

# Oil and Gas News Briefs

## Compiled by Larry Persily

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#### **Saudis will need to buy refined products to cover loss from attack**

(Reuters; Sept. 15) - Saudi Arabia is set to become a significant buyer of refined products after attacks on Sept. 14 forced it to shut down more than half of its crude and some of its natural gas output, consultancy Energy Aspects said. "The loss of gas has impacted refinery operations, possibly curtailing runs by 1 million barrels per day," the analysts said. "State oil firm Saudi Aramco will likely buy significant quantities of gasoline, diesel and possibly fuel oil while cutting liquefied petroleum gas exports."

About 5.7 million barrels per day of Saudi crude production was shut down after drone strikes claimed by the Iran-aligned Houthi group in Yemen. Along with oil, the attacks disrupted 18 percent of Saudi Arabia's natural gas output and half of its ethane and natural gas liquids production, Energy Aspects said. Saudi Aramco said it expected to restore about one-third of its lost crude production by Sept. 16. A full resumption, however, will likely take weeks, Energy Aspects said.

The quality of two Saudi crudes, Arab Light and Arab Extra Light, may also have been affected with excess hydrogen sulfide, reducing refiner demand for those grades of oil, the energy consulting company said. Meanwhile, Saudi oil exports will be maintained by running down 50 million to 60 million barrels of domestic crude stocks. Energy Aspects has some of the strongest intelligence on the Saudi oil sector.

#### **Oversupply continues to drive down U.S. natural gas prices**

(Bloomberg; Sept. 12) - An oversupply of natural gas in the United States will drive average prices in real terms at the Henry Hub benchmark to a level not seen since the 1970s, according to a report from IHS Markit on Sept. 12. That oversupply will come from new pipelines that will allow a surge of new gas output associated with oil production in the Permian Basin in West Texas and eastern New Mexico.

IHS Markit forecasts average gas prices in 2020 at the Henry Hub will drop to \$1.92 per million Btu, their lowest in real terms — including the effect of inflation — since the 1970s. IHS Markit's forecast for 2020 is the lowest of any analyst in a Reuters poll of Henry Hub price projections. The poll calls for an average of \$2.75 for 2020. Spot prices at the Henry Hub have averaged \$2.62 so far in 2019.

IHS Markit said prices would drop next year despite robust domestic demand, which has increased by 14 billion cubic feet per day since 2017, and rising exports. The U.S.

is expected to export an additional 3 billion cubic feet of gas as liquefied natural gas in 2020, IHS Markit said. But that will not be enough to absorb production growth. "It is simply too much too fast," said Sam Andrus, IHS Markit executive director. "Drillers are now able to increase supply faster than domestic or global markets can consume it."

## **Alberta town will shut down its money-losing natural gas wells**

(Calgary Herald columnist; Sept. 13) - How precarious is the state of Alberta's natural gas industry these days? Just look at the City of Medicine Hat, proudly known as the Gas City, population 65,000, which has owned its own petroleum production arm for more than a century. Today it's producing about 6,500 barrels of oil equivalent per day from shallow natural gas and oil fields in southern Alberta and Saskatchewan.

The average cost of its gas production is about \$2.78 per 1,000 cubic feet. The spot price for gas at Alberta's AECO hub closed Sept. 12 at 80 cents, about \$2 below U.S. prices. You don't need a sophisticated computer model to understand this gap means the city-owned utility has been hemorrhaging money. Facing such economics — and an expected cash loss of \$35 million this year from its gas and petroleum resources division — the city is throwing in the towel on the lion's share of its producing gas wells.

Medicine Hat announced Sept. 11 it will abandon more than 2,000 of its 2,600 wells over the next three years. The decision wasn't made lightly, said Brad Maynes, the city's commissioner of energy and utilities. "We are very proud of our gas history and our legacy ... The city has benefited so much from gas over the years." Its petroleum assets have contributed more than \$600 million to Medicine Hat's treasury over the past four decades, the city said. By the time the 2,000 wells are abandoned, production is expected to fall to 2,500 barrels of oil equivalent per day, a quarter of four years ago.

## **U.S. natural gas production hit another record in August**

(U.S. Energy Information Administration; Sept. 12) - U.S. natural gas production continued to increase in August, setting a new daily production record of 92.8 billion cubic feet per day on Aug. 19, according to estimates from IHS Markit. Gas production set a new monthly record in August, averaging more than 91 bcf a day for the first time. The U.S. Energy Information Administration on Sept. 10 forecast dry natural gas production to average 93.4 bcf a day from September through the end of the year.

