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Nuclear restarts in Japan a key factor in LNG demand

(Nikkei Asian Review; June 14) - Spot prices for liquefied natural gas in Asian markets remain in the doldrums, hovering at levels more than 40 percent below their most recent high in January. While new LNG production capacity comes online one after another in Australia and the United States, demand in Japan, by far the world's biggest importer of the fuel, is weakening now that several nuclear power plants have gone back online. As of early June, LNG spot prices in Asia were hovering in the mid-\$5 range.

If the price slump sticks, it could put more downward pressure on Japan's long-term LNG import contracts as the deals are renewed in the next few years — concerns over a supply glut are weighing on prices. By 2020, projects now under construction are expected to add more than 100 million tonnes a year of LNG capacity to the market. In addition, Qatar said in April it would resume developing its North Field, the world's largest gas field. Production is not expected to begin for five to seven years. When it does, the expansion could boost Qatar's annual LNG capacity by 15 million tonnes.

There is a strong possibility that competition among gas-producing countries will further intensify as supply continues to outpace demand. One factor in demand forecasts is the return of nuclear power in Japan, where all of the nuclear plants were shut down after the 2011 Fukushima meltdown. Japan currently has five reactors at three nuclear power plants online, reducing the country's need for LNG to generate electricity. Japan's LNG imports shrank for the second consecutive year in 2016, declining 2 percent.

BP expects natural gas demand to grow faster than oil or coal

(EnergyWire; June 14) - Analysts have long speculated on the potential for U.S. shale gas supplies to dramatically reshape global markets for the fuel. Now BP is saying it expects this vision to unfold over the next two decades. In its latest Energy Outlook, released June 13, BP predicts that natural gas use worldwide will grow faster than oil or coal at 1.6 percent per year between 2015 and 2035, accounting for a growing share of world energy as countries increasingly turn away from coal to fuel power plants.

Liquefied natural gas trade will grow seven times faster than pipeline gas over that time frame, according to BP's "most likely" scenario, growing from about one-third of all gas trade to about half by 2035. But a surge of LNG from the United States that entered world markets under new, less-restrictive contracts, and an unexpected softening of economic growth in China and around the world in recent years have contributed to a

glut of LNG supply on world markets. Long-term gas buyers in Europe and Asia have pushed sellers of pipeline gas and LNG for better pricing and more favorable terms.

Today, buyers in Japan, South Korea and China are working together in pursuit of greater leverage in LNG contract negotiations. A main point of contention is the destination clauses common in long-term LNG contracts that limit deliveries to preagreed ports, meaning buyers cannot easily resell cargoes if their needs change or if more favorable deals appear on the spot market. BP's analysis suggests that buyers will ultimately win significantly more control in the global gas trade.

The company predicts that Australia will primarily feed the Asian market, where it has an advantage in shipping distances, but U.S. cargoes will be directed around the world as marginal supplies in Europe, Asia, and South and Central America.

Japan pushing Qatar for better deals, regardless of diplomatic row

(Bloomberg; June 12) - As Qatar grapples with deepening diplomatic isolation, Japan's liquefied natural gas buyers are pushing the world's largest seller for cheaper supplies. Both JERA Co., one of the biggest LNG purchasers, and Tokyo Gas have not yet decided if they'll sign new deals with Qatar to replace current contracts that begin expiring in 2021, according to executives from both companies. The buyers are insisting on less-expensive cargoes and greater purchasing flexibility from the Mideast nation.

The demands from Japan, its largest LNG customer, may add pressure on Qatar after neighbors including Saudi Arabia severed diplomatic ties and cut travel by land, sea and air. Japan's hard-nosed bargaining tactics are not related to the diplomatic tensions but are the result of a global LNG glut that has forced producers to offer concessions, which may be necessary to lock up customers.

"LNG buyers believe the position of suppliers like Qatar are weakening and they are demanding more contractual flexibility," said Junzo Tamamizu, managing partner at consulting firm Clavis Energy Partners in Tokyo. JERA buys about 8 million tonnes a year of LNG, or 20 percent of its annual need, from Qatar. Tokyo Gas, which has a 350,000-tonne contract with Qatar that comprises a fraction of its 14-million-tonne annual buys, will review proposals for new agreements when its contracts get closer to expiration, paying attention to price and resale flexibility, a company official said.

