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Petronas considers buying KOGAS stake in B.C. LNG project

(Globe and Mail; Canada; Aug. 21) – Malaysia's Petronas is considering acquiring a South Korean firm's minority stake in a British Columbia liquefied natural gas project led by Shell after canceling its rival venture in the province last month. State-owned Petronas had led the Pacific NorthWest LNG proposal on B.C.'s coast but scrapped it in July. The company is now seeking other ways to move natural gas from its properties in northeastern B.C. to market, an industry source familiar with Petronas said.

Options for Petronas include acquiring the 15 percent interest held by Korea Gas in the Shell-led LNG Canada proposal in Kitimat in northwestern B.C. Shell holds 50 percent; KOGAS and Mitsubishi each hold 15 percent; PetroChina owns 20 percent. Petronas is also exploring the economic viability of moving its gas through existing pipelines to the U.S. Gulf Coast for liquefaction and export through terminals under construction there. And the company is looking at a new pipeline. "We are now looking at the possibility of working together with partners or parties on a pipeline that could be built to connect that area to the rest of Canadian market," said Petronas' upstream chief executive.

LNG Canada expects it would need to invest up to \$40 billion in the project that includes a 416-mile, \$5 billion pipeline to move gas to the coast. Petronas declined to comment but confirmed its strategy of looking for ways to unlock the value of its gas from B.C.'s Montney Shale. A global glut of LNG and low prices in Asia have squashed the dreams of the vast majority of proposals for Canada's West Coast. The Shell-led venture had planned an investment decision in 2016 but now says it may not happen until 2019.

First Nation leader still hopeful of Shell-led LNG project

(The Globe and Mail; Canada; Aug. 21) - Former Haisla Nation Chief Councillor Ellis Ross still has high hopes for a liquefied natural gas project in British Columbia, saying an international consortium is scrutinizing the proposal despite poor market conditions. Ross, who represents the provincial election district, said the consortium led by Shell is committed to crunching numbers to decide the economic viability of the LNG Canada project in Kitimat. "It's still alive," he said. "The project is fighting to stick around."

Last month's cancellation of the Pacific NorthWest LNG project near Prince Rupert, north of Kitimat, prompted industry speculation that other LNG plans in British Columbia are now doomed due to a global glut of the fuel and weak LNG prices. But Ross said LNG Canada hired about 45 people last month to begin dismantling infrastructure such

as storage tanks left on the site by the previous occupant, Methanex Corp. Another 100 people in Kitimat, Vancouver and Calgary are assigned to the multibillion-dollar project.

Site clearing is expected to be finished by the end of 2017. The work is being done in partnership with the First Nation, whose traditional home is on the east side of the channel near Kitimat. The LNG terminal would be built on the former site of methanol plant that closed in 2006, while the dock for tankers is a wharf formerly used by a pulp and paper mill that shut down in 2010. The Shell-led group had been expected to make a final investment decision by the end of 2016 but last month said that might not happen until early 2019. Its partners include companies from China, Japan and South Korea.

Australia LNG operator says it will hold output below capacity

(Reuters; Aug. 24) - Australia's Santos said Aug. 24 it expects sales from its Gladstone liquefied natural gas project to ramp up to about 6 million tonnes a year by the end of 2019 and stay at that level. That is 25 percent under the plant's full annual capacity of 7.8 million tonnes, as Santos is under pressure to deliver more gas into the domestic market to avoid export restrictions imposed by the government in times of tight supply.

Santos is the operator of the Gladstone LNG plant, with a 30 percent stake. The project cost almost \$20(US) billion and started operations in September 2015. It is fed by coalseam gas reserves. Other partners are Malaysia's Petronas, at 27.5 percent; France's Total, 27.5 percent; and Korea Gas, 15 percent. The plant, with two liquefaction trains, is one of three LNG projects built on Curtis Island in Queensland.

Low oil-linked LNG prices amid a global supply glut of the fuel have hurt Santos, which has taken almost \$1.5 billion in write-downs on its Gladstone investment.

Ice-class LNG carrier covers Northern Sea Route in under 7 days

(JWN Energy Group; Aug. 23) - A Sovcomflot-owned icebreaking liquefied natural gas carrier has set a new record through the Northern Sea Route from Europe to Asia while becoming the world's first merchant vessel to travel the full length of the Arctic passage without any icebreaker escort. In its first commercial voyage, the specially built ship set a new standard for the Northern Sea Route of just six days, 12 hours and 15 minutes.

