# Oil and Gas News Briefs Compiled by Larry Persily January 15, 2018

## U.S. Gulf Coast LNG hopeful wants to acquire 15 tcf of gas reserves

(Bloomberg; Jan. 12) - Tellurian plans to boost its natural gas reserves tenfold at a northern Louisiana shale deposit as it seeks partners in building a supply chain from the wellhead to global LNG buyers. The liquefied natural gas project developer is targeting reserves of about 15 trillion cubic feet at the Haynesville block in Louisiana, CEO Meg Gentle said in Abu Dhabi on Jan. 12. The Houston-based company is at 10 percent of its goal since buying access to acreage this fall to feed its proposed LNG facilities.

"We are seeking partners in our project," Gentle said. "Partners who will have a stake in the company, will own their share of the producing assets, the pipeline network and liquefaction plant. So they're essentially investing in U.S. shale." Tellurian wants to start building its Driftwood LNG terminal in Louisiana next year. It will make a final investment decision in the first half of 2019, she said, not the mid-2018 target the company initially set. The change is due to the Federal Energy Regulatory Commission review timeline.

Tellurian also is working to secure gas supplies from the Permian basin in Texas and will consider buying drilling rights in other areas after completing its Haynesville acquisitions, Gentle said. Saudi Arabian Oil Co., the world's biggest crude exporter, is one of Tellurian's potential partners. Saudi Aramco, as the company is known, is among more than 100 companies that may be interested in taking a stake in Tellurian's assets and proposed LNG project, Gentle said without commenting further on any discussions.

#### LNG opponents fight Oregon project, cite greenhouse-gas emissions

(Portland Oregonian; Jan. 11) - Opponents of a liquefied natural gas export terminal proposed in Coos Bay, OR., will rally at the state capitol Jan. 11 to highlight a new study which suggests that the project's in-state greenhouse emissions would be comparable to Portland General Electric's coal-fired plant in Boardman, and its total lifecycle emissions 15 times worse when counted from gas production to eventual gas consumption in Asia.

The study's release coincides with the beginning of a legislative session in which the top priority for many Democrats is passing sweeping legislation to limit greenhouse-gas emissions in Oregon. Opponents of the Jordan Cove Energy Project have been

urging state leaders to use their regulatory authority to kill the LNG project, and are hoping to highlight what they see as a double standard.

The study's conclusions are diametrically opposite those of the project's boosters, who contend the exported gas would displace coal-fired electricity in Asia and reduce global greenhouse emissions. The study was authored by Oil Change International, a Washington D.C.-based advocacy organization against fossil fuels. The study estimated the project's total lifecycle emissions, including upstream methane leakage rates in gas production, processing and transportation, as well as emissions from tanker transportation to Asia, local distribution and combustion in China.

## China looks for more gas for its pipeline from Myanmar

(Reuters; Jan. 12) - A subsidiary of China National Petroleum Corp., the country's largest oil producer, is looking for new sources of natural gas in Myanmar to feed the pipeline between the two nations, the China Daily reported Jan. 12. CNPC is seeking additional gas to supply the pipeline that runs from Daewoo International's offshore blocks in Myanmar, said Chen Xiangqiu, vice president of the pipeline project. The line has been moving gas under a 30-year deal that started in 2013. South Korea's Daewoo operates the field. Partners include other South Korea, Indian, and Myanmar companies.

Chen said the CNPC unit had been looking for new gas deposits in Myanmar, as well as keeping abreast of progress on new gas fields developed there by Daewoo and others. The Chinese company is also considering building a liquefied natural gas import terminal at the Made Island oil port in the western Myanmar state of Rakhine, the starting point of the Myanmar-China gas pipeline.

## China's coal-to-gas switch succeeds in cleaning up the air

(Bloomberg; Jan. 10) - China is seeing signs of success in its fight against smog as pollution levels slump dramatically in the capital Beijing. Concentrations of PM2.5 — the tiny particles that pose the greatest health risks — plunged 33 percent from a year ago in the fourth quarter across Beijing, Tianjin, and 26 surrounding cities, Greenpeace East Asia said in a report Jan. 11. Levels in the capital alone tumbled 54 percent.

