

# Oil and Gas News Briefs

## Compiled by Larry Persily

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#### **Toshiba lacks firm customers for its U.S. LNG commitments**

(Bloomberg; Jan. 19) - Toshiba, already reeling from a crisis at its nuclear business that has sent its market value down by almost half, is seeking help from one of the world's biggest buyers of liquefied natural gas to avoid billions of dollars in potential losses. Toshiba is working with Japan's Jera Co. to help it find buyers for the U.S. LNG that it is obligated to "take or pay" starting in 2019, said spokesman Hirokazu Tsukimoto.

Since Toshiba has not secured long-term contracts to sell the LNG, it may be forced to sell in spot markets at a loss or opt not to use its contracted capacity at Freeport LNG in Texas, Tsukimoto said. Either way, it pays a fixed tolling fee to Freeport, which is under construction. The potential for unsold gas is another blow to Toshiba, which is facing billions of dollars in losses at its nuclear business after a profit-padding scandal in 2015.

"Finding new buyers is difficult in the current market structure," said Junzo Tamamizu, managing partner at Clavis Energy Partners in Tokyo. When Toshiba struck the deal with Freeport in 2013, the outlook for profit seemed bigger. Gas sold in Asia was at a larger premium to U.S. prices then, making future export shipments more attractive. But a global supply glut has narrowed the U.S.-Asia spread since Toshiba agreed to pay for the right to liquefy 2.2 million tons a year for 20 years at the Freeport plant.

Toshiba has conditional agreements to sell more than half its output from the Freeport project, but none are legally binding, Tsukimoto said. Other buyers of U.S. LNG are also seeking to resell or swap the fuel amid narrower margins. Jera, a joint venture between Tokyo Electric and Chubu Electric, is helping Toshiba market LNG from Freeport. Under tolling agreements like the one Toshiba signed with Freeport, buyers typically pay fixed fees for the ability to liquefy gas, regardless of the amount they actually take. Toshiba's fixed fees over 20 years could be as much as \$8.2 billion. "It's a bloody disaster," said Amir Anvarzadeh, Singapore-based head of Japanese equity sales at BGC Partners.

#### **China may follow Japan in selling surplus LNG next couple of years**

(Bloomberg; Jan. 22) – A surplus of liquefied natural gas contracted by Japan is set to peak in the next few years, creating the opportunity for the world's largest buyer of the fuel to redirect supply to burgeoning markets. The Asian nation that uses roughly a third of the world's LNG is contracted to buy 20 million tonnes more than it needs by 2020, according to Bloomberg New Energy Finance. That supply glut — equal to almost half

of what Europe consumes in a year — will come as lower prices continue to spur consumption in about 30 smaller countries including Jordan, Thailand and Singapore.

Japan's projected surplus is the result of new LNG export projects colliding with lower-than-expected domestic demand and as coal and renewable energy eat into Japan's use of gas-fired generation. The glut that has benefited importers with lower prices and choices is turning some oversupplied buyers into sellers. "Japanese trading houses that are contracted to buy U.S. LNG may have an opportunity to resell some excess cargoes to new markets," said Maggie Kuang, an analyst with BNEF in Singapore.

"These smaller markets are responding to domestic needs to increase electricity production, but the amount of LNG they import will be dictated by price and infrastructure capacity," Kuang said of new buyers. Meanwhile, companies in Asia that contracted for more than they need are seeking ways to resell their supplies. China, which is also projected by BNEF to have a surplus, may be inspired to follow Japan's lead, said BMI Research. Excess supply for China will peak in 2018 and the country may seek to delay cargoes or request destination flexibility, Kuang said.

### **Suppliers offer low prices to win LNG contracts with Pakistan**

(Reuters; Jan. 19) - Commodity trader Gunvor has won a major tender to supply approximately 60 liquefied natural gas shipments to Pakistan over a five-year period, beating a host of rivals, while Italy's Eni will supply the country with LNG over a 15-year period, a Pakistani energy official told Reuters. The cost of the LNG will be linked to future oil prices, but at today's oil market in the \$50s per barrel the LNG would cost as little as \$6 per million Btu. Pakistan started importing LNG in 2015.

Pakistan LNG launched a five-year supply tender and a 15-year tender last year to buy a combined 240 shipments of LNG, drawing a lot of interest from suppliers eager to sell gas in an oversupplied market. Gunvor supplied the lowest bid in the five-year tender, expressed as a percentage of the price of a barrel of crude oil, at 11.6247 percent, the Pakistani official said. Eni, which won the 15-year tender to supply approximately 180 cargoes, entered a winning bid of 12.29 percent of a barrel of crude oil.

