

Oil and Gas News Briefs

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Novatek plans to have second Arctic LNG project operational by 2023

(Financial Times; London; Dec. 12) - Russia's Novatek could spend as much as \$47.6 billion by 2030 on liquefied natural gas projects in the Arctic as it aims to become a big supplier of the seaborne gas from the country's extreme north. A day after the company announced the first commercial shipment of LNG from its \$27 billion project deep in the northern Yamal Peninsula, Novatek said it planned to build a second production facility nearby, with output from the Arctic LNG-2 project expected to start in 2023.

"Our big plan is to create a major LNG production center in the Russian Arctic zone that will rival Qatar, Australia, and the United States," said Mark Gyetvay, the company's chief financial officer. The announcement by Russia's No. 2 gas producer — after state-run Gazprom — will make it a key player in the fast-growing global LNG market, which has previously been dominated by Qatar and Australia. Russia in the past had focused more on exports of gas via pipelines, but now wants to move heavily into the LNG trade.

Novatek is banking on a continued surge in global demand for LNG, particularly in Europe and Asia where its ease of transportation and relatively low emission profile has made it popular. Capital expenditure on the company's Arctic LNG activities will ramp up, Gyetvay told investors at a company event in Moscow on Dec. 12. Novatek plans to sell stakes in the Arctic LNG-2 project, which will produce 18.3 million tonnes of LNG per year when fully operational. In addition to Novatek, the partners in Yamal LNG are French oil and gas major Total, China National Petroleum Corp. and a China state fund.

Exxon takes larger stake in Mozambique LNG and will lead project

(LNG Global; Dec. 13) - ExxonMobil announced Dec. 13 it has completed its acquisition of a 25 percent indirect interest in Mozambique's offshore Area 4 block from Eni and assumed responsibility for midstream operations of the proposed onshore liquefied natural gas production and export facility. Exxon will lead the construction and operation of the larger onshore LNG facilities, while Eni will continue to lead the smaller Coral South floating LNG project and all upstream operations.

"ExxonMobil brings our LNG leadership and experience to support development of Mozambique's high-quality gas resources," said Exxon CEO Darren Woods. The deepwater Area 4 block holds an estimated 85 trillion cubic feet of gas. Eni has taken a final investment decision on Coral South and the Italian company and its partners have

lined up financing and signed construction contracts. LNG output is set to start in 2022. At 3.4 million tonnes a year, all of the output is under contract to BP for 20 years.

The onshore plant would be significantly larger than the \$8 billion floating LNG project. Exxon now owns a 35.7 percent interest in Eni East Africa (to be renamed Mozambique Rovuma Venture), which holds a 70 percent interest in Area 4, and is co-owned with Eni (35.7 percent) and China National Petroleum Corp. (28.6 percent). The remaining 30-percent interest in Area 4 is split equally by Mozambique's national oil and gas company Empresa Nacional de Hidrocarbonetos, Korea Gas and Portugal's Galp Energia.

China reports it is speeding up work on pipeline for Russian gas

(Xinhua news agency; Dec. 13) - China National Petroleum Corp. said Dec. 13 it had sped up laying natural gas pipelines connecting China and Russia. Welding of the northern China portion of the 2,090-mile Power of Siberia pipeline has begun, the company announced. China's portion of the line originates in the northeast, in Heilongjiang Province, and terminates in Shanghai in the east. Construction began in June 2015 and will be completed in 2020.

Upon completion, the pipeline will be able to provide China with more than 1.3 trillion cubic feet of Russian gas a year. The Russian part of the pipeline began construction in eastern Siberia in 2014. The Chinese government is encouraging the use of natural gas as a cleaner alternative to coal, prompting the need for new pipelines and a significant increase in liquefied natural gas deliveries.

Russian-flag requirement could be a challenge for Yamal LNG tankers

(Independent Barents Observer; Norway; Dec. 11) - There was great festivity in the Arctic port of Sabetta as Russian President Vladimir Putin on Dec. 8 officially marked the first liquefied natural gas cargo from the Yamal project. The fuel was loaded aboard the Christophe de Margerie, the flagship in the fleet of new icebreaking carriers built to transport the LNG to market. The Boris Vilkitsky was loading LNG at the same time. The two carriers are of the same class, built by the same South Korean shipyard.

