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Yamal LNG may have Chinese investment fund as new partner

(Reuters; Aug. 24) - Russia's second-biggest gas producer Novatek is close to selling a 9.9 percent stake worth an estimated \$1.4 billion in its Yamal liquefied natural gas project in the Russian Arctic to a Chinese investment fund, Kommersant business daily reported Aug 24. The deal could close in the coming weeks, three sources familiar with the talks were quoted by the Russian newspaper. One of the sources identified the buyer as China's Silk Road infrastructure fund, the paper said.

The sale could help Novatek line up project financing from Chinese banks after sanctions over Russia's actions in Ukraine shut access for Russian companies to Western capital markets, Kommersant said. Novatek declined to comment. Bank of America Merrill Lynch estimated that the 9.9 percent stake could be valued at up to \$2 billion. China National Petroleum Corp. paid about \$1 billion for a 20 percent stake in Yamal LNG in 2013 and France's Total spent \$425 million for 20 percent in 2011.

Novatek aims to retain more than 50 percent of the project, which is due to start shipping LNG in 2017 and projected to hit peak output of 16.5 million metric tons a year in 2021. China announced last year that it would contribute \$40 billion to set up the Silk Road fund to boost connections across Asia. The fund made its first acquisition in April, investing \$125 million in a Chinese company developing energy projects in Pakistan.

Qatar adapts to protect its share in changing global LNG market

(Reuters; Aug. 25) - Gas giant Qatar is becoming commercially sharper, using traders and tenders to grab new customers, and fighting to hold on to its share in the prized Asian market. Qatar is the world's top supplier of liquefied natural gas, but in the coming five years it could be surpassed by Australia, a shift which threatens its dominance in Asia — which accounts for almost three-quarters of the global LNG market and has paid the highest prices.

"Previously Qatar's strategy had been about retaining price. In the future, it's going to be about retaining market share," said Noel Tomnay, head of global gas and LNG research at consultancy Wood Mackenzie. "As lots of Australian LNG comes into the market, it's inevitably going to push out some Qatari volumes from Asia," Tomnay said. This has prompted Qatar to work more closely with trading houses that are focused on short-term deals, often in riskier markets, while also lowering its price expectations.

"In the past Qatar did not need to be commercial. Now they are a lot more commercial, a lot sharper," said one international trader. With the help of trade houses, Qatar has supplied LNG to some of the newest importers including Egypt, Jordan and Pakistan

that are buying via short-term deals. Qatar's largest customers are Japan, South Korea and India. The global LNG market has been based on long-term deals, but all the new supply has increased uncommitted volumes, triggering more focus on the spot market.

Bank of America warns low oil prices will hurt U.S. LNG prospects

(Bloomberg; Aug. 24) - Plummeting oil prices have dimmed prospects for soon-to-start U.S. liquefied natural gas exports, Bank of America said in a note to clients Aug. 24. The gap between U.S. and global LNG prices has narrowed as oil's collapse has reduced the cost of crude-linked LNG contracts in Asia and Europe, Max Denery, an analyst at the bank in New York, said in the report.

The reduced price advantage comes as Cheniere Energy finishes construction of its Louisiana export terminal, set to load its first shipment before the end of the year. U.S. LNG will enter the market as gas from new Australian terminals adds to a global glut. "Spare U.S. liquefaction capacity could aggravate the ongoing spot LNG market glut," the bank report said. "Longer-term, the critical question for LNG global prices is whether there will be enough demand to meet incremental supply from Australia and the U.S."

World demand for natural gas grew just 0.4 percent last year, the lowest rate since 2009, according to Bank of America. Imports have declined in China, where low oil prices are discouraging industrial users from switching to gas.

Conoco says costs are too high for new supply to Australia LNG plant

(Australian Financial Review; Aug. 26) - ConocoPhillips is targeting mid-2018 for a goahead on a potential \$15 billion (U.S.) offshore gas development off northern Australia to feed its Darwin liquefied natural gas plant after current supplies run out, but says the venture isn't viable without a sharp drop in costs. Frank Krieger, vice president of exploration and development for Conoco in Australia, said fields in either the Timor Sea or Browse Basin could be tapped, but only as backfill for Darwin LNG, not expansion.