Japanese concerned of impacts if Saudi-Qatari dispute lingers

(The Japan Times; June 11) - Japanese companies have grown wary about possible adverse effects from the Saudi-Qatar crisis on their businesses. Some companies have started considering how to cope with the heightened tensions caused by a Saudi

Arabia-led group of nations that have cut diplomatic ties with Qatar, sources said. As Japan imports 9 percent of its crude oil and 13 percent of its liquefied natural gas from Qatar, a number of Japanese firms are active in the country. According to Foreign Ministry data, 46 Japanese businesses had operations in Qatar as of October 2015.

Although most firms see "no immediate impact," concerns over the long-term effects are spreading, sources said. Marubeni, which has been importing Qatari LNG and selling it to electricity utilities and other companies since 1996, is worried about the possibility of its officials having difficulty flying between Tokyo and the United Arab Emirates capital of Dubai, where the Japanese trading house has its Mideast business headquarters. "At this point, we can do nothing but gather information," said a Marubeni official.

"If (the Saudi-Qatar crisis) prolongs, some influences may be seen in spot LNG prices, among others," said Toshihiro Sano, president of TEPCO Fuel & Power, a unit of Tokyo Electric that purchases a huge volume of Qatari LNG through a joint-venture arrangement with Chubu Electric. An official with Obayashi Corp. said that company is closely watching the situation in Qatar, where the general contractor is constructing a hotel-commercial complex.

First U.S. LNG cargo into Taiwan expected this week

(Reuters; June 12) - With a tanker expected to arrive in Taiwan within a day, the United States will increase the number of countries that have received liquefied natural gas from the Sabine Pass terminal in Louisiana to at least 23 of the 35 LNG importing countries, The Cadiz Knutsen tanker will dock at the Taichung LNG terminal in Taiwan with a load of gas from Cheniere Energy's Sabine Pass facility.

In May, a record 18 LNG cargoes left Sabine Pass. The vessels, which had a total capacity of almost 60 billion cubic feet of natural gas — less than a full day's U.S. production — went to several countries, including Brazil, the United Arab Emirates, Mexico, China, South Korea, Argentina and the first exports to the Netherlands and Poland. The first vessel left Sabine in February 2016. The plant is now operating three liquefaction trains, with a fourth production line expected to start-up later this year. In addition to Sabine Pass, five more U.S. LNG export terminals are under construction.

Australia continues debate over LNG export restrictions

(CNBC; June 14) - Australia's government is experiencing fierce backlash over a shortage of cheap gas on the country's East Coast that threatens to disrupt national power supplies. Industry players at the Australian Energy Conference on June 14 slammed the federal government over its response to dwindling gas supplies and

spiking prices in the East — a new "gas security" mechanism that will restrict liquefied natural gas exports if the resource become unavailable to domestic users.

Prime Minister Malcolm Turnbull's export controls have raised more questions than answers, said Mark Samter, head of Australian energy research at Credit Suisse. "We don't feel comfortable on what it's trying to achieve. Is it just trying to make gas available to the market, or is it trying to secure affordable gas? Those are two different answers with profoundly different implications for companies." The legislation is just a baby step and a lot of work needs to be done to bring affordable gas to industrial users, he added.

Australia's LNG ambitions and insufficient gas output are hitting the eastern region's supplies and driving up prices. The price to East Coast gas buyers averaged more than \$10 per million Btu in the March quarter, double last year's levels. The government was "asleep at the wheel" when it approved the LNG projects, said Fereidun Fesharaki, chairman of Facts Global Energy. "They should have stopped then." He referred to Turnbull's export restrictions as an example of "Trump-style populist measures," and said they project a "disappointing" signal. "The government interfering in exports does serious harm to Australian projects and the future of sales out of Australia," he said.

Australian government, LNG industry argue over export controls

(Australian Financial Review; June 13) – Australia's Resources Minister Matthew Canavan has hit back at gas exporters complaining about the predicted fall-out from planned LNG export controls, telling them that expanding exports at the expense of local customers is "not an option." The liquefied natural gas industry has told the government that its plan to limit exports risks worsening the local supply problem and has called into question the Australian Domestic Gas Security Mechanism.

