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Exxon, Anadarko both look to 2019 decision on Mozambique LNG

(Petroleum Economist; Nov. 1) – ExxonMobil's country manager in Mozambique has confirmed that the company expects to take a final investment decision on its LNG project in the east African nation by mid-2019. Exxon is part of a project consortium with big hitters including Eni, China National Petroleum Corp., and Galp of Portugal.

The U.S. company expects to be able to move forward to FID without needing to sell any LNG outside of the consortium. "We expect sufficient interest from the affiliate buyers to launch the project and support the financing," spokesperson Julie King told Reuters in July. ExxonMobil is taking the lead on the offshore gas development and onshore LNG plant, planned for 15.2 million tonnes annual capacity.

Anadarko is leading its own onshore project to liquefy gas from offshore fields with an investment decision also expected in 2019. Anadarko is working to sign up enough LNG customers to justify its decision to project-finance bankers. Also in Mozambique, a floating LNG platform, commissioned by Eni, is under construction and due to start LNG production in 2022 with capacity of 3.4 million tonnes per year.

Questions remain whether there is appetite from offtakers and lenders for both onshore LNG projects in Mozambique, but market dynamics look good. "The relative lull in FIDs over the past several years, plus strong growth in LNG demand in Asia, especially China, has created a feeling that the time is right for many large LNG projects," said analyst Kelly Krasity with IHS Markit's LNG team. However, she said, "there are multiple liquefaction projects in the U.S., Russia, Qatar, and Mauritania/Senegal all looking to reach FID in the next year or so, on top of the two projects in Mozambique. The market is highly unlikely to be able to absorb that amount of LNG in the next five or six years."

Mozambique needs to raise \$2 billion for its stake in LNG ventures

(The Southern Times for South Africa; Oct. 29) - Mozambique's National Hydrocarbon Co. needs to borrow US\$2 billion to finance its participation in proposed liquefied natural gas projects led by foreign oil and gas companies. ENH has a 10 percent stake in Offshore Area 4 of the Rovuma Basin and 15 percent in Offshore Area 1. Italy's Eni is developing an LNG project fed by Area 4 reserves, while U.S.-based Anadarko is the lead for the LNG terminal that would be fed by Area 1 reserves. ENH will need to come up with money to back up its stakes in the ventures. Minister of Economy and Finance Adriano Maleiane, interviewed by the independent television station STV, said the government wants to issue a sovereign guarantee for a \$2 billion loan, and has put it into the draft 2019 state budget, which will be debated in parliament in December. With a government guarantee, ENH will be able to go the international capital markets to seek financing.

However, the return of Mozambique to the capital markets will not be easy. Ratings agencies classify Mozambique as in "selective default" because in 2013 and 2014 the government issued sovereign guarantees, also for about \$2 billion, for loans taken out from European banks by three newly created security-related companies. All three companies are now effectively bankrupt, and the government has defaulted on the loan repayments, arguing that the creditors must agree to a restructuring of the loans.

Sempra expects first export cargo early 2019 at Cameron LNG

(S&P Global Platts; Nov. 2) - Sempra Energy is expected to begin flowing feed gas to its Cameron LNG export terminal in Louisiana before the end of the year, with first production to follow sometime later, a spokeswoman said Nov. 2. The San Diegobased power and gas provider will join Cheniere Energy and Dominion Energy as a U.S. exporter of liquefied natural gas produced from shale gas when it ships its first cargo, which is expected to occur in early 2019.

The United States is poised to become a major player in the global market, providing spot and contract cargoes to high-demand countries in Asia and Europe and greater optionality for traders. Besides Sempra, Kinder Morgan's Elba Island LNG export facility in Georgia and Freeport LNG's terminal in Texas are expected to start up in 2019. Still more export terminals are in various stages of planning, permitting, marketing and, eventually, maybe financing and a final investment decision to build.