That gas would be used to keep the project in operation after the existing offshore gas source, the Bayu-Undan field in the Timor Sea, is depleted in 2022 or 2023. Darwin, which produces about 3.7 million metric tons a year of LNG, has long been regarded as prime for expansion given it already has development approval to take capacity to 10 million tons. But Krieger signaled an expansion is highly unlikely after the significant cost inflation since the plant was built a decade ago, particularly given weak oil prices.

Darwin cost about \$3 billion, while Woodside Petroleum's similar-sized Pluto venture several years later cost \$15 billion. Projects currently under construction are even more expensive. "Darwin LNG was built in a low-price environment," Kieger said. "In terms of our global portfolio the price to build ... (an additional) train in Darwin just really isn't

competitive at the moment, so we'll need to see significant cost deflation." Developing either of the two other fields to supply Darwin is estimated at \$7 billion to \$15 billion.

Anadarko says Mozambique LNG go-ahead dependent on government

(Bloomberg; Aug. 26) - Anadarko has clinched almost all the supply accords it needs to bring a liquefied natural gas project in Mozambique to fruition and is awaiting state consent to export the fuel — just as U.S. competition gathers pace. The company has obtained about 90 percent of the heads of agreement, or non-binding accords, it needs to finance the \$15 billion onshore liquefaction plant at 12 million metric tons per year capacity, country manager John Peffer said.

Reaching an investment decision on the LNG project "is predicated on how quickly we can get the agreements from government," Peffer said. "They're motivated and we're motivated." Africa's projects to chill gas to a liquid for shipment overseas face competition from the U.S., which is moving ahead with its own export plans after shale production boomed and created a natural gas surplus. Mozambique's offshore gas discoveries are estimated at 75 trillion cubic feet.

"Ultimately, the timing for taking a final investment decision will be determined by the government's pace agreeing to the legal and contractual framework and approving necessary permits," Peffer said. Anadarko expects to submit its development plan in the coming months. Anadarko has secured pledges from Asian buyers for more than 8 million metric tons of LNG a year, or about 90 percent of the contracts it needs to proceed with the 12-million-ton-a-year project, according to Peffer.

India utility tries to revive 10-year-old, low-cost LNG deal with Iran

(Live Mint; India; Aug. 23) - State-run natural gas utility GAIL India has begun talks with Iran to revive a decade-old \$22 billion liquefied natural gas supply contract, the cheapest deal ever struck by an Indian firm. The 2005 sales-and-purchase agreement with the National Iranian Gas Export Co. provided for 5 million metric tons of LNG per year (240 billion cubic feet of natural gas per year) on a long-term contract at very attractive price of \$3.215 per million Btu.

But Tehran never honored the deal. With prospects of sanctions against Iran being lifted after a historic nuclear accord, India has tried to reopen talks on buying LNG from Iran. "Dialogue has been initiated with Iranian counterparts to revive the LNG supply long-term agreement," GAIL said in its latest annual report. "Iran has so far not responded to the offer," a GAIL official said, adding, "There is a half-finished LNG export terminal in Iran which will have to be completed before any export of LNG can begin from Iran."

The 2005 agreement, he said, was an extremely attractive deal with its price linked to Brent crude oil prices with a floor of \$10 per barrel and a ceiling of \$31 a barrel. The

GAIL official said Iran had attached to the deal a side letter that required the national gas export company to obtain approval of the National Iranian Oil Co. for the LNG contract within 15 days. However, the gas export company never obtained the required approval. Regardless, GAIL has said the agreement is still enforceable.

B.C. agency links 4.4-magnitude earthquake to fracking

(CBC News; Aug. 26) – Fracking triggered a 4.4-magnitude earthquake in northeastern B.C. last year, CBC News has learned, making it one of world's largest earthquakes ever triggered by the controversial process. B.C.'s Oil and Gas Commission confirmed the cause of the earthquake in an email statement to CBC this week, saying it was "triggered by fluid injection during hydraulic fracturing."

