# Oil and Gas News Briefs Compiled by Larry Persily July 3, 2019

# Floating nuclear power plant will serve Russian Arctic

(International Business Times; July 1) – The Kremlin is ready to tow to the Arctic the world's first floating nuclear power station with a capacity to supply 70 megawatts of electricity, enough to meet the energy needs of a city with 200,000 residents. The Akademik Lomonosov is equipped to transfer the energy generated by its nuclear reactors to settlements and companies extracting minerals and precious stones in the Chukotka region in northeastern Russia.

Earlier reports said the floating nuclear power plant, a product of Russia's state-run nuclear power company Rosatom, is a 472-by-98-foot barge, with two 35-megawatt nuclear reactors similar to those used to power icebreakers. Sergei Kondratyev, with the Institute for Energy and Finance in Moscow, applauded the floating power plant. He said the idea is to have low-capacity, mobile power plants that can be used in the Russian Arctic where large amounts of electricity aren't needed.

Construction of a conventional power station would be complicated and costly, he said. "The alternatives are coal, gas and diesel," Kondratyev said. Environmentalists, however, have dubbed the nuclear plant as "Floating Chernobyl" and "Chernobyl on Ice," drawing a connection to the 1986 nuclear accident in Ukraine in which several thousand people died from radiation poisoning.

# First summer cargo of LNG through Arctic route encounters thick ice

(The Barents Observer; Norway; July 2) – Ice was still thick as the first liquefied natural gas carrier of the summer left the Sabetta terminal in Russia's Arctic for a voyage through the Northern Sea Route for a delivery to South Korea. The ship, loaded at the Yamal LNG terminal, left Sabetta on June 29 and is expected to arrive in Okpo, South Korea, on July 15 with 70,000 tonnes of LNG, about 3.3 billion cubic feet of gas.

Data from the Russian Arctic and Antarctic Research Institute show that the northern parts of the Kara Sea and Laptev Sea still have significant volumes of ice, some almost seven-feet thick. The conditions appear most complicated in the East Siberian Sea, where there was not a single opening in the ice on June 25. The shallow waters between the Siberian mainland and the New Siberian Islands still has fast ice, the solid ice cover normally covering coastal parts of the area.

It is not the first time that the ice-class LNG carrier Vladimir Rusanov is breaking its way across the Arctic route. In 2018 the ship was the first to make it through the Northern

Sea Route. The LNG carrier is owned jointly by Japanese company Mitsui and China's COSCO Shipping Corp. Like the rest of the fleet of new ice-breaking carriers that serve the Yamal project, the ice-class Arc7 ship can break through ice up to seven-feet thick.

#### South Korean shipbuilders go after Arctic LNG-2 carrier orders

(Hellenic Shipping News; July 1) - South Korean shipbuilders are in a race to win orders for ice-class carriers that would transport liquefied natural gas for Russia's Arctic LNG-2 project, despite business risks caused by Russia's proposal that construction should be done in its territory. Russia's second-largest gas producer, Novatek, plans to start producing at Arctic LNG-2 by 2023, requiring several ice-breaking LNG carriers.

According to sources, South Korean shipbuilders including Hyundai Heavy Industries, the world's largest shipbuilder, and its new subsidiary are aggressively seeking orders for the work. Novatek plans to make a final investment decision on the \$20 billion to \$25 billion gas development later this year. Samsung Heavy Industries has teamed up with the Zvezda shipyard in the Russian Far East to take part in designing the vessels.

Analysts have expressed concerns at the mandates to use Russian-flagged ships to transport oil, gas, and coal on arctic sea routes. However, the money at stake is too much to miss. Daewoo Shipbuilding & Marine Engineering's 2014 order for an ice-class LNG carrier was worth \$320 million. "Russia, which lacks technical skills, has requested large-scale design staff as well as technical staff and construction personnel," a banking official said. "(But) it is almost impossible to meet delivery dates if they are built in Russia, and there is also a high concern of technology leaks."

