# Oil and Gas News Briefs Compiled by Larry Persily December 27, 2016

#### Hawaiian Electric drops LNG plans for 100% renewables by 2040

(Honolulu Civil Beat; Dec. 23) - The Hawaiian Electric companies that power Oahu, Maui County and the Big Island have submitted a new plan to state regulators that lays out how they will achieve 100 percent of their electricity generation from renewable sources by 2040 — five years sooner than the state-mandated goal. The plan also says the companies are setting aside their pursuit of using liquefied natural gas instead of oil as a bridging fuel, instead focusing on a change straight to renewables.

Gov. David Ige has adamantly opposed using LNG for electricity generation, saying the investments to upgrade oil-burning power plants and other infrastructure costs would be better put toward renewable-energy projects. The state Public Utilities Commission has repeatedly told the electric companies that their power supply improvement plans fall short of its expectations and demanded they resubmit them.

"We have a solid plan that accelerates our progress to get to 100 percent renewable energy. We can do this," said Alan Oshima, Hawaiian Electric president and CEO, in a news release issued Dec. 23. "We want to work with parties from all segments of our community — government, business, community and environmental groups – to refine the plans for Hawaii's energy future."

## FERC denies Sierra Club request for rehearing on Georgia LNG plant

(Savannah Morning News; Dec. 26) - The Federal Energy Regulatory Commission has denied requests for a rehearing of its order authorizing construction of the Elba Island LNG export plant five miles downriver from Savannah, Ga. Project sponsors are units of Houston-based pipeline giant Kinder Morgan. The project is expected to cost about \$2 billion and will add liquefaction units to the 1970s LNG import terminal on the Savannah River, with peak production of 2.5 million metric tons of LNG per year.

The FERC order, issued Dec. 9, denied requests for a rehearing from the Sierra Club and individuals who raised issues about the safety of the site's LNG storage tanks, two of which were built in the 1970s. The tanks' earthen dike impoundments are smaller than what is required for newly built tanks. But FERC said the addition of export capabilities "does not amount to the level of a 'significant modification to the historical mode of operation' of the existing storage tanks." Opponents plan to appeal in court. In its request for a rehearing, the Sierra Club said regulators too narrowly confined their analysis by ignoring indirect effects of gas production and LNG consumption, such as greenhouse-gas emissions and global warming. It also asserted that FERC's cumulative effects analysis was flawed because it lacked analysis of these effects when combined with effects from other past, present and reasonably foreseeable LNG export facilities. FERC rejected this argument — as it has in the past for other contested LNG projects.

# **<u>\$2 billion LNG plant in Georgia wins export approval; start-up in 2018</u></u>**

(Kallanish Energy; Dec. 23) - A natural gas liquefication and export facility in Georgia has won federal approval to ship LNG to non-free-trade-agreement countries. The Department of Energy's 20-year export authority for the Elba Liquefaction Project came in a 187-page ruling issued Dec. 16, a week after the Federal Energy Regulatory Commission denied an attempt to delay the project. Sponsors are Southern LNG and Elba Liquefaction, both units of Houston-based pipeline giant Kinder Morgan.

The \$2 billion plant at Elba Island, near Savannah, won FERC approval last June. The commission on Dec. 9 rejected a rehearing request. Initial construction began Nov. 1, next to the existing but underutilized LNG import facility at Elba Island that was built in the 1970s. The new plant is expected to begin operations in mid-2018 with the first of 10 small-scale liquefaction units. Full operations are slated for early 2019. Site preparation includes about 325 dump trucks a day six days a week ferrying fill and gravel to the site.

The production and export plant is designed to produce 2.5 million tonnes of LNG a year after it reaches full capacity, equal to 350 million cubic feet of gas per day, the company said. The project is supported by a 20-year takeaway contract with Shell. Department of Energy export approval was contingent on final FERC action.

