

# Oil and Gas News Briefs

## Compiled by Larry Persily

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#### **China boosts natural gas imports to keep up with growing demand**

(Bloomberg; Aug. 16) - Chinese President Xi Jinping's government has beaten expectations in its drive to help clear the nation's notoriously smoggy skies by burning less coal and oil in favor of cleaner natural gas. But that success may be too much, too soon. Gas consumption has risen 15 percent in the first half of the year as industrial customers shift toward the fuel and as distributors add more residential users.

That surge during the traditionally low-demand part of the year raises the possibility that the country may find itself short of gas when winter hits, according to analysts at Jefferies Group and SCI International. "China could be setting itself up for a nasty winter gas shortage," Laban Yu, a Hong Kong-based analyst at Jefferies, said in a research note last week. "We believe gas prices will have to increase, especially in winter."

China's drive to use more gas and renewables has seen coal's share of the energy mix drop to just below 60 percent during the first half of the year, according to the government. It accounted for 64 percent in 2015, and the government is aiming for 58 percent by 2020. China's gas demand will rise to almost 22 trillion cubic feet a year by 2030, China National Petroleum Corp. said. The country used just over 7 tcf last year.

Domestic gas production is up almost 9 percent this year, while liquefied natural gas and pipeline gas imports are up almost 21 percent. The government will probably push companies to ramp up LNG imports and ensure that new terminals are online to meet winter demand, said Liu Guangbin, a gas analyst at Shandong-based SCI International.

#### **Coal output drops worldwide; China's production down 9%**

(Hart Energy; Aug. 17) - Coal has fallen further from its throne as natural gas gains strength, according to a report by the International Energy Agency. Global output of coal dropped by 458 million tonnes in 2016, with the greatest decline evident in China. The country, which produces and consumes more coal than any other nation, saw its coal production drop by 9 percent in 2016, IEA said. The drop comes as China works to reduce emissions and increase the share of non-fossil fuels in its energy mix.

The world's growing appetite for cleaner-burning fuels such as natural gas has led to declines in coal use for electricity production. Data from the IEA show coal's share of electricity generation has fallen since the 1990s when it was more than 40 percent and

is now down to about 27 percent — the same percentage for natural gas. This shift has also led to increased trade for other energy sources, particularly liquefied natural gas.

“The greater demand for gas led to increases in trade” of pipeline gas and LNG, the IEA said. “Together, the increases saw total global gas imports increase by about 1.7 trillion cubic feet in 2016 — around 4.5 percent higher than 2015.”

### **Shell waits to see if floating LNG facility is cost-effective**

(Financial Times; London; Aug. 17) - It is the biggest floating structure ever built and an important part of Shell’s strategy for retaining its position as the world’s largest producer of liquefied natural gas. Named Prelude and — at 1,600 feet — longer than four football fields, it is a \$14 billion gamble on a technology that must prove its cost-effectiveness if it is to make “floating LNG” a fixture of the industry. Prelude arrived in Australia last month to begin commissioning, following construction in South Korea.

It is the flagship facility for FLNG, which liquefies gas from remote offshore fields without the need for onshore facilities. A big advantage is that FLNG facilities can later be towed to different fields when the original one is depleted. But the collapse in oil prices, new supplies of cheap U.S. shale gas and cost overruns experienced with Prelude have caused the cancellation of several FLNG orders, raising questions about the viability.

“There is less need for FLNG other than in niche situations,” said Neil Beveridge, an analyst at Sanford C. Bernstein. The complexity of FLNG vessels meant that anyone who can build an onshore LNG plant instead will choose to do so, he said. Last year, Shell decided not to proceed with orders for three FLNG facilities from Samsung.

In June, however, Italian energy company Eni decided to proceed with an FLNG development off the coast of Mozambique, and Malaysia’s Petronas recently brought the world’s first FLNG facility into production, though only at about a third of Prelude’s annual production. Shell has not revealed the cost of Prelude, which it says will go into production next year offshore Australia. Analyst estimates range up to \$14 billion.

