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LNG industry warned not to become over-reliant on China

(Reuters; March 15) - Liquefied natural gas producers must avoid becoming over-reliant on the strong Chinese demand growth seen in the past two years and should intensify efforts to broaden their markets and create new uses for the fuel, senior company executives said at an energy conference this week. "We are becoming too reliant on China in the last couple of years," Australia's Woodside CEO Peter Coleman warned at the CERAWeek energy conference in Houston. "It worries me because we've seen others drop off in the same period for demand."

LNG consultancy Poten & Partners has forecast new global LNG supply in 2019 will be twice what's needed. Demand growth in China could slow to 8 million tonnes of LNG in 2019 against its 15.7 million tonnes in 2018, according to Wood Mackenzie. "I would caution the LNG industry not to make linear extrapolations of Chinese LNG demand based on what you've seen in the past two years," said Hendrik Gordenker, chairman of Japan's JERA, a fuel-trading joint venture between Tokyo Electric and Chubu Electric.

China has choices in terms of potential energy supplies, including pipeline gas from Russia and central Asia, and domestic shale gas, said Gordenker, who heads the world's largest LNG buyer. China also is developing renewable energy sources and could continue to tap coal, he said. "We need to continue to develop a broader market base, or else we run the risk that other commodities have had of just becoming so focused on Chinese growth that it can become extremely additive," Coleman said.

U.S. LNG developers advised not to get carried away over China

(S&P Global Platts; March 15) - China is the thread that keeps the gas wheel spinning. That's a key takeaway from this year's CERAWeek conference that wrapped up March 15 in Houston. The world's most populous nation is expected to surpass Japan within the next decade as the top importer of liquefied natural gas. Developers of liquefaction terminals on the U.S. Gulf and West coasts are depending on that forecast as they scurry to sign offtake contracts and secure financing or equity partners for their projects.

But there are risks, from price volatility to trade tensions to geopolitical concerns. There's also competition for the market, from other countries and other fuels. Producers, traders, and investors have reason for optimism, but they were told at the conference to not be hasty. "China's impact is very significant and it's something that we watch closely," Hendrik Gordenker, executive chairman of JERA, a joint venture of

Tokyo Electric and Chubu Electric and a major buyer of LNG, said during a leadership dialog. "I think China will continue to grow, but China has a lot of choices in terms of energy."

Be proactive, not reactive, Gordenker said. He also had a piece of advice for U.S. LNG export bulls: Be mindful of history. "The industry has been characterized by feast or famine, huge waves up or down," Gordenker said. Charif Souki, chairman of Tellurian and its Louisiana LNG project, said of China: "What they tell us is, 'We're very interested, but not yet.' They are not going to explain to us why they are doing what they're doing. When they're ready, they're going to tell us they're ready." Until then, Souki said, "They come, they do their due diligence, they kick the tires."

LNG prices have dropped by a third, attracting price-sensitive buyers

(Bloomberg; March 14) - Liquefied natural gas prices may be about to hit bottom after losing more than a third of their value this year. But sellers of the world's fastest-growing fossil fuel may have to swallow a cut of another 10 percent over the next two months before prices rebound from the lowest since July 2017, according to traders surveyed by Bloomberg News. The bad news for sellers might be good news for the climate, as price-sensitive users in India and Bangladesh switch to cleaner gas from oil and coal.

Asia, the biggest consuming region for LNG, uses most of it for heating and power but a mild winter, an abundance of new supplies and a better preparedness of Chinese buyers meant prices went against the trend over the past few months by falling rather than rising. Traders are now watching for signs that summer cooling demand and buying by price-sensitive nations will spur a rally. LNG for April delivery to North Asia slipped 13 cents to \$5.52 per million Btu on March 13, the lowest since July 2017.