Under those percentages, calculated on today's oil in the low \$50s, LNG delivered to Pakistan would arrive at a cost of about \$6 per million Btu under the five-year deal and about \$6.40 in the 15-year contract. Both are far less than today's Asian spot-market price for February delivery of around \$9, and less than many older long-term contracts in Asia set to a higher percentage of the price of oil. Some older deals, signed before the LNG market glut developed, were around 14 to 15 percent of the price of oil.

### **Pakistan plans to boost LNG imports by 1.2 bcf a day**

(Dawn; Pakistan; Jan. 22) - The Pakistani government has decided to boost natural gas imports by 1.2 billion cubic feet per day to meet increasing demand from all sectors. The government has directed top officials at the country's leading gas pipeline and distribution companies to immediately start design and planning work. Under the plan, the government intends to boost liquefied natural gas exports through expansion of LNG storage and regasification port facilities at Karachi, on the Arabian Sea.

Pakistan currently imports an average of more than 400 million cubic feet of natural gas (as LNG) per day from Qatar. That is expected to climb to 600 million cubic feet per day by June. The additional gas supplies are intended for the textile, fertilizer, power plant and transportation fuel (compressed natural gas) sectors in Punjab, Pakistan's most populous province with more than 100 million residents. The country started importing LNG in 2015, as domestic gas production was unable to meet growing demand.

### **First U.S. shale gas LNG arrives in South Korea**

(Reuters; Jan. 20) - South Korean gas and power company SK E&S took delivery of the country's first spot cargo of U.S. shale gas early in January, two industry sources said Jan. 20. The arm of South Korean conglomerate SK Group imported 66,000 tonnes of U.S. liquefied natural gas from Cheniere Energy's Sabine Pass, La., export terminal, according to an industry source (about 3 billion cubic feet of natural gas).

Price details for the shipment, bought for use as a power station fuel, were not available, the sources said. The first U.S. shale gas delivery comes as the Korean government is encouraging domestic companies to look for more opportunities in U.S. oil and gas projects under the incoming administration of President-elect Donald Trump. South Korea is the world's second-largest LNG buyer after Japan.

South Korea mostly imports LNG through state-run Korea Gas, the country's sole wholesaler. Private gas companies and utilities in South Korea are only allowed to import LNG directly for their own power generation purposes. KOGAS is set to import 2.8 million tonnes of LNG per year from Cheniere Energy's Louisiana plant under a 20-year deal starting later this year. The first cargo is expected to arrive in June or in July this year, a KOGAS spokesman said.

### **LNG traders profit from spread between U.S. prices and Asian market**

(Reuters; Jan. 20) - U.S. liquefied natural gas exporters are sending cargoes to Asia this winter to fill a gap in demand as markets have tightened on surging consumption in China and Pakistan as well as Australia's continuing struggles to ramp up scheduled production. About a dozen U.S. LNG cargoes have gone to Asia since December. The

LNG is coming from Cheniere Energy's Sabine Pass, La., facility that opened last year as the first U.S. export terminal outside Alaska.

The additional cargoes are attracted to higher spot-market prices in Asia, which have doubled since a year ago "This run up in prices definitely took everyone by surprise. In mid-2016, I don't think anyone expected LNG prices to double to reach \$10 per million Btu," said Chong Zhi Xin, principal Asia LNG analyst at consultants Wood Mackenzie. Shipping brokerage Arctic Securities said this week that the spread between the cost of feed gas in the United States, plus liquefaction and shipping vs. the spot-market price in Asia means "LNG traders (are) netting \$1 million plus per U.S.-Asia cargo."

The juicy arbitrage is a result of Asian demand rising faster than expected, including colder-than-normal winter weather in North Asia. China's 2016 LNG imports surged 30 percent from 2015 to more than 25 million tonnes a year, making it the world's third-biggest LNG importer behind Japan and South Korea. Including India and Taiwan, the world's five largest LNG consumers are now in Asia, using about 70 percent of globally traded LNG. Still, the LNG market is well supplied, with available LNG capacity standing 45 percent above last year's demand, according to Thomson Reuters Eikon data.

### **[First icebreaking LNG carrier leaves shipyard for Russian Arctic](#)**

(Financial Times; London; Jan. 21) - A ship capable of breaking through thick Arctic ice to deliver Russian liquefied natural gas to Asia is due to begin sea trials, marking an important step toward completion of the \$27 billion Yamal LNG project championed by President Vladimir Putin. The tanker is the first of a new class of icebreaking LNG carriers designed to open an export route from Siberia to the Pacific — reducing Russia's dependence on selling its gas through pipelines to Europe.