The drops come after government policies last year forced millions of homes and businesses to switch from coal to cleaner-burning gas. The bluer skies came at a price, however, as the widespread switching to gas contributed to shortages of the fuel, leaving homes frigid and factories shut. Still, improving air quality is a win for President Xi Jinping, who pledged to unleash an "iron hand" against pollution, and anti-coal measures will likely continue, according to Sanford C. Bernstein & Co. "The switch from coal to gas has dramatically reduced pollution," Bernstein analysts including Neil Beveridge in Hong Kong said Jan. 11. "While there have been problems in implementation, the plan is delivering results." Replacing coal with gas for residential and industrial use is among the measures to clean smoggy cities, along with closing outdated or illegal steel mills, coal mines, and aluminum smelters. Gas demand rose 19 percent through October. It will probably rise by 15 percent this year as Beijing sticks to its anti-coal guns and spurs development of gas infrastructure, Beveridge wrote.

## Gas shortages cut into business operations across China

(Nikkei Asian Review; Jan. 11) - Chinese President Xi Jinping's campaign to curb air pollution by reining in coal use has created natural gas shortages nationwide, forcing businesses that rely on gas to halt production. The switch has not been smooth, since China relies heavily on coal for power generation and heating. Gas supplies are falling well short of demand and prices have spiked. The government has told gas suppliers to prioritize households over industry, leaving little left for businesses in many regions.

Chemical maker Yunnan Yuntianhua was forced to halt a majority of operations at a plant in the southern province of Yunnan last month after its gas supply stopped. Hubei Yihua Chemical Industry halted work at plants in the Inner Mongolia Autonomous Region and Guizhou Province. The Hubei Province-based company likely suffered a net loss for the year ended in December, and will have a hard time turning a profit this year if it cannot restart operations.

Energy and chemicals supplier Inner Mongolia Yuan Xing Energy stopped production of methanol in its home region in December. German chemical group BASF also took production lines in Chongqing offline. And more than 80 percent of ceramics makers in the Hebei Province city of Shijiazhuang switched from coal- to gas-fired kilns last summer. But staying profitable using the more expensive fuel has been difficult, and many have suspended production.

## Gas shortage hits hard at China's fertilizer producers

(Reuters; Jan. 11) - China's campaign to heat millions of homes this winter by natural gas has left fertilizer producers short of supplies and profits, an industry association said, with urea and ammonia plants halving their operating rates from a year ago. The feedstock crunch has tightened supplies and boosted prices of fertilizer components in the world's top agriculture market, and the trouble may carry into spring planting.

Chinese fertilizer and chemical industry associations are considering an appeal to the government to lower gas prices once winter is past to allay the effects of the supply shortages, according to two officials from the groups. "We are losing lots of money

every day," said Huo, a manager at a major gas-based urea and compound fertilizer producer in northwestern China. Huo declined to give his full name or identify his company due to the sensitivity of the issue.

His company stopped urea and synthetic ammonia production last month to help ensure gas supplies for households in the north. "Prices of urea and synthetic ammonia went up significantly," Huo said. Gas-based ammonia and urea plants usually limit output during winter and ramp up when supplies are ample, but this winter shortages have been worse than expected. Operating rates at gas-based nitrogen fertilizer plants have plunged to just 15 percent, down from about 31 percent at the same time last year, the China Nitrogen Fertilizer Industry Association said.

# Pakistan says LNG price quotes too high, rejects bid offerings

(The Express Tribune; Pakistan; Jan. 12) - The Pakistani government has decided to negotiate direct liquefied natural gas supply deals with more producing countries in the hope of securing cheaper contracts compared to spot purchases from energy companies. The decision came after Pakistan received higher bids that expected for spot-market LNG purchases, leading to the cancellation of at least two deals.

At present, Pakistan has a 15-year government-to-government LNG import agreement with Qatar, which has been shipping gas since March 2015. Now, the government has gotten engaged in talks with other countries including Russia and Malaysia to clinch more state-to-state supply deals, looking for lower prices.

Qatar is supplying LNG to Pakistan at 1 million Btu of gas priced at 13.37 percent of a barrel of crude. With increasing demand for the fuel and start-up at the country's second LNG import terminal, Pakistan sought quotes for additional cargoes. But in this winter's expensive spot market, the bids came in higher than Pakistan was willing to pay, ranging from 13.27 to 16.09 percent of oil. "State-owned Pakistan LNG has been forced to scrap deals ... due to higher quoted rates," a government official said.

