

# Oil and Gas News Briefs

## Compiled by Larry Persily

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#### **LNG prices must be more competitive, Japanese buyer warns**

(Financial Times; London; Sept. 27) - The head of the world's biggest buyer of liquefied natural gas has warned producers they need to become more competitive on price and allow for flexible contracts if they want to usher in a "golden age" of gas in Asia. Yuji Kakimi, the head of Japan's JERA — the joint-venture launched in 2015 between Chubu Electric and Tokyo Electric to procure fuel supplies — said LNG producers need to adapt quickly to a market where rising supplies are giving more power to buyers.

"The price of LNG has to be reasonable and there needs to be flexibility," Kakimi said. "If the market lacks these things, the golden age will never come." His comments come as fast-growing supplies of LNG have led large buyers to push for the end of so-called "destination clauses" and other restrictions that have for decades governed LNG trade.

The operators that build LNG export facilities have been dependent for years on signing long-term customers to deals linked to oil prices to finance construction of their terminals. Kakimi said the U.S. shale industry has dramatically transformed LNG, smoothing its boom-and-bust cycle and creating a global gas market. "Before [U.S. exports] and after — the market has completely changed. The surge in U.S. shale gas is giving buyers a stronger negotiating position. ... If we don't like the terms [of a certain project] we can say, fine we'll ask America to make us some," Kakimi said.

He cautioned LNG suppliers, however, that they are still competing on price with other energy sources, especially coal. "Can emerging markets, which are looking to grow, really push for an environment over economics?"

#### **LNG gains ground in China from low prices and clean-air policies**

(Wall Street Journal; Sept. 25) - If coal is king, then China, which burns half the world's coal every year, is a sooty emperor. It would like to be a gas giant instead. The nation's economic leaders have advocated cleaner-burning gas as an alternative, but have been stymied by high prices, rapidly growing power demand and bureaucratic intransigence. It looks to be changing: Gas prices in Asia have fallen by two-thirds since 2015, and China's leaders are increasingly nervous of middle-class discontent with air pollution.

Asian liquefied natural gas prices are hovering around their lowest levels in more than a decade — about \$5 to \$6 per million Btu this summer. Coal prices, meanwhile, are

back up near 2012 highs of \$90 a metric ton after falling as low as \$50 in 2016. As a result, the extra cost for buying LNG instead of coal in Asia is currently languishing around \$2 to \$3 per million Btu, the lowest since the turn of the century.

Rapidly expanding Australian and U.S. LNG exports, and China's determination to keep its own coal output in check, mean that price premium will likely remain low for a long time, encouraging gas adoption. Meanwhile, keeping power prices cheap is no longer a key plank of Chinese policy. State planners want to curb investment in energy-hungry industries to combat pollution and head off debt problems at beleaguered state-owned steel firms. For now, gas is a bit player in China's power mix — at just 4 percent of total generating capacity last year. Coal is still king in China, but nothing lasts forever.

### **South Korea plans big push from coal to LNG-fueled power plants**

(Platts; Sept. 26) - South Korea plans to replace coal-fired power plants under construction with LNG-fueled power turbines in a bid to cut pollution, the government said Sept. 26. It will also seek to scrap some 2.2 million diesel vehicles by May 2022, before President Moon Jae-In's term ends. People would be offered incentives to switch to less-polluting natural gas-powered cars, according to the statement issued jointly by the industry, energy, environmental, transport and finance ministries.

The government is eyeing a 30 percent cut in fine-dust emissions from current levels by 2022, the statement said. Reducing fine-dust pollutants has become a major issue amid increasing health concerns. Coal and diesel are seen as contributors to the pollution. South Korea has some 60 coal-fired power plants and dozens more under construction.

"The government will push to transform four coal-fired power plants, which are less than 10 percent constructed, into LNG-fired power turbines," the statement said. Three older coal-fired plants run by state-owned generators were shut in July. South Korea plans to close seven more coal-fired plants that are 30 years or older by early 2022. The Ministry of Trade, Industry and Energy said the measures would boost LNG demand for power generation and transportation, while reducing diesel consumption. "More detailed plans for specific targets and fuel demand prospects will come later this year," an official said.

### **China revives plan to create national gas pipeline company**

(Reuters; Sept. 26) - China's state economic planner has revived a plan to create a national natural gas pipeline company that would give gas producers better access to infrastructure and increase the use of the fuel. The National Development and Reform Commission (NDRC) is working with state oil companies China National Petroleum

Corp., Sinopec Group and China National Offshore Oil Co. on the proposal, said three senior officials familiar with the plan.

