# Oil and Gas News Briefs
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## Partners call halt to $30 billion Australian floating LNG project

(The Australian; March 23) - Woodside Petroleum, Australia's second-largest oil and gas producer, said March 23 it will not go ahead with near-term development of the $30 billion Browse floating LNG development off Western Australia, as low oil prices bite into project economics and access to development funds. Woodside, along with its partners in the massive offshore floating LNG production and storage project, said the "extremely challenging" energy market environment had stalled progress.

Woodside had been targeting a final investment decision this year. The announcement represents the shelving of Australia's last chance to continue a run of resources mega-project approvals that have seen $200 billion of LNG investments approved in the past decade. "The Browse joint venture participants have decided not to progress with the development at this time considering the current economic and market environment," Woodside said. Shell, BP, PetroChina, Mitsubishi and Mitsui are also partners.

"Woodside remains committed to the earliest commercial development of the world-class Browse resources and to FLNG as the preferred solution, but the economic environment is not supportive of a major LNG investment at this time," Woodside CEO Peter Coleman said. The Browse project sits on an estimated resource of 15.4 trillion cubic feet of dry gas, plus 453 million barrels of condensate, in a basin about 260 miles north of Broome in Western Australia.

## Indonesia rejects offshore LNG plan, tells companies to build onshore

(Wall Street Journal; March 24) - Indonesia's rejection of a $15 billion liquefied natural gas project by Japan's Inpex Corp. and Shell bodes ill for the revival of the flagging petroleum industry and highlights the nationalist pressures facing foreign investment in Southeast Asia's largest economy, analysts say. Inpex and Shell suffered a blow March 23 in their joint bid to develop one of Southeast Asia's largest deep-water gas blocks. President Joko Widodo rejected their plan to use a giant floating LNG facility in the country's remote east, calling instead for onshore facilities to help develop the region.

Inpex and Indonesia's upstream oil and gas regulator have said building onshore would require up to 375 miles of subsea pipelines and add up to $7.5 billion to costs — and delays. The Masela offshore plan had the support of the energy ministry and the upstream regulator. But late last year, ministers clashed over whether to force the companies to an onshore option. Energy experts say Widodo's rejection is a sign of nationalist pressures in an industry led by foreign players.

Indonesia was the world's largest LNG exporter ago. But analysts say the fast-growing nation of 250 million people will become a net importer in the coming years as domestic demand soars. The decision casts doubt on one of the major hopes for growth in Indonesia's oil and gas output, said Bill Sullivan, a Jakarta-based a legal adviser to companies in the extractive industries. "Foreign investors will see [it] … as caving in to nationalist interests and putting domestic political considerations ahead of rational economic considerations," Sullivan said, calling it a "definitive setback" for the industry.

## Canadian LNG project review focuses on risk to salmon habitat

(Globe and Mail; Canada; March 21) - The lengthy environmental review of Pacific NorthWest LNG is boiling down to Canadian regulators studying the risk that a sandy area for juvenile salmon habitat will suffer gradual erosion and disappear. A report in early 2015, prepared for the aboriginal-backed Skeena Fisheries Commission by Patrick McLaren, president of SedTrend Analysis, raised environmental alarm bells about the prospect of Flora Bank vanishing if the terminal is built to export liquefied natural gas.

The Canadian Environmental Assessment Agency has asked Pacific NorthWest LNG to address concerns about the project's impact on Flora Bank, near Prince Rupert, B.C. The agency last week was granted a three-month extension for its review. Visible at low tide, Flora Bank contains eelgrass that nurtures juvenile salmon in the Skeena River estuary. In its draft report last month, the agency said the project would likely harm harbor porpoises and contribute to climate change, but the export terminal could be built and operated without causing major ecological damage to Flora Bank.

McLaren warns that the trestle to the tanker loading berth would threaten to disrupt a complex system that holds Flora Bank in place. "It is predicted that sand will be lost from Flora Bank," he wrote in a paper published this year. Natural Resources Canada, however, is skeptical about McLaren's research. "In terms of Flora Bank stability, NRCan considers McLaren's conclusion … to be a hypothetical concept," Natural Resources Canada said in a letter last week to the environmental review agency.

## Japanese ambassador warns Canada about delay to LNG project

(Canadian Press; March 22) - The Japanese ambassador is warning the Canadian government that delays in a major liquefied natural gas export plant near Prince Rupert, B.C., could cost Canada a rare opportunity. Ambassador Kenjiro Monji sent a letter to the Canadian Environmental Assessment Agency after the government announced it would delay a final decision on the Pacific NorthWest LNG project by three months.

Japan Petroleum Exploration Co. is a 10 percent partner in Pacific NorthWest LNG, which is led by Malaysia’s Petronas. Monji said in his letter that Canada could wait another decade before it finds the same access to Asian buyers unless it acts quickly to develop LNG exports. Other partners include companies from China, India and Brunei.