### **U.S. natural gas pricing benchmark gains influence in global market**

(Wall Street Journal; Aug. 18) - An unassuming confluence of pipelines in the heart of Cajun Country in Louisiana is becoming the most important place in the world for natural gas prices. The Henry Hub has for years been a pricing benchmark for U.S. gas contracts. Now it is helping to set prices from Mozambique to Japan, as a wave of U.S. natural gas being unlocked by shale drillers reaches Europe, South America and Asia.

In the first half of 2017, there was a 31 percent increase in the volume of Henry Hub gas futures traded outside of typical U.S. trading hours, compared with the same period last year, according to the New York Mercantile Exchange's owner. It's a sign that traders abroad are increasingly dabbling in the benchmark. Henry Hub's growing prominence underscores how the burgeoning trade in liquefied natural gas is weaving disparate regions together into an increasingly unified global marketplace, more like that for oil.

U.S. LNG exporters hope Henry Hub will emerge as the global price setter because it would remove significant risk from their business model. They buy their gas at Henry Hub prices and could stand to lose money if they have to sell it at oil-linked prices if the margins are unfavorable. Henry Hub entered the global market when Cheniere Energy signed the first export contract of LNG from the Gulf Coast. Shipments started last year.

It's not only U.S. LNG that is being priced at Henry Hub. Anadarko has signed deals to sell from its proposed Mozambique project at Henry Hub. But there are challenges. Falling oil prices have slowed the change. Cheniere has noted that the lower price of oil has generated renewed interest in linking LNG contracts back to oil. And Asian buyers have become more reluctant to buy LNG at prices linked to Henry Hub, analysts said.

### **Pakistan close to signing LNG supply deals with Nigeria and Algeria**

(The Express Tribune; Pakistan; Aug. 18) - With an ambitious plan to double its volume of liquefied natural gas imports this year, the Pakistani government intends to ink multibillion-dollar state-to-state gas supply contracts with Nigeria and Algeria, sources said. Pakistan is currently importing 4.5 million tonnes of LNG per year and the volume will double to 9 million tonnes before the end of this year. Projections show Pakistan will need 20 million tonnes within three years and 30 million tonnes in five years.

According to sources, a draft agreement will be presented to the cabinet for ratification before clinching deals with Nigeria and Algeria. This will be followed by the inking of commercial contracts. According to the International Gas Union's World LNG 2017 report, Nigeria was one of the top five LNG exporters between 2015 and 2016 when the order of top five exporters was Qatar, Australia, Malaysia, Nigeria and Indonesia.

Pakistan has a 15-year agreement with Qatar for annual LNG imports of 3.75 million tonnes to meet its growing energy needs as its domestic gas production appears insufficient to bridge the widening demand-supply gap. LNG imports have given a new lease on life to some industrial sectors, compressed natural gas filling stations, fertilizer plants and power producers, which were earlier sitting idle or limping along in the absence of gas supplies.

## **Bangladesh builds pipelines to get ready for LNG imports**

(Platts; Aug. 14) - Bangladesh has completed construction of its first dedicated pipeline to move regasified LNG to end-users and has three more pipelines in the works as the country gets ready to start accepting liquefied natural gas imports, state-run Gas Transmission Co. managing director Md Atiquzzaman said Aug. 14. The 56-mile, 30-inch natural gas pipeline from Moheshkhali to Anowara, with a capacity of up to 800 million cubic feet of gas per day, has been completed and undergone testing, he said.

Gas Transmission Co., a wholly owned subsidiary of state-owned Petrobangla, is responsible for building and maintaining the pipelines. Bangladesh looks to start LNG imports in early 2018 and is making concerted efforts to move forward with the necessary gas distribution infrastructure. The country's first LNG import terminal is scheduled to be commissioned in April 2018, with capacity to receive, regasify and distribute 3.75 million tonnes of LNG per year (180 billion cubic feet of natural gas).

