# Oil and Gas News Briefs Compiled by Larry Persily November 16, 2015

## Decision date may slip for Anadarko's Mozambique LNG project

(Interfax Global Energy; Nov. 13) - Sluggish global LNG demand and intense wrangling between Mozambique's government and Anadarko mean a March 2016 final investment decision for a giant onshore liquefaction project — announced by shareholder Mitsui — looks optimistic. Anadarko still needs to finalize a government agreement, submit its development plan and sign binding offtake deals to anchor \$15 billion in debt financing.

While Anadarko has secured heads of agreements for two-thirds of the plant's capacity of 12 million metric tons per year, they have not been converted into sales agreements. Additionally, Mozambican state oil company ENH will likely rely on Anadarko to fund its 15 percent equity in the project. Interfax understands Anadarko is willing to finance the national oil company's stake, but at a rate over ENH's break-even price for the project.

The government also needs to re-award the contract for construction of a logistics hub for operations in the region. South African consortium Muyake originally won the contract, but was later sidelined in favor of a joint venture between Mozambique's national company and an Italian-Nigerian company, which has an opaque ownership structure that could create compliance problems. Interfax understands Anadarko will not use the base unless the Italian-Nigerian company is removed from the contract.

Other sticking points are how much gas Anadarko will supply from the offshore field to the domestic market and how much it will charge. As negotiations grind on, investor confidence in Mozambique is waning. The government has grown increasingly reliant on promised LNG revenues to meet its growing debt obligations, but the income is now likely to come in lower and later than projected, throwing Mozambique's debt into doubt.

## Developer plans 2016 decision on LNG project offshore Africa

(Reuters; Nov. 11) – London-based oil and gas explorer Ophir Energy expects to finalize sales agreements and make a final investment decision on its Fortuna floating liquefied natural gas project offshore Equatorial Guinea by mid-2016. Ophir's chief operating officer Bill Higgs said the firm is in talks with six or seven buyers representing a mixture of end users, oil majors and traders, and expects heads of agreements will be signed by the end of the month.

Heads of agreements are preliminary contracts that can be confirmed when full approvals are received and a final investment decision made on a project. The Africa

development is one of a number of LNG projects planned when prices were higher, but prices have more than halved since the start of last year on a glut of supply. Higgs said he expects that smaller projects such as Fortuna are more likely to gain a final investment decision than larger projects under the challenging market conditions.

The project is expected to produce 2.2 million metric tons of LNG per year, with first gas slated for 2019. It is smaller than the single-train onshore LNG plant that opened in Equatorial Guinea in 2007. Ophir is an 11-year-old company with assets in Asia and Africa, and a market value of about \$1 billion. It is focused on exploration and development, and has no production yet.

## **Global oil stockpile swells to record 3 billion barrels**

(Bloomberg; Nov. 13) – Global oil stockpiles have swollen to a record of almost 3 billion barrels because of strong production in OPEC and elsewhere, potentially deepening the rout in prices, according to the International Energy Agency. This "massive cushion has inflated" on record supplies from Iraq, Russia and Saudi Arabia, even as world fuel demand grows at the fastest pace in five years, the agency said.

Still, the IEA predicts that supplies outside the Organization of Petroleum Exporting Countries will decline next year by the most since 1992 as low crude prices take their toll on the U.S. shale oil industry. Crude has dropped about 40 percent in the past year as OPEC defends its market share against rivals such as the U.S. shale industry, which is cutting back only gradually despite the price collapse. Oil inventories are growing because supply growth still outpaces demand, OPEC said in its monthly report Nov. 12.

Total oil inventories in developed nations increased by 13.8 million barrels to about 3 billion in September, a month when they typically decline, according to the agency. The pace of gains slowed in the third quarter, although growth remained "significantly above the historical average." There are signs the some fuel-storage depots in the eastern hemisphere have been filled to capacity, the report said.