Total time of the voyage from the LNG plant in Hammerfest in Norway to Boryeong in South Korea was 19 days, about 30 percent faster than the southern route through the Suez Canal. Christened the Christophe de Margerie for the former CEO of Total, who was killed in a plane crash in Moscow in 2014, the vessel is operated by Sovcomflot on behalf of the Yamal LNG project in Russia's Arctic. Yamal's owners are Novatek, Total, China National Petroleum Corp. and China's Silk Road Fund. The Norwegian cargo

was a practice run of sorts for Yamal, which is scheduled to start up by the end of the year.

The vessel's average speed during the passage exceeded 14 knots, despite the fact that in some areas it had to sail through ice fields four feet thick. Built to order for Sovcomflot by Daewoo Shipbuilding Marine Engineering in Korea, the ship is the world's first and currently the only icebreaking LNG carrier. In winter, it will take the longer shipping route via the Suez Canal, traveling to Asia by the Northern Sea Route only in the summer. It is one of 15 such LNG carriers to be built for the Yamal project.

First U.S. LNG arrives in Lithuania

(Financial Times; London; Aug. 21) - Lithuania became the first former Soviet state to import a shipment of U.S. liquefied natural gas on Aug. 21. The cargo aboard the Clean Ocean tanker is highly symbolic, as Lithuania looks to cement ties and backing from Washington following Moscow's 2014 annexation of Crimea. Rising shipments of U.S. LNG, made possible by the country's shale boom, are increasingly stepping into regions that Russia's state-backed gas company, Gazprom, has considered its own backyard.

Lithuania has been importing LNG from Norway since it opened its first receiving terminal for the fuel in 2014, but is keen to show Moscow it has a variety of supply options, including from the world's largest economic and military power. "This shipment of U.S. LNG is historic and symbolic as Russia sees Lithuania as its backyard and traditionally one of Gazprom's monopoly markets," said Agnia Grigas, an Atlantic Council fellow in Washington D.C. and author of "The New Geopolitics of Natural Gas."

"It's also a signal from the U.S. LNG industry showing that they can go to any region and challenge Gazprom, while Lithuania hopes to deepen commercial ties with the U.S.," Grigas said. Lithuania's Energy Minister said the cargo from Cheniere Energy's 18-month-old export terminal in Sabine Pass, La., was price competitive with Russian pipeline gas. He did not reveal pricing terms. Lithuania estimates it will import half of its gas in 2017 as LNG, mostly from Norway's Statoil. The rest will come from Russia.

U.S. LNG in Europe 'is making Russia nervous'

(Wall Street Journal; Aug. 19) - U.S. efforts to export liquefied natural gas into Europe's energy market are facing stiff resistance from the region's dominant player: Russia. U.S. LNG cargoes already have gone Poland (last month) and Lithuania (this month), along with other countries in Europe. Russia is moving quickly to contain the new competition to its largest market.

Its state-run energy companies are lowering prices, changing sales methods and developing their own LNG export facilities. Moscow is also pushing ahead with a new gas pipeline opposed by Washington and the European Union. While Europe is eager to reduce Russia's chokehold and political leverage, consumers are looking past politics for the lowest prices. That favors Russia. Last year, Russia exported record levels of gas to Europe, helped by lower prices and falling domestic production in Europe.

Many analysts still expect U.S. exports to eat into Russia's share of the European market. "The arrival of U.S. gas is making Russia nervous. And they should be nervous," said Jason Bordoff, director of the Center on Global Energy Policy at Columbia University. Europe takes 75 percent of Russia's gas exports, according to the U.S. Energy Information Administration. It's an essential industry for Russia, where oil and gas revenues account for more than 40 percent of the federal budget.

Court orders FERC to consider gas pipeline's climate change impact

(EnergyWire; Aug. 23) - Environmentalists are celebrating a big win after a federal court ordered regulators to take a closer look at a natural gas pipeline's impact on climate change. A panel of judges Aug. 22 sided with the Sierra Club, ruling that the Federal Energy Regulatory Commission failed to adequately consider downstream greenhouse emissions from gas delivered by the Southeast Pipelines Project — a network that includes the contentious Sabal Trail pipeline in Florida.

