# Oil and Gas News Briefs Compiled by Larry Persily August 17, 2015

## Japan's nuclear reactor restarts expected to push down LNG prices

(Bloomberg; Aug. 13) – Japan's nuclear reactor restarts will pressure liquefied natural gas prices for years as the nation's electricity utilities reduce their purchases. Japan turned to LNG for gas-fired power generation after shutting down the country's reactors after the 2011 Fukushima disaster. Japan purchased a record 89 million metric tons of LNG in the year ended March 31, according to the Ministry of Finance, accounting for 46 percent of Japan's energy mix in that year compared to 29 percent in 2010.

Restarting reactors would also dent demand for other fossil fuels. If three reactors restarted this year, it would cut fuel oil demand by 80,000 to 100,000 barrels a day, according to Citigroup analysts. "The restarting of nuclear is only one of several seismic shifts now underway in Japan with substantial long-term impacts on global LNG," the Citigroup analysts, including Anthony Yuen, wrote in a note dated Aug. 12.

Citigroup expects global LNG prices will trade within a range of \$6 to \$8 per million Btu from now to 2020. In another spoiler for LNG: Supply is increasing from Australia and the United States, further weighing on prices, said Ali Izadi-Najafabadi, an analyst at Bloomberg New Energy Finance. BG Group began shipments from its Queensland Curtis LNG project in Australia late last year, and Cheniere Energy will start operating its LNG terminal at Sabine Pass, La., later this year.

# Low oil prices jeopardize Russia-China gas pipeline profitability

(OilPrice.com; Aug. 13) - Russia has publicly touted an expanding web of pipelines that would move its gas to some of its largest customers, while also achieving important strategic objectives. But many of these projects will not come to pass. Russia is one of the world's largest gas producers and Europe has been its most profitable customer. But that changed after the Ukraine crisis began in early 2014. Since then, Europe has made small but important steps toward reducing its dependence on Russian gas.

The lower demand from Russia's western neighbors has cut into Gazprom's profitability. Now Gazprom is looking east for its future. Concentrating on selling to China makes sense as it is expected to see its gas consumption rise in the years to come. However, the groundbreaking \$400 billion gas deal that Russia and China agreed to in 2014 may not turn out to be the huge win that Gazprom had hoped. The company revealed Aug. 10 that China deals would leave the company vulnerable to low gas prices. Gazprom officials confirmed that instead of a fixed price, gas sold to China would be pegged to a basket of oil prices, according to the Financial Times. If low oil prices continue, with Russian gas linked to those low prices, the pipeline deals with China would be unprofitable for Gazprom. It isn't just the China deals facing problems. A report last month from the Center for Strategic and International Studies outlined 10 major gas projects that Moscow has trumpeted that may not come true. For example, an LNG export terminal in Vladivostok in the Russian Far East was recently postponed.

## Nuclear restarts may not do much to cut Japan's trade deficit

(Bloomberg; Aug. 13) - When Japan shuttered its nuclear power plants in the wake of the 2011 Fukushima disaster, the impact on the nation's trade balance was almost immediate: a string of monthly deficits that culminated in the first annual shortfall in 30 years. The road back to a sustainable surplus is much more uncertain, with the restart of one nuclear reactor this week doing little for now to reduce the bill for fuel imports.

Economists at Mizuho Securities and the Norinchukin Research Institute in Tokyo project Japan's trade deficits to continue for the foreseeable future, citing structural shifts including the relocation of many factories abroad. A slump in oil prices that took some of the sting out of Japan's new energy mix has been accompanied by a weaker yen that has increased import costs for most goods.

While Kyushu Electric Power restarted one reactor Aug. 11, more than 40 around the country are offline and need regulatory approval. Ali Izadi-Najafabadi, a Tokyo-based analyst with Bloomberg New Energy Finance, estimates Japan may restart 8 to 10 reactors next year. Using a rough calculation, each unit online could improve the annual trade balance by 60 billion yen (\$480 million), said Junko Nishioka, of Sumitomo Mitsui Banking. That compares with a 1.7 trillion yen deficit in the first six months of this year.

## Japan's environment minister will oppose new coal power plant

(Reuters; Aug. 14) – Japan's environment minister will submit to the country's industrial ministry an objection to plans for a 1.07-gigawatt coal-fired plant to be built by Chubu Electric Power, NHK public TV said Aug. 14. As concerns mount over greenhouse gas emissions, Environment Minister Yoshio Mochizuki has been pushing back on the growing use of coal to generate power after the 2011 Fukushima nuclear disaster led to the shutdown of the nation's reactors.

