct. 26 on a conference call. He didn't give a date for the shipment.

The \$27 billion Yamal development has advanced despite concerns it would be hurt by U.S. sanctions levied against Novatek in 2014 after Russia annexed Crimea. Chinese lenders agreed to provide \$12 billion to the project last year after CNPC bought a 20 percent stake in the venture. China's Silk Road Fund holds 9.9 percent. Yamal LNG may send its first cargo in November, according to the Russian Energy Ministry, as China's LNG imports surge ahead of the winter heating season.

The Arctic plant, which is building three large-capacity LNG production lines with a fourth smaller-volume liquefaction train planned, is expected to reach full capacity of 17.5 million tonnes a year in 2019. Novatek owns 50.1 percent, and Paris-based Total has the remaining 20 percent stake. Total was first to team up with Novatek on the Yamal project almost seven years ago. "We are in a final stage of the commissioning process," with the first tanker set to arrive at Yamal's port soon, Gyetvay said.

Factories in China struggle with conversion to gas

(Reuters; Oct. 29) - Factories in China's industrial heartland making everything from steel sheet to tofu and ceramics are struggling with soaring costs or facing closure as they wait for authorities to approve new gas-powered boilers, five industry executives told Reuters. The problems illustrate the burden that is falling on China's small- and medium-sized manufacturers because of Beijing's radical shift from coal to natural gas and will raise concerns of insufficient power supply for industry.

China's government has ordered regions near the capital to shut 44,000 coal-fired boilers that provide steam and energy for factories, including steel rolling mills, ceramics

and chemical manufacturers, and convert or replace them with gas-fired boilers or switch to electricity by the end of October. The change is part of the push to wean the country off coal and reduce the amount of smog emitted by industry. Other measures include cutting steel and aluminum output and curbing construction in northern regions.

An average 10-tonne natural gas boiler costs about 2,531 yuan (\$381) per hour to run versus 909 yuan per hour for the same capacity of a coal boiler, according to Reuters calculations based on spot gas and coal prices in China. Rising demand for natural gas because of the switch has pushed prices higher, the sources said. China meets some of its gas demand domestically but the country is importing more liquefied natural gas to make up the shortfall. The spot price of LNG in Asia was at \$9 per million Btu on Oct. 27, up 49 percent from Aug. 25, according to Reuters assessments.

LNG sellers try new strategies to attract buyers

(Reuters; Oct. 25) - Liquefied natural gas sellers have new strategies to woo Asian buyers in a market that is set to be flooded with more supply, industry executives said at a conference in Asia this week. LNG producers are drawing customers with shorter-term contracts, by removing restrictions that limit where cargoes can be resold, and by providing the option of equity in the export terminals.

“It’s time for us to see more collaboration between buyers and sellers so they are not fighting with each other but can be friends,” Masakazu Toyoda, CEO of the government-associated Institute of Energy Economics, Japan, said Oct. 23. An equity model will share the burden of risk between upstream companies and downstream buyers, in turn lowering investment costs, Toyoda told Reuters.

Texas LNG is offering a flexible tolling fee for liquefaction, storage and loading at its proposed facility that could fluctuate according to market conditions and oil prices, said CEO Vivek Chandra. “When times are lean for you and oil prices are low, maybe I’ll drop (the fee) 10 percent. But when oil prices recover, maybe I’ll go up 10 percent and hope that over the next 10 years I average out to the agreed amount,” Chandra said Oct. 25. “The flexible tolling fee I think is an example of an innovative pricing structure.”

Liquefaction barge may allow Iran to enter global LNG market

(Reuters; Oct. 26) - Belgium’s Exmar is in negotiations for the use of its floating liquefied natural gas production vessel Caribbean FLNG for an Iranian export project, the company told Reuters on Oct. 26. The 472-foot-long barge-based liquefaction facility, delivered to Exmar earlier this year by its Chinese shipyard, was initially destined to go to work in Colombia, but remains unemployed after its contract was terminated before going into operation. Exmar is a global shipping and marine services company.

The National Iranian Oil Co. said in a statement on its website that it would supply natural gas for the project, led by Norway's IFLNG, which is a joint-venture between two Norwegian and Iranian companies. The chairman of IFLNG, Gerhard Ludvigsen, confirmed the plans in an email to Reuters. Exmar said a deal to use its vessel was the subject of ongoing talks. "We are not denying, but there is no deal yet, we are still negotiating," an Exmar spokesman said.