“The NDRC is engaging a small group of company people to design a plan for creating the national pipeline company,” said one of the sources. The talks will examine what assets would be included in the company, who will be the main stakeholders and how it will be run, the sources said. The plan, first raised about five years ago, is part of Beijing’s proposed reforms to make the state-dominated oil and gas sector more efficient. It follows a string of smaller steps over the past two years, including cutting down transportation costs and encouraging investment in gas storage.

CNPC controls nearly 80 percent of the country’s main gas pipelines, while Sinopec has the second-largest stake. China National Offshore Oil Co. is the leading operator of liquefied natural gas receiving terminals. “A national pipeline company will certainly lead to better and fairer access by upstream gas producers,” said Lin Boqiang, an energy researcher at Xiamen University. But Lin cautioned this would be a complex project as it involves a massive restructuring of assets worth tens of billion dollars.

### **South Korea has not profited from overseas oil and gas investments**

(Yonhap News Agency; South Korea; Sept. 25) - South Korea's state-run energy firms have poured US\$39 billion into overseas resource development projects and recouped a little over one-third of the investment due to a sharp drop in oil and gas prices. South Korea's state firms and private companies in total have spent \$74.63 billion on 476 resource exploration projects in 62 countries, including 141 in oil and gas and 355 in mineral resources, according to the report submitted Sept. 25 to the parliament.

The companies have recovered 54.9 percent of their investment as profit, dividends, and asset sales through the end of 2016, the Ministry of Trade, Industry and Energy said. State utility corporations, however, ran up huge losses from overseas projects that were aggressively pushed under President Lee Myung-bak’s administration (2008-2013) amid higher oil prices. The fall in crude prices, along with the U.S. shale oil and gas boom, have taken a heavy toll on the state-run energy companies.

Korea National Oil invested in 27 projects and has failed to earn profits from 22, the report said. It took over Canada's Harvest Energy in 2009 for \$4.08 billion but earned only \$4 million in 2014 as the U.S. shale oil and gas boom eroded its profits. Harvest's book value has plunged to \$254 million since the Korean investment. Korea Gas bought a 15 percent stake in the Gladstone LNG project in Queensland, Australia, and has recouped 34.5 percent of its investment. KOGAS bought a 50 percent stake in Horn River shale basin in Canada for \$791 million, but slipping gas prices hurt its profitability.

## **BP starts up new gas production in Oman; targets 1.5 bcf a day**

(Houston Chronicle; Sept. 25) - Natural gas has begun flowing through BP's operations in the prolific Khazzan field in Oman, the company's biggest project start-up so far this year. The first phase of the project — which includes 200 gas wells connected to a gas processing facility — could produce 1 billion cubic feet of gas per day. BP believes it will eventually drill about 300 wells in the region and could increase the field's output to 1.5 billion cubic feet of gas per day, the British oil and gas company said Sept. 25.

It's the sixth of seven major projects BP plans to bring into production this year, part of an effort to add some 800,000 barrels a day of oil-equivalent production by 2020. It's "an important milestone in our strategic partnership with Oman," BP CEO Bob Dudley said. "With further development already planned, this giant gas field has the potential to produce gas for Oman for decades to come."

Oman last year exported as liquefied natural gas about one-third of its gas production of 1.25 trillion cubic feet. Almost 90 percent of its LNG exports went to South Korea and Japan, with several South Korean and Japanese companies holding small stakes (between 1 and 3 percent) in Oman's three liquefaction trains, the first of which started operations in 2000.

## **Australia LNG operators avoid export restrictions**

(Reuters; Sept. 27) - Australia's three East Coast LNG plants have staved off threatened export curbs after promising to plug a projected domestic gas supply shortfall in 2018, Australian Prime Minister Malcolm Turnbull said Sept. 27. The agreement follows six months of government pressure on the producers of liquefied natural gas, led by Shell, ConocoPhillips, Origin Energy, and Santos, which have been blamed for sapping the local market of gas and driving up prices.

The Australian Energy Market Operator this week projected there would be a gas shortfall of as much as 100 billion cubic feet in 2018, or up to 17 percent of demand, which the companies have now vowed to supply. The threat of export controls on the three LNG plants had raised alarm about sovereign risk, especially for the investors in those plants and their Chinese, Japanese, Korean, and Malaysian customers.

Gas has become a hot political issue as soaring prices are hurting households and threatening jobs at manufacturers like food, building materials, and chemical producers, as well as driving up electricity prices. To deal with the crisis the government passed a law earlier this year that would allow it to limit exports from any of the three LNG plants on the East Coast to beef up local supply in any year that it deems there will be a shortfall. For 2018, the export controls will now not be invoked. The deal did not include a guarantee on prices. Turnbull said prices would "vary with the global price."