The U.S. Court of Appeals for the District of Columbia Circuit vacated FERC's approval of the project, a portion of which is already in service, and ordered the agency to take another look. The decision may push the project out of service, but the court has not yet issued a mandate. Many environmental lawyers see the decision as a gamechanger for gas pipelines. The 2-1 decision directs FERC to dissect downstream climate impacts of the Southeast pipelines or offer a better explanation for why it's not doing so.

Michael Burger of Columbia Law School's Sabin Center for Climate Change Law said he expects the decision will be appealed. "FERC has long maintained that this is not its responsibility, including during the Obama administration." The case centers on FERC's 2015 environmental impact statement. Opponents argued the impact statement should have carefully quantified emissions from the power plants that would burn the gas.

FERC concluded the impacts would be insignificant, largely because emissions by gasfired power plants would be offset by reductions in coal combustion. FERC and industry lawyers further argued that estimates of downstream impacts are too speculative to be useful due to uncertain and constantly changing market conditions and other variables.

Court decision could change federal review of gas pipelines

(Reuters; Aug. 22) - Federal regulators assessing new gas pipelines must try to analyze their potential to increase greenhouse gas emissions before giving them the go-ahead, an appeals court ruled Aug. 22, in a decision that industry and environmentalists said could have far-reaching effects on infrastructure projects. The ruling stemmed from a decision by the Federal Energy Regulatory Commission to approve the Southeast Pipelines Project, intended primarily to meet Florida's growing demand for power.

The U.S. Court of Appeals for the District of Columbia Circuit said FERC should have considered the environmental impact of the greenhouse gases likely to be emitted when gas delivered by the pipelines was burned. While some experts said the decision meant little more than an increase in paperwork for regulators, others said it could change the way the federal government decides what issues to examine in environmental impact studies required under the National Environmental Policy Act.

In the past, regulators have considered only the effects of a project they have the authority to control, which are considered direct effects. But the appeals court's decision could force them to consider indirect effects as well. "FERC would obviously prefer to say, 'We're approving a pipeline and here are the impacts from digging a trench and laying a pipe,'" said Elly Benson, a lawyer for the Sierra Club, one of the groups that challenged the FERC decision. A FERC spokeswoman declined to comment.

Only one coal power plant under construction in U.S. — it's in Alaska

(ClimateWire; Aug. 21) - About 16 percent of the U.S. coal fleet has retired in the past five years, but don't expect major new coal-fired generating plants to fill that void. The federal government counts four new coal projects on a list of planned power plants nationwide. Three of those face long odds, and none will be able to replace the millions of tons in lost annual coal demand resulting from recent plant retirements.

The developer of a proposed 320-megawatt unit in Wyoming is facing jail time after pleading guilty to stealing government cash. A Kentucky coke plant that would have generated electricity as a byproduct has been scrapped. And a planned \$2.1 billion plant in Georgia has been idled. The sole U.S. coal facility under construction anywhere in the country is a tiny plant being built by the University of Alaska Fairbanks.

While coal still accounts for roughly a third of U.S. power generation, the industry is slowly contracting as plants retire and utilities replace them with gas and renewables. American Electric Power, one of the country's largest coal-burning utilities, recently announced plans to build a \$4.5 billion wind farm in Oklahoma. PacifiCorp, another coal-centric power company, has similar plans to upgrade its wind-power turbines.

Utilities entered 2017 with plans to retire 4.5 gigawatts of coal — 2 percent of U.S. coal capacity — and add 11 gigawatts of gas and 8.5 gigawatts of wind.

Energy Department says cheap gas, not regulations, hurt coal

(EnergyWire; Aug. 23) - A long-awaited U.S. Energy Department staff report on electricity markets and reliability singles out natural gas — not renewables or environmental regulations — as the leading driver of coal-fired power plant closures in this decade, challenging the Trump administration's case for saving coal. "The biggest contributor to coal and nuclear plant retirements has been the advantaged economics of natural gas-fired generation" fueled by the shale revolution, the report said.

The 187-page report, which the department released the evening of Aug. 23, was ordered by Energy Secretary Rick Perry in April to review the closure of baseload coal and nuclear power plants and "market-distorting effects of federal subsidies that boost one form of energy at the expense of others." But the staff report assembled a more comprehensive review of challenges facing the U.S. power grid, from cheap natural gas to fast-moving new generating technologies. The report is open for public comment.

While electricity networks are performing reliably now, future resiliency cannot be taken for granted, the report said. The report, a month late in delivery, makes no definitive proposals. Its most political statement is the absence of any mention of climate change. The report suggests minor market reforms can help ensure a reliable electric power grid and shies away from handouts to struggling coal and nuclear-power producers.