# Mitsubishi may still sign on for Russian LNG investment

(Reuters; July 1) - Japanese trading house Mitsui and state-owned Japan Oil, Gas, and Metals National Corp. (JOGMEC) are still in talks with trading firm Mitsubishi over the latter joining a venture that will take a stake in Russia's Arctic LNG-2 project, Mitsui said July 1. Novatek, Russia's biggest private gas producer, said June 29 it would sell a 10 percent stake in Arctic LNG-2 to a joint venture of Mitsui and JOGMEC. The venture plans to take about 2 million tonnes of LNG a year from the 19.8-million-tonne project.

Russian President Vladimir Putin told a news conference that the Japanese investment in the project would reach almost \$3 billion. Mitsui declined to comment on terms of the deal but said the joint-venture's investment would include 10 percent of the total development cost of Arctic LNG-2, estimated by Novatek at as much as \$25 billion. France's Total and two Chinese companies also have taken 10 percent stakes each. "We are still talking with Mitsubishi on its possible participation in our joint venture," Taichi Nagino, general manager of Mitsui's Russia gas business division, told reporters July 1. A Mitsubishi spokesman confirmed the trading house is still considering whether to invest in the venture. Mitsubishi said last month it was studying the project. Novatek plans to make a final investment decision on LNG-2 later this year with start-up in 2023.

# German investment bank joins list that won't loan on coal projects

(Bloomberg; July 2) - Germany's KfW Group is pulling out of loans for new coal projects, joining other state-owned European development banks that have already followed orders of their governments to minimize exposure to the world's most widely used power-plant fuel. KfW will no longer finance the exploration or mining of coal or lend to coal power plant projects, the lender said July 1 as it updated its investment code from four years ago.

The firm hasn't made any new investments in coal projects since then and holds less than 2 billion euros (\$2.26 billion) in outstanding loans on fuel. The move to exclude coal in Frankfurt-based KfW's business complies with the German government's decision this year to adopt strict sustainable strategies in its financial dealings. The decision will impact federal investments such as pension fund holdings in foreign utilities with coal assets. The government is also mulling selling green sovereign bonds.

European development lenders began to taper coal investments earlier this decade, but many have been slow to declare an official end to the practice. At the same time, coal remains the dominant fuel in power generation despite the world searching for cleaner alternatives, BP's annual Statistical Review of World Energy showed last month. The fuel accounted for almost 40 percent of electricity last year, roughly constant for 20 years. The World Bank pledged in 2013 to stop direct financing of coal, yet it's come under fire for lending indirectly to projects through its International Finance Corp. unit.

# Anti-fossil fuel group says LNG could be worse than coal

(Australian Financial Review; July 2) - The latest research from an anti-fossil fuel group has identified liquefied natural gas as no better, and potentially worse, than coal in contributing to climate change and tries to cast doubt on investor support for the next wave of oil and gas projects in Australia. The Global Energy Monitor report warned that a possible tripling of global LNG capacity would lock in decades of high emissions and have an impact on global warming as large or larger than the growth in coal-fired power.

The researchers behind the report said LNG was potentially worse than coal because of hard-to-monitor methane emissions at all stages of the gas production-and-supply cycle. Global Energy Monitor, founded as CoalSwarm in the U.S. in 2007 to challenge

coal-fired power station investments, said global LNG expansion is at odds with Paris climate goals and risks creating US\$1.3 trillion (\$1.86 trillion) in stranded assets.

GEM executive director Ted Nace, a co-author of the report, said it is not too late to shelve investment plans given the falling cost of renewables and big questions marks over the long-term financial viability of LNG projects. "The LNG boom is happening incredibly fast ... a decade ago large-scale fracking was just getting started and we had no idea North America would become a huge gas exporter. Scientists still didn't realize just how large and potent the fugitive emissions of methane would turn out to be."