## Oil stored in tankers at sea double volume of earlier this year

(OilPrice.com; Nov. 12) - Global supplies are still too large to justify a significant rally in oil prices. The latest indicator that the glut has yet to ease comes from the Financial Times, which concludes there are 100 million barrels sitting in oil tankers worldwide. Oil has piled up in tankers as onshore storage space begins to dwindle. The level of crude oil stashed at sea is nearly double what it was earlier in 2015.

"Onshore storage is not quite full but it is at historically high levels globally," David Wech of JBC Energy told the Financial Times. Rising levels of crude stored at sea has more to

do with shrinking capacity onshore, rather than traders stockpiling volumes in order to profit from an eventual rebound in prices. Oil tanker charter rates have surged this year, so it doesn't exactly make sense to store oil at sea strictly for a trading opportunity.

The CEO of Euronav, a tanker company, told the Financial Times that traders are even asking his company to slow down the movement of tanker shipments in order to assist in managing storage levels, effectively parking oil at sea. Tankers are sitting at several ports in China, and more than a dozen ships are sitting offshore in Malaysia, Indonesia, and Singapore. A backlog of tankers sitting in the U.S. Gulf of Mexico is also rising.

# Tankers carrying 19 million barrels of Iraqi oil headed to U.S.

(Bloomberg; Nov. 10) - OPEC's latest challenge to U.S. shale oil producers would be about two miles long, lined end to end, and weigh almost 3 million metric tons. It's due to reach American ports this month. Iraq, the fastest-growing producer within the 12-nation group, loaded as many as 10 tankers in the past several weeks to deliver crude to U.S. ports in November, ship-tracking and charters compiled by Bloomberg show.

The 19 million barrels being hauled would mark the biggest monthly influx from Iraq since June 2012, according to U.S. Energy Information Administration figures. The cargoes show how competition for sales among OPEC members is spilling into global markets, intensifying competition with U.S. producers whose own output has retreated since summer. For tanker owners, it means charter rates are headed for the best quarter in seven years, fueled partly by the surge in one of the longest trade routes.

Iraq, pumping the most since at least 1962 amid competition among OPEC nations to find buyers, is discounting prices to woo customers. The U.S. may increasingly become one of them after its own output has dropped by as much as 500,000 barrels a day since June. Iraq is among the least expensive places in the world to extract crude. Capital costs are about seven times cheaper than for light, tight oil in the U.S. when measured by fields' daily capacity, according to the International Energy Agency.

## Trudeau orders moratorium on oil tanker traffic in northern B.C.

(Financial Post; Canada; Nov. 13) – Canadian Prime Minister Justin Trudeau is following through on an election promise to ban crude oil tanker traffic off the coast of northern British Columbia, a move which observers say would effectively kill the proposed \$7.9 billion (Canadian dollars) Northern Gateway pipeline that would carry up to 525,000 barrels a day of Alberta oil sands production more than 650 miles to a terminal at Kitimat, B.C., for export overseas.

Trudeau published his mandate letters to each member of his cabinet Nov. 13 and asked Transport Minister Marc Garneau to "formalize a moratorium on crude oil tanker traffic on British Columbia's North Coast, working in collaboration with the Minister of Fisheries, Oceans and the Canadian Coast Guard, the Minister of Natural Resources and the Minister of Environment and Climate Change to develop an approach."

The pipeline developer, Enbridge, did not immediately respond to a request for comment. Proponents of the Northern Gateway pipeline said they remain committed to building their link from Edmonton to Kitimat despite Trudeau's order.

## City of Tacoma approves LNG fueling depot for port

(KPLU radio; Tacoma, WA: Nov. 11) - Plans for a liquefied natural gas facility at the Port of Tacoma are one step closer to reality after the Tacoma City Council passed a resolution to move ahead on an agreement with the port for the project. Puget Sound Energy, which proposes to build a \$275 million LNG production, storage, distribution and marine fueling facility, said the insulated storage tank would be 140 feet tall.

"It's going to primarily serve as a back-up to our gas distribution system. So on that coldest day in January, when we all need more gas to heat our homes and businesses ... we can return some of that liquefied natural gas to our distribution system," said a Puget Sound spokesman. The plant will make LNG from pipeline gas supplies and is set to start up by 2018. It will serve as a fueling depot for TOTE ships that haul freight between Tacoma and Anchorage after TOTE converts its Alaska ships to run on LNG.

