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Papua New Guinea wants new fiscal terms for LNG plant expansion

(Reuters; Dec. 4) - Papua New Guinea is preparing to negotiate new fiscal terms for a \$10 billion expansion of ExxonMobil's liquefied natural gas project in the Pacific nation in a push to boost revenue, Patrick Pruaitch, the nation's treasurer, said on Dec. 4. The effort comes amid rising concern among rural landowners that they have yet to see the full benefits of the \$19 billion LNG project after more than two years of operation. ExxonMobil and its partners want to add a third production unit to the plant.

Pruaitch said the government aims to reach a deal with ExxonMobil over new tax terms for expansion of the LNG project in 2017, to ensure it goes ahead in time for an expected upturn in the LNG market early in the next decade. It is important to negotiate better terms for the country on what is expected to be a \$10 billion project, Pruaitch said. The country has been hit hard by a slump in oil and gas prices and a drought that has crippled farming and brought production to a halt at its largest copper mine.

To boost revenue, the government also wants to raise \$640 million by selling a 4.27 percent stake in the LNG project to landowners, but a deal has been stalled by disputes over landowner entitlements. "I'm desperate to ensure that every available revenue that I can use to fund this year's budget I will put my hands on, including proceeds of the sale," Pruaitch said. PNG recently lined up a \$500 million bank loan after putting on hold plans to raise \$1 billion with a sovereign bond issue due to market volatility.

LNG buyer doesn't believe it should pay more to lift resale restrictions

(Bloomberg; Dec. 1) - The Japanese company poised to become one of the world's largest LNG buyers said it should not have to pay producers to lift restrictions on where it can resell cargoes, countering that removing the resale limitations would benefit the entire market, including the producers. Jera, a joint venture between Tokyo Electric Power and Chubu Electric Power that has contracts to buy LNG from the U.S., Australia and Qatar, has said it won't sign new contracts with a restrictive resale clause.

Shell and BP warned last month that if Japan moves to ease restrictions that block its importers from reselling LNG, the nation may have to pay higher prices in return. Buyers are fighting for more concessions amid a global LNG supply glut, including removing the restrictive clauses. Japan's Fair Trade Commission is investigating whether the clauses violate competition laws. An estimated 80 percent of long-term

LNG contracts between major Japanese and South Korean buyers and suppliers include limits on resales.

"We think there is a significant amount of benefit for all parties in the industry to be able to run the thing in a more efficient way," Jera Chairman Hendrik Gordenker, former counsel at White & Case, said in an interview in Tokyo on Dec. 1. "If you make the shipping more efficient, then there will be shipping capacity available, and the sellers who have an extra cargo to produce in market may have a better opportunity."

Another hopeful U.S. LNG export developer looks for customers

(Houston Chronicle; Dec. 3) - The latest company cleared for U.S. liquefied natural gas exports is jointly based in Houston and Perth, Australia, and run by a longtime Chevron executive who came out of retirement for the job this year. Liquefied Natural Gas Ltd., better known as LNG Ltd., last week received federal approval to export LNG. Despite facing a global LNG glut and not having enough contracts to secure construction financing, the company is bullish on its proposed \$4.3 billion Magnolia LNG project.

It hopes to break ground in a year or so and begin operations by 2022, just as global LNG demand picks up, said CEO Greg Vesey. LNG Ltd. was founded 14 years ago in Perth, but its focus shifted to North America, largely because of cheap and ample shale gas supplies. The company aims to build four smaller modular liquefaction units at its site in Louisiana, totaling 8 million metric tons annual capacity. LNG Ltd. has 20 people in Houston, but Vesey said the problem is: "No one realizes we're here."

Analysts, however, see a world of other problems. Gautam Sudhakar, director of global LNG for IHS Markit, said too many LNG export projects are coming online in the U.S. and Australia, with global demand not growing as strongly as previously expected. "A glut isn't a good time to be reaching final investment decisions," he said. Global demand may not pick back up until 2024, Sudhakar said, so few buyers will be eager to enter into industry-standard 20-year contracts.