U.S. natural gas production increased by 7.1 bcf a day (8 percent) between August 2018 and August 2019. Production has increased, even as prices have declined, putting more downward pressure on prices. Henry Hub prices averaged \$2.40 per million Btu in June and \$2.37 in July — the lowest monthly averages for June and July since 1999.

## **Cheap gas-generated electricity could hurt solar power, report says**

(Bloomberg; Sept. 10) - The world will probably need more power from natural gas in the coming decades than previously thought because low electricity prices could limit the increase in solar power plants. The cleanest fossil fuel's share of the primary energy mix in 2050 will be as much as 29 percent, according to a report by energy and maritime risk services company DNV GL. A similar report a year ago had put the share at 25 percent. Solar's contribution was cut to 12 percent, from 16 percent a year earlier.

The price of electricity during the day — a growing volume coming from gas-fired power units — will fall so low that investors will probably build less solar photovoltaic capacity than previously expected, said Remi Eriksen, president of DNV GL. The surging need for gas underscores that the world probably won't meet targets implied in the Paris climate deal, DNV GL said.

Other features of DNV GL's most-likely energy scenario include: Natural gas will overtake oil as the world's single largest energy source in 2026; the amount of energy produced will start to decline in 2030, even in a world of rising economic production; and battery technologies could limit the role of gas.

## **BP will align business plan with goals of Paris climate accord**

(Bloomberg; Sept. 12) – BP plans to sell some oil projects and curb the development of others to align its business with the Paris accord, the latest sign climate concerns are starting to affect investment decisions of the world's largest fossil fuel producers. Senior executives met within the past few days to discuss how to cut carbon as BP grapples with a shareholder resolution requiring it to explain how its spending is aligned with Paris, CEO Bob Dudley said on a Sept. 12 call organized by JPMorgan Chase.

One proposal weighed up by BP's management team was exiting the most carbon-intensive projects, though Dudley wouldn't say which assets were targets because there are "governments and partners involved." He affirmed, "We are certain we've got a path, it may not be linear, to being consistent with Paris goals. ... There are going to be projects that we don't do, things that we might have done in the past. Certain kinds of oil, for example, that has a different carbon footprint."

His comments offer a response to increasingly severe criticism aimed at the entire oil industry over its contribution to man-made climate change. BP's own shareholders sparred with company managers at its annual general meeting in May, before voting almost unanimously to require the company to issue a report about how each new investment is aligned with the Paris climate accord. The report will be issued before its next annual meeting in May 2020.

## **Japan's Inpex wants to expand Ichthys LNG in Australia**

(Reuters; Sept. 13) - Inpex Corp., Japan's top oil and gas company, wants to expand its Ichthys liquefied natural gas operation in Australia as part of a plan to become a major regional gas company, its Australian boss said. "Our focus is on fully utilizing our Ichthys LNG facilities while creating a solid base for future expansion," Inpex's director for Australia, Hitoshi Okawa, told Reuters in an interview Sept. 13. Inpex completed construction last year on its first LNG operation, the US\$45 billion Ichthys LNG project in Darwin at the north end of Australia and shipped its first LNG cargo last October.

Production at Ichthys LNG, Japan's biggest foreign investment, has rapidly climbed toward its full capacity of 8.9 million tonnes a year, quicker than typical for LNG projects, especially for a company building its first one, consultants Wood Mackenzie said. Okawa said he expects to be able to declare soon that it has reached full capacity. The original plan was to reach plateau production within two to three years of start-up.

Inpex set out in its "Vision 2040" to become a Top 10 global oil company and a major gas company in Asia and Oceania, paving the way for expansion in Australia, alongside its other core areas of Japan, Indonesia, and Abu Dhabi. Inpex has space to add four LNG production trains at Ichthys and has points along its 553-mile undersea pipeline from the Ichthys offshore field to Darwin where pipelines from new gas fields could be tied in. Expansion in Australia could also involve acquisitions, Okawa said.

## **Nigeria LNG in talks to raise money for \$10 billion expansion**

(Bloomberg; Sept. 13) - Nigeria LNG, the operator of Africa's largest liquefied natural gas plant, is in talks with lenders to finance a \$10 billion expansion. The company is discussing with the country's top lenders to raise as much as \$2 billion, and with foreign lenders and export-credit agencies for the balance, CEO Tony Attah said. The funds will go toward building the gas plant's seventh liquefaction train, expected to boost output by almost 40 percent past 30 million tonnes a year.

"We have done the financial market pitch to know who has capacity," Attah said of potential lenders. The funding will be a combination of debt and equity. The seventh train will cost as much as \$7 billion to build, with an additional \$3 billion for gas projects and pipelines. Nigeria is joining nations from U.S. to Australia in increasing their LNG output to help meet rising demand led by China. Nigeria, Africa's top LNG exporter, already lost its position as the world's No. 4 exporter, overtaken last year by the U.S.