Sempra said it has initiated the commissioning process for the support facilities and first liquefaction train at Cameron. Spokesman Paty Ortega Mitchell said Sempra expects "all three trains to produce LNG in 2019." The \$10 billion, three-train project added liquefaction to an underused LNG import terminal. Export capacity will be almost 15 million tonnes a year. Sempra partners include Mitsui, Mitsubishi, and Europe's ENGIE.

Any expansion at LNG Canada 'probably a few years away'

(Reuters; Nov. 1) - Expansion of the LNG Canada project has a cost advantage over its rivals in the liquefied natural gas export industry, but a decision on the second phase of development is likely still a few years away, Shell Canada's president said Nov. 1. The first phase of the C\$41 billion Shell-led project in Kitimat, British Columbia, was given

the go-ahead last month. "What's in our favor now is expansions are typically lower capital cost," Michael Crothers told the Reuters Global Commodities Summit.

Expansion would offer cost savings, along with the project's other advantages, including a relatively short shipping distance to key Asian markets and cheap feed gas, he said. The question of when the second phase, which would double output from 14 million tonnes per year to 28 million tonnes, will be approved remains unclear, Crothers said. "I'm sure Shell leadership would like to see demonstrated performance before we start to consider this too closely. So that's still probably a few years away," he said.

Expansion would have to compete with global rivals and would depend on the market — though all signs point to sustained Asian demand, Crothers said. LNG Canada is a joint venture between Shell, Malaysia's Petronas, PetroChina, Mitsubishi, and Korea Gas. One of the key benefits for Canada-based projects is access to cheap gas, he said, noting that Western Canadian gas prices are roughly \$1 less than the U.S. benchmark. He also sees a first-mover advantage on labor costs as a construction slowdown in Alberta's oil sands is allowing LNG Canada good access to skilled workers.

Developer talks about selling stake in its Oregon LNG project

(S&P Global Platts; Nov. 2) – Calgary-based Pembina Pipeline Co. continues to talk about selling a stake in its proposed Jordan Cove LNG export project to help pay for the Coos Bay, Oregon, liquefaction terminal and feed-gas pipeline, an executive said Nov. 2. Amid challenges securing long-term offtake agreements and financing the billions of dollars needed to pay for construction, developers of liquefaction facilities are increasingly looking for partners to help shoulder the financial burden and reduce risk.

In Pembina's case, it inherited the Jordan Cove project when it acquired Calgary-based Veresen in October 2017. The project is making a second attempt after the Federal Energy Regulatory Commission rejected its first application in March 2016, in part because of a failure to show sufficient buyer demand for the gas. Pembina has since signed up potential customers and is trying again to win FERC authorization. The business plan is to liquefy Western Canadian and U.S. gas for LNG export sales.

"If we were successful in securing Jordan Cove, we have talked about monetizing potentially up to 40 percent, maybe 50 percent of that project to help with the capital program," Chief Financial Officer Scott Burrows said during an investor conference call to discuss Pembina's third-quarter financial results. Pembina continues to work on the project, looking for a FERC decision in November 2019 on the LNG plant and 230-mile, 36-inch-diameter pipeline through Oregon. The company is targeting first LNG in 2024.

U.S. sanctions put Iran LNG project on hold

(S&P Global Platts; Nov. 1) - Iran's first LNG export terminal with a planned capacity of 10.8 million tonnes per year has stalled due to the impact from the U.S. sanctions, a company executive said Nov. 1. The project hold underscores the impact of Washington's sanctions on Iran's petroleum sector that are set to take effect Nov. 5 and the debilitating impact it's having on Tehran's long-term plans to exploit its gas reserves.

Iran LNG, a project jointly owned by the National Iranian Oil Co. Pension Fund and the National Iranian Gas Export Co. (NIGEC), had already started construction near the port city of Assaluyeh, said Mostafa Sharif, general manager for market research and economic appraisal at NIGEC. "This project's storage capacity has been built and gas intake facilities are available, but the liquefaction facility has not been built due to the sanctions," Sharif said at the Gas Asia Summit of Singapore International Energy Week. "After the sanctions removal we hope that we can revive the project," he said.

