

Oil and Gas News Briefs

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South Korea power producers ask for relief from higher gas prices

(Reuters; Sept. 28) - Some South Korean power producers are asking the government to take steps to help offset rising liquefied natural gas prices, with the cost of generating electricity from the fuel twice that for coal. Rising gas costs in the world's No. 2 importer of LNG are undermining government efforts to boost power generation from cleaner sources than coal, which has been the nation's primary source of electricity for decades.

Seoul is planning to lift its power production capacity by up to a tenth by 2030, mostly using liquefied natural gas and renewable energy. "To increase gas power generation, the government needs to come up with measures to guarantee gas power operators' profits and ease the burden of LNG price hikes," Park Won-ju, director of the Independent Power Producer Association, said this week at an industry conference.

It cost more than twice as much to burn LNG to generate electricity in August than from coal, according to data from the Korea Power Exchange. In the first eight months of 2017, state-run Korea Gas, the country's sole wholesaler, sold 20.73 million tonnes of LNG, down 2 percent from last year, Reuters' calculations showed. For power generation, KOGAS sold 9 million tonnes over that period, down almost 7 percent.

Meanwhile, the energy ministry said this week that it was in talks with power companies to convert four newly built coal energy plants that would potentially spark more demand for gas in the domestic market, putting further upward pressure on prices.

Rising demand from China helps boost Asian spot LNG prices over \$8

(Reuters; Sept. 29) - Unexpectedly strong demand from China, along with rising oil and coal prices, should keep Asian liquefied natural gas spot-market prices buoyant this winter. Despite rising supplies from new plants, with three more plants to come online before the end of the year, spot prices have risen by 55 percent from their 2017 lows to \$8.40 per million Btu as Asian buyers refilled summer stocks. With the peak demand October-March winter gas season almost underway, further price gains are expected.

Nuclear outages in Taiwan and rising demand from Thailand, as well as new buyers like Pakistan, are absorbing oversupply of LNG faster than expected, traders and analysts said. Still, while Asian LNG prices are likely to keep rising, traders said, the pace could moderate as healthy inventories and more nuclear, coal and renewable generation by top buyers Japan and South Korea could cap their winter demand for gas.

Oil prices near two-year highs are also helping lift spot LNG demand as buyers choose between 20-year, oil-index LNG or spot cargoes, whichever is cheaper. As in previous winters, Chinese imports — up 44 percent over the January-August period in 2016 — are dictating Asian price trends. Under a drive to improve air quality by switching away from coal, China could overtake South Korea as the world's second-biggest LNG importer this year. Strong growth in China's LNG demand could be partly offset, though, by greater availability of pipeline gas from Central Asia, potentially holding down prices.

Tanzania LNG project increasingly unlikely, report says

(AllAfrica.com; Sept. 27) - The downturn in oil and gas markets has made potential investment in Tanzania's gas sector uncertain, decreasing the likelihood that a proposed LNG project will have an impact on the country's economic growth in the near future, a new report said. This comes barely two months after President John Magufuli's administration forced all upstream investors to renegotiate the terms of their contracts and concessions, further slowing down the country's gas production ambitions.

According to a report by the New York-based Natural Resources Governance Institute, the market outlook dims Tanzania's hope that its offshore gas will become a driver of future economic growth and development. "We estimate the minimum long-term LNG price at which companies will be willing to go ahead with the project to be \$14 per million Btu. Comparing this price with forecasts of long-term liquefied natural gas prices in East Asia of \$8 and ... our estimate suggests that under the current conditions and expectations the Tanzania LNG project is not likely to go ahead," the institute said.

The country had wanted work to start this year on an LNG export project with completion in 2024. In April, the government signed a draft agreement with a consortium of ExxonMobil, Statoil, Ophir, Shell, and state-owned Tanzania Petroleum Development Corp. for the \$30 billion project. Tanzania has 57 trillion cubic feet of largely undeveloped gas reserves. But in addition to economics, the project suffers from land acquisition delays and regulatory uncertainty, said Neil Ford, an energy consultant.