TOTE will use new LNG-ready container ships to serve Hawaii

(Work Boat; Aug. 21) - TOTE has announced plans for a new domestic shipping service to Hawaii, with four new liquefied natural gas-ready dual-fuel container ships to be built by Philly Shipyard and in service starting in 2020. The company also has opened negotiations to secure the Kapalama Container Terminal in Honolulu, a major step toward TOTE's expansion beyond its longtime Alaska and Puerto Rico enterprises.

The new vessels will be similar to the two ships that Philly Shipyard is currently building for TOTE's competition, Honolulu-based Matson, at its facility near the Philadelphia Navy Yard. The 853-foot-long designs from Korea Maritime Consultants are the largest container vessels to be built for U.S. trade, with deliveries to Matson set for 2018 and 2019. Both Matson and TOTE are operating under a timeframe will force the retirement by 2020 of aging ships in the Hawaii trade that cannot meet new air emission standards.

TOTE officials said their timetable with Philly Shipyard calls for the new ships to "enter service in early 2020 and 2021, just in time to meet the deadline and maintain trade

capacity." The ships will be capable of carrying the equivalent of 3,600 20-foot-long containers. Philly Shipyard's corporate parent is Aker, a Norwegian industrial investment company with interests in marine assets. TOTE also is converting the two ships that serve its Alaska route to run on LNG.

Hawaii-based operator orders two LNG-fueled container ships

(Asian Oil and Gas; Aug. 23) - Singapore's Keppel Offshore & Marine has secured work from Honolulu-based freight hauler Pasha Hawaii for construction of two liquefied natural gas-fueled container ships. Worth more than \$400 million, the dual-fuel LNG vessels will be built by Keppel's U.S.-based subsidiary Keppel AmFELS, which operates a shipyard in Brownsville, Texas. Delivery of the vessels is expected in 2020.

Pasha Hawaii started moving cargo between the U.S. mainland and Hawaii in 2005 and operates from California ports and Tacoma, Wash. The new 774-foot-long ships each will be able to carry the equivalent of 2,500 20-foot containers with a sailing speed of 23 knots. Burning LNG will significantly reduce the ships' sulfur oxide, nitrogen oxide and carbon dioxide emissions, allowing Pasha to meet tougher air quality standards.

B.C. government wants to intervene against oil sands pipeline

(The Canadian Press; Aug. 22) - The British Columbia government has applied for intervener status in court challenges against the Trans Mountain oil sands pipeline expansion. The government announced earlier this month that it would be joining the legal fight against Ottawa's approval of the \$7.4 billion project. Several First Nations and municipalities have filed legal actions against the project, which would triple the capacity of the Alberta-to-B.C. line and boost the number of tankers in Vancouver-area waters.

B.C. Attorney General David Eby said the majority of the pipeline is in B.C. and the government should be able to represent the interests of people in the province, notably because the project-supporter Alberta government has already been granted intervener status. "We clearly have a distinct point of view from the attorney general of Alberta in terms of the benefits of this project," Eby said. Alberta has long argued that it needs a pipeline to get more of its oil to the West Coast for export to overseas markets.

B.C.'s former government issued an environmental certificate for the project earlier this year, but Premier John Horgan, who won the spring's election, campaigned against the pipeline. Eby said the government's specific legal arguments are still being developed. Trans Mountain, a subsidiary of Kinder Morgan Canada, has said construction is set to begin in September, but the B.C. government has said only three of eight environmental management plans have been accepted, preventing work from starting.

PetroChina reduces staff in North America trading operations

(Reuters; Aug. 22) - A flurry of departures across the U.S. and Canadian units of Chinese state energy firm PetroChina have sparked speculation that the oil trader is reducing its presence in North America, even though the company says it is committed to the region. More than 30 people in its Houston and Calgary offices have left PetroChina since 2016, including heads of desks in crude, financial, natural gas and chemical trading, the company confirmed to Reuters.

Sources said PetroChina had approximately 150 to 200 people at its peak two to three years ago, and now has between 100 and 150. Nearly a dozen sources in New York, Calgary, Houston and Singapore, including current and former employees, told Reuters that the departures suggest a shift in mindset among firm management, and there are concerns about a broad pullback from its presence in North America. The sources the company may have expanded too quickly in North America.