However, while the de Margerie is owned by Russian national shipping company Sovcomflot, the Vilkitsky is owned by a joint-venture of Greek company Dynagas and Chinese Sinotrans and China LNG Shipping. Another three of the ships will be built for Dynagas; a consortium of Teekay and China LNG Shipping will get six ships; and three are being built for Mitsui OSK Lines and China Cosco Shipping. None of the new ships will carry a Russian flag; even the de Margerie has Cyprus as its home port.

But in a recent meeting with representatives of the shipping industry, Putin made clear that all oil and gas tankers transiting the Northern Sea Route must sail under Russian

flags. According to Putin, legislation is already being assessed by the Russian State Duma and is expected to be adopted “in the near future.” It is a potential challenge to Yamal LNG, which has been carefully developed together with French and Chinese investors. The latter have strong interest in promoting their own industries, and Chinese companies will ultimately take a major share of the gas exports from the region.

Western sanctions don't block Russian LNG from going to Britain

(Financial Times; London; Dec. 13) - British homes are set to be heated over the new year with natural gas from a Russian project targeted by U.S. sanctions, as the shutdown of a key North Sea pipeline slashes domestic output and sends utilities and traders scrambling for supplies. The first tanker of liquefied natural gas from the Yamal project in Russia's Arctic, which was opened by President Vladimir Putin last week, is making its way to the Isle of Grain import terminal in Kent as U.K. gas prices soar.

The shipment, which was originally expected to go to Asia, will be cheered in the Kremlin, which held up Yamal as evidence it can withstand western sanctions. The U.K. government has taken a tough line on Russian sanctions since Moscow first intervened in Ukraine nearly four years ago. Bringing in the LNG will highlight questions about the U.K.'s energy strategy and the security of supplies, following the shutdown of a three-decade-old pipeline this week that has cut off 12 percent of gas from the U.K.'s portion of the North Sea, sending prices to four-year highs and sparking fears of shortages.

While it's not unusual for the U.K. to import small amounts of Russian gas by pipeline through other European countries, the arrival of the LNG will be the first gas to arrive by ship. The Yamal cargo of more than 3 billion cubic feet of gas as LNG was sold to the U.K.-based LNG trading subsidiary of Malaysia's state-owned Petronas. Petronas holds import capacity at the Dragon plant in the U.K., so it is conceivable the cargo will end up there. The first handful of cargoes from Yamal will all be sold on a spot basis before the slew of long-term contracts for lifting from the plant come into effect in April 2018.

First LNG carrier to arrive today at new plant on Maryland shore

(Reuters; Dec. 14) - The first liquefied natural gas carrier was headed Dec. 14 for Dominion Energy's Cove Point LNG export facility in Maryland, a Reuters map showed, with the plant expected to enter service by the end of the year. Cove Point will be the second large LNG export terminal in the Lower 48 U.S. states, following on Cheniere Energy's Sabine Pass, La., terminal that exported its first cargo in February 2016.

The carrier is expected to arrive at the \$4 billion terminal later in the day. It can hold 3.3 billion cubic feet of gas as LNG. With Sabine Pass, Cove Point, and more terminals

under construction, the U.S. is expected to become No. 3 in global LNG export capacity by the end of 2018. U.S. export capacity is expected to soar from 3 bcf of gas a day now to 3.8 bcf by the end of the year, 5.3 bcf by the end of 2018 and 10.1 bcf by the end of 2019. Cove Point can handle 0.75 bcf a day. The 10.1 bcf a day is more than 75 million tonnes of LNG a year — the common international measurement for LNG.

Last week, Dominion said Shell will take the initial LNG cargoes from Cove Point during the plant commissioning process. Later, the long-term offtakers will step in. Dominion sold the project's full capacity for 20 years to a subsidiary of GAIL (India) and to ST Cove Point, a joint-venture of units of Japanese trading company Sumitomo and Tokyo Gas. Some of the LNG going to ST Cove Point will go to Tokyo Gas and some will go to Kansai Electric, according to Sumitomo's Pacific Summit Energy unit.

