

# Oil and Gas News Briefs

## Compiled by Larry Persily

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#### **China in talks with Anadarko to buy output from Mozambique LNG**

(Bloomberg; Jan. 9) - Anadarko is in talks to feed China's growing appetite for liquefied natural gas from its planned development in Mozambique. The Texas-based company is in discussions with "a variety of Chinese counterparts including national oil companies and emerging independent LNG buyers," Anadarko said. Increasing demand makes China "a long-term strategic market for the Anadarko-led Mozambique LNG project," the company said. The project is estimated at \$15 billion to \$20 billion for 12 million tonnes annual output capacity.

While Italy's Eni has signed off on its \$7 billion floating Coral LNG project offshore Mozambique, with about one-quarter the output capacity of Anadarko's proposed onshore plant, Anadarko needs more sales-and-purchase agreements to justify a final investment decision on its larger development in the north of the country. Anadarko has already lined up sales agreements for about 2.6 million tonnes a year.

China's record-breaking gas demand could help spur investment decisions on projects to export LNG from East Africa, said Emma Richards, a senior oil and gas analyst for BMI Research. Trillions of cubic feet of gas have been discovered offshore Mozambique and Tanzania, waiting on investment decisions for project developments.

#### **Novatek proceeds with development work for 2nd Arctic LNG project**

(Independent Barents Observer; Norway; Jan. 10) - It would be Russia's second major liquefied natural gas project in remote northern waters. The Arctic LNG-2 project is planned for the shallow waters of the Gulf of Ob, the bay located near the coast of the Kara Sea between the Yamal and Gydan peninsulas. The project would make Novatek, the Russian gas producer, one of the world's biggest suppliers of LNG. The \$27 billion Novatek-led Yamal LNG project shipped its first cargo last month.

Despite the souring climate in East-West relations, the venture would lean heavily on European oil and gas development companies. In May 2017, Novatek signed a framework agreement with Technip and Linde, the French and German engineering firms. Following Technip's merger with FMC Technologies, additional teams of Norwegian and British engineers might be taken on board. Novatek will use Linde's gas liquefaction technology, and has purchased the necessary license from the Germans.

In addition, the project is teaming up with the Italian company Saipem for development of the concrete-and-steel structure that would be sunk to the seafloor to support the

LNG plant. The structure would be built at the Kola Yard and towed across the Barents Sea to the Gulf of Ob. Saipem might be included as partner in the Kola Yard under development outside Murmansk City, where project modules would be built. Novatek says Arctic LNG-2 could start up by 2023, at 18.3 million tonnes LNG annual capacity.

## **Australia will not hold top spot in LNG exports very long**

(Business Insider Australia; Jan. 8) - Australia is expected to become the world's biggest natural gas exporter by next year as its huge build-out nears completion. But according to the latest quarterly resources outlook from the chief economist at the federal department of industry, innovation, and science, the title is likely to be somewhat short-lived as exports from the United States ramp up over the following years.

The report said Australia looks to overtake Qatar as the biggest gas exporter before the U.S. assumes the mantle in the mid-2020s. "Australia's (annual) LNG export volumes are forecast to reach 77 million tonnes in 2018-19, up from 52 million tonnes in 2016-17," the report said. "Higher export volumes will be driven by increased production at Gorgon, as well as the completion of the three remaining LNG projects under construction — Wheatstone, Ichthys and Prelude."

Qatar — currently the world's largest exporter of LNG — exported 74 million tonnes in 2016, and volumes are expected to remain little-changed over the forecast period to 2019. Longer term, the report cited the International Energy Agency's New Policies Scenario which forecasts that after the U.S. overtakes Australia, Qatar will reclaim the top spot with its planned significant production increase in the 2020s. Further expansion of U.S. export capacity could have it overtake Qatar by 2040, the report added.

## **LNG carrier headed to Boston turns toward Mediterranean**

(Reuters; Jan. 10) - A vessel that picked up a cargo of liquefied natural gas from the United Kingdom and was headed to the United States — and which may have included some Russian gas — has turned toward the Mediterranean, according to Thomson Reuters shipping data Jan. 10. Engie's Gaselys tanker picked up LNG from National Grid's Isle of Grain facility near London on Dec. 30. It was initially expected to deliver the gas to Boston on Jan. 22, according to Reuters and a report by S&P Global Platts.

