# Oil and Gas News Briefs Compiled by Larry Persily January 26, 2017

#### Floating LNG import terminals open up new markets

(Financial Times; London; Jan. 23) - A rapid increase in liquefied natural gas supplies is threatening to flood the market for at least the next three years, forcing producers and traders to find more nimble ways to place cargoes into global trade. The looming glut is focusing attention on whether existing customers stretching from Asia to the U.K. will benefit from lower prices and whether LNG can increase its market share by utilizing a growing fleet of ships that can deliver directly into power plants and pipeline networks.

These floating storage and regasification units (FSRUs) have become the key to opening up new markets for LNG over the past five years, allowing deliveries into countries like Egypt and Argentina without the need for costly new onshore import terminals. Over the next two years or so the number of operating FSRUs is set to grow by about 40 percent to almost three dozen worldwide, potentially opening up new markets and helping LNG move one step closer to becoming truly global.

"The overwhelming majority of new markets in recent years have been FSRU markets," said Hadi Hallouche, head of LNG trading at commodity house Trafigura. "The coming oversupply will only accelerate this trend." LNG supplies are forecast to increase by as much as 50 percent between 2015 and 2020, with the U.S., Australia and Russia adding significant export capacity. While the main LNG demand centers like Japan and China still rely on onshore terminals, which generally take years to build at a cost of billions of dollars, the tie-ups and links for an FSRU often can be put in place in a matter of months. Vessels can be built for \$300 million or existing tankers can be converted.

### Malaysian LNG plant starts up 9th liquefaction train

(Reuters; Jan. 23) - JX Nippon Oil & Energy Corp. said its venture with Malaysian state oil and gas firm Petronas has started commercial operations at the ninth liquefaction train at the Petronas LNG complex in Sarawak, Malaysia. The train, with a production capacity of 3.6 million tonnes of LNG per year, started up Jan. 1. The plant opened in 1983 with three LNG trains, adding capacity in 1995, 2003 and 2009.

The launch of the ninth train comes at a time when U.S. LNG exporters are sending tankers to Asia to fill a winter gap in the region's demand as markets have tightened more than expected on surging consumption in China and Pakistan, and as Australia struggles to ramp up production at new projects. The global LNG market, however,

remains well supplied, with available LNG capacity standing at 45 percent above demand last year, according to Reuters Eikon data.

JX Nippon, a unit of Japan's biggest oil refiner, last June bought a 10 percent equity stake in a Petronas subsidiary that was developing the ninth train at the Malaysian plant. The complex now has the capacity to produce about 30 million tonnes per year.

#### LNG sellers need to convert short-term surge into long-term demand

(Reuters' columnist; Jan. 25) – China's record imports of LNG in December, and the doubling in Asia of spot-market prices in the past six months, appear to contradict the prevailing market view that supply is overwhelming demand for the fuel. But while demand has definitely firmed in recent months, it's still likely that a wave of new supply will push the market into surplus — just perhaps not as much as some had feared.

Spot prices in Asia surprised on the upside in the second half of 2016 and early this year, peaking at \$9.75 per million Btu in early January. This is more than double the 2016 low of \$4, although the gains should be seen in context of the record \$20.50 in February 2014. LNG's slide seemed inevitable given the over-investment in the sector, and new projects are due to add 50 percent more capacity between 2016 and 2020.

Demand build has come largely from China, with growth from India, Pakistan, Egypt and Jordan. The exception was in Japan, where LNG imports were down 1.5 percent in the first 11 months of 2016 vs. 2015. However, the issue for 2017 and beyond is whether demand can continue to grow strongly enough to meet supply still to come — and the big surge is still ahead. Australia will add three more projects 2017-2018, with a total capacity of 20.9 million tonnes, and five U.S. projects are under construction, with start-up between 2018 and 2020, bringing total U.S. capacity to about 66 million tonnes.

The challenge for the LNG industry will be finding buyers for the new output. The trick will be converting what may be a short-term surge into sustained long-term demand. The best way is to ensure that LNG remains price competitive and politically attractive. LNG isn't cheaper than coal for generating electricity in Asia, but it is cleaner-burning.