India talks of encouraging more use of gas, including imported LNG

(The Mint; India; Dec. 1) – India Oil Minister Dharmendra Pradhan on Nov. 30 promised steps to encourage the use of imported liquefied natural gas, especially in refinery and petrochemical complexes and for long-haul road and rail transport, to help double gas use to more than 8 billion cubic feet per day in five years. The idea is to replace naphtha in petrochemical production, and furnace oil used for industrial heating with LNG, and to rely more on LNG and compressed gas for transportation instead of petrol and diesel.

The government is also planning to source more LNG from world markets to supply gas-based power stations, many of which now run way below their full capacity for want of fuel. "As of now, our gas uptake is about 6 percent of the primary energy basket against a global average of more than 24 percent," Pradhan said. "We can substitute liquid fuels with natural gas in several applications; this will help us in our objective of reducing our import dependency for oil by 10 percent from the current levels by 2022."

Currently, the power and fertilizer sectors consume about three-fifth of the 4.2 bcf a day available in the country from domestic gas production and imports. City gas distribution and other commercial and industrial uses account for the rest. In addition to boosting imports of LNG, which have dropped in price the past year, India is hoping for tens of billions of dollars of private investment in boosting domestic gas production, in particular in offshore deep-water blocks.

Asia spot-market LNG price up to \$7.40

(Reuters; Dec. 2) - Asian spot prices for liquefied natural gas this week rose to their highest point for 2016, lifted by OPEC's announcement it would cut crude oil production in cooperation with Russia and by a tightening regional gas market. Spot prices in Asia rose 30 cents from last week to about \$7.40 per million Btu, trading sources said. The main price driver was an agreement reached by the Organization of the Petroleum Exporting Countries and non-OPEC oil production giant Russia to cut crude output in order to rein in global oversupply that has dogged markets for more than two years.

The announcement led to a more than 10 percent rise in oil prices to above \$53 per barrel. With 80 percent of Asian LNG supply contracts linked to the price of crude, and oil playing a key role in shipping costs, the spot LNG market was also affected, traders said, pushing prices to their highest since November 2015.

However, because the price link with oil in term contracts is stronger than oil's influence in spot markets, analysts warned OPEC's output cut could yield a growing price disparity between more expensive term supplies and cheaper spot cargoes. "The unintended consequence could be the return of acrimonious negotiations as buyers opt for spot cargoes in lieu of long-term contracts," said Chong Zhi Xin, principal Asia LNG analyst at Wood Mackenzie.

CB&I wins contract to build small LNG plant on Tacoma waterfront

(LNG Global; Nov. 29) - CB&I announced Nov. 29 it has been awarded a contract valued at more than \$200 million by Puget Sound Energy for engineering, procurement, fabrication and construction of a natural gas liquefaction, storage, fueling and regasification facility in Tacoma, WA. The project will take pipeline gas, liquefy and

store it for regasification to meet peak utility demand in the area, while also providing LNG for marine bunkering and truck loading services.

Puget Sound Energy plans to start operations by early 2019. The facility will be built on 30 acres on Port of Tacoma waterfront property. The LNG storage tank will be 140 feet tall, capable of holding 8 million gallons of the fuel. The liquefaction plant will be capable of producing 150,000 tons of LNG per year, equivalent to about 7.2 billion cubic feet of natural gas.

Public opposition, delays hinder Northeast U.S. gas pipeline projects

(Argus Media; Dec. 2) - Pipeline project delays were the dominant trend in 2016 for the Northeast U.S. natural gas market, according to an annual report from the Northeast Gas Association. An increase in public opposition to oil and gas infrastructure, regulatory delays and, in some cases, a lack of customer interest led to delays and cancellations of a few regional gas pipeline expansions this year.

This year the Constitution pipeline (almost 630 million cubic feet of gas per day) was denied a key water permit by the state of New York, and Kinder Morgan canceled its Northeast Energy Direct gas pipeline (1.3 billion cubic feet per day) because it had not received enough contracts from power plants to make the project viable. The gas association's 2016 Statistical Guide also cited Dominion Transmission's New Market project and Tennessee Gas pipeline's Connecticut expansion as projects that, like Constitution, received federal certificates but encountered delays at the state level.

Possible delays and cancellations of northeast projects have worked to discourage and constrain growth, BTU Analytics said in October. "No projects can be taken for granted these days," the energy analysis and consulting firm said. The Northeast remains constrained at several points, especially into New England, southern New York and Long Island. Two gas utilities in Massachusetts are not allowing new customers on certain parts of their systems because of inadequate pipeline capacity, the report said.