Tehran has also been forced to shelve other LNG export plans that were on the drawing board. Iran holds nearly 18 percent of the world's gas reserves, making it the world's second-largest gas reserve after Russia, according to U.S. Energy Information Administration data. "We have been in discussions with large companies previously like BP, Total, and Shell, but given the current situation all projects have stalled," Sharif said.

Texas LNG hopeful says larger projects in trouble without China

(Reuters; Oct. 31) - The CEO of Texas LNG, one of three export terminals proposed in the Port of Brownsville, has cast doubts over his rivals' plans because he believes their larger projects will require a Chinese, or equally large, committed buyer. However, Vivak Chandra said, Chinese LNG buyers are seen as unlikely to want to commit to U.S. liquefied natural gas supplies after Beijing set a 10 percent tariff on the fuel as part of an ongoing trade war with President Donald Trump.

Chandra said a push to make final investment decisions on several U.S. projects next year may falter because buyers, whose commitments help finance projects, are still shy of coming forward in a fast-changing market. "In the U.S. ... I don't see a lot that is happening," Chandra said at an LNG conference in London. "If the buyers don't actually start making some decisions, we're not going to see a lot of projects coming up."

Of the 13 proposed U.S. projects that have not yet taken an FID, Chandra said many have capacities of at least 10 million tonnes a year, a size that would require a large commitment from a single buyer, which translates to China. "All of these guys (project companies) really need big, big contracts — 3 million to 4 million tonnes. They cannot manage with half a million here and there. You can't have 30 or 40 customers," he said.

Texas LNG proposes a capacity of 4 million tonnes a year. Chandra said it could reach FID next year, after final regulatory approvals and finalization of offtake agreements.

Gas storage tanks filling up in Asia; LNG carriers parked offshore

(Reuters; Nov. 1) - Rising gas storage levels in North Asia are denting demand for liquefied natural gas ahead of a warmer-than-expected winter, driving at least one utility in Japan to resell winter cargoes it does not need, regional trade sources told Reuters. Storage levels in Japan and South Korea are estimated to be at their highest since at least 2015, according to data from Refinitiv Eikon. Gas storage tanks are filling up in China as well, according to trade sources.

China National Petroleum Corp. said this week that it had finished injecting gas into its underground storage with volumes at record levels ahead of winter. North Asia's gas inventory typically peaks in October before winter drawdown starts, but this year there are no signs of stocks falling, according to the data. Nuclear power restarts in Japan, the world's top LNG buyer, are also denting demand for gas, while electricity generation using solar power has been growing in some parts of Japan and is also cutting LNG demand.

And, in an unusual move, LNG is being stored in ships off Singapore and Malaysia for up to three weeks, unable to find homes. At least half a dozen LNG carriers have been floating offshore Singapore and Malaysia, according to Refinitiv Eikon shiptracking data.

China building marina and regas vessel for Ghana LNG import project

(Reuters; Oct. 31) - Ghana's liquefied natural gas import project is finally under construction, years after its original inception, with two vessels under contract to store and regasify the fuel by the second quarter of 2020, a project partner said Oct. 31. China Harbour Engineering Co. has begun construction on the marina and the China State Shipbuilding Corp. will provide the floating regasification facility. U.K.-based Gasfin will provide the floating LNG storage unit, company CEO Roland Fisher said.

Ghana has been trying to get an LNG import project off the ground for years. After a false start due to contracting delays, the plan is ready to go, Fisher told delegates at an LNG conference. "The project is under construction. It's not subject to finance. It's not subject to any other permitting," he said. Ghana is expected to get its LNG from Russian oil and gas giant Rosneft, which has a 12-year deal to supply 1.7 million tonnes a year.

Australia makes significant cut in tax concessions for LNG projects

(Sydney Morning Herald; Nov. 2) - Oil and gas giants will be hit with a \$6 billion tax hike over the next decade following years of concern that Australia has been hemorrhaging lucrative revenue to multinationals. The decision was made after an 18-month wait for the government's response to a landmark review of its taxation of the liquefied natural gas industry. Australia is expected to eclipse Qatar as the world's top LNG exporter by 2020 but will receive far less in taxes than Qatar earns in royalties. State-owned Qatar Petroleum operates the country's LNG export facilities.