Pakistan looking for more LNG supply deals by end of the year

(Platts; Sept. 28) - Pakistan is in negotiations to secure an additional 3 million tonnes of LNG per year in long-term contracts by the end of the year to supply its new floating import terminal due to arrive by December, said M. Adnan Gilani, chief operating officer with Pakistan LNG. Negotiations are underway with more than half a dozen potential

suppliers on a government-to-government basis, Gilani said on the sidelines of the 9th CWC LNG Asia Pacific Summit in Singapore.

"We hope to have two to three government-to-government agreements signed by the end of this year," Gilani said. "In the interim, we will secure around four spot cargoes a month [the equivalent of 3 million tonnes a year] until our contracts start." The new supply agreements will increase Pakistan's total LNG contractual commitment to more than 11 million tonnes per year, as the country aims to resolve a decade-long energy crisis driven by mounting gas consumption and faltering domestic production.

The new volumes will be unloaded at Pakistan's second floating storage and regasification unit. Two more such facilities are due to start up next year. As with Pakistan LNG's previous supply agreements, the new deals will be priced against international crude oil benchmarks, Gilani said. "Because of the fuel-oil substitution effect, the risk of oil prices moving in one direction or another is less of a concern; as long as it is oil linked, it is always better for us compared to fuel oil."

Italy's Eni will expand trading desk for LNG sales in Asia

(Reuters; Sept. 28) - Eni plans to expand its Singapore trading desk to market liquefied natural gas supplies from new projects such as Mozambique to buyers in Asia, senior executives from the Italian oil and gas company's trading arm said. The expansion comes after Eni decided earlier this year to integrate its LNG and gas business with its upstream unit so that it can act as the marketing arm for new projects that are coming online in the next years, said Franco Magnani, CEO of Eni Trading and Shipping.

"What we want to do is to build a portfolio as a company, and this will require a much stronger presence in Asia than in the past in trading," Magnani said on the sidelines of the Asia Pacific Petroleum Conference in Singapore. In Asia the company exports LNG from its Jangkrik field in Indonesia through the Bontang terminal. In Africa, exports from its planned \$8 billion project at the Coral South gas field off the coast of Mozambique could start in 2022. That project will produce 3.4 million tonnes per year of LNG.

Eni could also export LNG from Egypt at a later stage, Magnani said. The giant offshore Zohr gas field in Egypt, with an estimated 30 trillion cubic feet of gas, is due to start production in December. Eni said in May it had clinched a 15-year deal to supply gas to state-run import Pakistan LNG. Eni is the largest international oil and gas company in Africa, producing close to 1 million barrels of oil-equivalent per day.

Mitsui sends world's largest floating LNG import facility to Turkey

(Nikkei Asian Review; Sept. 29) - Mitsui O.S.K. Lines will put its massive new offshore liquefied natural gas receiving terminal to work in Turkey this year instead of its original destination in Uruguay, due to delays with the South American project. The Japanese shipping line ordered the 40 billion yen (\$355 million) floating storage and regasification unit in 2013 from South Korea's Daewoo Shipbuilding & Marine Engineering and will receive the vessel next month.

The offshore terminal can store 263,000 cubic meters of LNG, almost 6 billion cubic feet of gas, giving it a larger capacity than the world's 22 floating storage and regasification units already in operation, according to Mitsui. It is the first such vessel to be solely owned by a Japanese shipper. The floating terminal was supposed to supply LNG in Uruguay but that project is behind schedule, prompting Mitsui O.S.K.'s decision to use it in Turkey for several years. It will be operated by a Turkish state-run gas company.

The floating facilities receive LNG from oceangoing carriers, store it, convert it to gas and send it ashore. Demand for such units is brisk in emerging countries since they can be built faster and cheaper than onshore LNG import terminals. Mitsui O.S.K. is building an LNG business to diversify its earnings base away from bulk and container shipping, which tend to be buffeted by economic cycles.