Prices are still dropping because more spot cargoes are entering the market and buyers in Japan, South Korea, and China are holding off from purchases. India, which is emulating China in its growing use of LNG to fight air pollution, may burn more gas rather than dirtier coal if LNG prices fall to \$5 per million Btu, according to Energy Aspects. But at \$6, there will be little increase in India's power-sector demand given lower coal prices, the industry consultants said. "India is price-sensitive," said Eric Bensaude, managing director at Cheniere Energy's marketing unit in London.

Shell plans expansion decision for LNG Canada by 2025

(Reuters; March 15) - Shell and its partners building a massive liquefied natural gas export terminal in Western Canada will decide by 2025 whether to double its capacity, the head of the project said. The C\$40 billion LNG Canada venture last October

became the first major gas development in the world in five years to win corporate approval, with its first export cargoes planned for 2025.

The second phase of the project would include two more liquefaction trains to double the plant's capacity to 28 million tonnes of LNG per year. Andy Calitz, LNG Canada chief executive officer, said a final investment decision on the second phase will happen before the plant's initial production starts. "We want to take FID on Phase 2 before LNG flows from Phase 1. (The partners) want to have some insight overall on the project before FID," Calitz told Reuters at the CERAWeek conference in Houston this week.

Since LNG Canada was approved, other gas export projects have been approved on the U.S. Gulf Coast and off the coast of Mauritania and Senegal as producers expect a sharp rise in gas demand, particularly in Asia. Shell's partners are Malaysia's Petronas, PetroChina, Korea Gas, and Japan's Mitsubishi. Work is underway at the project site in Kitimat, British Columbia.

FERC issues final EIS for Texas LNG, with habitat warning

(Houston Chronicle; March 15) - Federal regulators have completed their review of the 4-million-tonne-per-year Texas LNG export terminal in Brownsville, along with a warning about habitat fragmentation for the endangered ocelot, jaguarundi, and aplomado falcon if other similar projects are also approved. In its final environmental impact statement March 15, the Federal Energy Regulatory Commission concluded that the LNG project would have "adverse environmental impacts," but they could be mitigated through proper planning, design, engineering and training during construction and operations.

Among the recommendations are using electric motors to reduce noise and emissions, installing barriers to control erosion, planting native vegetation, and limiting construction activities during wildlife breeding periods. Located along the Brownsville Ship Channel and next to the Laguna Atascosa National Wildlife Refuge, the proposed LNG export terminal is inside a migratory wildlife corridor between the United States and Mexico.

Although the effects can be mitigated for Texas LNG as a single project, FERC warned that the combined impact of traffic, light, and noise created by Texas LNG and two more export terminals proposed for the port, pipelines and wind farms in the area would fragment habitat for the three endangered species and put them at further risk for fatal accidents with vehicles and equipment. "We have determined that cumulative impacts on ocelots and jaguarundis would be permanent and significant," FERC wrote.

The FERC commissioners are scheduled to decide on the Texas LNG application by mid-June. The company said on its website it plans to make a final investment decision on the project this year, with first LNG expected to be produced in 2024. Texas LNG and the other LNG export terminals face stiff opposition from a coalition of shrimpers, fishermen, environmentalists, neighbors and communities in the area.

Chairman says FERC has to work harder to move LNG projects

(S&P Global Platts; March 14) - Federal Energy Regulatory Commission Chairman Neil Chatterjee acknowledged March 14 the need to work harder to hasten approvals of U.S. LNG export projects, even with a FERC vacancy that some have said might have to be filled to break partisan logjams. The comments during a briefing with reporters at the CERAWeek by IHS Markit conference in Houston reflect the pressure the commission faces to give the U.S. LNG a shot at achieving its goal of winning more market share.

An agreement on greenhouse-gas considerations reached last month allowed the commission to approve by a 3-1 vote Venture Global LNG's Calcasieu Pass project in Louisiana, the first such permit approval in two years. The decision gave developers of other LNG projects hope they might soon be next. But with the slot for a fifth member on the commission still to be filled, such optimism has been questioned. "I'm confident the current complement of us, the four of us, can get things done," Chatterjee said.