The Australian government went further Nov. 2 than some in the industry had expected by declaring current projects would be affected by the change, despite industry threats that the move would put new investment at risk. Annual uplift concessions (tax savings) that allow companies to deduct the cost of risky exploration against future profits will be cut by two-thirds starting July 2019, bringing it in line with less risky projects.

The 30-year-old tax structure was designed to encourage investment in gas and oil exploration by giving generous concessions for projects that can take years and billions of dollars to materialize but produce very large profits once underway. The concessions meant that some projects would not pay the tax until 2030 despite being profitable. Economist Michael Callaghan, who led the government inquiry, called the breaks "excessively high." A 2010 review warned the system failed "to collect an appropriate and constant share of resource rents from successful projects," overcompensating investors.

Argentina spends big on shale oil and gas, looks to start LNG exports

(Argus Media; Oct. 26) - Argentina's state-controlled YPF plans to spend \$3.6 billion per year through 2023 to increase oil and gas production by 5 to 7 percent annually, mostly from the Vaca Muerta shale formation. The spending accounts for the largest share of YPF's five-year investment plan averaging \$4 billion to \$5 billion per year through 2023, CEO Daniel Gonzalez said during a presentation to investors in New York on Oct. 26.

Because of the increase in international oil prices and decrease in domestic natural gas prices, YPF plans to redirect much of its investment in the next five years to crude. Yet the company still expects to have enough surplus gas in the summer months to develop and sustain liquefied natural gas exports. Almost 70 percent of its capital spending in the next several years will be directed at unconventional output, including shale oil and gas. In the next year alone, YPF expects its unconventional output to grow 150 percent.

"We believe Argentina will have a sizable LNG export terminal in the next five years," Gonzalez said, noting that YPF has already started doing the engineering work to

determine the best location and size of such a project. The country's shale gas reserves have been estimated at several hundred trillion cubic feet.

Philippines moves closer to contract for first LNG import terminal

(Reuters; Oct. 30) - The Philippines has shortlisted three different groups to build and operate its first liquefied natural gas import terminal and hopes to nominate one by November, its energy minister said Oct. 30. Shortlisted companies were chosen from 18 groups that submitted proposals for the project, Alfonso Cusi told Reuters on the sidelines of the Singapore International Energy Week.

They include state-owned Philippines National Oil Co., which is seeking a partner for the project, Cusi said, while Tokyo Gas has partnered with the Philippines' First Gen Corp. China National Offshore Oil Corp. is also in the running, although it has yet to firm up a local partner, Cusi said.

The Philippines is expected to start importing LNG to feed gas-fired power plants in Batangas province, south of the capital Manila, as domestic gas supplies from the Malampaya field are set to run out in 2024. Besides meeting local demand, the Philippines also hopes the terminal would become an LNG trading hub for the region.

Nova Scotia LNG project expects investment decision by June

(CBC News; Canada; Nov. 1) - Pieridae Energy is optimistic it will build a liquefied natural gas plant in Guysborough County, Nova Scotia, starting sometime next year. But first, the company has to finalize supply and gas pipeline issues for the \$10 billion Goldboro LNG plant. The issue of greenhouse gas emissions will be dealt with after that. The company expects to make a final investment decision by June, said Mark Brown, vice president of business development. "We are optimistic," he said.

Pieridae has secured \$4.5 billion in loan guarantees from the German government, said Brown, including \$3 billion to build the plant and \$1.5 billion for developing more gas production. It has also signed a deal with German utility Uniper, which will buy half of the plant's LNG output for 20 years. The loans will help Pieridae close a deal to acquire Ikkuma Resources, a small Calgary-based oil and gas producer, which will solve "most of our gas supply issue," Brown said.