For people who live nearby, the potential for fire has been one of the main concerns, said John Thurlow, co-chair of the Northeast Tacoma Neighborhood Council. "I think the real issue is, can a fire there be contained properly and effectively?" Thurlow said. He was reassured Tacoma will be able to handle a fire at the plant when the city said it will reopen a former fire station near by. Puget Sound Energy will help pay to refurbish that station.

## N.Y. governor vetoes offshore project to receive LNG cargoes

(NorthJersey.com; Nov. 12) - New York Gov. Andrew Cuomo has vetoed a controversial project to build a liquefied natural gas import terminal off the New Jersey coast. Cuomo sent a letter to the U.S. Maritime Administration outlining his lingering concerns with the proposed facility, called Port Ambrose. The project, which had faced vocal opposition from environmental groups in New Jersey and New York, would have been located about 19 miles off Long Island, N.Y., and 29 miles east of Sandy Hook, N.J.

Under federal port regulations, governors of adjacent coastal states have veto power over such projects. "My administration carefully reviewed this project from all angles, and we have determined that the security and economic risks far outweigh any potential benefits," Cuomo said Nov. 12. "Superstorm Sandy taught us how quickly things can go from bad to worse when major infrastructure fails. The potential for disaster with this project during extreme weather or other security risks is simply unacceptable."

N.J. Gov. Christie had yet to take action on the issue. The proposal by Liberty Natural Gas included submersible buoys at sea for LNG carriers to anchor and connect, then regasify the LNG aboard the ship and offload the gas into a pipe for delivery to shore. The project developer was looking at about 45 deliveries a year to help meet peak winter demand for gas. Cuomo's move drew praise from environmentalists in New Jersey.

# North Dakota gives producers more time to reduce gas flaring

(U.S. Energy Information Administration; Nov. 13) - Because of insufficient pipelines to collect, gather and transport gas associated with oil production, about one-fifth of North Dakota's gas production is flared rather than marketed, according to the U.S. Energy Information Administration. North Dakota's Industrial Commission has established gascapture targets in an effort to reduce gas flaring, and recently issued a revision to the flaring targets in response to faster-than-expected gas production growth in the Bakken.

In 2014, flared gas averaged 350 million cubic feet per day in North Dakota, as oil production set new records, driving up gas production, too. By law, North Dakota prohibits natural gas venting, though exemptions are automatic for the first year and may be extended. Since 2014, the percentage of natural gas flared in North Dakota has fallen from 36 percent to 21 percent.

Based on the targets established in April 2014, the percentage of flared gas was set to fall to 15 percent in January 2016 and remain at that level until 2021. However, the state has loosened the restrictions for the near term, giving producers more time to add gas processing plant and pipeline capacity. The change allows 22 percent of gas production to be flared through the first quarter of 2016, with the decline to 15 percent delayed to November 2016.

## Brownsville, Texas, hopes LNG projects will pull it out of deep slump

(Bloomberg; Nov. 13) - Brownsville, on the southernmost tip of Texas, has had more than its share of booms and busts. Shipping, steel, cotton, Civil War-era smuggling, trade with Mexico — they all helped the city prosper. But Union Carbide shut its chemical plant. A big shopping mall closed in the 1990s. Airbus and steel producers

passed it up for new plants. Today, Brownsville is America's poorest metro area, with 35 percent of residents living below the poverty level, twice the national average.

Enter the shale boom, which has the U.S. producing more natural gas than it can burn. Three groups are now deciding whether to build plants in Brownsville that would liquefy the fuel and send it abroad. If they make good on their plans, the city's fortune changes with 400 permanent new jobs averaging \$70,000 a year, more than double the median household income of about \$32,100, and hundreds of millions of dollars in tax revenue, port fees and local spending. Brownsville's population is about 180,000.