#### Longer voyage to Asia could limit tanker availability for Yamal LNG

(Platts; Jan. 11) – As the first of three liquefaction trains at Russia's Yamal LNG plant has successfully shipped its first four cargoes — with three of the shiploads destined for northwestern European terminals, temporarily at least — the question is whether the gas stays in Europe or will be shipped elsewhere. And, ultimately, how will the Yamal supply, planned for 16.5 million tonnes a year, affect the global balance going forward?

The Yamal project stands out for its remote location, technical challenges, marketing struggles, and financing hurdles in the wake of U.S. sanctions against Russia. Now up

and running, the project's special-purpose carrier fleet is seasonally constrained. In December through April, cargoes can only travel westward, which means all journeys will pass by northwest Europe. From there, the LNG can undergo a ship-to-ship transfer for export. Or, alternatively, it can be loaded into storage for reload and resale later.

During May to November, or when conditions allow, the vessels will have the option of traveling directly to Asia by the Northern Sea Route. However, the route is about double the length of the westward route to Europe. If Yamal's special-purpose icebreaking carrier fleet were dedicated to deliveries to Asia during the summer, it could restrict the plant's output by limiting the availability of ships to haul LNG. The choice to deliver via this route will have to be weighed against the implications for capacity utilization.

## It will not be easy to develop Mediterranean gas

(Financial Times; London; Jan. 10) - Gas pipelines often turn out more pipe dream than reality. In the case of those that cross borders, they can take so long to negotiate that by their completion the rationale for them has changed. But it would be a huge waste of opportunity should this become the case in the eastern Mediterranean. Tens of trillions of cubic feet of offshore gas discoveries in a corner of the earth bedeviled by conflict could become a catalyst for greater regional cooperation and economic integration.

For Europe, the proximity of these gas fields provides a chance to reduce dependence on Russian energy supplies. It could also provide some European leverage to sway the region in a more peaceful direction. However, it will not be easy. The Levantine Deep Marine Basin spans the waters of Israel, Lebanon, and Turkish and Greek Cyprus. Some of the discoveries have also been made offshore from the Gaza strip, introducing an Israeli-Palestinian dimension that could complicate things further.

Italy's Eni has started production at Egypt's huge Zohr field, as has BP in the West Nile Delta. Egypt already has a well-developed domestic gas market that will easily soak up initial output. Development of the Israeli, Lebanese, and Cypriot fields is more fraught. With limited domestic markets, all three will need to find external buyers at a time when world markets are close to saturated. The most practical near-term path would be short pipelines to feed Egypt's LNG export plants. In the medium term there may be a case for a pipeline through Turkey. The EU is pushing for an alternative pipeline route to Italy.

#### Dutch regulator says gas production cut needed to reduce tremors

(Reuters; Jan. 11) - The Dutch gas regulator said Jan. 11 that a substantial cut in gas production at the Groningen field, the country's largest, was needed to reduce the risk of earthquakes, following a tremor there this week. The Jan. 8 tremor prompted operator NAM to propose halting production at six points at Groningen and lowering its overall production. The Netherlands' State Supervision of Mines said these proposals were a "step in the right direction" but were too vague.

The agency will conduct a survey on where and how to reduce production and will advise the energy minister, who will take the final decision, before Jan. 25. "A substantial production cut is needed" to limit seismic risks, the regulator said. "This could impact gas supply to households and businesses, but we will not take that into account. It is up to the minister to balance safety and certainty of supply," it said.

The government has lowered output from Groningen several times in recent years, as decades of extraction have triggered dozens of earthquakes each year in the region, causing damage to homes and buildings. Monday's 3.4 tremor was the largest in years and prompted NAM to propose a cut in production without naming a specific level. NAM is a joint-venture of Shell and ExxonMobil. Production at Groningen was lowered by 10 percent last October to 760 billion cubic feet per year, and the government has agreed to trim that to around 700 bcf by 2021. Production stood at 1.9 trillion cubic feet in 2013.

#### China reportedly considering stake in Russian oil pipeline company

(UPI; Jan. 12) - China could become one of the major shareholders in Transneft, the state-backed oil pipeline company in Russia, one of its directors said Jan. 12. Maxim Grishanin, Transneft's first vice president, said the Russian Direct Investment Fund was in talks to attract investors to the company. "There are investors from Japan, we are waiting for Singapore and China," he was quoted by Russian news agency Tass. "(The fund) is holding talks with the Chinese."