Caribbean FLNG has a capacity to produce 500,000 tonnes of LNG per year. The National Iranian Oil Co. said the deal was the fastest way for the country to join the global LNG market. Though Iran exports pipeline gas, it has no LNG export capability and has been looking to break into that trade. Sending gas to the floating liquefaction and storage facility, where the LNG would be loaded aboard carriers for delivery to overseas customers, would be a faster path than constructing an onshore LNG plant.

Shareholders frustrated that Louisiana LNG project not moving ahead

(KPLC-TV; Lake Charles, LA; Oct. 25) - Five years, that's how long the Magnolia LNG project has been talked about, but it's still not here yet. The CEO of LNG Ltd., the Australia-based project developer, met with shareholders Oct. 25 to discuss what's happening for the proposed plant in Lake Charles, La. "The piece we're missing is those long-term contracts," said Gregory Vesey, who joined the company from Chevron last year. That important piece is what would finally get the Magnolia project off the ground.

"For the last couple of years it's been a very slow market," Vesey said. "No one's been interested in signing those contracts." As Vesey explained this to Louisiana shareholders, some expressed their frustration. "I don't see us being really one step ahead of where we were 12 months ago from today," said shareholder Tab Perkins. "I mean, they are still saying the same thing. We still have zero contracts signed." Without long-term contracts, it's looking like Perkins investment could become a huge gamble.

"They got to have more of a demand for the LNG," Perkins said. "If we don't get a demand, we can't expect for this to all work." The \$6 billion project would include four liquefaction trains at 2 million tonnes each annual capacity. Vesey believes buyers will swoop in and purchase the contracts before year-end. He is optimistic things will work out, but as for Perkins and many other shareholders they will believe it when they see it. "We just have to wait and see, and watch what happens," Perkins said.

Coal demand still expected to grow in Southeast Asia and India

(Reuters; Oct. 26) - Southeast Asia and India are set to pick up the slack and drive global coal demand through 2040 as China cuts its use of the fossil fuel to fight pollution, forecasts from the International Energy Agency and Wood Mackenzie show. India and Southeast Asia will account for the bulk of increased coal use in the decades ahead as they rely on one of the cheapest sources of power to supply electricity, although pollution concerns have delayed some projects.

“Coal maintains a strong foothold in (Southeast Asia’s) projected consumption, not only because it is markedly cheaper than natural gas, but also because coal projects are in many cases easier to pursue as they do not require the capital-intensive infrastructure associated with gas,” the International Energy Agency said this week in its outlook for Southeast Asia. Some 100 gigawatts of new coal-fired capacity is expected to be built in Southeast Asia by 2040, boosting total capacity to 160 gigawatts, the agency said.

Vietnam, which recently overtook Thailand as the second-largest coal consumer in Southeast Asia, will become the largest regional importer by 2040, the IEA said. Wood Mackenzie expects Southeast Asia’s annual thermal coal imports to almost triple to 226 million tonnes by 2035. “Coal is still the most affordable technology in power generation, although we are seeing some pushback in coal development,” Kiah Wei Giam, principal coal/gas analyst at Wood Mackenzie, said at Singapore International Energy Week.

Gorgon LNG will fall short of nameplate capacity in 2018

(The West Australian; Oct. 26) - Too much hot air around the liquefaction trains has caused Chevron to flag a production cut at its Gorgon LNG plant in Australia as the company deals with problems 19 months after the \$US54 billion project’s maiden cargo. Chevron reportedly told project participants last month that production for the lifting year starting in April 2018 is expected at 14.6 million tonnes, or 1 million tonnes less than the plant’s nameplate capacity. The difference is worth almost \$500 million for the year.

In contrast, Papua New Guinea LNG, operated by Gorgon minority partner ExxonMobil, started production in 2014 and operated at 14 percent above nameplate capacity in 2016. All LNG trains are more productive at lower temperatures, and Gorgon’s trains have air-cooled heat exchangers mounted on top for cooling. Industry sources said the air is not circulating as predicted causing some of the hot exhaust to be sucked into the heat exchangers of liquefaction trains and reducing their cooling effect.

