

Oil and Gas News Briefs

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Delays, cost overruns cut into rate of return on Australian LNG

(Reuters; Jan. 26) - Australia's development schedule for a huge increase in liquefied natural gas output is being dealt a big blow by a series of production delays as energy companies struggle with technical problems and cost overruns. The country is still likely to become the world's biggest LNG exporter, dispatching about 85 million tonnes a year by the end of the decade, up from 31 million tonnes in 2015 and 45 million last year. But the pace of growth is much slower than expected because of snafus and higher-than-expected costs that have delayed plans to start up or finish new LNG export projects.

At least three of the megaprojects — Shell's Prelude floating LNG production vessel, the Ichthys project (led by Japan's Inpex), and the third liquefaction train at Chevron's Gorgon operation — won't begin exporting until 2018 or even later, rather than 2017 as previously planned, according to several sources. Making matters even worse, the project developers are having to go to their rivals to fulfill gas delivery contracts.

"The Australian producers have supply commitments, so when there are production delays they have to buy these supplies from competitors in the spot market," said an LNG trader. The projects are among the biggest and technically most challenging ever attempted in the industry. In addition, developers have struggled to find enough qualified and experienced staff. "On average, Australia's recent LNG projects were forecast to achieve an internal rate of return of around 13 percent," Wood Mackenzie's Saul Kavonic said. "They are now only forecast to realize below 8 percent."

Tanzania continues negotiations on LNG project investment

(Reuters; Jan. 24) - Tanzania hopes to reach an agreement with international oil and gas companies in 2018, paving the way for eventual construction of a liquefied natural gas plant, a senior official said on Jan. 24. BG Group (acquired last year by Shell), together with Statoil, ExxonMobil, and Ophir Energy are considering building a \$30 billion LNG export terminal in partnership with the state-run Tanzania Petroleum Development Corp. But a final investment decision has been held up by government delays in land acquisition and establishing a legal framework for the nascent hydrocarbon industry.

Tanzania and oil companies first must work out a "host government agreement" setting out terms for foreign investors to build and run the project. "Discussions for a host government agreement started in September 2016 and we expect the negotiations to last for about one and a half years," said Kapuulya Musomba, acting managing director of Tanzania Petroleum. "Conclusion of these talks will determine when the international oil companies will actually put in money for construction of the LNG project."

Oil majors are expected to push for government guarantees of stable fiscal, regulatory and commercial terms before they invest, analysts said. Oystein Michelsen, Statoil's Tanzania country manager, said in November a final investment decision on the LNG export terminal would not be made for at least five years and possibly much longer. It would take another five years after that decision to build the plant, he said.

BP's annual outlook shows strong growth in LNG production

(The Street; Jan. 26) - There is abundant oil for decades to come; the number of electric cars on the road will increase almost 100-fold over the next 20 years; and liquefied natural gas production will more than double over the same period, BP said in its annual exercise in crystal ball gazing. BP's Energy Outlook 2017 predicts long-term low oil prices and that much of the world's identified and technically recoverable reserves will remain in the ground for decades to come as consumption growth slows.

There was good and bad news on global warming in the report. On the downside, fossil fuels will continue to account for about 75 percent of total global energy production in 2035, while carbon emissions will likely peak in 2020. More positively, the growing importance of cleaner-burning natural gas, coupled with the growing share of renewable and nuclear energy, should mean that carbon emissions in 2035 will have fallen 12 percent below their 2015 level.

Cleaner-burning liquefied natural gas in particular is poised for a boom in production, particularly in the next four years as massive new projects in Australia and the U.S. boost supply capacity by about 60 percent from today. Global LNG output then will grow an additional 60 percent by 2035, according to BP's forecasts. "Asia [will] remain the largest destination for LNG. China, India and other Asian countries [will] all increase their demand for LNG, helping gas grow faster than either oil or coal."