# Increase in U.S. gas production could weigh on global LNG prices

(The Australian; Jan. 22) - Global energy markets are bracing for a hit as President Donald Trump's administration makes boosting U.S. shale oil and gas production one of its first official policies, threatening Australian LNG revenues. Within an hour of the inauguration, a new "America First" energy plan was posted on the White House website, focusing on gas and oil production and reviving the coal industry. It comes as a

\$200 billion Australian liquefied natural gas investment boom over the past decade is expected to catapult Australia into position as the world's top LNG exporter by 2020.

The U.S. Gulf Coast exported its first LNG last year and by December was exporting more cargoes to Asia because of strong spot prices there. Analysts said higher U.S. gas production would add more volume to global LNG spot markets, helping to hold down prices, while more U.S. oil would weigh on the longer-term LNG contract prices received by Australia's projects, nearly all of which are linked to international oil prices.

"Any policies that Trump implements — lower taxes, less regulation, opening up more areas for drilling — all imply more production, which implies lower U.S. gas prices ... and lower spot prices in Asia," Wood Mackenzie analyst Saul Kavonic said Jan. 21. But others cast doubt on the ability of the U.S. to ship more gas — as the economics don't work in today's market. "There is no scenario of more U.S. gas coming out, as the global oversupply and massive losses from the U.S. cannot be avoided," said Fereidun Fesharaki, chairman of consultancy FGE. "All Trump can do is a minor tax break, but when you lose money, a tax break does not help you," Fesharaki said.

#### China hits record high for LNG imports in December

(Reuters; Jan. 23) - China's liquefied natural gas imports hit a record high in December, customs data showed on Jan. 23, driven higher as the country pushes toward cleaner fuels. The world's No. 2 economy imported 3.73 million tonnes of LNG in December, topping the previous record of 2.66 million tonnes in November and up from 2.10 million tonnes a year ago, China's General Administration of Customs said.

Trade flow data on Thomson Reuters Eikon shows that Australia and Qatar exported the most LNG to China in December. Australia shipped 22 cargoes, equivalent to 1.5 million tonnes of LNG, according to that data, while Qatar exported nine cargoes. For all of 2016, China's LNG imports rose 32.8 percent to 26.06 million tonnes, an average of about 3.4 billion cubic feet of natural gas per day, China's customs data showed. That is just under 10 percent of global LNG trade last year.

# Coal, LNG imports on the decline in Japan

(Reuters; Jan. 25) - Japan's coal imports for power generation fell in 2016 from four years of successive record highs, and liquefied natural gas purchases dropped for a second year as an energy crisis brought on by the 2011 Fukushima nuclear plant disaster eased, government data showed. Rising supplies of renewable energy and the return of some nuclear power, amid falling demand as Japan's population declines, mean the world's third-largest economy has more diversity in its sources of energy.

Thermal coal imports declined to just below 110 million tonnes in 2016, down from a record 113.84 million tonnes in 2015, the Ministry of Finance said Jan. 25. LNG imports dropped for a second year in a row in 2016, down 2 percent to 83.34 million tonnes. Japan is the world's biggest importer of LNG, and demand surged after the 2011 meltdown disaster led to the eventual shutdown of all reactors in the country. But two reactors are now operating under new safety standards and more may restart this year.

#### Restarts could boost nuclear to 11% of Japan's energy mix this year

(Bloomberg columnist; Jan. 25) - Which country was the world's biggest coal importer in 2015? If you're tempted to believe it's dirty old China, think again. Japan — home of the Toyota Prius and the world's largest floating solar-power farm — shipped more coal than its neighbor in 14 out of the past 24 months. The country's shutdown of its nuclear power industry following the 2011 earthquake and tsunami disaster left it scrambling for alternative sources of electricity, and as a result, the use of coal, oil and gas soared.