In June, he objected to plans for a 1.2-gigawatt coal-fired plant to be built by Electric Power Development and Osaka Gas. An official at the environment ministry confirmed that Mochizuki planned to submit an opinion to the industrial ministry on Chubu's plant, to be built in Taketoyo in central Japan, but declined to comment on its content. Japan's Ministry of Economy, Trade and Industry has been promoting the use of coal to cut the use of expensive liquefied natural gas after the Fukushima disaster. Under Japan's environmental impact assessment law, government approval for a power plant is based on an examination of its effects on the surrounding environment. The industry ministry handles the process and is authorized to give approval, although the environment ministry can submit opinions that could influence the final decision.

## Hawaii state energy official says LNG is only a bridge to renewables

(Pacific Business News; Honolulu; Aug. 12) - Liquefied natural gas bulk shipments to Hawaii deserve consideration, but only if it supports the state's renewable energy agenda, said the head of the state's energy office. "We've said we are open to a consideration of LNG as a bridge only," said Mark Glick, administrator for the Hawaii Energy Office, pointing out that it has to be limited. "It would only be [used] to displace oil and only to support higher rates of [integrating] renewables and reduce costs."

Glick reiterated the state's stance this week on LNG, bulk shipments of which are being proposed for the islands as a replacement for oil-derived synthetic natural gas and diesel by Hawaii Gas, the state's only regulated gas utility, and by Hawaiian Electric. "There's a new planning process to get us to 100 percent [renewable energy by 2045]," he said. "We want to look at all options."

Hawaiian Electric and Hawaii Gas have signed a non-binding memorandum of understanding, documenting the two companies' desire to work together to develop and/or secure infrastructure for bulk LNG shipments and to establish a consortium to competitively procure the gas and provide storage and regasification at a terminal site.

## Oregon mayor urges state to block LNG terminal

(The Daily Astorian, OR; Aug. 14) - Astoria Mayor Arline LaMear urged the Oregon Department of Environmental Quality on Aug. 13 to block Oregon LNG from building an export terminal in Warrenton, at the entrance to the Columbia River, warning that the project has the potential to threaten the health and safety of residents. "Please help us keep Astoria and our beautiful Columbia River safe and healthy," LaMear told the Environmental Quality Commission, the department's policy and rulemaking board.

The mayor and several area residents used the public forum of the commission meeting to share their opposition to the \$6 billion project, which includes a terminal on the Skipanon Peninsula and an 87-mile pipeline to connect with an existing pipeline. The Federal Energy Regulatory Commission has released a draft environmental review of

the project that concludes that adverse impacts to the environment could be reduced if Oregon LNG takes steps to minimize harm to fish and wildlife habitat and water quality.

But other federal, state and local agencies reviewing the project could raise objections. The Oregon Department of Environmental Quality has to decide on a water-quality certification and permits regulating air quality, wastewater and storm water. LaMear has taken an aggressive tone against Oregon LNG in the past few months. Astoria does not have a say in the terminal or pipeline, but many residents oppose the project, fearing it would alter the region's scenic character, harm the environment and pose safety risks.

# Thailand's gas imports up 35% with rising demand, falling production

(Platts; Aug. 13) - Thailand sharply raised its natural gas imports by 35.1 percent year on year to 1.258 billion cubic feet per day over January-June on the back of higher demand and lower domestic production, according to data released Aug. 13 by the country's Energy Policy and Planning Office. LNG imports surged 47 percent year on year to average 330 million cubic feet per day in the same period.

The remaining 928 million cubic feet per day was imported via pipelines from Myanmar, up 31.3 percent year on year, the data showed. Thailand's overall gas demand grew 5.3 percent year on year to 4.829 bcf per day, with domestic production — though falling — covering three-quarters of demand. Gas-fired power plants led the rise in demand, consuming 2.898 bcf per day, up 7 percent from a year ago.

# Protestors object to small LNG plant in Rhode Island

(Providence Journal, RI; Aug. 13) - About 50 members of local environmental and student groups came out Aug. 13 to protest a plan by National Grid to build a \$100 million system to liquefy natural gas at an existing storage tank on the Rhode Island waterfront. Protesters showed up at an open house hosted by National Grid, the local gas and electric utility, and objected to the project they argue will pose a danger to the neighborhood in South Providence through emissions and the potential for an accident.

Holding signs, the groups briefly and peacefully interrupted the event. "We want clean energy. We want efficient energy. We can't keep polluting," said Steve Roberts, a community organizer with the Environmental Justice League, a Providence-based nonprofit advocacy group. National Grid proposes to build a small gas liquefaction plant to add to its ability to meet peak winter demand. A storage tank at the site has done that since 1971 — holding LNG delivered by truck — but the utility wants to boost its supply.

Members of Fossil-Free Rhode Island and the Sierra Club of Rhode Island also objected to the plan, in part because of concerns about the combustibility of gas. "It's

dangerous," one person said. But David Graves, a spokesman for the utility, said the storage tank has operated without incident. The only major change is that instead of getting LNG deliveries by truck from an import terminal near Boston, the tank would be filled with locally produced LNG. Gas would move to the liquefaction plant by pipeline.