BP forecasts shale will account for 75 percent of U.S. gas in 2035

(Natural Gas Intelligence Shale Daily; Jan. 25) - North America's fuel mix will undergo significant upheaval to 2035, with natural gas, fueled almost entirely by unconventional production, overtaking oil as the dominant fuel, BP reported on Jan. 25. The 2017 BP Energy Outlook provides key trends for fossil fuels and renewables to 2035. Over that

period, BP expects the U.S. to remain "the largest producer of natural gas in the world, accounting for 25 percent of production in 2035," said chief economist Spencer Dale.

"We have been repeatedly surprised by the strength of U.S. tight oil and shale gas," Dale said. "Technological innovation and productivity gains have unlocked vast resources of tight oil and shale gas. ... In the 2013 Energy Outlook, U.S. tight oil was projected to reach 3.6 million barrels per day by 2030. That level was surpassed in 2014. ... U.S. tight oil production is now expected to plateau in the 2030s at nearly 8 million barrels per day, accounting for almost 40 percent of total U.S. oil production."

Meanwhile, U.S. shale gas "is expected to grow by around 4 percent per year over the outlook. This causes U.S. shale gas to account for around three-quarters of total U.S. gas production in 2035 and almost 20 percent of global output." Shale gas production in the United States could reach 48 billion cubic feet per day by 2035, according to the forecast. All of the gas won't be used in North America, with U.S. liquefied natural gas exports reaching nearly 18 bcf a day by 2035, according to BP.

Russia's Novatek sees better future for gas sales to Asia than Europe

(Reuters; Jan. 25) - Russian natural gas producer Novatek looks toward a stronger future delivering more fuel to Asia by liquefied natural gas carrier or via Gazprom's Power of Siberia pipeline, Novatek Chief Financial Officer Mark Gyetvay said on Jan. 25. "We don't expect to see a dramatic increase in demand coming from Europe. We see growth coming from the Asian market," Gyetvay told a conference in Vienna.

Russian law allows Novatek to sell LNG into the export market but bans the company from encroaching on Gazprom's monopoly over pipeline gas exports. Gyetvay said his company was not lobbying for the right to export gas to Europe via pipeline but could wait for completion of Gazprom's Siberian line to China. The Gazprom website does not provide an expected completion date for the 2,500-mile pipeline. The China National Petroleum Corp. said in June that the line could be moving gas in 2019.

A year ago, Gazprom reported it was reducing spending on the construction project, estimated at \$50 billion or more for the pipeline to move gas from Eastern Siberia to Northern China and perhaps as far as the Pacific coast. Separate from any hopes for gas exports by pipeline, Novatek is moving closer to completion of its first LNG project on the Yamal Peninsula in the Russian Arctic. Yamal LNG, estimated at \$27 billion, is due to start production late this year.

Croatia says first LNG import terminal delayed to 2019

(Reuters; Jan. 25) - Croatia's floating liquefied natural gas import terminal in the

northern Adriatic will take a year longer to complete, Energy and Environment Minister Slaven Dobrovic said on Jan. 25. When finished, the country's first LNG receiving terminal will be capable of sending out an average of almost 200 million cubic feet of gas per day, with Croatia targeting Central European markets as well as domestic needs.

Croatia had aimed to finish the project in 2018, but now is targeting 2019. The terminal, to be built at the island of Krk, is among projects the European Union sees as important to its efforts to enhance energy security and reduce dependence on Russian gas.

LNG terminal near Vancouver deserves 'extra layers of safety'

(Vancouver Sun; Jan. 25) - Ships calling at a liquefied natural gas terminal at Tilbury Island about 10 miles from downtown Vancouver, B.C., could employ up to three tethered high-power escort tugs — the strongest such safety measures to date on the Fraser River and a reflection of public concerns over the transport of LNG. The \$175 million project expects up to 122 ships and 90 barges a year loading the fuel for export and domestic use. The terminal will be built next to the FortisBC LNG production and storage facility which opened in 1971 and is undergoing a \$400 million expansion.

The operator of the new LNG shipping terminal, California-based WesPac Midstream, expects to submit its formal application to the province's Environmental Assessment Office this fall at the earliest, but has already conducted extensive discussions and computerized bridge simulations with Fraser River Pilots. Capt. Mike Armstrong, chairman of Fraser River Pilots, said there are larger vessels on the lower Fraser but the LNG ships deserve "extra layers of safety, considering their high-profile cargo."