The industry says the timing for consultation is too short and the data is lacking that justifies such a radical measure. Sen. Canavan, who represents the state of Queensland in parliament, met with senior representatives from the LNG industry last week in Brisbane and rejected the criticism. "While Australia is on track to become the world's largest exporter of LNG, it's simply not an option for us to do so at the expense of affordable and reliable gas for Australian users," he said.

The Australian Petroleum Production & Exploration Association says the export-limit plan, announced by the prime minister in April and to start July 1, will depress spending when up to \$50 billion needs to be invested by 2030 to maintain gas supply. Data proving a shortfall is missing, industry said, and the trigger for the controls comes down to a modeling exercise. Canavan said the law is "designed specifically to provide more gas to the domestic market when there are grounds to believe a shortfall will exist."

Australian Outback community split over coal-seam gas development

(Bloomberg; June 12) - In the Outback town of Narrabri, farmer Peter Gett says the cold-shoulder treatment he has felt over the gas wells on his land shows that promoting Australia's energy security comes at a cost. The fifth-generation wheat grower allowed exploration of the gas reserves beneath his farm. Seven years after allowing three wells to be drilled, he says enthusiasm for the gas project run by Santos, Australia's third-largest energy producer, isn't shared by most of his neighbors worried that extracting methane from between layers of coal could ruin the town's precious water wells.

"People who aren't directly involved are skeptical and wary," Gett says. Anti-drilling placards have been nailed to fences by activists, and even farmers who support the project have left the signs up, fearful of being ostracized. "It's close to a 50-50 split," says the 60-year-old, who earns \$23,000 a year from the wells. "Some farmers don't want to get on the wrong side of businesses who oppose the project." They keep quiet instead. Others have been vocal, even locking themselves to machinery to stop drilling.

Gas has divided the community in Australia's cotton-growing heartland, making it a microcosm of a national debate. Land users and environmentalists are pitted against companies and politicians wanting to secure Australia's energy needs. That's meant a plan by Santos to drill 850 coal-seam gas wells in the farms and forest surrounding Gett's property has been mired in red tape, delaying the project by at least two years. The company has only 16 wells operating around Narrabri six years after its purchase of a controlling stake in the venture made it the largest holder of gas reserves in the state.

Wood Mac forecasts oil majors will step up investment in renewables

(Financial Post; Canada; June 12) - Major oil and gas producers will put more of their capital into wind and solar developments as returns from renewables are poised to exceed some hydrocarbon projects, according to a report from Wood Mackenzie. The report released June 12 predicts multi-national energy companies could spend billions on renewable projects between now and 2035, as "the all-in returns for wind and solar stack up against" higher-cost oil and gas plays, exploration projects and acquisitions.

Though Wood Mackenzie analysts note that some North American onshore oil projects can generate a 22 percent rate of return at \$65-per-barrel oil prices, they also report that full-cycle exploration and marginal plays earn an average 10 percent rate of return. As a result, the returns from onshore and offshore wind power projects and solar projects compare favorably and could compete for \$90 billion in capital, earmarked by the majors in those higher-cost oil and gas plays.

Even if the price of oil rises, demand forecasts for both oil and renewables illustrate the need for energy majors to allocate their capital toward wind and solar, said Valentina Kretzschmar, Wood Mackenzie director for corporate research. "They can't afford to

ignore it, they can't afford not to be there and gain the experience," she said, noting that renewables demand is growing. The Wood Mackenzie report indicated that European oil majors would be among the first to transition spending away from higher-cost oil and gas projects toward renewables.

Growing natural gas output pits Marcellus vs. Permian

(Bloomberg; June 12) - The two biggest shale gas deposits in the United States are producing a record amount of the power-plant fuel, signaling that a fight for market share will intensify as supply outstrips demand. As natural gas prices rebound from last year's historic lows, output from the Marcellus shale basin in the U.S. East and the Permian reservoir in Texas is driving a rebound in America's production of the fuel.

Low-cost supply from the Marcellus is surging as new pipelines are built to shuttle gas to markets across the U.S. and Canada. Meanwhile, Permian output is rising as a recovery in oil prices boosts the production of gas that's extracted alongside crude. A deluge of new gas production from Texas and Pennsylvania threatens keep the U.S. awash in excess supply and lower prices nationwide, even as rising exports trim a glut of the fuel in storage.