## Proposed Nova Scotia LNG project wins export approval

(CBC News; Aug. 14) – Canada's National Energy Board on Aug. 14 approved an export license for a proposed liquefied natural gas facility in Cape Breton, Nova Scotia. The Bear Head LNG Corp. wants to build a facility to liquefy Canadian and/or U.S. natural gas and load the LNG aboard tankers for export overseas.

"We have determined that the quantity of natural gas proposed to be exported by Bear Head LNG is surplus to Canadian needs," wrote the energy board in its decision. Environmental approval was granted by the Nova Scotia's Environment Department in May, under which the company must address 32 terms and conditions to control greenhouse-gas emissions and reduce impacts on wildlife, water and wetlands.

The company purchased the site from Anadarko in August 2014 for \$11 million. Anadarko gave up on a project years ago to build an LNG import terminal at the site after the North American market shifted with the shale gas boom. Bear Head LNG, owned by an Australian company, still needs customers, a gas supply and financing before moving ahead with its export terminal.

# Ontario Energy Board doubts value of proposed west-to-east oil line

(Canadian Press; Aug. 14) - The Ontario Energy Board says the environmental risks of the \$12 billion Energy East oil line outweigh the potential benefits, and warns it will drive up natural gas prices. "We have found there is an imbalance between the economic and environmental risks of the project and the expected benefits for Ontarians," said board vice president Peter Fraser as he released a report on the proposal to move Alberta crude to Quebec refineries and a refinery and export terminal in New Brunswick.

For two-thirds of the way, the project developer, TransCanada, plans to convert a natural gas pipeline to move oil and then build all new pipe thought Quebec and New Brunswick. After 15 months of consultations with people in communities along the pipeline route in Ontario, the energy board found people are worried about possible polluting of lakes, rivers and drinking water supplies. "The top concern expressed was the risk of an oil spill as the pipeline runs new or across many waterways," Fraser said.

"Our advice is that for the existing pipeline, when it is too close to environmentally sensitive areas, it should be rerouted unless it can be justified by TransCanada as

necessary." The report also said residents are rightly concerned the project could drive up natural gas prices when the existing pipeline is converted to carry oil. The OEB's experts found there will be higher natural gas prices because there will be less pipeline supply. The board's report will form the basis of Ontario's position when the National Energy Board holds hearings on Energy East, expected sometime in 2016.

## Canadian study says pipelines much safer than oil-by-rail

(Calgary Herald; Aug. 13) - Moving oil and gas by pipeline was 4.5 times safer than moving the same volume the same distance by rail in the decade ended in 2013 in Canada, according to a new study by the Fraser Institute public policy think-tank. Lead author Ken Green said the study — released Aug. 13, using newly compiled data from the Canadian Transportation Safety Board and Transport Canada — puts a number on the relative safety and environmental risk of the two types of oil transport.

"I hope it becomes better understood that saying 'No' to a pipeline is saying 'Yes' to rail, and that is to increase the risk to the environment and human health and not decrease it," Green said. "I think if people want to make rational decisions about these things, they have to understand that." Crude-by-rail shipments in North America have skyrocketed in recent years as rising volumes from the Alberta oil sands and U.S. shale oil plays outstrip the capacity of current pipelines.

Meanwhile, vocal opposition by environmentalists and property owners and regulator indecision have stretched out the approval process for pipeline capacity expansions. In a June forecast, the Canadian Association of Petroleum Producers said crude-by-rail volumes, which averaged 185,000 barrels per day in 2014 in Canada, are expected to continue to grow at least to 2018. The study's conclusions are similar to U.S.-based comparisons of rail and pipeline safety, Green said.

# Algeria invites foreign investment to help stem production decline

(OilPrice.com; Aug. 9) - The largest natural gas producer in Africa is overhauling its laws in the hope of stemming the decline in production, which has stagnated for more than a decade. Algeria is the continent's largest gas producer and the second largest supplier of gas to Europe, after Russia. It delivers gas by pipeline to Europe, and was the world's first LNG exporter in 1964. Algeria is also the third largest oil producer on the continent after Nigeria and Angola.

Algeria is also estimated to hold the world's third-largest shale gas reserves, according to the U.S. Energy Information Administration, with more than 700 trillion cubic feet of technically recoverable shale gas reserves. However, despite the large bounty, Algeria

has overseen a long, gradual decline in its oil and gas production. The EIA says delays in drilling and infrastructure projects are the culprit.

As a result, the Algerian government is reforming its energy laws in order to attract international investment, which it believes will help reverse production declines. State-owned operator Sonatrach is still required by law to take majority ownership (at least a 51 percent stake) in new oil and gas projects, but Algeria has offered up stakes for auction, including 33 blocks that attracted interest from international companies.