Gas shortages in northern China pull supply from southern regions

(Reuters; Dec. 13) - The southern Chinese province of Hunan has warned of natural gas shortages, an official said Dec. 13, as producers rush to divert fuel to heat northern homes with temperatures plummeting and factories across the country losing supplies of the fuel. The so-called "yellow" warning was issued Dec. 12, the latest sign that gas shortages are spreading to warmer southern regions in China.

Beijing has ordered millions of households and industrial plants across northern China to switch to gas heating from coal this year as part of its war against air pollution. But the surge in demand and an inadequate storage and pipeline network have led to severe supply crunch and a surge in prices just weeks into the start of the winter heating season, forcing the government to put the ambitious project on hold.

The yellow alert marks the third most serious level of warning in a scale of four grades of alert. In a move to ease the supply crunch as temperatures are forecast to plunge deeper below zero, local governments have reined in supplies to industrial users to ensure gas heating for residential use. "Gas shortages are spreading to southern regions like Jiangsu and supplies to eastern cities could be curtailed as producers make northern regions a priority," said Diao Zhouwei, analyst at IHS Markit.

China's demand surge pushes up energy prices worldwide

(Bloomberg; Dec. 13) - China's war against smog is lifting prices for energy all over the world, according to analysts at Goldman Sachs and the International Energy Agency. Policies promoting natural gas have helped boost China's consumption by 19 percent this year and raised it to the world's second-biggest importer of liquefied shipments of the fuel, lifting prices for spot LNG cargoes. Higher gas prices also are boosting demand for coal to save money, Goldman analysts said in a Dec. 12 research note.

Rising global energy prices are another ripple effect of China's clean-air efforts, which have improved air quality in Beijing and other notoriously smoggy cities but also resulted in gas shortages in the country and a burgeoning heating crisis in some areas. "China's dash for gas may lead to further increases in global gas prices, either because the shortage of gas drives some Chinese consumers back to coal and exacerbates the tightness in that market, or because China ends up attracting LNG shipments that would have otherwise gone to other countries," Goldman's Christian Lelong said.

Spot LNG prices in Northeast Asia rose this week to \$10.05 per million Btu, the highest level since January 2015. China's rising demand means it will need by 2020 to import about 15 million tonnes of LNG more than the previous forecast of 61 million, Lelong said. U.S. LNG producers will be the primary beneficiary.

Chinese company looks at 40-foot tanks to import Australia LNG

(Reuters; Dec. 11) - State-owned China Energy Reserve and Chemicals Group on Dec. 11 said it is investigating whether to ship liquefied natural gas from Western Australia to China's gas-hungry East Coast market. The integrated energy firm, which runs oil and gas projects, processing plants and gas distribution, said in a press release that its Australia subsidiary is studying the viability of transporting LNG by road, rail and ship.

The company's Australia business manager Kevin Gao said they would use LNG container tanks, which can maintain the superchilled liquefied fuel for 110 days. "It should be possible for us to ship 100 or 200 of our 40-foot ISO containers, each containing 18 tonnes of LNG, from Australia's West Coast to customers on the East Coast," he said. Each container would hold almost 1 million cubic feet of gas as LNG.

China eyes Pakistan as entry point for Mideast oil and gas deliveries

(Arab News; Saudi Arabia; Dec. 10) - China aims to ramp up its economic and soft power in the Middle East as part of a wider offensive to bolster trade and national security, experts told Arab News. The move is contingent on the development of a massive new trading hub at Gwadar port in Pakistan, which lies at the southern extremity of the much-touted \$55 billion China-Pakistan Economic Corridor. Liquefied natural gas imports would be among the commodities moving through the port to China.