The S&P Global Platts report noted that a tanker had unloaded the first cargo from Russia's Yamal LNG project at the same Isle of Grain storage facility Dec. 29, creating a situation where some of the Russian gas could have stirred up with other LNG in the storage facility and then been loaded into the U.S.-bound tanker. The Russian company that operates the Yamal facility, Novatek, is under U.S. economic sanctions.

Carol Churchill, a spokeswoman for French energy company Engie, which bought the LNG cargo in the U.K., said the company "does not comment on the transit of our ships or their schedules." Engie owns the LNG import terminal near Boston. Churchill did not answer a question whether any of the gas on the LNG carrier came from Russia. Engie would not comment on the cargo's final destination.

## **EIA forecasts U.S. gas production to set record in 2018, again in 2019**

(Reuters; Jan. 9) - U.S. dry natural gas production was forecast to rise to an all-time high of 80.42 billion cubic feet per day in 2018 from 73.57 bcf in 2017, according to the Energy Information Administration's Short-Term Energy Outlook on Jan. 9. The latest output projection for 2018 would easily top the annual record high of 74.15 bcf a day produced on average in 2015. Production would climb further in 2019 with output hitting 83.02 bcf, the EIA forecast.

In electric generation, the EIA projected that gas would remain the primary U.S. power plant fuel in 2018 and 2019 after taking that title from coal for the first time ever in 2016. Coal had been the primary fuel for U.S. generators for the past century. The EIA projected the gas share of generation would rise to 33.1 percent in 2018 and 34.3 percent in 2019 from 31.7 percent in 2017. Coal's share of generation was forecast to slide to 29.6 percent in 2018 and 28.1 percent in 2019 from 30.1 percent in 2017.

## **U.S. was a net exporter of natural gas in 2017**

(Bloomberg; Jan. 10) - America's trade imbalance just got a wee bit smaller. The U.S. has now become a net exporter of natural gas on an annual basis for the first time since at least 1957. Net exports averaged about 400 million cubic feet per day last year, flipping from net inflows of 1.8 billion in 2016, according to Victoria Zaretskaya, a Washington-based analyst for the U.S. Energy Information Administration.

A "significant projected increase" in U.S. natural gas sent by pipeline to Mexico and a growing number of liquefied natural gas shipments to the rest of the world should guarantee the trend moving forward, Zaretskaya said Jan. 10. The lone operating LNG export facility in the U.S., the Cheniere Energy terminal in Sabine Pass, La., will be joined by two more projects going online this year.

Canadian gas deliveries into the United States continue, although at lower volumes than before shale gas took much of the U.S. market.

## **Winter cold could help push U.S. gas storage to lowest in 4 years**

(Platts; Jan. 5) - As snow settles across New England and regional natural gas prices retreat, the lingering impact of this winter's biggest storm is likely to extend beyond the frigid temperatures forecast for this weekend. The cumulative impact of weather-driven shocks to supply and demand is now forecast to dramatically cut U.S. natural gas storage inventories — a factor that could lift prices later this season or potentially entering the summer months.

Over the next three weeks, Platts Analytics is forecasting consecutive gas storage withdrawals of 335 billion cubic feet, 227 bcf and 141 bcf. Assuming a five-year average pull from storage through the first week of April, the season-ending U.S. inventory level would decline to 1.391 trillion cubic feet — potentially the lowest in four years.

## **TransCanada continues permitting for gas pipeline without LNG plant**

(Vancouver Sun; Jan. 5) - TransCanada continues to keep alive its \$6 billion Prince Rupert Gas Transmission Project to pipe natural gas from northeastern B.C. to the coast despite uncertain market and economic conditions and no committed LNG terminal at the end of the line. Just two weeks ago, the B.C. Environmental Assessment Office approved an amendment to the project certificate for two additional construction camps and a standby compressor unit at each of eight proposed compressor stations.

The proposed 559-mile pipeline was meant to feed the Petronas-led Pacific NorthWest liquefied natural gas export project on Lelu Island near Prince Rupert that was canceled five months ago. “TransCanada continues to evaluate alternatives for the project and are completing matter-of-course permitting work that was underway prior to the Pacific NorthWest project being canceled,” a TransCanada spokeswoman said Jan. 4.

