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China market 'pivotal' for underpinning new U.S. LNG projects

(Wall Street Journal; Aug. 17) - The U.S.-China trade dispute has not impacted near-term global prices for liquefied natural gas, but some analysts believe it could disrupt U.S. exports and slow down new projects. That could weigh on gas prices in the longer term because U.S. producers are quickly running out of places to sell an unrelenting rush of supply and are looking to more LNG exports. The chilling prospect is that companies investing in U.S. export infrastructure scale back plans or put them on hold.

"There's no way in the current environment that anyone's going to be signing any deals," said Neil Beveridge, senior oil analyst at Sanford C. Bernstein & Co. "It's causing a big overhang on what can get done." Growing demand for LNG and unexpectedly fast growth in China have been a blessing for U.S. producers hoping to sell gas overseas as an outlet for their record production. "China could be really pivotal in underpinning that U.S. LNG growth," Beveridge said. Since 2011 companies have spent about \$44 billion on U.S. plants and terminals to export LNG, said energy consultancy Wood Mackenzie.

The trade fight could be a problem. "China will look elsewhere in the world to source the commodities they need," said J. Alexander Blackman, senior executive at Standard Delta, a Houston-based commodities firm with operations in Asia. U.S. exporters in turn will need to sell LNG to other countries if they are cut off from the Chinese market due to tariffs. Since exports wouldn't be hit immediately, analysts doubt it would lead to a sudden swelling of supplies or lower prices — the impacts would be felt longer term.

China making progress in cleaning up its air

(Bloomberg; Aug. 19) - Beijing residents have been breathing some of the cleanest air in a decade as they begin to reap the benefits of China's anti-smog push. Of the seven lowest monthly pollution readings in the capital city since 2008, five have been recorded since the beginning of last summer, according to data gathered by the U.S. Embassy in Beijing. That's when Chinese officials ramped up enforcement of government policies restricting coal burning in Beijing and surrounding areas.

The improvement underscores how rapidly China is attacking the problem that created Beijing's "airpocalypse" in 2013, when tiny smog particles peaked at 35 times the World Health Organization's recommended limit. Since President Xi Jinping made fighting air

pollution one of the country's top priorities, millions of northern businesses and families were forced to switch from coal to cleaner-burning gas for industrial power and heating.

"China has made a very clear pledge to 'bring back the blue skies,'" said Sydney-based Tim Buckley, director of energy finance studies at the Institute for Energy Economics and Financial Analysis. "Hardly a week goes by when China doesn't bring in a new regulation or policy to further this commitment." But there's still a long way to go and the cost to shift the country's energy mix to cleaner fuels is rising. China is seeking to lower the amount of energy it gets from coal to 58 percent by 2020 from about 60 percent now through substituting gas for home heating and industrial boilers and nuclear reactors for coal power plants, Jefferies Group analyst Laban Yu said in a research note last month.

LNG buyers sign mid-term supply deals to protect against price risk

(Bloomberg; Aug. 19) - Some of the world's biggest buyers of liquefied natural gas are signing mid-term supply deals, a move seen as protection against a further rise in prices that are already at the highest in four years. A unit of BP signed a five-year supply deal with the ExxonMobil-led Papua New Guinea LNG project on Aug. 17, following a similar deal by PetroChina last month. Japan's JERA Co. inked an agreement for the same duration with Abu Dhabi Gas Liquefaction Co.'s LNG plant last week.

"Buyers have been concerned about the strength of prices this summer and coming winter and may have expectations of further increases," Wood Mackenzie analyst Nicholas Browne said in an e-mail. "For a portfolio player like BP, it gives them additional supply and optionality close to key Asian markets over this period."

ExxonMobil is negotiating another mid-term LNG deal from the PNG LNG facility in lieu of spot-market sales, partner Oil Search said Aug. 17. More mid-term deals are likely at least until 2023 or 2024, when the next round of major LNG supply projects come online, Browne said. "The uptick in demand and spot prices over the last year has brought home the risks to buyers of being exposed to the spot market too much," said Saul Kavonic, Credit Suisse Group's director of energy research in Asia. That has created "more deal space for buyers and sellers to agree on mid-term contracts."