Canadian regulators have requested more details from the project consortium about the environmental impact of the development, particularly the effects on critical juvenile salmon habitat in the area of the marine terminal.

## Canada’s gas industry needs LNG exports to replace U.S. sales

(CBC News; March 20) - The situation facing Canadian gas producers might be thought of as a bakery that sells all its bread to the same customer every day. That's fine until the customer opens its own bakery next door, and the original baker realizes it’s lost business. Historically, the U.S. has been the main buyer of Canada's oil, gas, propane and other petroleum goods. In the past five years, this relationship has seen profound changes as prices have fallen and U.S. shale oil and gas production has boomed.

At the same time, Canada is still trying to sell its oil and gas across the border. Like in the case of competing bakeries, however, the demand is only so big. "[We're] very concerned about it. We are losing our market in the U.S. for our gas," said Dave Tulk, of Calgary-based Gas Processing Management. "The ability of our gas to compete with the gas coming out of the shale plays … it's a real concern."

Similar to the Canadian oil industry's desire for new export pipelines, the gas industry is also craving an outlet to international markets. Several liquefied natural gas facilities are proposed for British Columbia's coast, but there is significant uncertainty whether any will be built. If they aren't, there is little doubt Canada's industry will suffer, especially as the U.S. gas market dries up, Tulk said. "Failure is we don't get anything off our coast. … We absolutely need this option to stop the irreversible decline of our gas industry."

## Novatek continues to insist first Yamal LNG cargo next year

(Reuters; March 22) - International sanctions have undermined the ability of Russia's Arctic Yamal LNG project to raise necessary funds but it will be launched as scheduled, Leonid Mikhelson, head of the project’s main shareholder, Novatek, said in a televised interview March 22. The company, co-owned by Gennady Timchenko, an ally of President Vladimir Putin, was placed under U.S. sanctions in 2014, soon after the final investment decision had been taken on the Yamal project in late 2013.

The punitive measure makes it harder for the project to raise money. "Of course, technical difficulties due to … sanctions against Novatek and automatically against Yamal LNG ... there are difficulties with attracting credit financing," Mikhelson told the state-run Rossiya-24 TV channel. Russia's Novatek holds 50.1 percent in the $27 billion Yamal LNG project; France's Total and China National Petroleum Corp. control 20 percent each; and China's Silk Road Fund bought a 9.9 percent stake this month.

Shareholders have invested $13 billion, while about $2.4 billion has come from Russia's state National Wealth Fund, Mikhelson said. The project has sought financing from Chinese banks and export credit agencies in Europe, but so far has failed to reach an agreement. Banks have been cautious due to the sanctions and low oil prices. Novatek continues to insist the first tanker with liquefied natural gas will be shipped next year as planned, with production to start at the first of three planned liquefaction trains. Several industry analysts, however, expect delays of at least a year before the first cargo.

## Oregon LNG developer says it has preliminary deal with a customer

(Calgary Herald; March 22) - Calgary-based Veresen announced March 22 it has signed up the first customer for its proposed LNG export project on the Oregon coast, just 11 days after U.S. regulators denied approval in part because the developer could not show a public need for the project, particularly the 232-mile pipeline through more than 150 parcels of private land. Veresen announced a preliminary agreement with Jera, a joint venture of Tokyo Electric Power and Chubu Electric Power, to take 1.5 million metric tons of LNG per year for 20 years.

Veresen said the deal proves there is market support for its Jordan Cove LNG facility in Coos Bay, Ore, but financial analysts were quick to point out the agreement with the partnership of Japanese power companies does not include a tolling (rate) agreement and only covers one-quarter of the plant’s capacity, which may not be enough to demonstrate commercial support to the Federal Energy Regulatory Commission.

FERC said it was reluctant to approve the project over landowner protests when the sponsors have not demonstrated need — but left the door open for the applicant to try again. Chris Cox, an analyst for Raymond James, said Veresen’s announcement was “encouraging” but much work needs to be done, including finalizing a tolling agreement with Jera. Texas-based petroleum and energy analyst Art Berman has not changed his views. “Whenever I look at them, the economics are marginal to non-profitable," Berman said. "The announcement today is largely symbolic."

## Chevron ships first Gorgon LNG cargo

(Wall Street Journal; March 21) – Chevron has shipped the first cargo of liquefied natural gas from its new multibillion-dollar plant off Australia's west coast to a customer in Japan, the U.S. energy company said March 21. The first export is a significant milestone for the Gorgon project, which has been hit by delays and cost overruns since construction started, as it now begins generating revenue for Chevron and its partners.