In the past several years, PetroChina built itself into one of the largest oil traders in North America, hiring top talent with the goal to compete with trading giants Vitol, Trafigura and Mercuria Energy, sources said. The departures have been notable ones, including John Mee, director of financial crude trading; Jie Wang, president in Calgary; and Eric Dixon, domestic head of physical crude onshore. PetroChina appears to be shifting away from trading volumes on pipelines — which accounts for the lion's share of oil trading in the U.S. — and favoring more vessel-based cargo trading, sources said.

Chevron drops appeal of Australia tax case over LNG project loans

(Bloomberg BNA; Aug. 18) - Australia's tax authority is eyeing at least A\$10 billion (\$7.9 billion U.S.) in additional tax receipts from companies after reaching a settlement with Chevron's Australia unit on a landmark dispute. The Australian Taxation Office estimates that a court ruling against Chevron's group financing will "bring in more than \$10 billion" from similar business activity in the next decade, Australia's Revenue and Financial Services Minister Kelly O'Dwyer said in an Aug. 18 statement.

The comments come after Chevron Australia withdrew its application to appeal the April 2017 ruling by the Federal Court of Australia, the country's second-highest court. A Chevron Australia spokesman said the company has reached "reasonable resolution" with the tax office, which had sought A\$340 million in back taxes. The case will allow the tax office to target companies with similar arrangements to Chevron. Discussions with a number of taxpayers are underway, a tax authority spokesperson told Bloomberg.

In the case, the government challenged a \$2.5 billion intra-company loan that Chevron Australia Holdings received in 2003 to finance Chevron's stakes in liquefied natural gas projects. The loan to Chevron's Australian unit should have been made on the same basis as similar transactions involving independent companies, otherwise known as the

arm's-length principle, to ensure that the transactions are priced on a fair basis. Yet by borrowing funds at just 1.2 percent interest and lending to the Australian unit at 9 percent, a U.S.-based subsidiary of the Australian unit benefited from Chevron's good credit rating and received "significant" untaxed profits, according to the court ruling.

Total's purchase makes it North Sea's second-largest oil producer

(Reuters; Aug. 20) - Total is buying Maersk's oil and gas business in a \$7.45 billion deal that the French major said would strengthen its North Sea operations and raise its total output to 3 million barrels per day by 2019. For Danish company A.P. Moller Maersk, the sale of Maersk Oil, with reserves equivalent to about 1 billion barrels of oil, fits with a strategy of focusing on its shipping business and other activities announced last year.

The world's top oil companies have been back on the takeover trail over the past year, helped by signs of a market recovery. Total expects its biggest oil deal since it acquired Elf in 2000 to generate financial synergies of more than \$400 million a year, in particular by combining assets in the North Sea. Expected to be completed in the first quarter of 2018, the deal could see some job cuts, Total said.

The acquisition gives Total further economies of scale by making it the second largest player in the region with production of about 500,000 barrels of oil equivalent per day. The move illustrates Total's strategy of using its strong balance sheet to acquire assets from struggling competitors. Total has emerged from the prolonged oil downturn stronger than some of its rivals. Analysts from Raymond James said the value of the deal appeared fair, with Total paying \$13.4 per barrel of reserves.

Ghana looks to neighboring Equatorial Guinea for LNG

(Reuters; Aug. 21) - Ghana's President Nana Akufo-Addo plans to sign an agreement to import liquefied natural gas from Equatorial Guinea during his three-day visit to the Gulf of Guinea petroleum producer this week, his office said. Though an oil and gas producer in its own right since its Jubilee field came on stream in 2010, Ghana has in the past struggled to ensure reliable power production for a growing domestic market.

Equatorial Guinea, meanwhile, is exploring the possibility of selling a portion of its LNG output to its African neighbors. The statement from Akufo-Addo's communications director said the president was expected to sign a framework document with his counterpart President Teodoro Obiang Nguema to import LNG from Equatorial Guinea. "The agreement is intended to augment domestic supply ... and improve further the power situation in the country." Equatorial Guinea started up its LNG plant in 2007.

The acting head of Ghana National Petroleum Corp. said in June that it was in the market for between 250 million and 500 million cubic feet of gas per day and expected to begin importing LNG early next year. Italian oil and gas company Eni last month launched production from its Sankofa field offshore Ghana, the first phase of the \$7.9 billion Offshore Cape Three Points project. LNG imports could help Ghana meet its needs until domestic gas production can meet demand.