## Thailand boosts spending on renewable energy

(Bloomberg; July 2) - Thai energy conglomerate PTT is boosting its investment in electricity generation, particularly renewables, given what it says is a "highly uncertain" outlook for oil over the next year. The country's biggest company, which is involved in everything from oil exploration and power generation to gasoline and coffee retailing, revised its 2019 capital spending plan in late June, CEO Chansin Treenuchagron said. Most of the 33.2 billion baht (\$1.1 billion) of extra spending will go to electricity projects.

Buffeted by trade wars, geopolitical tensions and the U.S. shale boom, oil faces an uncertain outlook over the next year, Chansin said. PTT's pivot toward renewables comes even after a unit of the majority state-owned company spent \$4.2 billion this year buying electricity producer Glow Energy, which generates most of its power from gas and coal. A PTT unit owns 8.5 percent of a liquefied natural gas development in Mozambique, which is still considered a core project, he said.

"Under the volatile environment, PTT focuses more on clean energy as well as infrastructure," Chansin said. The government has a target of about 27 percent of its total generating capacity from renewable energy sources by 2037. The country produced 8.7 percent of its power from non-hydro renewables last year, according to Ministry of Energy data. PTT will also use the additional funds to support projects like expanding an industrial port and developing a technology manufacturing hub.

#### Bangladesh raises natural gas prices to cut subsidies of LNG imports

(S&P Global Platts; July 2) – Starting with the new fiscal year on July 1, Bangladesh has raised the price of domestic natural gas by a weighted average of 32.8 percent, the largest rise in the country's history, to reduce the losses incurred by the increasing cost of liquefied natural gas imports. The decision will ease pressure on state-owned oil and gas company Petrobangla.

While the impact on Bangladeshi gas consumption has yet to be seen, the move has already sparked a backlash from opposition parties and export-oriented industries that have urged the government to reduce the increase because of its impact on production costs and export competitiveness. The hike in prices to an average of US\$3.40 per 1,000 cubic feet of gas affects all consumers except small businesses, for which prices will not be raised. The increase will be the biggest, at 64 percent, for fertilizer manufacturers, and up 41 percent for most gas-fired power generating plants.

Bangladesh Energy Regulatory Commission had previously hiked consumer natural gas tariffs by 22.70 percent in March 2017 and by 26.29 percent in September 2015. The July 1 rate hike still falls short of the 75 percent increase that would be needed to fully meet Petrobangla's estimated LNG import bill, according to a member of the Energy Regulatory Commission. The government will continue to subsidize the losses. The country is expected to import an average of 850 million cubic feet of gas per day.

# Australia, Japan, U.S. will help finance LNG in Papua New Guinea

(The Epoch Times; June 26) - Australia, Japan, and the United States have teamed up to help finance a liquefied natural gas project in Papua New Guinea, as part of a trilateral initiative in the Indo-Pacific region announced in 2018. The initiative is widely viewed as the United States' effort to challenge China's influence in the region through the latter's foreign policy of "One Belt, One Road." Adopted in 2013, the strategy seeks to build Beijing's geopolitical influence through financing infrastructure in more than 60 countries.

The three allies will lend more than \$1 billion for an LNG project in Papua New Guinea, according to a June 25 report by Japanese media Nikkei. Plans for the project will be finalized over the next two to three years. The report did not say which LNG project in Papua New Guinea — there are two in development. The financing will come from three government-backed banks: Japan Bank for International Cooperation, U.S. Overseas Private Investment Corp. and Australia's Export Finance and Insurance Corp.

The three banks issued a joint statement on June 25 at the conclusion of their meeting in Tokyo. The statement said the partners took a joint mission in April to Papua New Guinea, where they identified several prospective projects and looked to advance them in cooperation with the government and the local private sector. The gas project is the first expenditure in the Trilateral Infrastructure Partnership, according to Nikkei.