The company will look to complete arrangements to get gas by pipeline from Western Canada to the East Coast, he said. Pieridae also will be ramping up its efforts to attract other investors, Brown said. In addition, LNG plants are considered large emitters of greenhouse gases. Brown said initial estimates are for the Goldboro plant to produce about 2.4 million tonnes of GHGs annually. Pieridae has held talks with the province over its cap-and-trade emissions-reduction program, but nothing has been decided because the Goldboro plant likely wouldn't be operational until at least 2023, he said.

New maritime fuel rules will drive up Hawaii's electricity costs

(Bloomberg; Oct. 30) - Hawaii — which already has the nation's highest electric bills — could see them jump by as much as 20 percent in two years thanks to new regulations on fuel use in oceangoing ships. The state relies on mostly low-sulfur fuel oil for about 70 percent of its power. In 2020 demand for that fuel is expected to surge, pushing up prices, as new rules require ships worldwide to lower the amount of sulfur in their fuel. Meanwhile, Hawaii's shift to 100 percent renewables isn't slated to happen until 2045.

"The average person has no clue," said Shasha Fesharaki, the Honolulu-based executive vice chairman at FGE, an energy industry consultant. Individual Hawaiians paid 32.4 cents per kilowatt hour for electricity in August. That could easily rise by 20 percent, Fesharaki said. Brendan Roberts is a co-owner of Big Island Booch, which manufactures and sells organic kombucha, a fermented, slightly alcoholic sweet tea. Electricity already accounts for as much as 40 percent of the plant's overhead, Roberts said, and a 20 percent increase would mean about \$1,000 a month in added costs.

Last year, Hawaii generated about a fifth of its power from renewables, but major renewables projects can take years to plan, pay for and build. At one point, the state was examining plans to use liquefied natural gas, which can be brought in by ship and would provide cheaper and cleaner electricity than oil. But Gov. David Ige dismissed that in 2015, saying the cost of building infrastructure to use LNG as a transitional fuel didn't make sense. Electric utilities, and customers will have to adjust to higher prices.

Switch to low-sulfur marine fuels could cost Russian suppliers

(Bloomberg; Oct. 29) - Russia is set to suffer the biggest revenue losses from rules mandating cleaner marine fuels in 2020 because the world's top exporter of the sulfurous residual oil that powers ships doesn't look prepared for the change. Refineries across the world are bracing for the generational shift intended to reduce pollution from ships. While plants in Europe and the U.S. Gulf Coast seem well positioned to make the change to low-sulfur output, Russian companies have done little to prepare.

"Russia's oil segment appears to end up among the biggest losers financially," IHS Markit's senior research analyst Alexander Scherbakov said. There's "no chance for them to be 100 percent prepared" when the new rules kick in, so Russia's sulfur-rich fuel will sell at a widening discount, he said. In 2020 the loss could amount to \$3.5 billion, said Wood & Co. Financial Services, an investment bank focused on Europe. That estimate is more than a third of the \$9 billion in revenue Russian suppliers received from fuel oil exports last year. International Maritime Organization regulations will require that ships must either purchase low-sulfur fuel or install scrubbers that remove the pollutant from their exhaust gases. That's bad news for Russian oil majors that produce and process sulfurous Urals crude.

Air-quality agency holds hearing on contentious Tacoma LNG plant

(The News Tribune; Tacoma, WA; Oct. 31) – Most of the 130 people who signed up to speak at a public hearing Oct. 30 were critical of the Puget Sound Clean Air Agency's draft supplemental environmental review of the liquefied natural gas production and storage facility under construction on the Tacoma Tideflats, about 25 miles south of downtown Seattle. The review — a lifecycle analysis of greenhouse-gas emissions — adds to the city of Tacoma's environmental impact statement of the \$310 million project.

The Puget Sound Energy facility would produce and store LNG for peak-demand days and to serve the maritime industry, including TOTE's Alaska cargo ships. "I know all too well what it's like to live in a dirty, polluted city, and it's exactly why I support the LNG plant," said Jenn Adrian, who grew up when the Asarco copper smelter was operating in Tacoma. "LNG is a way forward, a way to move beyond the dirty industrial past."