While Japan has been ramping up its use of renewable energy, its fleet of mothballed nuclear represents low-hanging fruit in any effort to reduce its dependence on imported fossil fuels. But predictions of nuclear restarts have been confounded so many times over the past six years that many people appear to assume it will never happen. That could prove a costly mistake. Restarts will finally get going in earnest this year. At the high end, nuclear could rise to almost 11 percent of the country's energy mix in 2017.

The effect on energy markets could be dramatic. As well as being one of the world's biggest coal importers, Japan buys about a third of the world's liquefied natural gas. The nuclear shutdown helped drive Japan's LNG import prices to record highs. The reverse scenario would weigh further on an already depressed, oversupplied global market. Japan is already contracted to buy 20 million tonnes of LNG more than it needs by 2020, according to Bloomberg New Energy. Should Japan reach the high-case scenario for nuclear restarts, an extra 3 million tonnes will be added to that total in 2017 alone.

### Papua New Guinea plant exceeds expectations; expansion possible

(Platts; Jan. 24) - The PNG LNG project in Papua New Guinea has ample gas supply options to add liquefaction capacity, Australia-listed project partner Oil Search said in its quarterly report Jan. 24. Regardless of any potential expansion, the two-train LNG plant operated well above its nameplate capacity in late 2016, Oil Search said. The plant, which started up in 2014 and has a nameplate capacity of 6.9 million tonnes of LNG a year, produced at an annualized rate of 8.3 million tonnes October through December.

The \$19 billion Papua New Guinea LNG project is operated by ExxonMobil, which has a 33.2 percent interest in the project. Oil Search has a 29 percent stake. Other partners

include Australia's Santos at 13.5 percent, Japan's JX Nippon Oil and Gas at 4.7 percent and the National Petroleum Co. of PNG at 16.8 percent.

Formal talks on a project expansion are expected early this year, RBC Capital Markets analyst Ben Wilson said Jan. 24. "One of the key upcoming catalysts we are looking for is forming commercial arrangements with ExxonMobil, Total and Santos around expansion plans for two trains at the PNG LNG site," Wilson said. France's Total is a partner in additional gas reserves that could feed an expansion at the plant.

#### LNG project in Australia loses contractor on power plant

(Australian Financial Review; Jan. 25) – Australia-based contractor CIMIC has walked away from UGL's contract to build a gas-fired power plant in Darwin to power the Ichthys LNG project, putting 300 people out work and leaving the job unfinished. The move, which also heightens doubts around the timetable for starting up production at Ichthys LNG, came after CIMIC sealed its hostile takeover of UGL, a smaller Australia-based contractor, which has been struggling with large cost overruns on the project.

The design, construction and commissioning contract, which UGL was managing in a joint-venture with U.S. engineering group CH2M Hill, has been the subject of ongoing disputes with client JKC Australia LNG, a consortium of Japanese engineering groups JGC and Chiyoda and U.S.-based KBR that is building the \$37 billion LNG project on Australia's West Coast. Construction on the power plant is temporarily halted at 89 percent completion. The LNG project contractor said it is committed to finishing the job.

Ichthys LNG, 96 percent owned by Inpex and France's Total, is due to begin production in the third-quarter this year. Inpex said start-up — which analysts have said is severely under pressure — is unaffected by the contract issue. Inpex said the dispute is between CIMIC and the overall project contractor. CH2M Hill said Jan. 20 that the power plant, where costs have ballooned to \$1.46 billion, was not expected to be finished until the second half of 2018. UGL has blamed JKC, the main contractor, for many of the delays.

# Gas suppliers benefit as winter cold pushes up demand in Europe

(Bloomberg; Jan. 23) - It only took a few cold weeks to break Europe free from its threeyear-long energy glut. From Houston to Oslo and Moscow, companies that sell natural gas have seen sales and exports surge at the start of the year as Europe scrambles to secure enough supplies to manage the harsh weather. After forecasts for a mild winter, January temperatures plunged enough to freeze rivers.