# Gas pipeline developer drops project, blames FERC for delay

(S&P Global Platts; June 28) - Dominion Energy Transmission on June 28 withdrew its application for the Sweden Valley pipeline expansion in Ohio and Pennsylvania, saying its contracted shipper walked away while Dominion was waiting on the Federal Energy

Regulatory Commission to approve the expansion. The project was designed to add an outlet for Appalachian gas production by constructing a new lateral on the Dominion system that would deliver into the Tennessee Gas Pipeline in eastern Ohio.

FERC issued a positive environmental assessment last August. Of those projects with a positive assessment and ready for a FERC decision, Sweden Valley has been waiting the longest. Dominion's decision to pull the project comes amid uncertainties over whether an impasse over greenhouse gas considerations is affecting FERC's ability to act on pipeline projects. Dominion had expected a decision from FERC no later than November 2018 in order to meet its planned in-service date of November 2019.

The commission did not comment on Dominion's move. There has been a divide at FERC over how far it should go in considering indirect upstream or downstream emissions associated with gas projects such as pipelines and LNG plants. In criticizing the commission's inaction, Dominion has said the project "faced zero public opposition, has obtained all necessary right-of-way access through mutual landowner agreements and was located within or adjacent to existing facilities and pipeline corridor."

# Pipeline opponents go to court in Montana against Keystone XL

(The Associated Press; July 1) - Environmentalists asked a federal judge on July 1 to cancel permits and other approvals issued by the U.S. Army Corps of Engineers for the Keystone XL oil pipeline from Canada, opening another legal fight over the long-delayed energy project. Attorneys for the Northern Plains Resource Council, Sierra Club, and other groups filed the latest lawsuit against the \$8 billion pipeline in Montana, where they've previously won favorable rulings in related cases.

They claim the Army Corps did not examine the potential for oil spills and other environmental damages when it approved plans submitted by pipeline developer TC Energy (formerly known as TransCanada). The line would cross hundreds of waterways along a 1,184-mile path from Canada to Nebraska, where it would connect to deliver oil to U.S. Gulf Coast refineries and export terminals.

Almost all the water crossings fall under an Army Corps program that gives blanket approval to individual pieces of a bigger project without considering potential cumulative impacts, according to the lawsuit. That means no analysis was done of the possibility that the line would break and cause an oil spill, the lawsuit said. First proposed in 2008, Keystone XL was rejected by President Barack Obama but revived under President Donald Trump, though legal challenges continue.

# U.S. crude output sets new record in April at 12.16 million barrels

(Bloomberg; June 29) - U.S. crude output soared to new heights in April, highlighting OPEC's dilemma just days before the producer group meets amid growing geopolitical threats. A government report June 28 showed U.S. production grew 2.1 percent in April to 12.16 million barrels a day. Booming shale production from places like the Permian basin of West Texas have enabled U.S. oil output to overtake Saudi Arabia and Russia.

At the same time, trade disputes and escalating tensions in the Persian Gulf have clouded the outlook for the Organization of Petroleum Exporting Countries, which is expected to extend current output cuts next week. "It really means that OPEC has to make a decision to balance the market or shale will do it for them," said Jim Lucier, managing director of Washington, D.C.-based Capital Alpha Partners.

Crude output from the Permian is expected to jump an additional 50 percent by 2025, according to Bloomberg New Energy Finance. Global consultancy ESAI Energy forecasts crude and condensate from the Bakken, another prolific shale play, will continue growing and surpassing its record output into next year.

## **OPEC and Russia agree to extend curbs on oil production**

(Reuters; June 29) - Russia has agreed with Saudi Arabia to extend by nine months a deal with OPEC on reducing oil output, Russian President Vladimir Putin said, as oil prices come under renewed pressure from rising U.S. supplies and a slowing global economy. Saudi Energy Minister Khalid al-Falih said June 30 that the deal would most likely be extended by nine months and no deeper output reductions were needed.