If they flop — as some suspect they might, considering this year's collapse in energy prices — Brownsville ends up back where it started. "We have a generation of people that the only thing they know about Brownsville is high unemployment, high poverty levels and lack of education," said Gilberto Salinas, executive vice president of the Brownsville Economic Development Council. "But we have come a long way and opportunity is there. The question is, what do you do with it?"

#### Saudi Arabia pursues its own shale gas

(Globe and Mail; Canada; Nov. 12) - Great attention has focused on the North American energy boom, driven by fracking and horizontal drilling, and for good reason: It has yielded far more energy than most people expected and has altered energy security by adding more than 4 million barrels of oil a day to global markets since 2008. But what about Saudi Arabia? The House of Saud has launched its own fracking boom, and it could well be the next big thing in global energy.

Saudi efforts are more advanced in shale gas than in oil, but both are in motion. In 2011, several years after the U.S. boom was in full swing, Saudi Aramco launched its own unconventional gas program in the northern region. Two years later, Saudi Aramco was ready to commit new shale gas production to a 1,000-megawatt power plant. Ali al-Naimi, Saudi Minister of Petroleum and Mineral Resources, estimated that the kingdom possesses about 600 trillion cubic feet of shale gas reserves.

"The kingdom has made promising shale gas discoveries and acquired the technologies to produce it at a reasonable price," al-Naimi said. The Saudis have established a global research network of 11 technology offices and research centers in North America, Europe, China and at home. In September, 2014, the company inaugurated the Aramco Research Center in Houston.

Propane draws interest as fuel for small power plants

(Power magazine; Nov. 10) - As liquefied natural gas continues to draw increasing attention, another liquefied gas — propane — is beginning to expand its share of the power-generation mix. While propane-powered engines and microturbines have been around for a long time, they've taken a back seat to diesel for a variety of reasons. Diesel has historically been less costly than propane, but a combination of higher oil prices, a glut in the natural gas liquids market, and growing environmental regulation of diesel engines has made propane power generation more attractive.

Propane (also referred to as liquefied petroleum gas, or LPG) is a by-product of natural gas processing. Compared to LNG, the infrastructure required to make the switch to propane is far less challenging. Though generation with propane results in slightly lower output and efficiency compared to natural gas, propane is much easier and less expensive to compress, ship and store than LNG or compressed natural gas. Propane-powered turbines can be used for the same applications as natural gas-fired turbines.

For island grids dependent on imported fuel oil, propane power is especially attractive. The U.S. Virgin Islands Water and Power Authority is in the middle of a \$150 million transition from fuel oil to propane. The project is expected to cut fuel costs 30 percent. Propane-fueled microturbines have drawn interest as generation sources for microgrids. A supplier recently deployed a propane-fired microturbine at a luxury ski resort in Chile, as well as at Southern California Edison's plant on Santa Catalina Island in California.

#### Former Hawaii utilities regulator backs LNG

(Pacific Business News; Honolulu; Nov. 9) - Utilizing liquefied natural gas as an alternative to oil for the state's fuel supply, coupled with cost-effective renewable energy sources, offers Hawaii the best hedge against rising costs and volatility, the former head of the Hawaii Public Utilities Commission said. "We really need to take a closer look at our fuel infrastructure and work off the findings of the refinery task force," said Hermina Morita, speaking at last week's Hawaii Economic Association luncheon in Honolulu.

"We don't have the opportunity to be price competitive with fuels," she said. Limited suppliers and local pipelines "have us over a barrel because that's the only point of access." She said developing the infrastructure that can introduce competitive pricing for fuels is essential. "That's why I think the LNG debate is very important, because even though we're looking at low oil prices now, it's still something that is very volatile.

"Everything I see, LNG, coupled with cost-effective renewables, offers our best hedge against rising cost and volatility," Morita said. Both Hawaii Gas and Hawaiian Electric have separate plans to ship in bulk LNG by 2019. However, Hawaii Gov. David Ige, at an energy conference in Honolulu earlier this year, said he had reached a conclusion that Hawaii does not need LNG in its future, that he would not support bulk LNG deliveries to the islands, and that the focus should be on renewable energy projects.