BP signs 5-year contact for Papua New Guinea LNG

(Australian Financial Review; Aug. 17) - The Papua New Guinea liquefied natural gas venture, which includes ExxonMobil as the operator and Australia-listed Oil Search and Santos in the partnership, has snared another new customer, with BP committing to a five-year contract potentially worth more than \$2.2 billion. The deal makes BP the first

non-Asian customer for PNG LNG and augurs well for longer-term sales that would underpin a proposed \$US12 billion liquefaction capacity expansion at the terminal.

The BP deal follows a similar but smaller contract announced a month ago with PetroChina. BP's Singapore unit will start receiving LNG from the venture this month as part of a contract to buy 450,000 tonnes a year for an initial three years, before doubling to about 900,000 tonnes a year for a subsequent two years. Exxon and its partners in PNG LNG have been able to offer extra volumes for spot sales due to the outperformance of the project since it began production more than four years ago.

Oil Search managing director Peter Botten said the contract with BP broadens the customer base for PNG LNG. Negotiations still are under way with "several" other parties under mid-term deals of up to 450,000 tonnes a year, Botten said.

Nova Scotia LNG developer in talks with Swiss energy trader

(Reuters; Aug. 16) - Axpo, a Swiss utility and energy trader, said Aug. 16 it was in talks with a Canadian company planning to build a liquefied natural gas export terminal on the country's East Coast for a 10-year supply deal. If the talks lead to a sales-and-purchase agreement, it would help boost the chances of the C\$10 billion (US\$7.6 billion) Goldboro 10-million-tonne-per-year project proposed by Pieridae Energy to become the first LNG export terminal on Canada's East Coast.

Canada is rich in oil and gas but has yet to export LNG to Asia from its West Coast or across the Atlantic from its East Coast in commercial quantities despite more than 20 proposals for export terminals. Under the non-binding term sheet, Axpo would purchase the output from the project's second liquefaction train with deliveries to start in the third quarter of 2023. A German utility, Uniper, already has signed on as a customer for the Nova Scotia terminal, according to Pieridae.

Pieridae's CEO Alfred Sorensen told the Financial Post on Aug. 14 the company is close to taking a final investment decision on the project next month after spending the past year seeking permits and talking to construction contractors and LNG buyers. Another hurdle is getting gas to the Nova Scotia liquefaction plant. The company has said that about half of the gas would come from Alberta and the other half might come from plays in Pennsylvania with new pipelines needed from either area.

Louisiana LNG developer raises \$160 million

(The Acadiana Advocate; Lafayette, LA; Aug. 16) - Venture Global, which is working to develop two liquefied natural gas export projects in Cameron and Plaquemines parishes in Louisiana, said it has raised an additional \$160 million for the projects as it works

toward starting construction in early 2019. The company is one of several racing to get multibillion-dollar LNG export projects off the ground in Louisiana in hopes of meeting heightened global demand in the early 2020s.

The new round of funding, which Venture Global said came from large institutional investors, brings the total capital raised for the projects to \$630 million. The company's previous round, which closed last fall, brought in \$108 million. Co-CEO Mike Sabel said the company continues to sign 20-year LNG purchase agreements with customers for the two facilities. The firm's Calcasieu Pass subsidiary said earlier this year it inked a purchase agreement with BP. Neither project has reached a final investment decision.

The firm's 10-million-tonne-per-year Calcasieu Pass facility is planned on a 1,000-acre site at the intersection of the Calcasieu Ship Channel and the Gulf of Mexico. The company also has plans to build a 20-million-tonne-per-year terminal in Plaquemines Parish on the Mississippi River.

FERC approves start-up of feed gas to Corpus Christi LNG

(Reuters; Aug. 17) - The Federal Energy Regulatory Commission has approved a request by Cheniere Energy to feed the first gas into its new liquefied natural gas facility in Corpus Christi, Texas, marking the beginning of the commissioning phase for the export terminal. The FERC approval, issued Aug. 16, means Cheniere will be able to produce the first commissioning cargo by the fourth quarter of this year, if not earlier.

Train 1 at the Corpus Christi facility will become the first LNG export terminal in Texas and the third operating plant in the United States. Cheniere CEO Jack Fusco told analysts earlier this month the facility would produce its first LNG in the fourth quarter, implying a commercial start-up of the facility earlier than the slated first half of 2019. The LNG market looks for facility start-ups not only because they ultimately add supply but because the commissioning cargoes tend to be traded on the spot market, whereas initial commercial deliveries go to prearranged long-term buyers.