Differences at the commission over greenhouse-gas issues have tended to divide along party lines, although Democratic Commissioner Cheryl LaFleur has voted with Republicans to back projects. "We at the commission have to do our part to make sure we are evaluating the applications before us in an expeditions and efficient manner," Chatterjee told conference attendees. He said balancing interests is a "really vexing challenge," especially with the Houston oil and gas hub lobbying hard.

LNG developers promote their projects as outlet for Permian gas

(Houston Chronicle; March 15) - The liquefied natural gas export industry wants to become an outlet for the record amount of gas being produced in the Permian Basin, where much of it is being burned off due a lack of pipelines to move it out of the West Texas shale play. During a discussion of Permian Basin pipelines at CERAWeek by IHS Markit in Houston, Matt Schatzman, CEO of the LNG export terminal developer NextDecade, said flaring is not a long-term option for handling gas produced with oil.

LNG terminals proposed along the Gulf Coast could become an outlet for much of the volume, he said. NextDecade is one of several LNG project developers seeking to build export terminals. "LNG is going to be a major part of helping to resolve this gas issue so producers can attain flow assurances so they can produce the much more valuable oil, which is driving the economics of the ... Permian," Schatzman said. The Permian's output is over 13 billion cubic feet of gas per day, about 15 percent of total U.S. gas.

Pipeline operator Kinder Morgan is already building two pipelines to move gas from the Permian to the Gulf Coast. The company's Gulf Coast Express Pipeline is expected to begin moving 2 billion cubic feet of gas per day in October, while its Permian Highway Pipeline would move an additional 2 bcf per day starting in October 2020. Some of that gas also would be shipped on Kinder Morgan pipelines to markets in Mexico.

U.S. natural gas production up 10 bcf a day in 2018 to new record

(U.S. Energy Information Administration; March 14) - U.S. natural gas production grew by 10 billion cubic feet per day in 2018, an 11 percent increase from 2017. The growth was the largest annual increase in production on record, reaching a new high for the second consecutive year, according to the U.S. Energy Information Administration. Gas production measured as gross withdrawals averaged 101.3 bcf per day in 2018. Production measured as marketed gas also reached a record high at 89.6 bcf per day.

Marketed production reflects gross withdrawals less gas used for repressuring wells, quantities vented or flared, and non-hydrocarbon gases removed in treating or processing operations. As U.S. gas production in 2018 increased, the volume of gas exports — both through pipelines and as liquefied natural gas — increased for the fourth consecutive year, reaching an average 9.9 bcf per day. Pipeline and LNG exports both reached record monthly highs in December 2018 of 7.7 bcf and 4 bcf, respectively.

The Appalachian region remained the largest gas-producing region in the United States. Gas from the Marcellus and Utica/Point Pleasant shales of Ohio, West Virginia, and Pennsylvania continued to grow with gross withdrawals increasing from 24.2 bcf per day in 2017 to 28.5 bcf in 2018.

Louisiana LNG developer wants to be the country's largest

(Reuters; March 14) - Venture Global LNG said March 14 it wants to expand the capacity of its liquefied natural gas business to 60 million tonnes per year to meet growing demand. If the company actually builds that much capacity — which it has not yet started — it could become the biggest U.S. LNG supplier ahead of current market leader Cheniere Energy. Venture Global, however, has a long way to go before it can challenge Cheniere's dominance.

Cheniere has 31.2 million tonnes of annual capacity in operation, 10 million tonnes under construction and 15 million tonnes under development for a total of 56.2 million at its LNG export terminals in Sabine Pass, Louisiana, and Corpus Christi, Texas. Venture Global has two LNG export projects under development in Louisiana — Calcasieu Pass, at 10 million tonnes, and Plaquemines Parish, at 20 million. Venture Global said Kiewit, the contractor for Calcasieu Pass, plans to start site activities "imminently."