The company has not said what alternatives there might be for the gas pipeline. Two other LNG projects in the Prince Rupert area have also been canceled. Last September, Nexen Energy, the Calgary-based subsidiary of Chinese oil giant CNOOC, said it had decided with Japanese partner INPEX to pull the plug on the Aurora LNG project. In March 2017, Shell announced it was canceling the Prince Rupert LNG project, which it inherited from the BG Group when it purchased the company in 2015.

## **New production helps Trinidad boost LNG output**

(Platts; Jan. 8) - Natural gas production in Trinidad and Tobago in November rose to its highest level in two years, helping to boost LNG production at Trinidad-based gas liquefaction complex Atlantic LNG, the energy ministry reported Jan. 8. The increased

production is a rare positive sign for the twin-island nation's gas supply picture, which has been negatively impacted by ongoing shortages for years.

Production at Atlantic LNG in November was up 29 percent on the year, the ministry said in its monthly bulletin. That is the highest production figure since January 2016. Production increases reflect a significant rise in gas output by BP Trinidad and Tobago, BHP Billiton and other producers. The gas supply picture has improved partly because of new supply, including BP's Juniper gas development and other sources.

In August, BP said the \$2 billion offshore Juniper project will eventually boost production capacity by an estimated 590 million cubic feet per day. Gas curtailments by producers have undermined supply since about 2010. Atlantic operates and manages four LNG trains, each owned by a holding company comprised of different companies. In addition to BP, Shell is also a major shareholder. The first liquefaction train went online in 1999.

### **Russia looks to Pakistan and India to boost its natural gas sales**

(Nikkei Asian Review; Jan. 8) - Under pressure from European and U.S. economic sanctions, Russia is turning to South Asia for customers to buy its natural gas. Projects include construction of a pipeline to carry gas across Pakistan, and a plan to co-develop Siberian gas fields with India. Pakistani Prime Minister Shahid Khaqan Abbasi reportedly discussed the gas pipeline plan with Russian officials during a Shanghai Cooperation Organization heads-of-government meeting in Russia in early December.

The pipeline talks have not been confirmed by the Pakistani foreign ministry, but it is understood an agreement was reached during a Russia-Pakistan bilateral meeting or on the sidelines of the conference. The \$2 billion pipeline would run for almost 700 miles between the northeastern city of Lahore and Pakistan's biggest city Karachi. Russian LNG imported through Karachi would be delivered to power plants near Lahore.

To win the hearts of voters ahead of a general election in 2018, Pakistan's ruling party, the Pakistan Muslim League-Nawaz, is seeking to boost the country's electricity reliability in response to chronic complaints about lack of power. A quarter of Pakistan's 200 million people have no electricity, and blackouts remain frequent in electrified areas. Pakistan relies on gas-fired generation for 26 percent of its power. In Siberia, a joint project between Indian and Russian companies is underway at oil and gas fields.

### **Finland's environment minister wants end to coal-fired power by 2025**

(Finnish Broadcasting Company; Jan. 6) - Finland's Environment, Energy and Housing Minister Kimmo Tiilikainen wants the country to rid itself of coal-burning power plants in the next seven years. The Ministry of Employment and the Economy is currently

considering a 2030 cut-off date, but Tiilikainen announced Jan. 6 that he is going to lead efforts to bump up the deadline to 2025.

The minister explained his proposal by citing figures from Statistics Finland that indicate that greenhouse-gas emissions are on the rise. The agency reported in December 2017 that Finland's carbon dioxide emissions were up 6 percent in 2016, compared with 2015. The main reason was an unexpected rise in coal burning for electricity and heat. Can Finland eliminate its reliance on coal-burning power plants in less than a decade? "The sooner the better when it comes to the environment," Tiilikainen said.

Coal is still widely used for heating homes in the major cities of southern Finland such as Helsinki, Espoo, Vantaa, and Lahti. About 1.2 million people currently live in dwellings that rely on coal-dependent district heating. Tiilikainen said the short-term solution is to replace coal with gas, which gives off 60 percent fewer emissions. "In the longer term, the alternatives could be geothermal heat, the utilization of captured waste heat from various industries, and biomass and biogas solutions."