The corridor is Beijing's flagship infrastructure project that involves building an oil pipeline, refineries, power stations, roads, and railways to boost trade from Gwadar on the Arabian Sea northward into western China. The corridor and development of Gwadar is a way to convey crude and liquified natural gas from the Persian Gulf into the Middle Kingdom, instead of having to go the much longer way through the Malacca Straits and South China Sea, which takes at least an extra week.

But the initiative could be a long, tortuous affair with plenty of bumps. According to a report in the Financial Times, Pakistani interests have expressed concern that the terms of business deals with China and its industries might undermine Pakistan's business community and even its sovereignty. The argument is that procurement and bidding procedures greatly favor Beijing, with Chinese companies winning contracts to build and finance infrastructure in Pakistan in deals often guaranteed by Islamabad.

'Golden age of gas' did not turn out exactly as forecast

(Financial Times columnist; London; Dec. 11) - The "golden age of gas" has not turned out quite as forecasters and gas producers expected. Gas was seen as the irresistible fuel of the future. After the 2011 nuclear disaster at Fukushima, nuclear power stations across Japan were closed and liquefied natural gas imports surged. Gas was the safe, reliable fuel and it was cleaner than coal — making it the obvious replacement as the world became more serious about the risks of global warming and climate change.

To meet the expected demand growth, more LNG would be needed, and that led to a rush of investment in highly expensive projects. But global gas demand has increased by much less than predicted. In Japan, nuclear is reviving, and in Europe both gas and coal are losing out to renewables, led by wind. Subsidies and mandated market shares started the process but now wind is achieving cost reductions to the point where it can compete without help. Gas demand in Europe is 12 percent lower than 10 years ago.

China's and India's gas demand continues to grow but dramatic gains by solar power, where costs have fallen 85 percent since 2009, are opening the market, while in both countries the strongly entrenched position of coal — a source of millions of direct and indirect jobs — will be very tough to break. The result of all this is that the growth of gas supply exceeds demand and prices are down. There is no obvious gas shortage on the horizon, and those who dreamed of ever-rising volumes and prices will be disappointed.

Korea fines steel company for allegedly underpaying LNG import tariff

(Korea Herald; Dec. 12) - South Korean energy companies are resisting a recent government decision to impose a huge tariff on steel giant POSCO for its imports of low-priced liquefied natural gas, industry sources said Dec. 12. The backlash comes after the Korea Customs Service informed the country's leading steelmaker on Nov. 30 that it should pay 170 billion won (\$156 million) in back tariffs for underreporting the price of LNG imported from Indonesia during 2012-2016.

The customs service reportedly believes POSCO acted deliberately to reduce import duties. POSCO's reported LNG import price is said to be nearly half the average cost of LNG imported by state-run Korea Gas, which serves as the benchmark for the customs

service. Last year, the customs office conducted a similar probe into city gas provider SK E&S Co., which imported LNG from Indonesia under similar terms. The office decided to slap a tariff of 150 billion won on the company.

Local energy companies oppose the decision, arguing that the tax authorities have unfairly judged their reported prices as fake without clear evidence. The companies said they have not intentionally underreported the price, but rather were able to import LNG cheaper than KOGAS thanks to their superior negotiating power. Companies are entitled to file an appeal with the customs service against its decisions.

First Nation's new council against LNG project in British Columbia

(CBC News; Canada; Dec. 11) - The Squamish Nation elected eight new councillors under the age of 36 and a record number of off-reserve councillors, giving the council a mandate for change, said newly elected councillor, Dustin Rivers, whose traditional name is Khelsilem. "The New Nine," as they are called, ran on a platform against Woodfibre LNG, a \$1.6 billion liquefied natural gas export project planned for Howe Sound in the traditional British Columbia territory of the Squamish, north of Vancouver.

Many on the previous council supported the project, which has received a final investment decision from its Singapore-based developer though no construction date has been set. Newly elected councillor Orene Askew, also an off-reserve member like Khelsilem, said halting the project would be in the best interests of the First Nation as the risks to the environment are too great. "It's a big N-O." Environmental groups and many First Nation members have worked against the project at a former pulp mill site.