The recommendation for two pilots aboard LNG vessels allows one to give instructions while the second ensures the crew accurately carries them out. The recommendation for a "minimum two high-power escort tugs tethered to the ship at all times in the river" might be expanded to three depending on final design of the LNG ships. That would be comparable with regulations for oil carriers in Burrard Inlet in front of Vancouver.

Final 2016 tally for earthquakes in Oklahoma: 623

(EnergyWire; Jan. 24) - Oklahoma officials have a final count for the number of earthquakes in 2016. There were 623 earthquakes of magnitude 3 or greater, said Jerry Boak, director of the Oklahoma Geological Survey. It represents a 31 percent drop from 2015, but some of the quakes were much stronger than in 2015, so 2016 still set a state record for seismic energy release.

Oklahoma's earthquake swarms have been linked by scientists and state officials to deep injection of drilling wastewater by oil and gas companies. The reduction in quakes has followed a reduction in wastewater injection because of government restrictions and a slump in oil prices that reduced drilling activity. Last year's 623 quakes is the second-highest number ever recorded in Oklahoma. It's higher than the 585 recorded in 2014 but a drop from the 903 recorded in 2015.

Before 2009, Oklahoma averaged about two earthquakes a year. But a sharp increase in wastewater disposal from oil and gas drilling drove a surge in seismic activity. The state officially acknowledged the link to oil field activity in 2015. The quake swarms crept north into Kansas, where companies were producing from the same Mississippi Lime formation that creates massive amounts of wastewater. In the past few years, the state of Oklahoma has directed about 700 disposal wells to close or reduce operations.

Pipeline industry worries that Trump will energize opposition

(Pittsburgh Post-Gazette; Jan. 26) – On Jan. 25, the day after President Trump signed executive orders aiming to expedite two oil pipelines that were stymied under his predecessor and to streamline pipeline permitting for others, the oil and gas industry gathered in Pittsburgh and allowed itself the most muted, cautious optimism it could muster. A cheerleader-in-chief won't heal all of the industry's wounds, they warned. In some cases, it may complicate things by galvanizing the opposition.

"We can all sit here and be very excited [that] we've got an administration that's supportive of our business today," said Alan Armstrong, president and CEO of The Williams Cos., an Oklahoma-based energy infrastructure firm. "We can be very thankful about announcements like we saw yesterday," he told the crowd at a shale oil and gas conference. "But I will tell you that is not changing the opposition that we have at a local level. And we're going to continue to see that and, I will tell you, it may even enhance."

Inside the conference, Robert Huffman, director of business development of U.S. transmission at Spectra Energy, said his company is "as optimistic as we've ever been about pipeline infrastructure" given the political environment. But none of its executives expect permitting to get easier, he said. If environmental groups feel they aren't getting their way with federal agencies, they are likely to step up their efforts, the lawyers said.

FERC will lack enough commissioners to take action as of Feb. 3

(Bloomberg; Jan. 26) - A U.S. energy regulator filed his letter of resignation on Jan. 26, and with that letter he may have brought federal decisions on multibillion-dollar natural gas pipelines to a halt. Norman Bay said he will leave the Federal Energy Regulatory

Commission effective Feb. 3. His announcement followed President Donald Trump's decision to replace Bay as FERC chairman with fellow commissioner Cheryl LaFleur.

With Bay's departure, the five-commissioner agency will have just two commissioners, short of a quorum needed to decide anything from controversial gas pipeline projects to contested utility mergers. His resignation comes just as developers are rushing to build a network of pipelines to accommodate booming natural gas production from shale reserves in the Northeast, unlocking bottlenecks that have caused prices to plunge.

"After next week, FERC will need a full complement of commissioners as soon as possible so that it can tackle the important work on its busy docket," said Sen. Lisa Murkowski, R-Alaska. LaFleur said in a statement that the agency is "working to get as many orders out as possible" before Bay's departure. Filling the panel's three vacancies will take time. Even a speedy confirmation process could take 30 to 60 days, according to David Wochner, a partner at the Washington-based law firm K&L Gates.