The Federal Energy Regulatory Commission has approved the Calcasieu project, though the company has not announced the start of construction. At Plaquemines, Venture Global said it expects to receive final authorization from FERC in August and start construction before the end of the year. Venture Global has said it expects Calcasieu to enter service in 2022 and Plaquemines in 2023. The company has secured 20-year offtake agreements with units of Shell, BP, Italian energy company

Edison, Portugal's Galp Energia, Span's Repsol, and Polish oil and gas company PGNiG.

'It's a tough job' for First Nations that support LNG

(The Prince George Daily News; BC; March 15) - Indigenous leaders who support a liquefied natural gas industry in British Columbia are feeling the heat. "To promote LNG, it's a tough job," said Karen Ogen-Toews, CEO of the First Nations LNG Alliance, during an all-day conference and job fair in Prince George, B.C., on March 14. "It's not about me, it's about our people."

She said it has been hard the past few months since a blockade, supported by some Wet'suwet'en hereditary chiefs, was removed on the route of the gas pipeline from northeastern B.C. to the LNG Canada project in Kitimat. "We've had some pretty tough times, especially the elected (Wet'suwet'en) chiefs (who signed a benefit agreement with Coastal GasLink)," she said. "I just want to commend them ... that's a tough job."

She said there are a lot misconceptions about why some Indigenous leaders support the industry. "When I was chief and we signed our first benefit agreement with the province, we received a huge backlash on social media," she said. It's been hard to see criticism that they are selling out the environment for a dollar figure, Ogen-Toews said. "We are for our people," she said. "We understand aboriginal rights and title, we understand that concept of un-ceded territories. ... But our people need help today." Indigenous communities have high rates of unemployment, high rates of incarceration, high rates of children in care and more. "We have more needs than we have money."

Argentina moves toward ending gas imports, starting exports

(Houston Chronicle; March 13) - Argentinian energy company YPF is moving forward with plans to couple its development of the Vaca Muerta shale play with a floating gas liquefaction facility to allow the South American nation to go from being a seasonal importer of natural gas to becoming an exporter. During a March 13 panel discussion at CERAWeek in Houston, YPF Executive Vice President Marco Browne said Argentina's Vaca Muerta has become the largest shale play outside of the United States.

Stretching more than 5 million acres along the border with Chile, the Vaca Muerta holds large reserves and will be able to produce more natural gas than Argentina consumes, creating a surplus for export. Facing seasonal gas shortages during the South American winter months of June, July, and August, Argentina uses an offshore liquefied natural gas terminal to import gas.

Browne said development of the shale play will ultimately eliminate those imports and allow for exports via pipeline to neighbors Chile, Uruguay, and Brazil. The next step, Browne said, will be build LNG export terminals to sell shale gas on the global market. YPF recently bought a floating liquefaction unit that it renamed Tango, stationing it southwest of Buenos Aires in Bahia Blanca. Tango is expected to begin production the second quarter of 2019 with a capacity of 500,000 tonnes of LNG per year.

Egypt gets back online as LNG exporter

(Bloomberg; March 14) - Egypt indicated it's ready to rejoin the club of major exporters of liquefied natural gas, making its biggest offer to supply the market in at least five years. State gas company EGAS is tendered to sell four cargoes of LNG for loading in April, sources said. The bids are due March 18, according to the sources. Supplies from Egypt would hit a market already battling with spot prices trading at the lowest level since July 2017 following a mild winter that curbed demand across Europe and Asia.

The United States, Russia, and Australia all are contributing to a glut, starting new plants to export the fuel and build market share. For Egypt, the tender marks a revitalization of its gas industry, where sagging domestic production forced it to halt most exports of LNG in 2014. Egypt became a major LNG importer in 2015 after a decade as an exporter. The North African nation has regained self-sufficiency with the help of major discoveries including the super-giant Zohr gas field. Its LNG exports flow from two liquefaction plants, Damietta and Idku, which were largely left idle five years ago.