Petrobangla is also planning to set up at least two more import terminals by 2025. It has a deal with Qatar to import 2.5 million tonnes of LNG per year for 15 years. Petrobangla is counting on government subsidies to enable it to pay for the imports. Earlier this year, the company requested a \$1.4 billion government subsidy to foot its LNG import bill for 2018 — almost 80 percent of the estimated cost. Demand for gas, which accounts for more than 70 percent of Bangladesh's energy fuel, is expected to continue growing.

## **Australia faces challenges in next round of LNG investment**

(Reuters columnist; Aug. 16) - Should the arrival of the last major piece in Australia's \$180 billion liquefied natural gas building spree be a cause for celebration or wake? It may seem that the arrival of the Ichthys Venturer floating production, storage and offloading facility would be worthy of breaking out the champagne. The vessel is part of Inpex's Ichthys project, the final piece of the jigsaw of eight massive new LNG ventures.

These projects, when in full production, will see Australia overtake Qatar as the world's largest producer of LNG. But Australia's rise to the top may be short-lived, as Qatar has announced plans to boost its output capacity by 30 percent, enough to take back the crown from Australia. Qatar can boost capacity by expanding existing facilities, which is considerably cheaper than building new projects.

No new LNG project has reached a final investment decision in Australia since 2012. The collapse in LNG prices to the current \$6.20 per million Btu from over \$20 at the start of 2014 has no doubt played a part in delaying or canceling projects. However, there is hope that by the mid-2020s the LNG market will move from its oversupplied state back to deficit. This means a developer with confidence that demand will grow would have to look at sanctioning a new project soon, or risk losing out to competitors.

Australia, however, has its high-cost challenges of construction in remote areas, wages and rising compliance costs. And there has been a small ratcheting up of political risk. The government has instigated a gas reservation policy, under which it can direct gas away from LNG plants to the domestic market if it feels the domestic price is too high.

### **New tankers lose less LNG to evaporation during transit**

(Bloomberg; Aug. 17) - When the tanker left Louisiana for Chile last month with a load of U.S. liquefied natural gas, it went around South America instead of taking a shortcut via the Panama Canal. Not only may the route be cheaper without canal transit fees, but advances in technology mean less of the fuel would end up lost during the journey — some LNG evaporates while in transit. A new generation of ships is reducing such losses, giving traders more flexibility to choose the scenic route to save money.

“People use vessels more as trading vehicles,” said Paul Wogan, CEO at shipowner GasLog. “And once you can get the newer ships out, you can use them almost as storage vessels” because improved insulation keeps the LNG in its liquid state for longer, he said. New vessels allow for longer voyages because their rates of boil-off, or LNG evaporation, are about 0.1 percent a day, compared with 0.15 percent a decade ago, Wogan said. Ships built from this year on will bring the rate down even more.

Going through the Panama Canal would have saved about two weeks on travel time for the U.S. LNG headed to Chile, but would have cost tolls and securing a transit slot. “The Panama Canal tolls are very expensive in relation to the current market freight rates, and LNG prices as well as fuel prices,” said Emilie Menard, a spokeswoman at French energy company Engie, which owns the tanker that went to Chile. “It is sometimes more attractive to travel the longer distance.”

### **The Philippines looks for investors in energy projects, LNG terminal**

(Bloomberg; Aug. 17) - The Philippines has held discussions with China, Japan, Russia and other countries about investing tens of billions of dollars to help the country boost its electrical generation capacity by 43 gigawatts in the coming decades to stabilize its power supply as the economy expands, said Energy Secretary Alfonso Cusi. “There’s a lot of expressions of interest to invest in the Philippines, and we’re going to make it easy for investors,” Cusi said Aug. 16. “We are open to all parties, all countries.”

Japan and China already have been active in the region. Japan has either sponsored or financed 21 energy development projects with a combined value of \$23.7 billion that are currently under construction or planned in Southeast Asia, while China has backed 21 projects worth \$32.8 billion, according to BMI Research.

The Philippines plans to start building by next year a 100 billion peso (\$1.95 billion) liquefied natural gas import terminal to supply power plants. The generating stations now rely on the country's Malampaya gas field, which is expected to be depleted by 2024. The LNG terminal, to be built south of the capital Manila, will have an initial annual capacity of 5 million tonnes when it starts by 2021, Cusi said. The Philippines will decide on its LNG partner this year. "I think we can only marry one," Cusi said.