Asia Excellence, one of several LNG carriers that Chevron is adding to its fleet, left the facility on remote Barrow Island off northwestern Australia, Chevron said. Its cargo will be delivered to Chubu Electric Power, one of the project's foundation buyers. The $54 billion project, a cornerstone in Chevron's efforts to become a major LNG supplier, began production two weeks ago. It's one of the world's biggest new LNG operations and represents the largest investment in Australia by a private company or government.

When completed, three liquefaction lines will produce 15.6 million metric tons of LNG a year plus enough gas to generate electricity for 2.5 million Australian homes. Chevron is operator and majority owner of Gorgon, with ExxonMobil and Shell each holding 25 percent stakes. Osaka Gas, Tokyo Gas and Chubu Electric each have small interests.

## Malaysia signs 10-year LNG supply deal with Japanese gas utility

(Nikkei Asian Review; March 22) - A unit of Malaysia's national oil and gas company Petronas has signed a 10-year contract to supply liquefied natural gas to Japan's third-largest city gas provider Toho Gas. The sales price is a formula that combines linkages to both crude oil and the U.S. natural gas benchmark price (Henry Hub), according to Toho Gas. The companies did not disclose further financial details.

Under the agreement, Petronas LNG will start shipping cargoes in April 2017. Toho, which supplies gas mainly in three major prefectures in the Tokai Area, plans to take between seven and nine cargoes a year shipped by Petronas. Malaysia, the world's second-largest LNG exporter after Qatar, is a major seller of gas to Japan. The Southeast Asian country exports more than half of its LNG output to Japan on medium- or long-term supply contracts.

## Unions want shorter work schedule at Australia LNG project

(Sydney Morning Herald; March 21) - Labor unions have pledged to ramp up their campaign for changes in the on-off work schedule at Inpex Corp.'s $37 billion Ichthys liquefied natural gas project in northern Australia, raising the possibility of worker actions that could send the costly venture further over budget. After a successful protest march last Sunday in Darwin, involving 450 workers or more, the three unions behind the action are set to intensify their efforts.

The unions are dealing with the project's main construction contractor, a joint venture between Japan's JGC Corp. and Chiyoda, and Houston-based KBR. "The workers are getting fairly frustrated now," said Bryan Wilkins, Northern Territory organizer for the Australian Manufacturing and Workers' Union. At the heart of the grievances is the current 28-day-on, 7-day-off work roster. Union pressure at other LNG construction sites in Australia has led to the introduction of shorter work periods, leaving Ichthys an outlier.

"We're the last project with four-and-one rosters in place," Wilkins said. "We'd like to see at least 21-7 introduced." But an Inpex spokeswoman said the current roster is "consistent with industry standards," noting that most workers have Sunday off. Such a change to three weeks on and one week off would involve significantly higher costs for the project backers, Inpex and French oil major Total, and their major contractors. Ichthys is already running late, with start-up pushed out until fall 2017.

## Cheniere's high-ethane content LNG likely headed to Brazil

(Platts; March 16) - Brazil's Petrobras will likely import up to seven of the eight to ten commissioning cargoes from Cheniere Energy's Sabine Pass, La., LNG export terminal, market sources said this week. Cheniere's commissioning cargoes, which reportedly have a high ethane content, are well-suited for import by Brazil where natural gas liquids can be fractionated prior to the regasification process.

"The feedstock gas being used for first exports is coming from storage tanks," one market source close to Cheniere said March 15. "It's old LNG. The boil off gives it a higher ethane content." Only a limited number of LNG importers in the Atlantic Basin can handle elevated ethane levels. The first Sabine Pass cargo was delivered in early March to Rio de Janeiro, where Petrobras has the equipment to fractionate gas liquids. Brazil's only ethane-based petrochemical complex is located in Rio de Janeiro state.

## First U.S. ethane export to Europe scheduled to dock March 23

(Wall Street Journal; March 21) - Swiss petrochemicals giant Ineos Group Holdings plans to accept the first U.S. shipment of a type of shale gas to Europe on March 23 — a milestone that marks the opening up of a new market for American energy producers trying to sell a glut of the fuel. The ship is carrying a natural gas liquid known as ethane that was extracted from the Marcellus Shale in Pennsylvania, where producers are looking to diversify the markets for ethane because of pipeline and storage limitations.

The shipment is the first seaborne U.S. export of ethane to Europe, Ineos said, another sign of how the North American shale boom has transformed the global energy map. "We know that shale-gas economics revitalized U.S. manufacturing, and for the first time Europe can access this important energy and raw material source too," said Ineos chairman Jim Ratcliffe. Ethane is a component of natural gas that is separated out and often turned into a liquid for transporting. It is used to make plastics.

The cargo was loaded at a terminal near Philadelphia. Ineos's ethane is underpinned by a 15-year contract with Range Resources, one of the most active Marcellus drillers, and Consol Energy, another Marcellus producer. Both companies, and many of their peers, are struggling as declining energy prices have cut their revenue. Ethane has been among the worst-performing commodity markets and the companies have spearheaded efforts to ship it to new customers on the Gulf Coast, in Canada and abroad.