The problem stems from Gorgon’s plant layout and is difficult to fix, sources said. Baffles have been retrofitted on some trains to improve the air flow. Industry sources have pointed to other problems not yet factored into production expectations. Flow meters of a type known as a V-cone are cracking, and fragments could damage

equipment downstream of the meters. Fixing the problem may require further shutdowns. Offshore, the gas from the Gorgon field has unexpected wax, which may require the injection of chemicals into the gas stream that feeds the LNG plant.

Osaka Gas looks to invest in power generation in Southeast Asia

(ICIS; Oct. 25) - Japanese utility Osaka Gas is looking at investing in and building gas-to-power generation capacity as well as liquefied natural gas import terminals in Southeast Asia. "We have a good [gas-to-power] model in Japan, so we'd like to replicate that model across Southeast Asia," Yoshihiko Kimata, the utility's representative for the region, said at Singapore International Energy Week.

Emerging markets including Indonesia, the Philippines and Thailand have plans to increase the share of gas in their power mix, while reducing coal and oil. Osaka's first steps would be helping these emerging markets develop the infrastructure to receive and use natural gas, Kimata said. That could include funding or providing expertise in the midstream and downstream sectors. "Every country has big state-owned giants and to cooperate with them is inevitable, essential and necessary, but it is not so easy."

LNG demand in Southeast Asia is expected to hit 70 million tonnes per year by 2035 as the region continues to install import terminals and gas-fired power generation capacity. The region is also expected to increase the use of LNG in small-scale distribution for transportation users. "We see [high demand] potential in Southeast Asia," Kimata said, but added that competition is steep. Mitsubishi, Mitsui and Tokyo Gas have already announced plans to invest in or develop gas and power infrastructure in Southeast Asia.

Shale production drives growth in U.S. oil and LNG exports

(Nikkei Asian Review; Oct. 27) - Energy markets across Asia could be about to undergo a huge overhaul. Driven by the shale drilling revolution, U.S. exports of crude oil and liquefied natural gas are growing rapidly and likely to make significant inroads into the market share held by Middle Eastern producers. U.S. oil prices have been so low that new customers have even been found in India, while American LNG comes relatively free of destination and resale restrictions — a big draw for major buyers like Japan.

In early October, a supertanker docked at Paradip Port in eastern India carrying the first shipment of U.S. crude purchased by state-owned Indian Oil Corp. At the end of 2015, the U.S. decided to lift its ban on oil exports for the first time in 40 years. Pressure for exports had been mounting as growth in shale oil production had led to increased stockpiles. U.S. crude oil exports have recently been boosted by relatively lower prices. U.S. oil has been running about \$5-a-barrel below the international Brent benchmark.

The country's oil exports reached a record high in the last week of September. But whether or not the momentum is sustainable is the subject of debate. "U.S. crude oil is being purchased simply because its price is low as the hurricane has expanded the price difference," said Mikiko Tate, a senior analyst at Sumitomo Global Research, suggesting that the surge would be temporary. Meanwhile, U.S. LNG exports are expected to supply an estimated 18 percent of global demand in 2022.

Nova Scotia upset with gas pipeline discount offered to oil refinery

(CBC News; Canada; Oct. 23) - Some of the biggest users of natural gas in Nova Scotia are alarmed about a looming price shock expected in the next two years. And they're pinning the blame on a \$176 million discount being offered to Atlantic Canada's biggest energy company, Irving Oil. Nova Scotia's gas distributor Heritage Gas, Nova Scotia Power and the Province of Nova Scotia have filed warnings with Canada's National Energy Board, which is considering an application by the Maritimes and Northeast pipeline to slash the tolls it charges to deliver gas to Irving Oil's refinery in Saint John.

Starting in 2019, Irving is being offered a 13-year "load-retention rate" that would save it \$176 million over the term of the agreement. The discount is designed to keep Irving — which uses 65 million cubic feet of gas per day — from switching to a rival pipeline, owned by Halifax-based Emera. Opponents say the discount will have to be made up by other customers through higher tolls. Nova Scotia Power said pipeline tolls could increase by 30 percent, costing it up to \$6 million a year.