Putin, speaking after talks with Saudi Crown Prince Mohammed bin Salman, said the deal — which was due to expire June 30 — would be extended in its current form and with the same cutbacks assigned to each member. The Organization of the Petroleum Exporting Countries, Russia, and other producers, an alliance known as OPEC+, will meet July 1-2 to discuss the deal for curbing oil output by 1.2 million barrels a day. Falih said the new deal would help reduce global oil stocks and balance the market.

Asked about a deeper cut, Falih said: "I don't think the market needs that. ... Demand is softening a little bit but I think it's still healthy." The Saudi minister said he expects the market to balance in the next six to nine months. "The strategic partnership within OPEC+ has led to the stabilization of oil markets," said Kirill Dmitriev, chief executive of the Russian Direct Investment Fund, who helped design the OPEC-Russia deal. Crude has climbed more than 25 percent since the start of 2019, but prices could stall as a slowing global economy squeezes demand and U.S. oil floods the market.

# Texas shipyard will build LNG-fueled container ships for Hawaii route

(Houston Chronicle; July 1) - Keppel AmFELS has built offshore drilling rigs and platforms in Brownsville, Texas, for decades. But the past few years have not been particularly kind to the offshore energy companies, which in the face of low oil prices and competition from shale has delayed, canceled and scaled back projects. Now Keppel AmFELS is entering a new line of business: shipbuilding.

At the company's facility about 14 miles from the U.S.-Mexico border, crews are constructing two 775-foot-long container ships that will be powered by liquefied natural gas and carry cargo between the West Coast and Hawaii. In doing so, Keppel AmFELS joins a small fraternity of companies that build merchant ships in the United States. It's a fraternity that's vital to Hawaii since a nearly 100-year-old law, known as the Jones Act, only permits American made ships with American crews to operate between U.S. ports.

Keppel AmFELS, a unit of the Singapore company Keppel Corp., the world's largest builder of offshore oil rigs, is building the ships for Pasha Hawaii, an ocean cargo company headquartered in Honolulu. The ships will join Pasha's fleet of six vessels to haul everything from food and consumer products to cars and private airplanes to the Hawaiian Islands. The companies declined to disclose the financial terms of the contract. The ships will include engines that can run on cleaner-burning LNG, putting them in compliance with the International Maritime Organization's new emissions rules.

#### Producer efficiencies cut deeply into oil field service companies

(Bloomberg; July 5) - For the oil field services industry, it's no longer about merely navigating a downturn. It's about survival. Five years after crude began its plunge to less than \$30 a barrel from more than \$100, the companies that drill and frack wells are living in a new world. The producers they work for have become increasingly efficient and cost-conscious, reacting to shareholder demands for payback and a crude market that's recovered only part of that brutal price decline.

Meanwhile, service companies are barely holding on. The share prices of Schlumberger and Halliburton, the two biggest providers, have each fallen by more than 65 percent since crude started tumbling. It's a model that "definitely needs to be changed," said Luke Lemoine, an analyst at Capital One in New Orleans. Service providers have a long history of riding the market's ups and downs. They ramp up rigs, workers and prices when oil is more expensive, and cut back when the market drops.

When crude began recovering in March 2016, the servicers started refortifying. But with their customers keeping a lid on spending, the gear began to pile up. In February, Rystad Energy, an industry consultant, estimated that supplies of U.S. fracking gear — the pumps that blast water, sand and chemicals underground to release crude — will

exceed demand by about 68 percent by year's end. Shortened horizontal drilling times and longer laterals that require fewer wells to be drilled are taking a toll on servicers.

In June 2014, the U.S. pumped 8.4 million barrels of crude using 1,545 drilling rigs. Last month it produced 12.2 million barrels with just 788 rigs. "The oil field services industry has fundamentally changed," Carin Dehne-Kiley, an analyst at S&P, wrote to investors.