## Canadian LNG project awards contract to KBR

(Canadian Press; March 21) - Houston-based KBR announced March 21 it has been awarded a multi-phase contract for front-end engineering and design for the proposed Woodfibre LNG project in Squamish, B.C., north of Vancouver. Woodfibre LNG is a subsidiary of Pacific Oil & Gas, which is part of a Singapore-based group of companies.

KBR will provide pre-FEED and FEED services for the liquefaction plant and export facility, including development of a fixed-price offer for engineering, procurement and construction services. The plant, with an annual capacity of 2.1 million metric tons per year, is estimated at $1.8 billion.

Canadian Environment Minister Catherine McKenna announced March 18 that a federal environmental review of the project determined that Woodfibre LNG is unlikely to cause significant harm, subject to certain conditions. The project also requires regulatory authorizations from Fisheries and Oceans Canada and Transport Canada.

## Ontario will look at trucked LNG to serve northern communities

(CBC News; March 15) - The Ontario government is looking at a way to reduce energy costs in some northern communities. The province has committed $100,000 from the Northern Ontario Heritage Fund for a feasibility study that will look at converting five communities with a combined population of about 11,000 — Marathon, Manitouwadge, Schreiber, Terrace Bay and Wawa — to burn liquefied natural gas for power and heat.

LNG conversion could help communities without access to natural gas pipelines, Minister of Northern Development and Mines Michael Gravelle told CBC. "Liquefied natural gas is a different form, and may I say, an odorless, non-toxic, non-corrosive form of gas that basically gets chilled so it can be transported by insulated vehicles," Gravelle said. He expects results of the study within four months. The trucked-in LNG could be warmed up, turned back into its gaseous state, and burned for electricity or heat.

Converting Terrace Bay to LNG would cut residents' heating costs by around half, Mayor Jody Davis said. People there currently heat their homes with electricity, propane or wood — and that's expensive, he said. "Over the past several years in January, February, March, many of our residents had electric bills that were over $1,000 a month, so that's quite a load for people that are on fixed incomes," Davis added.

## Canadian company plans study of Alberta-to-Alaska oil rail line

(Canadian Press; March 16) - A company is getting ready to launch a feasibility study this spring into its plan to send trains of oil sands bitumen from Fort McMurray, Alberta, to Alaska. From Delta Junction, near Fairbanks, the oil would move in the trans-Alaska pipeline to the port of Valdez, where it would be loaded in tankers and shipped to Asia. The railway would run about 1,500 miles. Under the proposal from Vancouver-based G Seven Generations, First Nations would hold a 50 percent equity stake in the project.

Last month, a preliminary study by the Van Horne Institute — backed by a $1.8 million grant from the Alberta government — found there is merit to the idea. It estimated a project with a capacity of up to 1.5 million barrels a day could cost as much as $34 billion. The next step will involve a detailed feasibility study to narrow down the railway's precise route. G Seven Generations has not released a cost estimate for the study.

G Seven Generations CEO Matt Vickers said he wants the study to start before leaves return to the trees this spring so that the company can do survey work from the air along the route through Alberta, British Columbia, the Yukon Territory and Alaska. The trains would carry bitumen in heated railcars. Vickers said clean-up from any spill would be relatively easy. Alberta oil sands producers are looking for ways to get their product to market as various pipeline proposals to coastal ports have met with strong opposition.

## Eni starts offshore-Norway oil production 2 years behind schedule

(Bloomberg; March 13) - Goliat, the first oil field to start output in Norway’s Arctic waters, has been a giant headache for Italy’s Eni and Norwegian partner Statoil. Production, which finally began March 12, was delayed more than two years and investments escalated to about $5.6 billion, almost 50 percent more than the initial plan. The field, with about 180 million barrels of recoverable oil, is also starting at a bad time, with prices at about $40 a barrel after the worst market slump in a generation.

Goliat is only the second field in production in the remote waters of the Barents Sea, after the Snoehvit gas deposit — Europe’s only liquefied natural gas export plant. Eni’s construction of the Goliat floating facility, the biggest and most advanced of its kind, was delayed several times, most recently because of electrical system problems. “If they had known back then that it would be this expensive, they wouldn’t have gone ahead,” said Erik Holm Reiso, at Oslo-based consulting firm Rystad Energy.

Eni needs oil prices to average $95 to $100 a barrel over the production life of 15 years for the project to make a profit, Rystad Energy said. That calculation includes capital and operating costs and a 10 percent return on the cost of capital. Eni said its own calculations show a break-even price for Goliat of less than $50. Even if Eni fails to recoup its investment and costs in the field, with expected maximum production of 100,000 barrels of oil a day, it will still generate cash flow, Rystad said.