Though the reservoirs are thousands of miles apart, competition between the Marcellus and Permian is set to heat up as producers go after the same customers in major markets like the Midwest. "Everyone can't grow and everyone can't win," said Justin Carlson, managing director of research at East Daley Capital Advisors, an energy consulting company in Colorado. Marcellus output will rise to 19.4 billion cubic feet a day in July, while Permian production will climb to 8.5 billion, the U.S. Energy Information Administration said June 12. That's an all-time high for both shale deposits.

Recovery underway in North Dakota's Bakken shale

(Wall Street Journal; June 12) - Radio stations in Watford City, N.D., are again running ads from oil-field companies seeking drivers and mechanics. A cafe is serving an alligator-and-crawfish lunch to welcome Gulf Coast workers. New rigs are rising across the sprawling prairie. Drillers are inching back to action in North Dakota's Bakken shale, a sign the oil-and-gas industry recovery is spreading beyond the Texas and Oklahoma fields where production is cheaper because there is more oil that is easier to tap.

The revival after a nearly three-year bust is welcomed by local leaders and merchants, who are grateful to see signs of life in places such as Watford, a city of about 6,400 people that was booming just a few years ago. The area is expected to get a boost from the June 1 start-up of the Dakota Access Pipeline, a new route for oil out of the region. But some are concerned that too much too soon could send oil prices plunging once

again. "It's a nice level of production that we hope will be sustainable," said Kari Cutting, vice president of the North Dakota Petroleum Council. North Dakota's oil output has again topped 1 million barrels a day, after wobbling below that point since late last year.

Yet despite technological improvements and cost cutting, only some producers can afford to drill in the Bakken at today's oil prices. While some Bakken producers can break even at \$40 oil, according to consultancy Wood Mackenzie, most need upwards of \$50 and wouldn't significantly increase activity until oil approached \$60. Locals believe \$60 or \$70 oil would be enough to keep the Bakken humming at a reasonable pace. Anything more, they fear, might bring back the chaos of the boom.

U.S. shale production gains could overwhelm market

(Reuters columnist; June 14) - The oil market is on an unsustainable course with output from U.S. shale and other non-OPEC sources increasing rapidly, even as OPEC and its allies trim production to reduce inventories and prop up prices. The International Energy Agency projects non-OPEC output will increase by 1.5 million barrels per day in 2018. If that proves correct, non-OPEC suppliers will capture all the increase in demand next year, because the IEA predicts consumption will increase by only 1.4 million barrels.

In effect, OPEC will be restricting its own output only to see rival producers step in to meet growing demand from refiners. OPEC will face the familiar dilemma of whether to defend oil prices by continuing to restrict output or defend market share by growing production again. OPEC and its non-OPEC allies are unlikely to remain impassive as U.S. shale producers and other non-OPEC countries not bound by the production agreement capture all the growth in market demand in 2018.

If U.S. output continues to grow rapidly, OPEC will likely return to defending its market share in 2018, even if it means accepting lower oil prices. OPEC's strategy can best be described as a cycle alternating between prioritizing price protection and defending market share. The resurgence of U.S. shale is already complicating OPEC's efforts to draw down global stocks in 2017, as well as threatening its market share in 2018. U.S. producers have added more than 400 drilling rigs in the past year in response to higher oil prices. But U.S. production gains are now threatening to overwhelm the market.

U.S. oil price has fallen 19% this year

(Bloomberg; June 13) - U.S. shale is coming perilously close to puncturing its own rally. Just months after predicting double-digit production increases, largely based on crude prices sitting between \$55 and \$60 a barrel, drillers are suddenly contemplating the possibility of retrenchment as a stubborn global supply glut pushes prices below \$45.

It's a reversal that could accomplish what OPEC and other global producers have failed to do this year: slow down America's booming shale industry.

Analysts and company officials say a drop to \$40 a barrel could halt rig growth for smaller drillers in less active U.S. shale basins, and undercut efforts by fracking service providers to raise their fees. "The growth outlooks ... appear tenuous at best and not resilient to prolonged weak oil prices," Mizuho Securities USA analysts Timothy Rezvan and James Lizzul wrote in a June 11 note. They cited rising service costs and the industry's lack of hedging protection for next year.