## **Pipeline opponents try to apply court victory to more cases at FERC**

(EnergyWire; Sept. 28) - A month-old federal court decision favoring in-depth climate analysis for gas pipelines is cropping up in a slew of other development skirmishes. After the U.S. Court of Appeals for the District of Columbia last month ordered federal regulators to closely consider downstream greenhouse gas emissions from the Sabal Trail pipeline, environmental lawyers have hustled to apply the model in other battles.

Last week, advocates flagged the ruling's relevance to a number of pipeline proposals pending before the Federal Energy Regulatory Commission. In a letter to FERC, for example, Sierra Club attorney Elly Benson argued the agency must beef up its analysis for the Appalachia-region Mountain Valley Pipeline in light of the D.C. Circuit decision. Environmental lawyers are eager to see precedent from the Sabal Trail decision take root, even as some say the court decision may not be the final word on the issue.

"FERC and other agencies have been failing to fully account for the indirect greenhouse gas emissions and climate impacts of these major fossil fuel projects," Benson said. "Under the Sabal Trail decision, they need to go back, and in some cases that means doing a supplemental environmental impact statement and actually do that analysis." The court ruled that FERC violated the National Environmental Policy Act by declining to quantify downstream emissions from the Southeast Market Pipelines Project, which includes the Sabal Trail line. The court ordered FERC to revise its environmental impact statement to detail those emissions, or offer a better explanation for not doing so.

## **FERC responds to court ruling on gas pipeline climate impacts**

(EnergyWire; Sept. 28) - Federal regulators wasted no time responding to a recent court order requiring additional consideration of the climate impacts of new natural gas pipelines. The Federal Energy Regulatory Commission on Sept. 27 released a five-page draft analysis tallying greenhouse-gas emissions from the Sabal Trail pipeline and related projects in the Southeast. The agency said the analysis supports its decision to greenlight the pipelines — a conclusion likely to face pushback by environmentalists.

The draft supplemental environmental impact statement comes a month after federal judges criticized FERC for refusing to quantify those emissions in its review of the gas pipeline. The U.S. Court of Appeals for the District of Columbia had scrapped FERC's approval and ordered the agency to take a closer look at emissions from power plants that would burn the gas. FERC's answer to the court is a short five pages that estimate downstream emissions from the project and analyze the magnitude of those emissions.

FERC said the emissions would represent an increase of 3.7 to 9.7 percent in statewide greenhouse-gas emissions in Florida compared to 2014. The project, the agency said, "would not result in a significant impact on the environment." FERC declined to go a

step further in its analysis and project concrete impacts associated with climate change. The analysis says no "suitable method" exists to make such complex projections. The draft is open for public comment until Nov. 20. Environmental law experts are already debating whether FERC's new analysis is enough to meet the court's expectations.

### **Exxon announces plan to reduce methane leaks**

(Financial Times; London; Sept. 25) - ExxonMobil has launched a plan to curb methane leaks from its shale oil and gas operations, taking unilateral action on an issue that has been the subject of sustained political and legal battles in the U.S. in recent years. XTO Energy, Exxon's shale subsidiary, will replace equipment, train staff and research new technologies to curb leaks of methane, a potent greenhouse gas estimated to trap heat 28 to 36 times as effectively as carbon dioxide over 100 years.

Exxon's move comes even though the Trump administration is working to roll back or suspend regulations imposed under President Barack Obama to control methane leakage. Exxon, which is the largest gas producer in the U.S., said it would put its leak-reduction plan into action no matter what the administration and courts eventually decide on regulation.

XTO President Sara Ortwein said she expects the program to have a "very meaningful impact" on the company's methane emissions, but did not specify a reduction target. She also did not disclose how much the improvements would cost, or how much of the costs would be recovered by selling the retained methane. The U.S. Environmental Protection Agency estimated that in 2015 only about 1 percent of U.S. gas production escaped into the atmosphere, but other estimates have been much higher.

### **Chevron plans to invest \$4 billion next year in Permian Basin**

(Reuters; Sept. 24) - Chevron will invest about \$4 billion next year to ramp up its crude production in the Permian Basin, a company executive said Sept. 25. Ryan Krogmeier, Chevron vice president of crude supply and trading, told the S&P Global Platts conference in Singapore that the company would increase its output from the Permian, largely situated in Texas and New Mexico, to more than 400,000 barrels per day over the next few years.

"We will be investing roughly \$4 billion of capital next year in the Permian Basin, and we plan to grow production over the next several years to well in excess of 400,000 barrels per day," he said. Chevron expects crude output from all producers operating in Permian to rise by 1.4 million barrels per day in 2020, from 2.4 million at present. "The Permian is the powerhouse (of U.S. crude output growth)," Krogmeier said.