Khelsilem said the election clearly shows the community does not support the small-scale LNG project or the direction of the previous council. But hereditary Chief Ian Campbell, who was re-elected Dec. 10, said the nation needs to work within an official process to maintain its legal leverage and simply saying no to LNG isn't an option. The First Nation in 2016 conducted its own environmental assessment, which was accepted by the project developer and included 25 legally binding environmental conditions.

Oregon senator comes out against Coos Bay LNG project

(The Oregonian; Portland; Dec. 9) – Oregon Sen. Jeff Merkley abandoned his tepid support of the Jordan Cove LNG project this week, setting off a political fracas over the controversial proposal to build a liquefied natural gas export terminal in Coos Bay and a feeder pipeline stretching across the state. The project would create economic benefits, he said, but its climate-change impacts are too much to ignore. Merkley's opposition comes amid strong support for the project from the Trump administration.

Merkley doesn't hold much sway in the regulatory process for the \$8 billion project, which backers tout as the largest infrastructure project in Oregon history and a major job creator. But the Democrat has been buffing his environmental credentials for some time, and he becomes the only member of Oregon's congressional delegation to express outright opposition to the project.

The Federal Energy Regulatory Commission has jurisdiction over LNG terminals. The commission rejected the Jordan Cove application in 2016, leading the Calgary-based developer to make some changes and reapply this year — prompting FERC to start a new environmental review. The new Trump-appointed FERC commissioners are widely seen as pro-industry based on their past statements, and Jordan Cove officials have said they like their prospects under the new administration.

Oregon state geologist critical of LNG project earthquake analysis

(Mail Tribune; Medford, OR; Dec. 10) - Oregon's state geologist said the scientific analysis of potential earthquake and tsunami hazards for a proposed natural gas pipeline and LNG export facility is inadequate and relies on outdated data. The concerns about the Pacific Connector Pipeline and Jordan Cove liquefied natural gas terminal were outlined in a letter by Oregon Department of Geology and Mineral Industries Director and State Geologist Brad Avy.

The information submitted by the applicant is incomplete, the department said, adding it sees "possible deficiencies in the scientific and engineering analyses related to geologic hazards, and at this point is not satisfied that geologic hazards will be adequately addressed to ensure public safety." The Oregon Department of Justice submitted the letter this month to the Federal Energy Regulatory Commission, which is reviewing the pipeline and LNG project.

The 230-mile pipeline would go through several Oregon counties to the proposed Jordan Cove export facility in Coos Bay. FERC denied the project application in 2016, but the developer, a Calgary-based company, has since reapplied and is going through a new federal environmental review process. In particular, the state criticizes the project analysis for stating there are no faults that could produce earthquakes except in the Klamath Falls area. Avy noted that the state has mapped faults in the Coos Bay area.

Production will begin soon at large Egyptian offshore gas field

(Bloomberg; Dec. 10) - Pilot production at Egypt's Eni-operated Zohr natural gas field will begin "in the coming few days," the oil ministry said, as the country nears its goal of commercial output from the biggest gas discovery in the Mediterranean Sea by the end

of this year. Pipelines are being tested in preparation for output from the offshore field, Oil Minister Tarek El-Molla said Dec.10.

Production will start before year-end at about 350 million cubic feet per day, he said. Output will rise to some 1 billion cubic feet per day by mid-2018 and reach 2.7 billion by the end of 2019, the ministry said. Zohr marks a turning point that would spell an end to the sales to Egypt that LNG suppliers have won in past years. Once it starts producing, the field will help end Egypt's reliance on imported liquefied natural gas next year and may eventually enable the nation to export gas, El-Molla said last month in an interview.

Egyptian liquefied natural gas plants exported the fuel for about a decade, until declining production from older fields and rising domestic demand shut down exports. Zohr gas will also help ease pressure on Egypt's economy, which has been plagued by a shortage of foreign currency since a 2011 uprising. Zohr, which Eni discovered in 2015, has estimated reserves of about 30 trillion cubic feet of gas.