Cheniere's Sabine Pass terminal in Louisiana, with four operating liquefaction trains, is the largest LNG facility in the country with annual capacity of 18 million tonnes of LNG per year. A fifth train is under construction at Sabine Pass. Dominion Energy's Cove Point terminal in Maryland began operations in March of this year. Coming next, Kinder Morgan's Elba Island LNG terminal in Georgia, Sempra Energy's Cameron LNG in Louisiana, and Freeport's Texas facility all are scheduled to start up in 2019.

LNG Canada project will build salt marshes to offset impacts

(Northern Sentinel; Kitimat, BC; Aug. 18) - LNG Canada will construct two salt marshes in Minette Bay to offset the environmental impact caused by work nearby at the gas liquefaction project construction site and in the waters of Kitimat harbor. LNG Canada director of external relations Susannah Pierce said the salt marshes will be completed regardless whether LNG Canada's joint-venture partners make a positive final investment decision on the C\$40 billion project in Kitimat, British Columbia.

"This work is required as soon as we begin our work on site, work that will impact the waterways that flow across our site," Pierce said. "We will be required to monitor the performance" of the marshes for 10 years. Under permit terms issued by Canada's Department of Fisheries and Oceans, the company must create new offsetting fish habitats to mitigate the effects on breeding, especially the impacts of marine dredging. The Shell-led LNG project is expected to reach an investment decision later this year.

"The rule of thumb is that we create more fish habitat than the fish habitat we affect. As it relates to marine habitat, some of the new marine fish habitat offsets will be created at Minette Bay," Pierce said. The offsets will enhance existing mud flats by creating salt marshes and rock reef habitats. "We plan to remove a significant amount of large woody debris and help reinstate tidal channels that allow fish to utilize the Kitimat River estuary and Minette Bay," Pierce said.

Opponents continue fight against LNG projects in Brownsville

(The Brownsville Herald; Texas; Aug. 16) - The Save RGV (Rio Grande Valley) from LNG and the Lower Rio Grande Valley Sierra Club planned a benefit concert for Aug. 17 in Port Isabel, Texas, as the groups continue raising funds for their efforts to oppose liquefied natural gas terminals proposed for the Port of Brownsville. Rebekah Hinojosa, an organizer with the Sierra Club, said members are "concerned for public health, the environment and safety if LNG comes to town. ... LNG is not a done deal in the valley."

The organizations' supporters have submitted hundreds of comments to the Federal Energy Regulatory Commission against the LNG terminals, Hinojosa said, adding that South Padre Island, Port Isabel, Laguna Vista, and Long Island Village have passed resolutions opposing LNG facilities. Developers have proposed two projects for the port — Annova LNG and Texas LNG. Neither project has finished its federal environmental review or lined up all the required permits and authorizations.

The opponents are seeking to raise \$10,000 to hire an environmental attorney to assist in submitting comments on the project's environmental studies and permits.

North Dakota companies flared 17% of gas production in June

(S&P Global Platts; Aug. 17) - Gas production in North Dakota's Bakken Shale remains strong, but the inability to gather and process all the gas led operators to flare nearly 17 percent, or 388 million cubic feet per day, of all gas produced during June, according to the latest data released by the North Dakota Industrial Commission. It marked the third straight month producers were unable to keep flaring within state regulations of 15 percent or less as companies there are primarily interested in much higher-value oil.

Producers flared 15.5 percent in April, 17 percent in May and 16.8 percent in June. Starting Nov. 1, only 12 percent of associated gas can be flared before possible state fines kick in. Operators did manage to only flare 12 percent in March, but gas output has increased by about 200 million cubic feet per day since then to 2.3 billion cubic feet per day, further exceeding the system's processing capacity. In addition, some new wells are in areas where there are not adequate gathering lines or processing facilities.

"The industry is tapping the brakes a little bit," said Lynn Helms, North Dakota Industrial Commission director. Some operators voluntarily shut in some oil production during June in order to stay in compliance with the gas capture policy, he said. But not all companies are able to meet the goals. Eleven producers captured less than the 85 percent target in April while nine failed to do so in May. Helms said companies are concerned about meeting the 12 percent goal in November, but some relief is on the way in the form of new gas processing plants and expansions.