The supplemental review, prompted by challenges from The Puyallup Tribe and project opponents, recommended the plant should use gas supplied from Canada, which has tighter air emissions limits for drillers than the U.S. Taking gas by pipeline from Canada "won't be an issue," said David Mills, a senior vice president at Puget Sound Energy. The air-quality agency is expected to release a final environmental impact statement in February before deciding whether to permit the plant. "I am fully expecting to have an air permit in hand late winter, early spring and … to resume construction," Mills said.

Yukon utility will burn more diesel and LNG to cover for less hydro

(CBC News; Canada; Nov. 1) – Yukon Energy said it expects to burn more diesel and liquefied natural gas this winter to meet demand for electricity by residents and businesses of Canada's Yukon Territory. Company president Andrew Hall said low water levels in Aishihik Lake means there will be less hydroelectric generation at the dam there. The corporation also operates hydro plants in Whitehorse and near Mayo.

Hall said the corporation is leasing six portable diesel generators for the winter for peak cold periods and emergencies. "The purpose of that is to really provide us with insurance ... against a worst-case event where we lose one of our large hydro facilities," he said. "We know that if we were to lose our Aishihik facility, which is our largest single unit, and that happened on the coldest day of the year that we would be facing a deficit."

The corporation also is adding a third permanent gas-fired generator this fall to the two it already owns. The units will run all winter to fill the gap created by the low water in Aishihik Lake. Yukon Energy gets its LNG delivered by truck from a liquefaction plant in Alberta, stores it and then warms up the supercooled fuel to bring it back to a gaseous state for burning in the generating plant.

U.S. passed Russia in August as world's largest oil producer

(Bloomberg; Nov. 1) - The U.S. surpassed Russia in August to claim the title of world's top oil producer, with the largest year-on-year output increase in its history. Output rose to a record 11.346 million barrels a day, according to a monthly report issued Oct. 31 by the U.S. Energy Information Administration. Russia pumped 11.21 million barrels in August, according to its energy ministry. U.S. output surged by 2.1 million barrels over August 2017, the largest recorded increase going back to 1920, according to the EIA.

Oil companies boosted shale drilling in Texas, Colorado, and other states in response to a rally in prices. U.S. Gulf of Mexico production hit a record high, as did New Mexico, which has benefited from massive growth in the Permian Basin. But the U.S. reigns as world's biggest oil producer may be short-lived: Russia in September produced 11.37 million barrels a day and it may be above 11.4 million in October. Saudi Arabia and Russia have pledged to pump more oil to offset declines in Venezuela and plug any supply shortfalls from U.S. sanctions on Iran.

Steep price discount pushes Canadian producers to trim oil output

(Financial Post; Canada; Nov. 1) - Several Canadian companies plan to cut production as the industry is forced to sell its oil at a third of global market prices. Canadian Natural Resources, the country's largest oil producer, said it will "strategically shift capital, curtail volumes, shut in production and delay completion of recently drilled oil wells," due to lack of market access for its oil, lack of fiscal competitiveness, regulatory uncertainty, and rivals that are exacerbating the country's stressed pipeline capacity.

The company plans to reduce 10,000 to 15,000 barrels per day of heavy oil production in October and is targeting 45,000 to 55,000 barrels in November and December in response to deep price discounts. The company also reduced its 2018 production outlook. "Market access for lack of takeaway capacity is a major driver of the current Canadian pricing," Tim KcKay, chief operating officer at Canadian Natural, told analysts in a call Nov. 1. "Root cause for the lack of takeaway (pipeline) capacity is Canada's dysfunctional regulatory, legal and political systems that allow endless delays."

MEG Energy said it plans to reduce its fourth-quarter production by 4,000 to 6,000 barrels per day. Cenovus Energy said it was limiting output due to severe discounts

and said it expected the price of domestic heavy crude to rise by mid-2019 as increased rail volumes ease transport bottlenecks. New pipeline capacity expected next year also will help. Canadian heavy crude for December delivery in Hardisty, Alberta, was US\$46.50 a barrel below North American crude futures on Nov. 1, said Shorcan Energy brokers.