## **Study estimates Permian reserves at more than 60 billion barrels**

(Bloomberg; Sept. 25) - The Permian Basin of Texas and New Mexico holds 60 billion to 70 billion barrels of yet-to-be pumped crude oil, according to a new study by analysts at IHS Markit. The Permian region's so-called recoverable resources would be enough to supply every refinery in the U.S. for 12 years and have a market value of about \$3.3 trillion at current prices for West Texas Intermediate oil, the domestic benchmark.

IHS spent three years studying output data from more than 440,000 wells to calculate the amount of crude remaining within the sprawling, mile-thick rock formation that pumps more oil than any other U.S. field, the London-based researcher said in a statement Sept. 25. The estimate may grow as IHS geologists and data scientists extend their analytical techniques to deeper geological zones.

"The Permian Basin is America's super basin in terms of its oil and gas production history, and for operators it presents a significant variety of stacked targets that are profitable at today's oil prices," said Prithiraj Chungkham, director of unconventional resources for IHS. In November, the U.S. Geological Survey estimated that just one layer of the Permian known as the Wolfcamp holds 20 billion barrels.

## **Too many Permian wells could slow production growth, report says**

(EnergyWire; Sept. 25) – The Permian Basin's growing profusion of oil wells could end up slowing production within the next few years, according to a report from consultancy Wood Mackenzie, as new wells deplete pressure within the basin's formations. "We're drilling so many wells, and with such tight spacing, should we really expect well No. 5,000 to perform like well No. 5 did?" said Robert Clarke, research director at Wood Mackenzie's Dallas office.

Some 380 drilling rigs — roughly 40 percent of the country's total number — operate in the Permian Basin, which has experienced a post-2014 boom in horizontal shale drilling. The U.S. Energy Information Administration expects the basin to yield about 2.6 million barrels of oil per day next month, and as many as 5 million a day by 2025.

The Wood Mackenzie report said newer wells will likely produce at lower rates than older ones, making it harder to sustain the surge in production of the initial years. By 2021, it predicts, oil production in the basin could hit a 3.5-million-barrel-per-day peak, short of the 5 million barrels in the EIA forecast.

## **Permian oil CEO worries of too much optimism**

(Bloomberg; Sept. 25) - Steve Pruett has seen more than his share of booms in three decades in the oil business. None, though, as strange as the one gripping the Permian Basin right now. The telltale signs are the same as always, with companies like his desperate for skilled workers to staff the drilling rigs that pierce the horizon in West Texas. What's unusual, and unnerving, he said, is that the Permian is still thrumming with activity after prices cratered for the stuff it pumps out.

Crude is trading for around \$50 a barrel, but this is the hottest oil patch anywhere on Earth, a swing producer influencing global markets and threatening OPEC. That either means the industry has become so incredibly efficient that production can continue to rise even if prices don't, or that it's throwing money after a mirage. Pruett, CEO of Midland, Texas-based Elevation Resources, is more concerned about the latter. "Oil men are innately optimistic. ... Sometimes our optimism is our own worst enemy."

That's the funny thing about the business. Ups and downs are so ingrained that success is seen as an omen that the end may be around the corner. What gives Permian oil executives pause is that costs for everything from pumps to well casing have been rising, up 20 to 30 percent in the past year, a marker of an overheated situation that could burn out. Another is that possibly too-eager drillers are starting to venture from prime acreage to less bountiful plays, where they may get less bang for their bucks.

## **Oil market improves, but there may be a limit to how high it can go**

(Bloomberg columnist; Sept. 26) - Oil bulls are back in the driving seat with \$60 a barrel in sight, but it could be a short ride. OPEC and Russia are cutting output deeper than ever, demand is strong and the threat of Mideast disruption looms again. Global prices have jumped more than 20 percent since June, with Brent hitting a two-year high on Sept. 25 (\$59 a barrel for November on the futures exchange). But many insiders say OPEC and its allies will need to prolong their production cuts beyond the scheduled March expiration to avoid the glut — and lower prices — making a comeback next year.

The \$60s, however, are more likely to be a limit than a launch pad. Growing revenues could weaken the Organization of Petroleum Exporting Countries' commitment to its supply cuts, which many forecasters say still must be extended. U.S. shale oil production is already growing rapidly, and higher prices could prompt another surge in drilling. "Brent could go above \$60 a barrel in the fourth quarter," but may not be sustainable, said Giovanni Staunovo, a commodity analyst at UBS Group.