BP applies U.S. fracking knowledge to Oman gas project

(The Telegraph; UK; Sept. 25) - BP has started production at the Khazzan project in Oman, the largest of the new projects it has scheduled for this year, as the oil major attempts to export its U.S. fracking experience around the world. The \$16 billion gas project uses the same controversial drilling technique that has unleashed an energy revolution in the U.S. Fracking has been used to prepare about 200 wells in Oman that will tap gas three miles below the earth's surface in extremely hard, dense rock.

The project is expected to produce 1 billion cubic feet of gas a day. BP believes the daily volumes could rise to 1.5 bcf in the project's second phase, which will include an additional 100 wells. BP has used horizontal drilling and hydraulic fracturing for years in the U.S. But the Khazzan project will be its biggest unconventional gas project outside of the U.S., and the largest of seven new projects the company planned for this year.

Liam Yates, an analyst with Wood Mackenzie, said the project will boost Oman's production by 25 percent and allow an increase in the amount of liquefied natural gas it is able to export. "Khazzan is BP's first major unconventional project outside of the U.S., with challenging geology contributing to the high capital cost." The project also plays to BP's strategy to invest more in gas than in oil to meet climbing demand for cleaner energy. In the next four years BP will bring 16 projects online, 12 of which will be gas.

East Coast Canada LNG projects promote themselves as alternative

(The Canadian Press; Sept. 25) - Two liquefied natural gas megaprojects proposed for Canada's East Coast hope to move ahead, even as investors pull the plug on plans for the West Coast. Bear Head LNG, a subsidiary of Australia-based Liquefied Natural Gas Ltd., and Goldboro LNG, a Pieridae Energy project, may be the best bet for Canada's first LNG export facility. Despite a global oversupply of gas, low prices and cancellation of facilities proposed for British Columbia, the two Nova Scotia projects are still alive.

After buying the site in 2014, progress on the proposed \$5 billion Bear Head LNG terminal has been hog-tied by a competitive energy market, including in its own backyard. About 60 miles southwest of its site is the location eyed by Pieridae Energy for its LNG facility. That project, expected to cost \$7 billion to \$10 billion (US), aims to tap into the natural gas supply from the existing Maritimes and Northeast Pipeline.

As Western Canadian producers take stock of their options, what once seemed like a potentially risky venture — signing a long-term deal on a long-shot East Coast export terminal — has emerged as an alternative to sending gas west. Those producers have invested billions of dollars in developing the upstream, exploring for and producing gas, but getting the gas downstream to energy-hungry customers is a problem. Building new pipeline capacity to Nova Scotia would require upfront deals from producers.

Italian utility signs up with proposed LNG project in Louisiana

(Natural Gas World; Sept. 27) - Italy's Edison, part of the French EDF group, has signed a 20-year contract to buy U.S. liquefied natural gas. Under the agreement announced Sept. 27, Edison would buy 1 million tonnes of LNG a year from Venture Global, which proposes to build its Calcasieu Pass LNG export facility in Cameron Parish, La. Venture Global, owned by private investors, has applied for — but not received — federal export authorization and Federal Energy Regulatory Commission authorization for the project.

Prices under the deal were not disclosed. Edison covers 20 percent of Italy's gas imports through long-term agreements for LNG from Qatar and pipeline gas deliveries from Libya and Algeria. Its contract with Qatar runs to 2034. Edison has 6.5 gigawatts of power plants in Italy and the Mediterranean basin, and is a major Italian energy utility.

Australia exporting its way to coal and natural gas shortages

(Bloomberg; Sept. 27) - Australia's energy crisis keeps getting stranger. The world's second-biggest seller of liquefied natural gas has threatened producers with LNG export curbs as it struggles to find enough gas supply for domestic use. And, as one of the

world's largest thermal coal shippers, it's now running to replenish stockpiles at some power plants after they dwindled following a surge in demand and constrained supply.