The ship docked in Zeebrugge, Belgium, on Jan. 21 after its maiden voyage from South Korea, where it was built by Daewoo Shipbuilding and Marine Engineering. It will sail north for its first encounter with sea ice around the Yamal Peninsula where Russian gas producer Novatek is the lead partner in building the LNG project with France's Total and China National Petroleum Corp.

The \$300 million LNG carrier is engineered to withstand temperatures as low as minus 58 Fahrenheit with a flat, rather than bulbous, prow designed to rupture ice up to 5-feet thick. "Without this icebreaking capability the Yamal project would not work," said Mike Borrell, Total's head of exploration and production in Europe and Central Asia. "It will allow us to ship LNG 365 days a year." Daewoo is building 15 of the ice-class tankers for use at Yamal, which is scheduled to start up its first liquefaction train late this year.

It will take 14 to 16 days to travel to China or Japan in the summer via the northern sea route through the Arctic. In winter, when ice is thicker, the tankers will make the shorter journey to Zeebrugge, where the LNG will be transferred to a conventional carrier for a

25-day run via the Suez Canal to East Asia. More than 95 percent of Yamal's capacity has already been sold in 15- to 20-year contracts, mostly to buyers in Asia and Europe.

### **Texas developer looks at second potential LNG project site**

(San Antonio Express; Jan. 19) - NextDecade is honing in on a Texas City location near Galveston for its latest effort to build a multibillion-dollar liquefied natural gas export facility. NextDecade, which has focused on an LNG export project in Brownsville, said it signed lease agreements for a nearly 1,000-acre site at Texas City's Shoal Point. The move comes after the Point Isabel school board in Brownsville rejected property tax incentives for NextDecade's Rio Grande LNG project in that community.

Residents and environmental activists teamed up to oppose NextDecade's project and another Brownsville LNG plant seeking similar tax breaks. NextDecade has vowed to proceed in Brownsville without the tax breaks, but it also now has plans for Texas City. The company said it is working to attract financing for both projects. NextDecade, established in 2010, does not own or operate any LNG plants. The company filed its Brownsville application with the Federal Energy Regulatory Commission in May 2016.

### **Australia's LNG exports could total 60 million tonnes this year**

(The Observer; Australia; Jan. 17) – Gladstone's three Curtis Island liquefied natural gas plants triggered a flood of new LNG shipments to the global market, helping Australia achieve record exports for 2016. Australia's LNG exports surged 37.7 percent to 36.8 million tonnes last year, and the boost isn't expected to stop anytime soon. EnergyQuest says Australia's exports will be up an additional 63 percent this year.

Total exports in 2016 were 10.1 million tonnes more than the 26.7 million tonnes shipped in 2015. In its new report, the independent energy consultancy firm said the Australia Pacific LNG plant in Gladstone and the Chevron-led \$54 billion Gorgon project on the other side of the country will continue to ramp up production in 2017, with Australia's exports expected to total near 60 million tonnes this year.

Notwithstanding the lower oil-price environment for much of last year, EnergyQuest estimates the total value of Australia's LNG exports at \$17.9 billion in 2016, an 8.6 percent increase over 2015. If current, higher oil prices are maintained, EnergyQuest estimates the value of LNG exports will double to about \$36 billion (Australian) in 2017. Japan remains the largest customer for Australian LNG, taking 48 percent of 2016 cargoes. China is now the second biggest customer, taking 30 percent.

## **Australian state worries it is losing local gas to LNG exports**

(The Australian; Jan. 16) - Offshore gas fields run by ExxonMobil and BHP Billiton in the southern Australian state of Victoria have been consistently sending gas 1,000 miles north to Gladstone's LNG export plants over the past year as big onshore gas resources in the states of Queensland and New South Wales remain undeveloped and concerns grow about domestic gas supplies. The three new liquefied natural gas export projects built in Gladstone started up operations in late 2014 and 2015.

Amid the supply concerns, it appears that gas exploration moratoriums and other hurdles imposed by the Victoria and New South Wales governments are firmly in the sights of producers and users. The draw on southern gas supplies comes as concern about a potential shortfall and high prices grows among big domestic users. Since the start of 2016, gas from Victoria and Cooper Basin fields has consistently flowed north, draining southern supplies and forcing domestic buyers to compete with LNG exports.

The flows show that demand from Queensland's LNG plants is outstripping that state's gas supply and competing with southern domestic users that are complaining of an inability to buy gas at reasonable prices. This is despite Queensland having more undeveloped gas resources than New South Wales and Victoria. There is pressure building over the reluctance of New South Wales to develop its onshore reserves and a Victorian ban that blocks exploration to learn if the state has significant onshore gas.