The U.S. benchmark price tumbled as low as \$44.54 in trading June 14, its lowest in five weeks after the U.S. government reported gasoline and other petroleum product stockpiles swelled last month. The price has fallen 19 percent this year. Data on rising U.S. inventories followed a similar report from the American Petroleum Institute showing a bump in oil stockpiles. The International Energy Agency forecasts that growing output from the U.S. and other non-OPEC sources will exceed global demand growth in 2018.

No boost yet from new pipeline for North Dakota oil price

(EnergyWire; June 14) - The Dakota Access pipeline hasn't boosted the price for oil in its namesake state, at least during its first 12 days of operation, North Dakota's top oil regulator said. The controversial pipeline, which is big enough to carry more than half the oil produced in the Bakken Shale formation, is intended to bring crude to refineries on the Gulf Coast where it can fetch a higher price. As of June 13, though, the price for North Dakota Sweet oil was \$35.50 a barrel, about \$10 less than the U.S. benchmark.

"The competition doesn't appear to have really kicked in there yet," state Mineral Resources Director Lynn Helms said on a conference call with reporters. The pipeline, which went into service June 1, may not be carrying its full capacity yet, said Justin Kringstad, head of the North Dakota Pipeline Authority. It's hard to tell because pipeline companies don't typically disclose how much oil is shipped on their systems.

"Eventually, as market conditions shift and production grows, it's not unlikely they would get up to capacity," Kringstad said. North Dakota's output has grown more than fivefold in a decade, to just over 1 million barrels a day, as companies exploit the Bakken Shale. But the oil price there has historically lagged the national average because the field is so far from major refineries. Dakota Access can carry up to 570,000 barrels a day from western North Dakota, and connects in Illinois to other pipelines and refineries.

Opponents call on Canadian banks not to fund oil sands pipeline

(The Canadian Press; June 12) - A coalition is calling on Canada's six biggest banks and others to back away from providing funding for Kinder Morgan's controversial Trans Mountain oil sands pipeline expansion. The coalition of 20 indigenous and environmental groups said in an open letter that it will use its influence to urge local and foreign governments to divest from banks that ignore its opposition to the pipeline.

It names a total of 28 banks as potential targets for its campaign, including 14 that underwrote the recent initial public offering for Kinder Morgan Canada. The underwriters included all of Canada's biggest banks as well as others from the United States, the European Union and Japan. The coalition's letter urges the banks to decline any additional involvement with Kinder Morgan that would help to finance the pipeline expansion project, particularly a \$5.5 billion credit facility the company is seeking.

Among the signatories on the letter are Grand Chief Stewart Phillip, president of the Union of British Columbia Indian Chiefs, and Grand Chief Serge Simon of the Mohawk Council of Kanesatake in Quebec. Kinder Morgan plans to start work on the \$7.4 billion project this fall to almost triple the capacity of its pipeline from Alberta to an export terminal on the British Columbia coast. The expanded line will be capable of moving up to 890,000 barrels a day.

Minnesota, Wisconsin utilities partner on \$700 million gas power plant

(Inforum; Fargo, ND; June 8) - Minnesota Power is partnering with another utility to build a \$700 million gas-fueled power plant in Superior, Wisc., across the water from Duluth, Minn., as part of a suite of energy proposals that include new wind and solar generation. "It's really about giving customers affordable, reliable, less carbon-intensive energy," Julie Pierce, Minnesota Power vice president of strategy and planning, said this week. "What we're doing with this is bringing in flexible generation ... to back us up."

Minnesota Power will split the cost and ownership of the 550-megawatt plant with Dairyland Power Cooperative, a 76-year-old, Wisconsin-based electricity provider serving about 600,000 people that gets most of its power from burning coal. "We scanned the entire Midwest — the Superior site is shovel-ready, with access to gas and transmission lines," Minnesota Power spokeswoman Amy Rutledge said. "This is the next step for moving from primarily coal to more than 40 percent renewables."

If approved by regulators, construction could start in 2020 and the plant could be operating by 2025. Minnesota Power also is entering into agreements to buy power from a new 250-megawatt wind farm in southwestern Minnesota and a 10-megawatt solar array in the middle of the state. The wind farm will likely come online in 2020; the solar power could come online in 2019. The moves are part of the utility's plan to get one-third of its electricity from coal, one-third from gas and one-third from renewable sources. About a decade ago, 95 percent of the utility's power came from coal.