Growth in global LNG trade good news for shipbuilders, owners

(Wall Street Journal; March 14) – The multiple U.S. liquefied natural gas projects coming online in the next few years are likely to boost the global fleet of seagoing LNG tankers by up to a third, as shipping operators jarred by sharp swings in oil markets rush to take advantage of a big new stream of business. Despite their high cost — about \$175 million each — top shipowners say LNG carriers could be the most profitable trade in shipping since crude oil tankers powered global maritime fortunes in the 1960s.

The LNG trade is on an upswing as energy producers look for cleaner sources of power to replace oil and coal. "We are moving into an era where fossil fuels will be reduced in the energy mixture, and LNG will be used extensively in the transitional period," said shipowner George Prokopiou. "If you are in shipping, you can't ignore LNG." Prokopiou is chairman of Dynagas LNG Partners, which has five icebreaking LNG carriers on long-term contracts to move gas from the Yamal LNG project in the Russian Arctic.

Maritime operators and a beleaguered shipbuilding sector buffeted by sharp swings in various shipping markets in recent years are anxious for the business. There are about 520 carriers capable of hauling LNG across the oceans, said David Bull, an analyst at London-based Maritime Strategies International. He expects the fleet to grow by about 28 percent by 2020. South Korea holds the largest share of the LNG carrier shipbuilding market. LNG tankers cost about double the price of the largest crude supertankers because of the technology needed to control the super-chilled gas on long voyages.

LNG industry looks to align interests of buyers and sellers

(S&P Global Platts; March 13) - Conventional wisdom says the success of the next wave of North American LNG projects depends largely on the ability of developers to secure traditional long-term offtake contracts with buyers. That contention has been challenged by two recent decisions to go forward without new contracts. The question is how to align the needs of LNG buyers that want flexible terms and transparent pricing with the needs of producers that want to satisfy banks and investors with stable returns.

Over the past 12 months, new contracts for U.S. projects has picked up significantly after a lengthy lull. However, most of the developers that are expected to start up in the early to mid-2020s have not announced any firm long-term deals, causing some to delay final investment decisions. ExxonMobil and Qatar Petroleum, however, decided they will build their Golden Pass project in Texas without announcing any long-term offtake contracts. That followed Shell-backed LNG Canada's similar decision in October 2018 for its terminal in Kitimat, British Columbia.

Those moves signaled the willingness of major energy companies to accept a level of risk that was unheard of in the North American market until recently. Analysts have wondered whether that'll catch on with more developers willing to go without traditional contracts. "We still consider ourselves that old-fashioned model," Venture Global LNG co-CEO Michael Sabel said. "It has to be take or pay. If it isn't, the cost to capital to build is too high." His company is trying to develop an export terminal in Louisiana.

India's pipelines unable to keep pace with LNG import capacity

(Reuters; March 14) - India's demand for liquefied natural gas is set to rise by about 10 percent this year — less than the country's import capacity is growing because infrastructure constraints are keeping gas from getting to consumers and hindering growth rates. India made a commitment in the Paris Agreement of 2015 to reduce the carbon emissions intensity of India's economy by one-third. It aims to more than double the share that gas holds in its energy mix to 15 percent by 2030 from 6.2 percent now.

India's four LNG import terminals last year took in 21 million to 23 million tonnes, up nearly 13 percent from 2017, according to government and shipping data. Over the next seven years the government plans to build an additional 11 import terminals. But with existing terminal capacity now at 35 million tonnes a year, and additions and expansions expected to bring that to 41.5 million tonnes by the end of 2019, India's LNG import terminals are likely to remain underutilized for years to come.

Driven by growth in city gas distribution and transportation, India's LNG demand is expected to climb by 9 to 11 percent to about 25 million tonnes this year, said analysts at Wood Mackenzie and FGE. That would still put import terminal utilization at just over 60 percent by year-end. While India's ruling party plans to invest billions of dollars to extend gas pipelines across the country, progress is slow and half of the existing import terminals operate at well below their capacity. Petronet's Kochi terminal is not even connected to a main gas network because of resistance from land owners to pipelines.