It's the latest twist in the saga of how a global energy powerhouse is struggling to sustain reliable and affordable electricity for its own population. Power price spikes and gas shortages have frustrated businesses and homes across the nation and put pressure on the government to prioritize domestic customers over sometimes more lucrative gas export markets.

Coal inventories at Australia's three largest electricity providers have shrunk over winter as they use more of the fuel to compensate for gas shortages. Against this backdrop, power plants have struggled to get sufficient supplies as they compete with overseas buyers for lower-quality coal that was once considered too poor to export. Miners can command higher prices for coal known as high ash in China, South Korea and India. They can probably sell it to international customers at double the price sold to domestic buyers, said Robin Griffin, a research director at Wood Mackenzie in Brisbane.

Analyst expects fierce price competition between coal and gas

(Platts; Sept. 27) - Coal and natural gas are likely to fight for every marginal megawatt-hour in the United States for the next few years like "cats in a sack," said an S&P Global Market Intelligence analyst Sept. 27. Speaking at the 40th annual Coal Marketing Days conference in Pittsburgh, Steve Piper said that as long as electricity demand remains low, competition between coal and gas will remain fierce.

Piper said a reality of the current landscape is that coal and gas are stuck. If the price of one fuel increases, generators will switch to the other, which brings prices back to parity. And this dynamic is likely to persist for some time, he said. "More year-over-year volume changes are attributable to coal and gas competition than are attributable to organic growth or retirements," Piper said. Gas demand continues to grow in the power sector, but is roughly flat in the industrial and commercial sectors. U.S. LNG exports are expected to add demand, but are not likely to be material until 2019 or later.

Piper said gas prices are increasingly sensitive to power demand, and that the interplay with coal is quickening, meaning that the year-over-year volatility in coal demand due to competition with gas is potentially greater than structural changes due to coal retirements. Some 22 gigawatts of coal retirements, however, are expected by 2020, while some 40 gigawatts of gas plants are expected to be added, though the respective loss and addition of coal and gas demand will still be dependent on gas pricing.

Exxon 50-50 partner in billion-dollar bids for Brazilian offshore blocks

(Wall Street Journal; Sept. 27) - Brazil held its most successful oil auction ever Sept. 27, as a new partnership between state-run Petróleo Brasileiro and ExxonMobil agreed to shell out \$1.1 billion for rights to drill in coveted offshore areas. Petrobras and Exxon teamed up in six exploration blocks in the Campos Basin off Brazil's southeastern coast, at least some of which are believed to hold oil in an ultra-deep layer known as the "pre-salt." The companies agreed to split the financial burden of developing the blocks 50-50.

The auction marked a return by Exxon to Brazil after it abandoned efforts to drill in the neighboring Santos Basin in 2012. For Brazil, the signing bonuses from Exxon and Petrobras — which beat bids by majors including Shell, Repsol, China National Offshore Oil, Total and BP — marked a boon to government efforts to attract private investment as the country recovers from its deepest recession ever. Officials had predicted signing bonuses would fall in the range of \$157 million to \$313 million.

Since taking office last year, President Michel Temer has sought to loosen regulations that had limited private-sector interest in Brazil. But Petrobras faces challenges unmatched in the oil industry. It has the largest debt burden of any oil company, is at the center of the biggest corruption scandal ever uncovered, and is exposed to meddling by Brazilian politicians due to the government's controlling stake in the company.

Gazprom takes over top spot in Platts' ranking of energy companies

(Forbes contributor; Sept. 26) - Sanctions have not had any real impact on Russian oil and gas giant Gazprom, as it has toppled ExxonMobil's 12-year reign as the world's leading energy company, according to S&P Global Platts' rankings released Sept. 24. Platts' annual Top 250 ranks energy companies based on a compilation of asset worth, revenues, profits and return on invested capital.

That Gazprom is No. 1 is a testament to its management's ability to weather low oil and gas prices and bans from low-interest-rate credit in Europe, and its secured position as the European Union's leading supplier of gas, a market the United States is desperate to tap. Gazprom is majority owned by the Russian state, and while it is known as a gas company, its subsidiary, Gazprom Neft, is one of the largest oil firms in the country.