Quebec wants to promote LNG distribution in province

(LNG Industry; Aug. 16) – The Quebec government is seeking proposals to supply liquefied natural gas to the Cote-Nord region — population about 100,000 — a large area stretching almost 800 miles in the northeast portion of the province along the St. Lawrence River. The call for proposals is the first step in a process designed to supply LNG to large manufacturing companies, mining companies, shipowners, maritime transportation companies, and others in the region not served by gas pipelines.

The government said the availability of natural gas, with an effective logistics chain for distribution, will help promote economic development in the region. Proposals are due by Oct. 15.

Federal judge says new review needed for Keystone XL oil line

(Calgary Herald; Aug. 16) - A U.S. federal judge dealt TransCanada a new setback on Aug. 16 in its years-long push to build the Keystone XL oil pipeline, while competing pipeline projects celebrated major milestones on the same day. U.S. District Court

Judge Brian Morris issued a ruling in Montana, requiring the U.S. State Department to conduct an environmental assessment of the new Keystone XL route through Nebraska.

The judge ruled that a new assessment was necessary because the Nebraska Public Utilities Commission approved the US\$8 billion pipeline along an alternative route through the state, rather than the company's desired route, and because that route had not been properly studied. The Calgary-based pipeline company had planned to begin preliminary work on the line, which would ship 830,000 barrels of oil a day from Alberta to the U.S. Gulf Coast, later this year but the ruling adds uncertainty to the timeline.

Meanwhile, and on the same day, rival Enbridge announced the start of construction on its own Canadian oil export project, Line 3, and the National Energy Board cleared Kinder Morgan to begin construction on the majority of the Trans Mountain expansion project to move more oil from Alberta to a marine terminal in British Columbia. The Line 3 replacement project will roughly double the capacity of the line to 760,000 barrels per day, allowing more Canadian crude to move to refineries in the U.S. Midwest.

Pakistan faces challenges in its hopes for gas pipelines

(Interfax Global Energy; Aug. 16) - Pakistan is considering two rival pipeline projects to reduce its reliance on imported liquefied natural gas. However, both the Turkmenistan-Afghanistan-Pakistan-India (TAPI) pipeline and the recently resuscitated Iran-Pakistan (IP) pipeline will be hugely challenging to deliver.

TAPI has broad international support and has made progress this year, with work on the Afghan section having started in February. This has caught the attention of China, which last week expressed interest in joining the project. Beijing plans to construct a spur line through northern Pakistan into western China. A spur from TAPI is expected to be a cheaper way for China to access Turkmenistan's gas than building a fourth line of the Central Asia-China Pipeline, which passes through Uzbekistan and Kazakhstan.

However, TAPI faces major obstacles, especially in Afghanistan. The pipeline will pass through lawless areas and is likely to come under attack. Analysts consider it unlikely that TAPI will be completed given the scale of the threat and the inability to protect the pipeline. The IP pipeline also will be difficult to deliver, primarily because of international opposition. The U.S. and Saudi Arabia are important allies to Pakistan, and both are seeking to isolate Iran economically and diplomatically. They are expected to pressure Pakistan to keep the project shelved and have been promoting TAPI as an alternative.

Mitsubishi plans new venture to supply Bangladesh with LNG

(Nikkei Asian Review; Aug. 17) - Mitsubishi Corp. plans to supply liquefied natural gas to Bangladesh and other developing Asian countries, looking to meet the needs of these growing markets in a way that could help Japan in its trade friction with the United States. Japan has been considering importing more American LNG, but domestic demand is leveling off as the population shrinks.

If Mitsubishi is able to sell more Southeast Asia and Middle East LNG to other Asian countries, that will reduce the Japan-bound supply, leaving a shortfall that can be met with U.S. gas. Considering that Japan is the world's largest LNG importer, this would help reduce its trade deficit with the U.S. The Japanese trading house aims to begin operating an LNG terminal in Bangladesh next year with local company Summit Group.

It will park a floating storage and regasification unit — which is faster and cheaper to build than a land terminal — off the coast, supplying the country with 3.5 million tonnes of LNG annually. Mitsubishi will hold a 25 percent stake in the terminal operation business and also plans to be involved in related areas, such as LNG procurement and power plant operation. Bangladesh began importing LNG this year as its own gas production is in decline. The country is expected to bring in 17 million tonnes of LNG in 2030 to meet the needs of a growing population.