The quake was felt in Fort St. John and Fort Nelson in August 2014. It was preceded by a 3.8-magnitude earthquake in late July, also caused by fracking. B.C.'s Oil and Gas Commission told CBC that several companies were doing hydraulic fracturing in the area at the time, and several more were disposing of fracking waste. But the commission says it was Progress Energy's operations that were "associated with triggering this event."

Since the 2014 earthquake, Progress Energy has been ordered to reduce the volume of fracking fluid it uses, and the company has complied, the commission said. As well, new seismic equipment has been set up in the area. No new quakes have been detected in the immediate area. Progress Energy is owned by Petronas of Malaysia, which also leads Pacific NorthWest LNG, the venture planning to build a giant liquefied natural gas export facility near Prince Rupert, B.C., supplied by gas fracked in northeastern B.C.

First Nation says it is looking for new site for controversial LNG plant

(Vancouver Sun; Aug. 26) - The Lax Kw'alaams First Nation appears to be taking steps to propose a new site for the Pacific NorthWest LNG terminal, one that would not affect salmon-rearing habitat in the Skeena River estuary in front of Prince Rupert, B.C. In an Aug. 24 message to members posted on its Facebook site, the First Nation said while the federal government has been a tremendous disappointment in its environmental review of the project, the provincial government looks to be making a concerted effort to fully understand the concerns of the Lax Kw'alaams, particularly salmon habitat.

"A protocol has been established to do investigative drilling in aid of determining an alternative site, away from the Flora Bank," said the message. "That exploratory work is to commence soon." It is not clear with whom the protocol agreement on investigative drilling was reached. Lax Kw'alaams Mayor Garry Reece and other community leaders could not be reached for comment Aug. 25. Neither Pacific NorthWest LNG nor the B.C. Ministry of Natural Gas responded to requests for information from The Vancouver Sun.

The \$36 billion LNG terminal, pipeline and northeastern B.C. gas development project is led by Malaysia's state-owned Petronas. The move to find a new site could remove a significant obstacle for the project, particularly as First Nations in British Columbia find themselves with an increasing strong say over natural resource projects. The Lax Kw'alaams earlier this year rejected a billion-dollar deal with Pacific NorthWest and the province to support the project. The First Nation said the risk to salmon was too great.

Hawaii governor says LNG should not be part of state's energy future

(Pacific Business News; Honolulu; Aug. 24) - Hawaii Gov. David Ige said Aug. 24 the state does not need liquefied natural gas as part of its energy future, and said Hawaii should focus on developing renewable energy rather than large-scale imports of LNG. "I have reached the conclusion that Hawaii does not need LNG in our future," said Ige, speaking at the Asia-Pacific Resilience Innovation Summits & Expo in Honolulu. "It's time to focus all of our efforts on renewables. We will oppose building LNG facilities."

LNG is being pegged as a cleaner and lower-cost transitional fuel for Hawaii. Prior to his Aug. 24 statement, the governor had said he would support LNG imports only as a bridge toward integrating more renewable energy. The state upped its renewable energy goal earlier this year to 100 percent renewables by 2045. Ige noted that any time and money spent on LNG is time and money not spent on renewables. "LNG will no longer save us considerable money," he said. "It is a fossil fuel and it is imported."

Hawaiian Electric and Hawaii Gas have both started efforts to bring in LNG as a replacement for diesel or other oil-based fuels. Though Hawaii Gas has been running a pilot project, importing LNG in 40-foot-long containers from California, neither utility has committed to bulk LNG cargoes. While opposing large-scale LNG imports for power generation, Ige said he is OK with the smaller effort by Hawaii Gas, which the utility can continue "without great infrastructure."