Despite international sanctions against Russia for its meddling in Ukraine, Gazprom rose from the No. 3 spot in the rankings to No. 1, unseating Exxon, a company now blocked from its own joint-venture with Rosneft, another sanctioned Russian firm. Exxon slipped to No. 9. Germany's E.ON rose meteorically to No. 2 from No. 114. It is one of the world's largest investor-owned electric utilities. No. 3 is held by India's Reliance Industries, an oil-and-gas producing, refining and marketing firm.

Moody's says shale producers need oil over \$50 for long-term profits

(Bloomberg; Sept. 28) - Shale drillers and oil sands producers have posted some healthy profits so far this year, but it will take oil consistently above \$50 a barrel for their investments to pay off in the long run. That's the conclusion of a Moody's Investors Service study of 37 exploration and production companies in the U.S. and Canada released Sept. 28. It's also why legendary hedge fund manager Jim Chanos said independent explorers have been a bad deal for shareholders.

Shale oil producers "are creatures of the capital markets," Chanos said on Bloomberg TV. "Because the wells deplete so quickly, they constantly need to raise money to replace the assets." Producers in the U.S. and Canada have made dramatic efforts to cut costs since the collapse of oil prices three years ago with many delivering higher dividends to investors this year. But with limited wiggle room to reduce costs further, any improvement in their ability to sustain healthy returns will have to come from commodity prices, Moody's analysts Sreedhar Kona and Steven Wood said.

"Companies will be able to demonstrate meaningful capital efficiency, measured by the leveraged full cycle ratio, only if the West Texas Intermediate oil price is above \$50 per barrel and the Henry Hub natural gas price is at least \$3 per million Btu," they said.

Proposal would truck LNG to small Ontario communities

(CBC News; Canada; Sept. 25) - A plan to bring liquefied natural gas to five Canadian communities along the north shore of Lake Superior could see the fuel flowing by 2021. A proposal from Northeast Midstream, a Toronto-based company, working with the small towns (total population about 11,000), will see natural gas taken off the main TransCanada pipeline and sent to a soon-to-be-built LNG plant near Nipigon, Ontario.

"If all goes according to our schedule, and we receive approval in late 2017 for the LNG plant, we're likely looking like 2021, '22 to hopefully have LNG facilities in our communities," said Daryl Skworchinski, the chief administrative officer in Marathon, Ontario, population 3,300. "It sets the stage for the municipalities to take the next step in business planning, and look at the residential development."

Skworchinski said the LNG would be trucked from the Nipigon-area plant to distribution centers in Schreiber, Terrace Bay, Marathon, Manitouwadge, and Wawa for regasification. The municipalities would be responsible for creating the underground pipeline system needed to distribute the gas to homes and businesses.

South Korea starts program to develop LNG-fueled marine industry

(The Korea Herald; Sept. 25) - South Korea will launch a pilot program to build the world's largest vessel powered by liquefied natural gas in a bid to support more green shipping and develop associated industries, the Ministry of Oceans and Fisheries said Sept. 25. The ministry said it will join forces with local shipyards, builders and state institutes to develop a class of 180,000-ton LNG-fueled vessels.

The government launched a task force in January comprised of companies to develop the marine transport sector to comply with the International Maritime Organization's sulfur cap on fuel, set to be enforced in 2020. "This pilot program is aimed at building the world's largest LNG-propelled ship, which is expected to pave the way for related industries to take root in the nation," said Kang Joon-suk, the vice marine minister.

LNG-powered ships are considered an eco-friendly option to meet strengthened international regulations, but high costs have posed challenges. South Korean shipyards have outstanding expertise in building LNG carriers and bunkering shuttles, but are still in the early stages when it comes to LNG-powered ships and bunkering infrastructure. Only one LNG-propelled vessel operates in the country.