Still, after years of gloom, the mood in the market is shifting. At the annual Asia-Pacific Petroleum Conference in Singapore, the mood this week was certainly more optimistic. The consensus was that global demand will grow by 1.7 million to 1.8 million barrels a day this year, 400,000 to 500,000 more than expected at the start of the year. "This



rally here is much more fundamentally based than the rallies we saw” in the spring, Torbjorn Kjus, chief oil analyst at DNB Bank in Oslo, said by phone.

### **Oklahoma special session will focus on oil taxes**

(EnergyWire; Sept. 25) – Oklahoma lawmakers are facing renewed pressure to raise taxes on the oil and gas industry as they open a special session to fix a budget deficit that has led to shorter school weeks and other severe spending cuts statewide. The oil industry worked with the Republican-controlled Legislature during its regular session in the spring to avoid any rate increases. Instead, state budget-writers opted to increase fees on cigarettes and eliminate some tax deductions and incentives for the oil industry.

The state Supreme Court ruled in August, however, that the new fee on cigarettes amounted to a tax and had to be approved by a three-fourths majority in both legislative chambers. Democrats hold 30 of 101 seats in the House, so the ruling gives them a stronger voice as the special session opens. Oil and gas executives at an industry conference Sept. 22 acknowledged the state's budget problems, but said higher taxes could force them to shut down some drilling operations in the state.

Oklahoma tweaked its tax regime in 2014, shortly before oil prices fell. State revenues have dropped so much since then that a fourth of its school districts have enacted four-day school weeks to save money. Teachers and other state workers have gone without raises for years and, at one point, state troopers were limited to driving 100 miles a shift. "We can't continue down this road," said David Blatt, Oklahoma Policy Institute director.

The biggest point of contention has been the state's 2 percent oil production tax for the first three years of a new well's output. Critics say it's a giveaway to the oil industry since most new wells give up the bulk of their production within a few months.

### **Texas county accepts property tax deal for LNG plant expansion**

(Caller Times; Corpus Christi, TX; Sept. 26) - San Patricio County in Texas could see \$20 million in payments over a 10-year period in lieu of full property tax payments under a tax abatement agreement with Cheniere Energy for expansion of the company's Corpus Christi liquefaction facility. The payments would not start flowing until 2022 under terms of the agreement, though they could start sooner if construction begins earlier than expected. County commissioners Sept. 25 approved the tax deal.

Cheniere is considering boosting the capacity of its LNG facility from 13.5 million tons a year to 22.5 million tons by adding two liquefaction trains to the three-train facility. Construction on the first trains started in 2015, with initial start-up scheduled for next

year. Cheniere also operates the first LNG export terminal built on the U.S. Gulf Coast, in Sabine Pass, La., which started operations 18 months ago.

Cheniere is asking for the structured payments in lieu of property taxes for 10 years, covering construction and the first few years of operation of the two expansion trains. As part of the deal, the company will pay \$1 million a year to the county for each train for the duration of the agreement. Under the agreement, the company is required to start construction by Jan. 1, 2022, for Train 4 and Jan. 1, 2023, for Train 5. Cheniere has a similar tax agreement with the county for the first three trains at Corpus Christi.

### **Brazil reverses 2007 decision, opens bidding to foreign oil firms**

(Wall Street Journal; Sept. 26) - Brazil will begin reversing what industry officials say was a costly and disastrous decision a decade ago to set aside billions of barrels in a huge discovery for its state-run oil firm at a time when foreign companies were eager to invest. Brazil removed key acreage from a 2007 auction that could have yielded \$100 billion in bonuses plus hundreds of billions more in spending commitments when oil was near record high prices, said several former executives at Western oil companies.

Now, Brazil may generate just a fraction of what it could have as it looks to exploit its oil potential and revive its economy with foreign investment. The Sept. 27 auction is the first of nine rounds planned through 2019 for areas that could hold 10 billion barrels of recoverable oil. Included in upcoming auctions are areas that Brazil had originally intended to lease out in 2007, shortly after Petrobras discovered huge reservoirs of crude in an ultra-deep layer known as the sub-salt, off the southeast coast.

But days before the 2007 auction, Brazil's president yanked 41 exploration blocks after being convinced by Petrobras' former head of exploration and production that it would be a "crime against the fatherland" to open the reserves to other companies, according to a former official. Brazil's output now is less than half what industry officials say it should be, as Petrobras has been hobbled by mismanagement and corruption. Given Petrobras' problems, Brazilian policy makers say the only solution is foreign capital. "It shows we are doing now, 10 years later, what we should have done 10 years ago," said Décio Oddone, head of the ANP, the country's energy regulator.