### **U.S. oil output could top 11 million barrels a day in 2019 to lead world**

(Bloomberg; Jan. 9) - The U.S. may challenge Saudi Arabia and Russia in the next two years to become the world's largest oil producer. U.S. output will rise to 10 million barrels a day as soon as next month and top 11 million in November 2019, according to government forecasts Jan. 9. That compares with almost 11 million barrels of Russian production in 2017 and Bloomberg estimates of just below 10 million from Saudi Arabia. Both countries have pledged to limit output this year to curb supply and boost prices.

"If the pricing environment is supportive, there is no reason" why the U.S. wouldn't reach 11 million barrels, said Ashley Petersen, lead oil analyst at Stratas Advisors in New York. The growth of North American shale production, which caused an estimated 5 percent increase in U.S. crude output in 2017, has rocked the oil industry in the past few years, spurring the Organization of Petroleum Exporting Countries and other producers led by Saudi Arabia and Russia to cut their output to trim global inventories.

U.S. output will average 10.3 million barrels a day this year and 10.9 million in 2019, both higher than the record 9.6 million pumped in 1970, according to the U.S. Energy Information Administration's monthly Short-Term Energy Outlook, which attributed the projected growth to shale production in Texas and North Dakota. Any potential changes in policy from players like OPEC or supply disruptions in key U.S. basins would risk affecting the U.S. estimates, EIA officials acknowledged on a conference call Jan. 9.



## **As crude prices rise, so does U.S. shale oil output**

(Reuters; Jan. 5) - U.S. oil prices have risen past \$60 per barrel which should accelerate shale drilling and production in the next few months, provided the price increase is sustained. U.S. crude futures are trading over \$60 for all delivery months between February and August 2018, an increase of about 40 percent since the middle of 2017. The futures strip for 2019, the benchmark against which shale producers can execute hedges for 2019 output, is trading over \$56, up 20 percent the past six months.

Futures prices are sending a clear signal to shale firms that they should step up drilling and boost output. Shale production is already increasing strongly as a result of the growing number of wells drilled earlier in 2017 and completed in the second half of the year. Production from the Lower 48 states excluding the Gulf of Mexico, much of it from shale formations, has surged from 6.6 million barrels per day in January 2017 to 7 million in June and 7.7 million in October.

Production from the Lower 48 excluding federal waters in the Gulf is forecast to top 8 million barrels per day before the end of 2018, according to the U.S. Energy Information Administration. The more U.S. crude prices rise, the bigger the eventual production response is likely to be, which could significantly complicate OPEC's attempt to draw down global oil inventories.

## **LNG, LPG cargoes rise to 4<sup>th</sup> place in Panama Canal traffic**

(Platts; Jan. 9) - With 2017 marking the first full year since the \$5 billion expansion of the Panama Canal, shipments of liquefied petroleum gas and liquefied natural gas are among the largest uses of the waterway, Juan B. Sosa, Panama's consul general in Houston, said Jan. 9. LPG and LNG cargoes, largely from ports along the U.S. Gulf Coast to markets in Asia, had a "tremendous impact" on the total volume transiting the canal in the past year, Sosa said, speaking at a joint meeting of the American Petroleum Institute and American Association of Drilling Engineers in Houston.

The number of transits by LPG tankers almost doubled from 449 in fiscal year 2016 to 876 in fiscal year 2017, while the number of transits by LNG carriers jumped to 163 from 17 in the year-ago period, according to data from the Panama Canal Authority. Combined, that ranks fourth in the number of transits, behind containerized cargo ships at 2,493 transits; dry-bulk vessels at 2,915 transits; and chemical tankers at 1,959 transits in the same period.

Sosa said the increased traffic in petroleum-related products is a result of the expansion of the canal, which was completed in June 2016, allowing the locks to accommodate the larger tankers that have become the international standard for shipments of LPG, LNG and other petroleum products. Widening the locks and other improvements allow it to

handle about 80 percent of the global LNG fleet. Cheniere Energy's Sabine Pass, La., LNG export terminal — the first on the Gulf Coast — started shipping in February 2017.