The revenue boost offered a reprieve from a price collapse that's lingered since 2014, with supply overwhelming gas demand during the three warmest years on record. While

consumers and industry will be hit as power prices in Germany surged to a record and U.K. gas traded near a four-year high, energy companies are enjoying a winter windfall. "I can't remember a start to the gas year that's been this good," said Frode Leversund, CEO of Gassco, which sends Norwegian gas to the continent and the U.K.

German utilities ran their plants full throttle as temperatures plunged to a countrywide average of minus 25 Fahrenheit some days last week. Britain and Scandinavia, which have mostly avoided abnormally low temperatures, have been exporting electricity. The U.K. is generating its highest-ever volume of power from natural gas to send to France. Cheniere Energy has shipped two LNG cargoes from its Louisiana plant into the Mediterranean for the first time within the space of a week.

#### U.S. LNG moves to Europe to take advantage of higher prices

(Reuters; Jan. 24) - U.S. liquefied natural gas exporters have shifted their focus to Southern Europe from Asia as cold weather and problems with Algerian gas supply have driven Europe's gas prices higher. Prices in Europe are at their highest premiums to U.S. gas prices in three years. Several cargoes have already made their way from Cheniere Energy's Louisiana to Europe, and analysts expect more to come.

Day-ahead prices at southern France's Trading Region South gas hub jumped to a near five-year high last week of over \$14 per million Btu, making TRS one of the world's premium markets. Next-day gas prices at the Henry Hub benchmark in Louisiana, meanwhile, traded around \$3.25 on Jan. 24. Consumers cranked up their heaters as cold weather hit Europe, pushing up demand for gas. As demand has risen, supply from Algeria has been reduced due to problems at Sonatrach's Skikda LNG export terminal.

The shutdown of some French nuclear plants after discovery of forged manufacturing documents for parts has also fired up demand for power from the region's gas-fired plants. The gas flow will likely slow at the end of winter.

### Calgary company plans new gas, gas liquids plants and rail access

(Calgary Herald; Jan. 23) – Calgary-based AltaGas has revealed plans to build processing facilities for natural gas and gas liquids, along with rail access that would deliver propane to its proposed export terminal on the British Columbia coast for shipment to Asian markets. The company said Jan. 23 it has entered into a non-binding agreement with an unnamed oil and gas producer to build the plants and rail terminal worth up to \$180 million.

AltaGas spokeswoman Sandra Semple declined to specify where the processing facilities would be built — in Alberta or B.C. Should the deal go ahead, AltaGas said it

would jointly own a natural gas plant, estimated to cost \$100 million to \$110 million, that could process 120 million cubic feet of gas per day. AltaGas would solely own a separate facility that would process 10,000 barrels of natural gas liquids per day, along with the rail terminal, which would cost a combined \$60 million to \$70 million.

The facilities would have access to rail allowing for propane shipments to the company's Ridley Island propane terminal on the coast. The export terminal, which would ship up to 1.2 million tonnes of propane a year, is expected to be operational by early 2019. AltaGas on Jan. 2 announced plans to go ahead with the propane export terminal at an estimated cost of \$450 million to \$500 million. The natural gas and liquids processing facilities, along with the rail terminal, are expected to be finished about the same time.

### TransCanada will ask shippers if they still want Keystone pipeline

(The Canadian Press; Jan. 25) – TransCanada's CEO said the company will talk with shippers to determine if they still support the Keystone XL pipeline after it was given a new lease on life by President Donald Trump earlier this week. In his first comments since Trump invited the company to reapply to build the pipeline for moving Canadian oil sands output to the U.S. Gulf Coast, Russ Girling said he thinks the economic case for the project can still be made.

"I believe this still makes sense, but we haven't engaged in direct conversation (with shippers) on that issue," he said during a presentation at an investors conference in Whistler, B.C., on Jan. 25. He expects access to the "biggest heavy oil refining market in the world in the U.S. Gulf Coast" will remain attractive for TransCanada's customers. TransCanada still faces bitter opposition from environmentalists, landowners and Native Americans who are determined to block Keystone XL.