## **LNG competition for gas could boost local prices 50% in Australia**

(Australian Broadcasting Corp.; Jan. 18) - Australians' energy bills could rise significantly over the next few years, new research shows. Domestic energy producers are connecting with wholesale exporters of liquefied natural gas as part of Australia's transition to become one of the world's biggest exporters of LNG. However, the LNG exporters are facing significantly higher costs for their gas supplies, and those same costs are expected to be pushed on to local suppliers and, ultimately, households.

This is the finding of a report by Phin Ziebell, an economist with National Australia Bank. The report highlights how important LNG exports are to the national economy. But with huge multinational companies drilling for gas and exporting the fuel, it exposes Australia's gas buyers to international markets and the prices others are willing to pay.

"Now when you compare that to the LNG export industry, where prices have tended to be quite a lot higher, bringing us into global parity in terms of prices has actually increased prices and the price pressure in the market," Ziebell said. He forecasts that higher gas prices on the wholesale market will translate to higher utility prices for people at home. "We're talking about potentially gas prices moving upwards by the end of this decade, sort of around the 50 percent range," he said.

## **Pennsylvania gas producer installs portable liquefaction plant**

(Kallanish Energy; Jan. 20) - Dresser-Rand announced it has commissioned the first micro-scale natural gas liquefaction system in Pennsylvania's Marcellus Shale. The modular, portable unit was installed at the Ten Man LNG facility near Mansfield in Tioga County, in northeast Pennsylvania. The four-module facility allows driller Frontier Natural Resources to "monetize stranded gas assets" and to move LNG to market despite the lack of pipelines, the company said.

The equipment arrived on eight trucks and takes up 5,500 square feet, or as much space as a basketball court, said the company, part of German-based Siemens Power and Gas. Dresser-Rand calls the new system LNGo. The company did not indicate how much the system costs. The Pennsylvania facility produced about 120,000 gallons of LNG in its first 20 days of operation, the company said. The system is designed to produce up to 7,000 gallons of LNG per day (about 600,000 cubic feet of natural gas).

The unit is self-powered. It is designed primarily for areas with no gas pipelines or infrastructure, and for areas where flaring may not be allowed or is a problem.

## **Permian Basin in Texas, New Mexico emerges as top shale oil play**

(Reuters' columnist; Jan. 17) - U.S. oil and gas producers are looking forward to better times in 2017 as the industry has passed the low-point in the cycle and embarked on the road to renewed expansion. Domestic production hit a trough in the first half of 2016 and showed signs of rising in the second half as drilling picked up in response to higher prices. The downward trend in oil and gas output has been arrested by a significant upturn in the number of rigs drilling onshore, especially in West Texas.

The number of rigs drilling oil-rich formations across the U.S. has risen by more than 200, or 65 percent, from its low at the end of May. More than half of the new rigs have been added in the Permian Basin of West Texas and Southeast New Mexico, which has emerged as the top shale oil play in the United States. The Permian's stacked layers of organically rich but relatively shallow shale formations make them an ideal target for drillers seeking to add low-cost, low-risk oil production in a low-price environment.

The Permian has long been among the most productive sedimentary basins in the world and is among the best explored. But with the advent of horizontal drilling and hydraulic fracturing, drilling companies can target the thick impermeable shale layers that are the source of most of the oil and gas that has made the basin a top producer in the past. Thanks to improvements in targeting, drilling and fracturing efficiency, Permian wells are now producing almost 60 percent more during their first 30 days than in 2014.

## **U.S. border tax could hit Canadian oil producers**

(The Financial Post; Canada; Jan. 17) - Canadian oil and gas producers happy to see the end of the Obama era are quickly coming to the realization that Trump's presidency could be even more challenging if he moves forward with the so-called border adjustment tax. While other Canadian sectors have been vocal in condemning the proposal, "no sector ... will be more affected than petroleum," said Colorado-based energy expert Philip Verleger, who has been studying the proposal since last summer.

Verleger, principal of consultancy PKVerleger, believes Canadian exporters of oil and oil products are in for a nasty surprise. "Bluntly speaking, for oil the law's passage is pure mercantilism. Exporters from Mexico, Canada, and the rest of the world could be shut out," Verleger writes this week in a report to clients.

Under the proposal, U.S. businesses that rely on imported inputs would lose the ability to deduct those costs in calculating their taxable income. The reform would effectively boost the cost of imported goods by 25 percent, knocking down the value to Canadian producers, whether oil or refined products, Verleger said in a paper for The Brattle Group, a U.S. consultancy. The reform would slam Canadian producers hard because they export more oil to the U.S. — three million barrels a day — than any other country.