U.S. natural gas exports to Mexico hit record

(Bloomberg; Jan. 26) - It could take more than a political standoff between President Donald Trump and Mexico to keep U.S. shale gas from flowing south. While Mexico works to reverse declining oil and gas production, the nation is burning record amounts of natural gas pulled from tight-rock formations north of the border. Pipeline deliveries of the fuel from the U.S. have more than doubled in the past two years, and Mexico is now tied with Chile as the top buyer of U.S. liquefied natural gas leaving Louisiana's coast.

Gas piped to Mexico climbed to a record last year, averaging more than 4 billion cubic feet per day in August through October, U.S. government data show. That supply, equal to roughly a fifth of Texas's total gas output, displaced LNG from Peru, according to Madeline Jowdy, senior director of global gas and LNG at consultancy Pira in New York.

LNG imports to Mexico's Manzanillo terminal from the U.S. have also jumped. Ten tankers have unloaded at the facility on Mexico's western coast since the beginning of August, according to ship tracking data compiled by Bloomberg. The pipeline gas and LNG shipments have helped U.S. producers eliminate a supply glut that had sent prices of the fuel plunging to the lowest level in almost two decades.

Chinese oil company boosts spending, including Gulf of Mexico

(Bloomberg; Jan. 18) - CNOOC plans to raise capital spending for the first time since crude began its crash in 2014 as China's biggest offshore oil and gas producer

prepares for life after the slump and confronts a second year of falling output. The explorer will increase expenditures in 2017, including in the U.S. Gulf of Mexico, to 60 billion to 70 billion yuan (\$8.7 billion to \$10.2 billion) after cuts the past two years. It set its production target at between 450 million to 460 million barrels of oil equivalent.

“As a pure upstream player, CNOOC has to invest for the future, especially in exploration as it needs to find new reserves,” said Tian Miao, a Beijing-based analyst at North Square Blue Oak. The global oil industry is expected to boost spending in 2017 for the first time in three years after slashing almost half a million jobs globally during the price downturn. Brent averaged about \$45 a barrel in 2016, more than 50 percent below levels in 2014, and is expected to rise above \$55 this year, according to the median of 45 analyst estimates compiled by Bloomberg.

CNOOC, the China National Offshore Oil Corp., is more exposed to the price of oil than its Chinese peers as it earns almost all its income from exploration and production. The deep-water Gulf of Mexico fields, Appomattox and Stampede, will take a majority of CNOOC’s overseas spending this year, Chairman Yang Hua said at a press conference in Hong Kong. China’s crude oil output fell 6.9 percent in the first 11 months of 2016 as state-owned producers struggled to maintain output at the country’s aging fields.

China and India may ease build-up of their oil inventories

(Wall Street Journal; Jan. 23) - The world’s oil producers are counting on a production cutback to boost crude prices, but a slowdown in stockpiling by China’s and India’s governments could be an obstacle to that plan. For years, the governments of emerging oil consumers like China and India have been stockpiling crude, looking to build buffers like those long held by the United States and other developed countries.

These stockpiling efforts have been important — if difficult to quantify — sources of demand throughout the oil-price downturn. Analysts said China in particular has been aggressive in exploiting low oil prices to boost stockpiling. India, too, has picked up its buying, while other Asian countries have signaled plans to build crude cushions. Yet threats to the buying spree are emerging. The pace of strategic reserve growth in China and India appears to be slowing as storage space becomes more scarce, analysts said. Rising oil prices could further cool enthusiasm for stockpiling, the analysts said.

Analysts said the buying by China and India accounts for an underappreciated portion of global oil demand. BMI Research estimates that stockpiling by the two countries last year added an estimated 760,000 barrels a day to global demand. “We don’t expect China to completely stop increasing their stockpiles. But even if they reduce by 300,000 or 400,000 barrels a day, that’s a pretty significant impact on global markets,” said Christopher Haines, oil analyst at BMI Research. “Price will be the most important factor,” said Virendra Chauhan, an Energy Aspects analyst.