Australia LNG industry objects to proposed carbon emissions rules

(Reuters' columnist; March 13) - The concept that fossil-fuel producers will have to pay for the carbon emissions from their products is something the industry will no doubt fight, and regulatory steps in Australia show the battle may be starting. Liquefied natural gas major Woodside Petroleum reacted angrily to recent moves by the environmental regulator in Western Australia state to require that projects offset their emissions.

The state Environment Protection Authority announced new guidelines earlier this month that would mandate projects with more than 100,000 tonnes a year of emissions to offset them through programs aimed at mitigating the impact of climate change. The proposed measures would add billions of dollars to the costs of running the six LNG plants in the state. Woodside Chief Operations Officer Meg O'Neill told a conference in Perth on March 13 that the rules were "wrong" and would disadvantage the region.

Federal Resources Minister Matt Canavan went further, saying the rules were a "brain explosion" that "defied common sense," according to a report in the Sydney Morning Herald. Canavan called on Western Australia to scrap the proposals, something the state has indicated it may do. But it is becoming clearer that the next phase in the green battle against fossil fuels is likely to be regulatory with activists increasingly taking to the courts and putting pressure on governments to take action by imposing rules.

Goldman now forecasts Brent crude to top \$70 per barrel

(CNBC; March 15) - The world's appetite for oil and gasoline is growing faster than many forecasters expected, putting Brent crude on pace to top \$70 a barrel, Goldman

Sachs said. The investment bank said global demand grew by 1.55 million barrels per day in January alone, a strong result. For the first quarter, Goldman expects global oil demand to grow by nearly 2 million barrels per day, trouncing its earlier forecast for 1.1 million barrels and driven by consumption in emerging markets.

"We continue to believe that ongoing macro and oil-demand concerns are overdone," Goldman analysts said in a research note March 14. The strong demand will likely push Brent crude, the international benchmark for oil prices, above \$70 per barrel. The rally has already outstripped Goldman's prior view that Brent would peak at \$67.50 in the second quarter. Brent hit a 2019 high above \$68 on March 14.

Goldman sees catalysts around the world, including the move away from diesel engines in Europe, a value-added tax cut in South Korea and lower gasoline prices relative to biofuel in Brazil. But the bank warns that strong demand also creates a key risk to the price rally: Rising prices could prompt one of President Donald Trump's now infamous OPEC tweets. "Any further meaningful rally in oil prices will likely lead to further U.S. pressure" to ease production cutbacks by OPEC and its allies, Goldman said. The president's past comments have asked OPEC to bring on more supplies to lower prices.

Industry says Canada 'falling behind' due to offshore drilling ban

(The Canadian Press; March 14) - An oil and gas industry representative said Canada is "falling behind" the U.S. and other nations in developing its rich Arctic natural resources because of a five-year moratorium on offshore drilling in the North put in place in 2016. However, Northern Affairs Minister Dominic LeBlanc defended the ban as a necessary device to ensure the resource is developed in a way that is environmentally sensitive, allows indigenous input and is based on science.

The debate touched off in 2016 when Prime Minister Justin Trudeau and then-President Barack Obama announced offshore Arctic development restrictions. Paul Barnes, Atlantic Canada and Arctic director for the Canadian Association of Petroleum Producers, said recent moves by President Donald Trump to reopen the Alaska Arctic to drilling illustrate Canada's "lost opportunities."

Barnes says Canada's ban on development creates uncertainty in the market and means Canada isn't able to compete for investment dollars for Arctic drilling or related research. LeBlanc, however, said Ottawa is using its time to consult with northern people, governments and industry and come up with a science-based report for its review of the moratorium in 2021. "Done properly, oil and gas development can bring growth and prosperity to a region that in some cases may have been overlooked for a long time," he said. "However, the development ... must be done properly."