Pipeline protestors start hike to proposed LNG site in Oregon

(Herald and News; Klamath Falls, OR; Aug. 23) - Described as a "scar" by some onlookers, one man pointed toward a cleared-out patch of land on a hillside near the Oregon-California border. "That's the Ruby Pipeline coming from Wyoming," said Ted Gleichman of the Oregon and National Sierra Club. "It's the size of an interstate highway." The scale and size of the natural gas pipeline was used as an example to describe what could happen if an extension is built to the coast at Coos Bay, Ore.

Gleichman was among several who joined or supported "Hike the Pipe," an effort to protest a 232-mile pipeline extension that would bring Rockies gas to the proposed Jordan Cove LNG project at Coos Bay. Of the dozens who joined the initial 3-mile trek near the Oregon-California border Aug. 22, three will hike the entire length of the

proposed pipeline. "This is a beautiful example of young people and others taking on our planetary crisis one step at a time," Gleichman said. "Literally. For 232 miles."

There will be community events during the hike to encourage more participation on the way. Hikers said it will take them several weeks to reach Coos Bay. Many opponents of the LNG project object that landowners and land users along the pipeline route will pay the price of environmental and community impacts, but most of the revenues will go to the gas producers and Coos Bay plant. "The actual jobs and income to American communities and in Southern Oregon is so minuscule," said economist Torrey Byles.

LNG importer says New England doesn't need new gas pipelines

(Boston Globe; Aug. 24) - The conventional wisdom among energy regulators in New England is that more natural gas pipeline capacity will help get the region's high electricity prices under control. But the state's primary importer of liquefied natural gas is determined to challenge that line of thought. Last week, GDF Suez Energy North America began to send copies of a new report to policy makers that says plans to charge electric ratepayers for more gas pipelines would hurt consumers.

GDF Suez, which runs the LNG import terminal in Boston Harbor and an offshore receiving port near Gloucester, commissioned the study to assess New England's energy markets and the implications of using funds from electric ratepayers to build gas pipelines. The report, unsurprisingly, echoes GDF's official position that only modest pipeline improvements are needed for long-term stability of the electricity grid. LNG supplies, the report said, along with backup oil turbines, can help cover shortfalls.

GDF Suez, part of the French conglomerate now known as Engie, has motivation to prevent more pipelines from being built. Additional gas from lower-priced U.S. sources could compete with the imported LNG that GDF Suez delivers by ship to Massachusetts. Few consumer issues are as pressing to New England's governors as the sharp rise in electric bills that constituents saw in recent winters. In large part, the increases were blamed on the region's constrained gas pipeline capacity.

Opponents fight proposed U.S. West Coast rail-to-ship oil terminals

(The Canadian Press; Aug. 22) - To Canadian crude oil producers hankering for a route to market while pipeline proposals stall, a bevy of crude-by-rail projects planned on the U.S. West Coast may look enticing. But efforts to send trainloads of crude to refineries and marine terminals in Washington, Oregon and California aren't having an easy time of it either. Environmental organizations and community groups have been teaming up to fight rail projects in various stages of development in the region.

Among the concerns is the prospect of more Alberta bitumen, derided as "dirty" in some quarters, coming to the area by rail. "We're as much of a green enclave as you're going

to get in North America," said Matt Krogh, a ForestEthics campaigner based in Washington state. "There's some real cognitive dissonance around allowing the expansion of a dirty and polluting industry in your backyard that makes no long-term economic sense."

Some of the concerns center on safety. The Quebec disaster two years ago, in which a crude-laden train exploded and killed 47 people, is still in many minds. But the larger implications of enabling more fossil fuel development and what that means for climate change also play a role in the debate. The broad issue of shipping oil, natural gas or coal from the U.S. West Coast raises an "identity question," said Eric de Place, with the Seattle-based think-tank Sightline Institute. "There's a lot of anxiety about that."

County and residents object to small LNG plant near Edmonton

(Edmonton Journal; Aug. 24) – Alberta's Sturgeon County residents are fighting a proposed \$50 million liquefied natural gas production plant next to their farms and homes. The county council and residents say they would prefer to see the proposal by Calgary-based Ferus Natural Gas Fuels moved about 30 miles east into the Industrial Heartland, an area set aside for heavy industries. But Ferus says its project only makes economic sense if it is sited next to the gas plant that would supply the feedstock.