## Work underway on LNG plant in Port of Tacoma

(The News Tribune; Tacoma, WA; Dec. 22) - Demolition that started in November continues on a 30-acre parcel that will eventually hold a \$310 million liquefied natural gas production, storage and fueling facility on the Tacoma Tideflats in Washington state. The space previously held a more than 200,000-square-foot warehouse. That's coming down to make way for the LNG facility, run by Puget Sound Energy. Heavier construction could begin by mid-year 2017, said PSE spokesman Grant Ringel.

Toward the end of 2019, the plant should be ready to load LNG to fuel Tote Maritime's Alaska-bound cargo ships, Ringel said. And, on winter's coldest of days, the plant's 8-million-gallon LNG storage tank will be ready to help meet peak demand from the utility's residential and commercial gas customers. In addition to providing LNG for

marine or highway users, the plant will be able to regasify the LNG and pipe the gas into the region's distribution grid. That same pipeline system will send feed gas to the plant.

The project has obtained all major permits and is filing for routine construction permits as the project moves along, Ringel said. Community and environmentalist opposition continues, however. Sarah Morken, a Tacoma resident, led nearly two dozen plant opponents on a rainy walk to a Puget Sound Energy field office in Tacoma on Dec. 22. The group sang parodies of Christmas carols.

#### Tokyo Electric, Tokyo Gas compete for customers in open market

(Reuters; Dec. 26) - Tokyo Electric Power will enter the city's metropolitan gas retail market next July, it said Dec. 26, opening a new stage of competition with Japan's biggest city gas operator, Tokyo Gas. TEPCO Energy Partner, Tokyo Electric's retail unit, will work with gas operator Nippon Gas, which already has 320,000 city gas retail customers, to offer maintenance and other services.

The pair aim for about 500,000 customers by the end of March 2018, including Nippon Gas' existing customers, and to boost that to one million by the end of March 2020, or about 10 percent of Tokyo Gas' customer base, a TEPCO official told reporters. The move chimes with Japan's plan for nationwide liberalization of its \$20 billion retail gas market in April 2017. Competition between power utilities and gas operators was spurred in April 2016 when Japan's \$70 billion retail electricity market opened up.

Under the deal, TEPCO will provide piped gas equivalent to about 275,000 tonnes a year of liquefied natural gas to Nippon Gas, which has been buying LNG from Tokyo Gas. To counter the challenge, Tokyo Gas aims to further expand its market share in electricity, President Michiaki Hirose said. Will liberalization of the gas market prompt consolidation among utilities and gas operators? Hirose said that was likely. "Japanese energy companies need to become competitive in the global market, which means they will need economy of scale. For that reason, I expect to see more consolidation."

## Tanzania minister says LNG fiscal negotiations could take 3 years

(AllAfrica; Dec. 23) - The process toward a liquefied natural gas plant in Tanzania has now entered the negotiation stage for the host government agreement, which would govern the rights and obligations of foreign investors and the government for the development, construction and operation of the project.

Energy and Minerals Secretary Justin Ntalikwa said Dec. 23 that a team of government experts is negotiating with the companies that hold interests in the estimated \$30 billion venture: Statoil, Shell, ExxonMobil and Ophir Energy, in partnership with the Tanzania

Petroleum Development Corp. Ntalikwa said the parties would craft a fiscal regime to determine the price of gas to be extracted, land issues and other financial terms.

"In the negotiations, we will come up with a decision whether to introduce a new law or use the country's existing laws governing oil and gas," he said. "The negotiation is something that can take a long time, and to come up with the agreement document could be within three years starting this year." Front-end engineering and design could begin after the fiscal terms are negotiated, he said. First LNG might come in 2029.

# Cold weather, plant outages help drive Asia spot LNG to \$9.50

(Reuters; Dec. 23) - Asian spot liquefied natural gas prices remained firm into the final leg of 2016 as cold temperatures in South Korea, China and Turkey fueled demand as global supply faltered. Spot prices for Asian LNG for February delivery jumped to \$9.50 per million Btu, 20 cents above last week's levels. Two LNG plants led by Chevron in Angola and Australia's Gorgon were hit with outages that severely restricted output, capping a disappointing year for both projects still grappling with technical difficulties.