Russia's Arctic oil production continues to grow

(Bloomberg columnist; Dec. 10) – When Saudi Arabia's oil minister attended the Dec. 8 opening of a liquefied natural gas plant in Siberia, he'd have known this was just part of a bigger energy story emerging in Russia's north. It's not just gas that's a big deal there. Russia's Arctic oil flows are soaring too. Though much of the Arctic exploration has been halted by cheap oil and Western economic sanctions, other projects in the region have quietly gathered momentum, yielding almost 400,000 barrels a day of exports.

Russia has three Arctic oil terminals. Shipments began from Lukoil's Varandey terminal in 2008, and it now handles about 150,000 barrels a day from nearby fields. Gazprom Neft's Prirazlomnoye field produces 80,000 barrels a day, with a target of 130,000. And Gazprom's Arctic Gate terminal started up this year and exports about 150,000 barrels from the Novoportovskoye field. Crude from all three terminals is shipped in shuttle tankers to Murmansk, Russia, where cargoes are sent on larger vessels to Europe.

The terminals' exports hit a new high of almost 385,000 barrels a day in November. As well as gas, Novatek's new LNG project on the Arctic Yamal Peninsula will produce about 26,000 barrels a day of condensate — a very light form of crude. That's not a lot in the grand scheme of things, but it's just one field. As Russia's gas industry targets deeper, liquids-rich reservoirs, its condensate output is rising.

U.S. exporting more of everything: oil, diesel, gasoline, propane, LNG

(Bloomberg; Dec. 12) - The world's largest oil consumer exported more hydrocarbons than ever before in 2017 and shows no signs of slowing down. You name it — crude

oil, gasoline, diesel, propane and even liquefied natural gas — all were shipped abroad at a record pace by U.S. exporters. While the surge comes many years after the shale boom started, it can be traced straight back to the growth of horizontal drilling and fracking.

Exports are poised to expand even further, as the fear of peak oil supply has all but vanished. The U.S. is expected to end the year pumping oil out of the ground at rates unseen since the early 1970s. More and more of it is going overseas, giving OPEC a headache as the group restrains its own output. Last year the U.S. tested the oil export waters after a nearly four-decade-old ban was removed. This year, purchases of U.S. light, sweet crude have skyrocketed as pipeline and dock infrastructure was built out.

“It’s pretty amazing, really,” said Matt Smith, ClipperData’s director of commodity research. “You learn to never say never in this market.” Of all the emerging trade flows this year, U.S. crude deliveries into Europe and Asia are most surprising, Smith said. The growth of U.S. gasoline and diesel exports was more subtle this year, mostly filling the gaps left as refiners in Latin America weren’t up to the task of meeting the region’s growing thirst for fuel. Refiners in the middle of the U.S. were making fuel at a record pace, leaving a surplus of refined products along the Gulf Coast ready to be shipped.

Lack of pipeline capacity pushes down price for Canadian oil to \$30

(Calgary Herald; Dec. 12) - Enbridge, Canada’s largest pipeline operator, warned that it is reaching maximum capacity, while at the same time heavy-oil prices have collapsed after pipelines started rationing space to producers amid surging Western Canada supplies. Western Canada’s heavy-oil benchmark dropped sharply Dec. 12 from more than US\$36 a barrel as trading opened to \$30.64 mid-day, creating the widest discount Canadian producers have seen in three years compared to the U.S. benchmark.

During an investor presentation, Guy Jarvis, Enbridge executive vice president for liquids pipelines and major projects, said his company’s oil pipeline network is reaching maximum capacity and would remain full even if new oil pipelines were built in the near term. The company said its system is expected to be at or near capacity through 2021. In addition to an Enbridge project, TransCanada’s Keystone XL and Kinder Morgan’s Trans Mountain expansion will help move Canadian crude to market when completed.

Western Canadian production hit 4.16 million barrels per day in November, compared with 4.05 million at the start of the year, forcing pipeline operators such as Enbridge to apportion barrels on their systems. In response, many oil companies have moved a large amount of crude into storage tanks in Alberta and are also utilizing rail cars to export their barrels. These developments have led to a doubling of the discount that Canadian producers must accept for their crude, as they miss out on the oil price rally.