Australia wool producer blames exports for high natural gas price

(Australian Broadcasting Corp.; Dec. 2) - Australia's largest domestic wool producer may have to close its doors because it is unable to get a new natural gas deal, possibly putting 40 people out of work. Several gas suppliers told Victoria Wool Processors at Laverton North, in Melbourne's western suburbs, that they were unable to meet the company's demands for gas next year because of a supply shortage.

It takes more than 100 million cubic feet of gas to heat and treat the 12,000 tonnes of greasy wool the company produces every year. David Richie, the company's general

manager, said the current contract with Energy Australia expires at the end of the year. The business is not large enough to buy gas wholesale, and retail suppliers have offered quotes for double the current price, which Richie said is not viable. He called on the government to limit the amount of liquefied natural gas exports from Australia.

"We are seeing gas prices that are increasing as a result of the fact that we are having gas ... for the first time exported globally from Queensland," Victoria Energy Minister Lily D'Ambrosio said. Australian Petroleum Production and Exploration Association CEO Malcolm Roberts said Australia would run out of gas by the end of the decade unless there was new exploration soon. "By 2019 there is expected to be a shortfall of supply on the East Coast and that's going to have an impact on households and industry."

South Korea joins list of Asia LNG hub hopefuls

(Business Korea; Nov. 30) - To support South Korea's domestic shipbuilding and shipping businesses, both of which have been under severe financial strain, Korea Gas is planning to place an order for liquefied natural gas carriers and promote domestic ports as an LNG hub in Northeast Asia by establishing LNG bunkering infrastructure at the ports. Growing demand due to global environment regulations has prompted ship owners and operators to increasingly consider LNG as a cleaner-burning fuel than oil.

KOGAS wants to establish South Korea as an LNG hub for the region ahead of similar efforts in China and Japan. KOGAS plans to build LNG bunkering facilities by the end of 2019. A spokesperson also said on Nov. 29 the company plans to order two LNG carriers and to convert two other vessels for transporting the fuel. The International Maritime Organization's Marine Environment Protection Committee recently decided that ships by the year 2020 shall reduce the sulfur content in marine fuel from the current 3.5 percent to 0.5 percent. The rule will spur the growth of LNG as a marine fuel.

Canadian study advocates for early consultations with First Nations

(Platts; Nov. 29) - Proponents of natural gas and LNG projects in British Columbia should help pave the way for environmental and First Nations' approval through early consultation and negotiation with all parties, especially First Nations groups, said a recent study by the Canadian Energy Research Institute. The study evaluated 29 gas infrastructure and LNG projects in various stages of the environmental and regulatory process in the Western Canadian province.

Some of the LNG export projects have received their environmental assessment approval as well as an export license, but a number of them "are still caught in this

opposition," chiefly from First Nations bands whose lands are impacted by the proposed projects, Dinara Millington, CERI vice president of research, said on Nov. 28. "The legal matters are resolved, yet there is still strong opposition from First Nations," she said.

The study considered as successful those consultation processes in which the parties can work out their issues without having to resort to the courts. Developers should engage with indigenous communities to learn what issues are of most concern to them, the report said. "You want to start engaging with indigenous people right at the start, when you're considering the project," Millington said. "Even before you start marking where the land will be impacted, just start introducing yourself in the communities."

B.C. wants oil and gas producers to use electricity to cut emissions

(Dawson Creek Mirror; Dawson Creek, BC; Nov. 30) – British Columbia will offer steep discounts on natural gas producers' power bills and also lean on the federal government to fund new transmission lines as part of an aggressive plan to electrify its emissionsheavy oil and gas fields. In an interview on Nov. 29, B.C. Energy Minister Bill Bennett laid out the government's new plan to slash oil and gas sector emissions — an effort that would lead to a boom in transmission line construction in Northeast B.C.

Electrifying B.C.'s gas fields would require buy-in from industry as well as help from the federal government — challenges Bennett compared to a Rubik's Cube. "There's a reason the federal government and the provincial government are so enthusiastic about trying to solve that Rubik's Cube," he said. "It's because there's a lot to be gained here in terms of emissions reductions."