Russia has focused investment efforts toward the Asia-Pacific, which offers a buffer against a European Union frustrated with the former Soviet Union's influence in the regional energy sector. The 2010 launch of the East Siberia-Pacific Ocean oil pipeline has been described by President Vladimir Putin as a strategic victory for Russia's energy sector looking to capitalize on Asia's economic success. Transneft three years ago said it would increase the annual capacity through the line by 80 percent by 2018.

Expansion of Russia's East Siberia-Pacific line would allow additional oil exports to China. Oil demand from China in November, the last full month for which data are available, was 9 million barrels per day — the second highest on record.

## Canada not enjoying the same good times for oil and gas as U.S.

(Financial Post columnist; Canada; Jan. 12) - Oil prices are rallying, but instead of reaping the benefits Canadian oil and gas producers are stuck on the sidelines while their American counterparts are riding them with all they've got. Indeed, a tale of two oil and gas sectors is emerging. On the Canadian side, the mood is subdued, budgets for 2018 are flat relative to last year, and job creation has taken a back seat to automation.

The Canadian sector is held back by pipeline bottlenecks that are depressing oil and gas prices (benchmark West Texas Intermediate rose near US\$64 a barrel Jan. 11, while Western Canadian Select was trading just above US\$37); by governments that are more concerned about transitioning to renewable energy; and by investors who have moved on to better and faster opportunities elsewhere.

On the U.S. side, optimism is strong, thanks to the industry's success in shale gas and tight oil and boosting exports, plus support from a president whose only concern about fossil fuels is that there should be more. In contrast, Canada's oil and gas sector sees another year of uncertainty, low prices, and increasing tax burdens. The coming big-ticket items are a tanker ban off Canada's West Coast, reforms of federal reviews of major projects, tougher methane emission regulations, and national carbon pricing.

#### California orders utility to use non-fossil fuel to meet peak demand

(Bloomberg; Jan. 11) - California, the state that helped birth the global boom in batterytoting electric vehicles, is trying to spark a similar transformation for utilities. And that spells trouble for power plants all across the U.S. that run on natural gas. The California Public Utilities Commission approved an order Jan. 11 that will require PG&E Corp., the state's biggest utility, to change the way it supplies power when demand peaks.

Instead of relying on electricity from gas-fired plants run by Calpine, the utility will have to use batteries or other non-fossil fuel resources. The shift is possible in California partly because there is a surplus of solar power, after a surge of rooftop panels and large-scale gathering systems helped double the renewable energy used over the past decade. Batteries can charge up in daylight and dispense electricity later.

With improved technology and lower costs, storage systems are becoming more viable for utilities, especially in a state hoping to get half its power from wind and solar by 2030. "California is going to create a blueprint for the coming years," said Michael Ferguson, the director of U.S. energy infrastructure at S&P Global Ratings in New York. "Renewables proliferated where there was supportive regulation, and that caused the costs to decline. I would expect to see the same thing to happen with battery storage."

The shift away from fossil fuels in power generation has been pronounced in California, where tougher standards for cleaner air have become a model for the rest of the country and the world. Gas use dropped to 36 percent of the state's power supply in 2016 from 42 percent a decade earlier, while renewables jumped to 25 percent from 11 percent.

#### New line will move growing volume of gas liquids from North Dakota

(Bismarck Tribune; ND; Jan. 8) – Tulsa-based Oneok plans a 900-mile natural gas liquids pipeline that will accommodate increasing North Dakota production and play a role in reducing gas flaring in the shale region. The proposed Elk Creek Pipeline will have the capacity to move up to 240,000 barrels per day of natural gas liquids from a terminal near Sidney, Mont., to Bushton, Kan. The pipeline will run adjacent to Oneok's existing Bakken NGL and Overland Pass pipelines, which are operating at full capacity.

The \$1.2 billion Elk Creek Pipeline will not cross North Dakota but will connect to existing pipelines in northwest North Dakota. It will cross Montana, Wyoming, Colorado, and Kansas, and is expected to be complete by the end of 2019, but still needs regulatory approvals from federal, state and local agencies. Justin Kringstad, director of the North Dakota Pipeline Authority, said additional pipelines are needed to transport growing volumes of natural gas liquids, such as ethane, propane and butane.

Kringstad estimates that North Dakota produces more than 400,000 barrels of natural gas liquids per day. But due to insufficient pipeline capacity, about 40,000 to 60,000 barrels a day are transported by rail, he estimated. Under Kringstad's forecast, North Dakota natural gas liquids production is projected to more than double by the 2030s to between 800,000 and 1 million barrels per day.