"We're a farming community here," said Janis Clegg, who lives across the road from the proposed Ferus site and keeps cattle. "It seems ludicrous to put the industry here when Heartland is ready to take the project." Residents are also concerned about LNG tanker trucks traveling the narrow gravel roads with school buses around the community, she added. Both Ferus and the residents have asked for a hearing with the Alberta Energy Regulator, which has final say on the location and whether the project should go ahead.

The county told the regulator the plant should go in the industrial area where there is "less land-use conflict with residential land uses," and roads have been upgraded for heavy trucks. Ferus had applied to build in the industrial area, but could not secure a "commercially viable" location, said a Ferus vice president. The plant, proposed for northeast of Edmonton, would liquefy natural gas and move it by truck for sale as a cleaner alternative to diesel. The plant's first phase would produce 100,000 gallons of LNG per day.

Company plans \$800 million LNG plant for Quebec mines, industry

(The Canadian Press; Aug. 24) - The Quebec government has given the green light to a nearly \$800 million liquefied natural gas production plant in Becancour, on the St. Lawrence River. Niels Stolt-Nielsen, CEO of Stolt-Nielsen and a principal shareholder in the project, announced the go-ahead Aug. 24 at an event with Quebec's premier. Stolt-Nielsen also announced a transportation partnership agreement with Quebec trucking firm Somavrac and Petro-Nav, which specializes in maritime transport of bulk liquids.

The company expects to start up the plant in 2018. The project has received its environmental approvals since it was announced more than a year ago to provide LNG to industries in Quebec not served by the existing gas pipeline network. Environment Minister David Heurtel said a natural gas supply offers a greener alternative to oil and diesel. "This project will lower Quebec's greenhouse gas emissions by increasing access to natural gas for industries which aren't connected to the gas network," he said.

Local member of the Quebec provincial assembly Laurent Lessard said Bécancour is the perfect location for such a project, given that it is already connected to a natural gas pipeline and is on the St. Lawrence River. The plant will help serve mining companies and industries in Northern Quebec, a provincial official said.

Gladstone LNG will sell commissioning cargoes during start-up

(Reuters; Aug. 21) – Australia's Gladstone liquefied natural gas production plant coming on stream in September is expected next week to offer up to six commissioning cargoes for sale between October and December, trade sources said. Gladstone LNG, led by Australia's Santos, expects to begin loading tankers in late September, which traders say will be sold to market participants until its long-term delivery obligations begin.

Once online, the production facility will go through a commissioning period during which equipment and production processes are tested, until the plant can be declared commercial. Commissioning cargoes are subject to loading delays, even cancellation, however, if equipment does not meet certain performance standards.

Partners with Santos in the \$18.5 billion project are Korea Gas, Malaysia's Petronas and France's Total. When fully operational, the two-train liquefaction plant will be capable of producing up to 7.8 million metric tons of LNG per year.

Gorgon LNG construction workers vote to approve strike

(The West Australian; Aug. 25) - Construction workers on Chevron's Gorgon LNG project on Australia's Barrow Island could walk off the job as early as next week in support of their campaign for "family friendly" work schedules. The Australian Manufacturing Workers' Union and the Construction, Forestry, Mining and Energy Union said Aug. 24 a secret ballot of more than 1,000 members authorized by the country's Fair Work Commission resulted in 94 percent of votes cast in favor of a job action.

The unions are now able to stop work with seven days' notice. The workers want to change their roster from 26 days on, nine days off, to a more family friendly 20 on, 10 off. The unions said the ballot followed months of failed negotiations with Chevron's lead contractor, CB&I. "Workers are prepared to spend two-thirds of their time on

Barrow Island," Manufacturing union state secretary Steve McCartney said. "They just want one-third of their lives for their families."

Any industrial action could further delay the \$54 billion Gorgon project, which is 90 percent complete but over budget. Employer groups said a strike will hurt Australia's reputation.