Under the new policy, BC Hydro will offer incentives for oil and gas producers to connect to the electricity grid, instead of burning their own gas to power hydraulic fracturing and processing operations. Bennett said the province is also in discussions with the federal government over funding for transmission lines to reach remote northeast oil fields. The oil and gas industry produces about 18 percent of B.C.'s greenhouse-gas emissions, according to the province's Climate Leadership Plan.

Lawyers speculate about cost recovery in failed oil pipeline effort

(Vancouver Sun; Nov. 30) - Legal experts are divided whether Enbridge can recoup some or all of the \$500 million it says it spent in seeking federal government approval to construct a \$7.9 billion oil sands pipeline to Kitimat, on the B.C. coast. Enbridge said company executives and their partners, including B.C. and Alberta aboriginal groups that were in position to receive \$2 billion in benefits, will discuss options after Canadian Prime Minister Justin Trudeau's cabinet killed the Northern Gateway project on Nov. 29.

Two private-sector lawyers, who spoke on condition of anonymity, said Calgary-based Enbridge has a legitimate legal case. "In my view, the Crown has the discretion to change or alter policy," a Vancouver-based lawyer said. "But it can't do so with impunity in a situation such as this, where over the course of several years the proponent carried out the duty to consult on behalf of the Crown and participated in an arduous regulatory process, only to be let down by Canada's unsatisfactory efforts," the attorney said.

A Calgary lawyer said he couldn't predict a legal challenge would succeed, but he does believe there's a case to be argued. "You can't victimize people who relied on the rules in good faith," she said. University of Victoria law professor Chris Tollefson commented: "It think it would be an extraordinary precedent for government to be held liable for regulatory negligence here."

Canadian research says fracking can cause earthquakes

(EnergyWire; Nov. 28) - Researchers in Canada say hydraulic fracturing can cause sizable earthquakes, and not just from wastewater injection. In a piece in the November issue of the journal Science, a team at the University of Calgary said studies of recent earthquakes in Western Canada point to fracking as the cause. The paper clarifies that the seismic events are different from quakes in Oklahoma, which are mainly caused by the deep injection of fracking wastewater. They also caution that more study is needed.

Geophysics professor David Eaton and co-researcher Xuewei Bao said a data exercise led them to conclude that the propagation of fractures caused by pressure-pumping to open up shale oil and gas reserves triggered active faults, leading to tremors in parts of Canada with oil and gas activity. Furthermore, they believe that the migration of fracturing fluids left behind after pressure-pumping stopped also contributed to quakes. The largest tremor measured for the research, on Jan. 23, 2015, was a magnitude 3.9.

"Our results indicate that fault activation during and after hydraulic fracturing can be triggered by different mechanisms, including stress changes due to the elastic response of the rock mass to hydraulic fracturing or pore-pressure changes due to fluid diffusion along a permeable fault zone," the paper said. "While stress-related triggering appears to diminish shortly after operations, a fluid-pressurized fault may be susceptible to persistent seismicity for a period of at least several months."

B.C. expects to get 'fair-share' payment out of pipeline company

(The Canadian Press; Dec. 1) - A senior official with the British Columbia government said the province expects to negotiate a "fair-share agreement" with Kinder Morgan that will have the pipeline company pay for an environmental fund. The official, who spoke on the condition of anonymity, said the fund will become part of the province's five

conditions that must be satisfied before supporting the company's \$6.8 billion, 700-mile expansion of its Trans Mountain oil pipeline from Alberta to Burnaby, B.C.

The official said the fair-share agreement would be to compensate the province for the risk it will bear from the pipeline and an increase in tanker traffic on the West Coast. But the official did not specify the amount of money B.C. expects, and said negotiations will determine if the province receives a one-time payment or payments by installment. Speaking Dec. 1 after a speech to the B.C. Road Builders Association, B.C. Premier Christy Clark said any money the province receives will go to environmental protection.

Canadian Prime Minister Justin Trudeau announced the pipeline's approval on Nov. 29, saying the project, which will triple the capacity of the current Trans Mountain pipeline, is in the national interest. Clark has said the federal government is close to meeting B.C.'s five conditions for approval of the pipeline. Kinder Morgan expects the expanded pipeline to go into service in 2019.