The \$8 billion project would move oil almost 1,200 miles beginning in Hardisty, Alberta., and extending to Steele City, Neb., where it would link with other lines already leading to Gulf Coast refineries. "Assuming that regulatory hurdle can be overcome, it becomes a question now of economics for TransCanada and whether or not the pipeline can be shown to generate the kind of returns that TransCanada would expect," said Miles Pittman, a partner in the energy group for Calgary law firm Borden Ladner Gervais.

# **Energy consultant says market has changed, Keystone at 50-50**

(Edmonton Journal; Jan. 24) - Despite U.S. President Donald Trump's move to push ahead with the Keystone XL pipeline, there's only a 50-50 chance the line will ever be built, an energy consultant said. Trump signed an executive order Jan. 24 advancing the Keystone line, but said the government would "renegotiate some of the terms." That could include making the project part of wider free-trade negotiations, requiring that only

U.S. goods and services are used for construction, or imposing a border tax on energy trade, said Paul Michael Wihbey, founding partner of Connect Global Strategies.

As well, Gulf Coast refineries are switching to process light Bakken crude and might not have capacity for the heavy oil that Keystone would deliver from Alberta, Wihbey told an Alberta Enterprise Group-Edmonton Chamber of Commerce luncheon. Keystone's importance had diminished greatly in the past few years, said Wihbey, also president of Washington-based GWEST, a consulting firm in resource geopolitics. "The Americans are going to ramp up [domestic] production ... the energy landscape has changed entirely. ... I would say (the chance of Keystone construction) is probably 50-50."

### Keystone could end TransCanada's alternative pipeline to East Coast

(EnergyWire; Jan. 25) – If the \$8 billion Keystone XL pipeline moves forward, as endorsed this week by President Donald Trump, it could scuttle TransCanada's other proposal to move Canadian oil sands production to market, the \$15.7 billion Energy East pipeline. Billed as an alternative to Keystone, Energy East would send crude from Alberta to eastern Canada, bypassing U.S. Gulf of Mexico coastal refineries and allowing for direct exports rather than re-exports of oil sands crude through U.S. ports.

The economics of either pipeline project work individually but probably not both at the same time. Either line would create huge new additions of carrying capacity, well in excess of anticipated growth at Canadian oil sands projects if both were built. Wood Mackenzie researcher Afolabi Ogunnaike said he thinks Canada's oil production isn't big enough for both lines.

Last month, TransCanada reiterated its commitment to Keystone. President Trump has invited TransCanada to reapply for the border-crossing authorization denied by the Obama administration, and has directed the State Department to issue its decision within 60 days of an application. Keystone XL would carry about 590,000 barrels of oil a day — half the volume of Energy East. Wood Mackenzie thinks it could be in operation as early as 2020. TransCanada didn't respond to requests for comment on Energy East.

# New Canadian oil pipeline capacity could boost producer revenues

(Bloomberg; Jan. 25) - President Donald Trump's decision to revive TransCanada's Keystone XL pipeline may herald a new era for Canadian oil sands producers after years of bottlenecks. The decision follows the Canadian government's approval in November of Kinder Morgan's Trans Mountain line to the Pacific coast and Enbridge's expansion of its pipeline to the U.S. Midwest. The three lines would add 1.8 million barrels a day of crude export capacity, enough to handle Western Canada's growing oil production for 20 years, according to National Energy Board projections.

"Too much capacity is not a big concern for the Canadian marketplace and producers right now," said Tim Pickering, founder and chief investment officer of Auspice Capital Advisors in Calgary. "It gives us room down the road to increase production." The new lines also could increase revenues for Canadian oil producers that have been selling their heavy crude at a hefty discount to the U.S. benchmark price. The discount has averaged about \$14 a barrel over the past year, data compiled by Bloomberg show. That may shrink to \$5 to \$7 a barrel should all three lines get built, Pickering said.

Kinder Morgan's Trans Mountain line and Enbridge's line are scheduled for completion by the end of the decade, both companies have said. Trans Canada is "working very hard and diligently" to renew its application for U.S. approval of the Keystone XL pipeline, the company's CEO said Jan. 26, without providing a development timeline.