### **B.C. government cancels international LNG conference**

(Globe and Mail; Canada; Aug. 17) – British Columbia's new government has scrapped an annual international conference designed to spur development of liquefied natural gas projects, the latest blow to the once-lofty dreams of LNG riches in Canada. The government under then-Premier Christy Clark held three major LNG conferences in Vancouver to court global energy players. But the government has canceled the fourth gathering, which had been set for Nov. 28-30.

"Future events will be considered," the government said Aug. 17. The new government, which took office in June, said it did not have enough time to plan the event. Canceling the meeting is the latest sign of diminishing LNG ambitions in British Columbia. Market conditions began deteriorating in 2015 amid a growing worldwide glut of LNG. Today, the cost of producing and exporting LNG from British Columbia vastly exceeds what buyers in Asia are willing pay.

The first three conferences — organized by the government and co-sponsored by the energy industry — were held in 2013, 2014 and 2015. The three-day event in 2015 attracted over 3,000 participants and 300 exhibitors. Clark's government aggressively promoted the potential of LNG wealth and jobs in the 2013 election. But so far, none of the large-scale LNG projects has proceeded to construction. The Green Party, a big player in the new coalition government, has been a long-time skeptic of LNG exports.

### **Bakken producers save money by switching from rail to new pipeline**

(Financial Post; Canada; Aug. 17) – Ian Dundas expects to see far fewer oil trains rumbling across the farmlands of North Dakota in coming years. Dundas is the CEO of Calgary-based Enerplus, one of the first companies to enter the Bakken Shale, an oil field spanning southern Saskatchewan, North Dakota and Montana. In the absence of pipeline capacity, producers moved oil by rail. As production boomed, producers began investing more in oil-by-rail terminals, paying a premium to get their product to market.

But the completion of the highly contentious Dakota Access pipeline in June, a major oil conduit carrying some 570,000 barrels of crude per day from North Dakota to Illinois, has upended the region's dependence on rail. The pipeline has dramatically reduced

shipping costs for Bakken producers, bringing overall costs in line with other U.S. shale producers, like those in the highly prolific Permian Basin in Texas and New Mexico.

“It’s going to be a pretty powerful advantage that we haven’t had for the past six or seven years,” Dundas said Aug. 17. Production in the Bakken began to rocket upward in 2009, growing to more than 1 million barrels a day in less than five years. But lacking an equally fast expansion of pipelines, the pipeline system in the region quickly became congested. By 2014, Bakken producers were shipping about 500,000 barrels a day by rail tank car. Transport by pipeline is less than half the per-barrel cost of rail.

### **Federal court upholds New York state denial of gas pipeline permit**

(Platts; Aug. 18) - Efforts to serve New England with more shale gas that would make the fuel cheaper on days of high demand for heat and electricity suffered a blow Aug. 18 when a federal appeals court effectively stalled the \$1 billion Constitution Pipeline at the New York border. Operator Williams and shippers Cabot Oil & Gas and Southwestern Energy have viewed Constitution as an important cog in the natural gas wheel that would alleviate bottlenecks in the pipeline-constrained Northeast.

New England, in particular, heavily relies on pipeline imports from Canada and liquefied natural gas imports from overseas to meet winter peaks — and pays high prices during shortages. The pipeline would have moved more gas into the area from the Marcellus and Utica shales. Constitution's sponsors had expressed optimism in recent months that they would succeed in their legal challenge of the New York State Department of Environmental Conservation's denial last year of a key water permit for the pipeline.

But that goal has been put in limbo now that the 2nd U.S. Circuit Court of Appeals has ruled to uphold the permit denial. The court ruled that the state was “within its statutory authority and that its decision was not arbitrary or capricious, and we deny the petition.” The 121-mile Constitution Pipeline was planned to support production growth from the Marcellus Shale in northeastern Pennsylvania, transporting up to 650 million cubic feet of gas per day toward New York City or into New England and Boston demand centers.