Inactive oil and gas wells pose unfunded liability in Alberta

(Calgary Herald; Sept. 27) - There are 155,000 non-productive oil and gas wells sitting idle in Alberta that pose a potential \$8.6 billion liability to the energy industry and taxpayers, according to a new C.D. Howe Institute report. The report calls on the Alberta government to change how it regulates the clean-up of oil and gas wells to avoid the massive and growing liability, which has come sharply into focus following the collapse in oil prices that has hurt the province's finances.

"In the past, Alberta and other western provinces had a system that worked but with low energy prices it won't work," said Benjamin Dachis, the institute's associate director and co-author of the report. As many as 155,000 oil and gas wells in Alberta, or 34 percent of all the province's 450,000 wells, are inactive but have yet to be fully remediated. In addition, the number of orphaned oil and gas wells for which there is no responsible owner has risen from under 100 to more than 3,200 in the past five years.

The Alberta government loaned \$235 million to the energy industry this year to help pay for the clean-up of orphaned wells, and \$30 million in interest payments on that loan will be covered by the federal government. The province has also convened a commission to look at how it can improve regulations for idle oil and gas wells and drive down the number of problem wells in the province. The report suggests the Alberta government should require oil and gas companies to post partial bonds for wells they intend to drill and maintain insurance on those wells to prevent a problem occurring in the future.

Court says Canada failed to protect First Nation's interests in pipeline

(The Canadian Press; Sept. 27) – Canada's Federal Court of Appeal has set aside a government decision approving expansion of Kinder Morgan's oil pipeline through the Coldwater Indian Band reserve south of Merritt, B.C. In a split decision, the three-judge panel ruled that the federal minister of aboriginal and northern affairs had failed to assess the impacts of a pipeline easement on the Coldwater band. The ruling said the minister has a continuing duty to protect the band's interests from an exploitive bargain.

Coldwater Band Chief Lee Spahan said Sept. 27 that the band was celebrating the decision, which also forces a review of the original pipeline agreement made 65 years ago. The pipeline was constructed through the small reserve in 1952. The band, which has about 860 members, received a one-time payment of \$1,292. "Our people weren't allowed to hire lawyers," Spahan said. "We weren't allowed to hire consultants. They just put the agreement in front of the leadership and they were told to sign."

When Kinder Morgan went back to the federal government to increase the capacity of the pipeline between Alberta and the B.C. coast, the First Nation expressed concern. "They also expressed their desire that the minister take the opportunity ... to modernize the terms of the indenture so as to include more generous compensation for the band," the ruling said. The federal government has approved the pipeline expansion project to move additional volume of oil sands production, though construction has not yet started.

Sierra Club questions FERC's supplemental pipeline review

(EnergyWire; Sept. 29) - A new federal analysis of the climate impacts of a natural gas pipeline project may be too little too late, environmental lawyers say. Sierra Club attorney Eric Huber said he was not impressed by a five-page supplemental environmental review released Sept. 27 by the Federal Energy Regulatory Commission that weighs greenhouse-gas emissions from the Southeast Market Pipelines Project, which includes the 515-mile Sabal Trail pipeline in Florida, Georgia and Alabama.

"We were surprised to see something as quick," Huber said. "It looked rushed to us." The analysis — a draft supplemental environmental impact statement — was ordered by the U.S. Court of Appeals for the District of Columbia Circuit just over a month ago. The court found that FERC's failure to quantify downstream greenhouse-gas emissions from the pipeline project violated the National Environmental Policy Act. The Sierra Club filed the underlying lawsuit that prompted the court's decision.

Huber said the group is reviewing the supplemental EIS and will weigh in during the comment period. But some inadequacies are already apparent, he said, including FERC's conclusion that the greenhouse-gas emissions will not have a significant effect on the environment. "The remarkable thing here is they say [the emissions] may be up

10 percent — 9.7 percent to be exact — of the state total, and then they find that's not significant," he said. "10 percent of the state of Florida seems like an awful lot to me."