Pipeline tolls were less important when customers had access to a ready supply of gas from Nova Scotia's two offshore projects: Exxon's Sable and Encana's Deep Panuke. But those developments are rapidly winding down; by 2019, customers will increasingly rely on gas imported by pipeline from the U.S. Nova Scotians already pay the highest natural gas prices in Canada, said Energy Minister Geoff MacLellan. "Providing this particular incentive for one operation could have the impact of driving up rates here."

Speaker warns of 'sweet-spot exhaustion' for Appalachian gas

(Platts; Oct. 23) - Despite improved drilling and completion techniques such as longer horizontal laterals, natural gas production from the Appalachian Basin cannot continue on its current rapid upward trajectory indefinitely, a speaker at the Platts Appalachian Oil and Gas Conference in Pittsburgh said Oct. 23. Appalachian shale producers will eventually experience "sweet-spot exhaustion," Alan Farquharson, senior vice president of Range Resources, said on the sidelines of the conference.

"As you drill longer and longer laterals, it minimizes the number of wells it takes to develop that core position," Farquharson said. "As a result, the core of the acreage

gets drilled up, you have to step out to tier-one, tier-two and tier-three wells, which means you get lower productivity per well." Forecasts from Platts Analytics' Bentek Energy call for production from the U.S. Northeast to grow from an average 24.9 billion cubic feet per day in September to a winter-ending average of 27.3 bcf per day in March 2018.

In recent months, producers in Appalachia and other basins have been experimenting with drilling extended lateral wells, which have recorded higher per-well production. However, that per-well production growth comes at a cost when measured against an operator's production across the entire acreage, Farquharson said. The Appalachian is similar to other producing basins in that there are core areas where well productivity is the highest, as well as non-core areas where output tends to be less prolific.

Fight over pipeline compressor station jeopardizes gas flow to Maine

(Press Herald; Portland, Maine; Oct. 26) - Delay in building a new compressor station in Massachusetts to help push natural gas bound for Maine could lead to higher prices for heat and electricity if the work isn't finished before the 2019 heating season. Plans to fully open the \$1 billion Atlantic Bridge pipeline project next month to send lower-cost gas from Pennsylvania north have been stalled by ongoing opposition to building a large compressor station in Weymouth, Mass.

The compressor is needed to maintain pipeline pressure into Maine, New Brunswick and Nova Scotia, according to Enbridge, the Calgary-based company that took over the project last year. The work is intended to expand gas capacity along existing pipelines. The southern end through Connecticut will go into service in November as planned, an Enbridge spokeswoman said. North of Massachusetts, Atlantic Bridge will reverse the flow of the Maritimes & Northeast Pipeline to bring gas from Pennsylvania into Maine and beyond. Service in Maine and Atlantic Canada is expected in the second half 2018.

That's a year later than targeted. The compressor dispute is now in federal court, and if the fight drags on another year the region may need to bring in gas via other pipelines or deliveries of imported liquefied natural gas. Both would be more expensive options for customers. The compressor is an example of a local fight with a regional impact. Enbridge chose Weymouth in part because it's the right location on the pipeline from an operations standpoint. It wants to build the compressor station next to a power plant. But opponents say it will create noise, pollution and a safety risk in a populated area.

Stricter regulations continue steering maritime industry to LNG

(Reuters; Oct. 26) - The shipping industry may adopt liquefied natural gas as a fuel faster than expected because of stricter regulations that target carbon dioxide

emissions, said an executive at maritime agency Bernhard Schulte Shipmanagement (BSM). The regulation enacted by the International Maritime Organization in 2013 will require newly built ships to emit less CO₂, and that will drive shippers to move toward LNG as a fuel when placing orders for new vessels, said Angus Campbell, corporate director energy projects at BSM.

“We’re going to see over time shipyards will have to become proponents of cleaner fuels because there are only so much efficiency gains you can get by making the ship more hydrodynamic and engines more efficient,” Campbell said. The CO₂ regulations are in addition to the maritime organization’s global sulfur cap that takes effect at the start of 2020. However, a lack of supply infrastructure remains one of the largest hurdles for the LNG marine fuels industry. “Ship owners are looking for certainty on LNG supply and infrastructure and those of us looking at developing the infrastructure are looking for people to order (LNG-powered) ships,” Campbell said.