Gorgon's first production line may resume output next week, one source said. The current price rally, triggered by the partial Gorgon outage last month, found support from buyers rushing to secure supply, one Japanese trading source said, with cold weather playing a major role in spurring gas consumption. But in price-sensitive LNG importer India, higher spot prices have muted demand for LNG, with buy orders drying up.

## **Turkey commissions first LNG import terminal**

(Platts; Dec. 23) - Turkey on Dec. 23 commissioned the country's first liquefied natural gas floating storage and regasification unit at Aliaga, north of the port city of Izmir on the country's Aegean coast. The floating unit can store LNG from an average-size LNG carrier delivery, and can regasify the load and add it to Turkey's gas pipeline system in about five or six days at peak capacity.

Officials speaking at the opening ceremony did not say if it was already handling its first cargo, or when that might arrive. Turkey's state news agency last month reported two private groups had applied for licenses to develop additional floating LNG receiving terminals. Turkey's interest in LNG imports follows several years of gas shortages during mid-winter peak demand periods when the capacity of the existing pipeline grid is insufficient to meet demand, causing the state to cut gas supplies to power plants.

## LNG supporters rewrite Christmas carol to back B.C. project

(EnergeticCity; Fort St. John, BC; Dec. 23) - Five Fort St. John for LNG members met at the local sports center Dec. 23 to record a Christmas carol with a new twist. Group founder Alan Yu came up with the idea for "All I Want for Christmas is an FID," using the tune from "All I Want for Christmas is My Two Front Teeth." The group decided to record a video as a Christmas greeting and as a message of support for the proposed Pacific NorthWest LNG project backed by the Malaysian state-owned Petronas.

Yu said he is hopeful that the Petronas-led venture will make a positive final investment decision (FID) in the first half of 2017. The LNG plant and marine terminal is proposed for near Prince Rupert, B.C., and would be a boost for the natural gas-producing region of Fort St. John. Pacific NorthWest LNG has its federal environmental approval; all it needs is a financial commitment by the partners to spend billions of dollars.

## University study quantifies benefits and social costs of fracking

(Greenwire; Dec. 23) - Hydraulic fracturing benefits local communities, says a study by the University of Chicago. Employment, incomes and property values all go up when the oil and gas production technique is used. But the study found negatives, too, including more crime, traffic and pollution. The study, released by the university's Energy Policy Institute, tried to quantify the benefits and downsides of the fracking boom. The study concluded the economic benefits outweigh the environmental and health costs, for now.

"This study makes it clear that on net there are benefits to local economies, which we believe is useful information for leaders in the United States and abroad who are deciding whether to allow fracking in their communities," said Christopher Knittel, a co-author and professor at the Massachusetts Institute of Technology.

In 2015, fracking supplied about half of U.S. crude oil production, a massive jump from 2 percent in 2000, according to the Department of Energy. According to the study, income rose 7 percent, employment 10 percent and home prices 6 percent in communities near fracking operations. In North Dakota, home prices went up by more than 20 percent. The study found a net benefit of about \$1,900 a year for an average household in nearby communities vs. the cost for a lower quality of life at \$1,600.

## Pennsylvania tries new rules to limit earthquakes from disposal wells

(Pittsburgh Post-Gazette; Dec. 22) - Pennsylvania environmental regulators are on the verge of approving two planned disposal wells for oil and gas waste fluids, on the condition that the operators take new steps to limit the chances the wells will cause the kinds of earthquakes that have shaken other oil and gas producing states. Department

of Environmental Protection officials said they will soon issue long-delayed permits to Pennsylvania General Energy and Seneca Resources for disposal wells in two counties.

The applications for the wastewater wells have inspired an extraordinary degree of local opposition, especially for regions of the state that have a history of oil and gas development. The state permits will carry common conditions, as well as individualized requirements, state officials said. They will require the operators to perform seismic monitoring around the wells and to make the data publicly available. They will also force the operators to shut down wells that cause earthquakes of magnitude 2.0 or greater.

The state's goal is to allow disposal of oil and gas wastes deep underground without repeating the failures in newly earthquake-prone Oklahoma, where oil and gas disposal wells "have fundamentally changed the tectonic regime." Pennsylvania has about 15 operating or federally permitted disposal wells — a tiny number compared to more than 200 in Ohio and about 4,000 in Oklahoma. Drillers are looking for more options to dispose of produced water in Pennsylvania when recycling or reuse is impractical.

#### Peak workforce estimated at 1,200 on Alberta-to-B.C. oil pipeline

(Business in Vancouver; Dec. 20) – Work on the \$6.8 billion Trans Mountain oil pipeline expansion to move Canadian oil sands production to the British Columbia coast will generate an estimated 1,200 jobs at peak construction and \$158.7 million in spending by workers in Vancouver alone, according to the Greater Vancouver Board of Trade. And once the job is done, the Conference Board of Canada estimates, each of the 348 additional oil tankers that will move in and out of Vancouver harbor each year will generate \$366,000 in spending in Metro Vancouver, a total of \$127 million per year.

But before an excavator turns sod, Kinder Morgan will have spent hundreds of millions of dollars getting the project shovel-ready, according to Conference Board of Canada estimates. The company expects it will take a year to meet some of the National Energy Board's 157 conditions before construction begins in earnest in 2018. Once construction starts, spending is estimated to be \$2.5 billion each year during 2018 and 2019.

In addition to 618 miles of pipeline, the company will invest in Burnaby, B.C., where 20 storage tanks will be built, and an expansion of a marine terminal to three berths for tankers. Seaspan, which will provide tug services, has invested \$75 million in five new tugboats for the oil tankers and other expected increases in large-vessel traffic.

#### Northwest Territories premier unhappy with Arctic oil and gas ban

(The Canadian Press; Dec. 21) - A federal decision to stop issuing offshore oil and gas licences in the Canadian Arctic was made without consultation with the people whose

economy stands to pay the price, Northwest Territories Premier Bob McLeod said Dec. 21. The leader of the territory south of the oil-rich Beaufort Sea said he heard about the new policy just two hours before it was made public Dec. 20 in a joint statement by Canadian Prime Minister Justin Trudeau and President Barack Obama.

McLeod said he is disappointed by Ottawa's "unilateral" move, which he said has set back recent initiatives by Ottawa to give Canada's territories more autonomy. "We need to have northerners making decisions about the North that affect them," McLeod said. "We live here, we want to protect the environment. ... In order to appease opposition to resource development in the south, they're looking at using the North to put in protected areas and stopping development."

Trudeau defended the decision Dec. 21 while in Calgary, saying the measure represents a "historic" moment that will protect the Arctic for generations to come from a devastating oil spill under sea ice. "We have been engaged in significant northern consultations over the past months," he said. There is currently no drilling or production in Canada's Arctic waters, nor is any planned in the near future, so the economic effect of the ban will be muted, Trudeau said.

#### Fate of existing Canadian Arctic oil and gas leases uncertain

(The Canadian Press; Dec. 22) - Energy firms including Imperial Oil and BP will get a year of consultations to hash out the fate of their rights in Canada's Arctic after Prime Minister Justin Trudeau's drilling freeze set the stage for a dispute over licence extensions. Trudeau and U.S. President Barack Obama said this week they would designate most of North America's Arctic waters off-limits to new activity, including all future oil and gas licensing in Canadian waters.

Trudeau's government said existing licenses would not be affected, but initially offered scant detail. Five companies — Imperial, BP, ConocoPhillips, Chevron and Franklin Petroleum Canada — hold active exploration licenses in Canada's share of the Beaufort Sea, where there currently is no oil production. Many of those licenses expire within the next five years, when Trudeau has pledged to review his moratorium.

Some companies may seek license extensions, which will be a central issue in talks between government and the industry over the next year. "I suspect most companies would still want to maintain an active license there" or seek an extension "until such time as the government has another review," said Paul Barnes, of the Canadian Association of Petroleum Producers. The exploration licences due to expire over the next five years were issued in 2012 when crude hovered around \$100 a barrel.