Nigeria LNG on Sept. 11 moved closer to taking a final investment decision on the project when it signed a letter of intent for engineering, procurement and construction contracts with Saipem, Chiyoda, and Daewoo Engineering & Construction, a milestone toward a final investment decision. "Our ambition is to take that decision on Oct. 31,"

Attah said. State-owned Nigerian National Petroleum Corp. is the biggest shareholder at 49 percent, followed by Shell at 25.6 percent, Total 15 percent, and Eni 10.4 percent.

### **Company looks for partner in offshore Australia LNG project**

(Reuters; Sept. 11) - Privately owned Western Gas said it has appointed Goldman Sachs to advise on finding a partner for its Equus project offshore Western Australia, as it aims to start producing at the \$3.5 billion project in 2024. Western Gas wants to develop the field with a floating liquefied natural gas facility, rather than feeding into larger, existing onshore LNG plants as contemplated by the previous owner, Hess Corp.

Western Gas declined to comment on the economics of the project but said engineering firms McDermott International and Baker Hughes had designed a "globally competitive, mid-scale LNG development plan" for Equus, involving a 100-mile seabed pipeline feeding a floating liquefaction facility capable of producing 2 million tonnes per year. To achieve its target of first production from Equus in 2024, Western Gas will need to make a final investment decision on the project in 2020.

### **Croatia a year away from its first LNG import terminal**

(Bloomberg; Sept. 10) – Workers on the Croatian island of Krk are laying the foundation for independence from Russian natural gas. The construction of a floating seaside liquefied natural gas storage facility, already a decade in the making, is still more than a year away from being operational. But planners are already counting on it to give the newest European Union member flexibility in meeting future energy needs.

The project is the first of its kind for Croatia, which has the EU's fifth-longest coastline, and is the result of the U.S. lobbying to reduce the country's need for Russian gas. Once online, the terminal will have an annual capacity of about 90 billion cubic feet of gas, nearly as much as Croatia uses each year. The terminal would function like one in Lithuania, whose floating terminal is fully booked by multiple users through the end of 2020. The EU contributed 101 million euros (\$111 million) to develop the Krk terminal.

So far, Croatia's gas line grid operator HEP and Zagreb-based refiner INA Industrija Nafta have booked capacity at the terminal, and the government is in talks with Hungary to book about 25 percent of the facility's annual capacity. Croatia expects interest in the gas terminal will increase as demand for the cleaner-burning fuel grows. Krk's terminal will be a 920-foot-long converted LNG carrier, due on site next November.

## **Lithuania will receive its first cargo of Russian LNG**

(Bloomberg; Sept. 12) - The liquefied natural gas import terminal Lithuania built five years ago to reduce its dependence on Russian fuel is about to get its first Siberian cargo. The cargo will arrive at the facility, symbolically named Independence, next week, according to ship-tracking data on Bloomberg. That vessel loaded the LNG at France's Montoir terminal from another carrier that had in turn taken it from a Russian ship in Zeebrugge in Belgium.

The moves indicate the increasingly global nature of the LNG trade, when cargoes change hands, and vessels, several times. The final seller into Lithuania is unknown and may not be Novatek, the operator of Russia's Yamal LNG project, which sells its cargoes to a variety of buyers.

Lithuania built the Independence floating terminal in 2014 to take LNG from global sellers such as Norway, Qatar, and the U.S. to reduce its almost total dependence on Russian pipeline fuel and as a bartering chip to secure better prices. "It is a bit ironic to now observe Lithuania's 'Independence,' a symbolic name representing Lithuania's independence from Russian gas, receiving a cargo originally sourced from Yamal," said Madeleine Overgaard, an LNG market analyst at Kpler, a data intelligence company.

## **Neighboring community prepares for LNG Canada project**

(The Northern View; Prince Rupert, B.C.; Sept. 10) - When LNG Canada announced a positive final investment decision for its C\$40 billion liquefied natural gas terminal in Kitimat, British Columbia, last fall, neighboring Terrace reacted at first with optimism of what it would mean for economic growth. But when the dust settled, the question of how the city of 12,500 could support a sudden influx of new residents came into focus. Preliminary work has started on the terminal, which is expected to go online in 2024.

Terrace is grappling with how it can prepare for Canada's largest private-sector investment just a 40-minute drive away. While Kitimat and neighboring First Nations communities have secured benefit agreements from LNG Canada and the province, Terrace did not — and risks being left behind despite its role as a hub for goods and services. "The city will bear the majority of the burden and impact from LNG Canada yet is unable to generate revenues to address these impending issues," said a city report.

Terrace's population is expected to double in the next 10 years, according to the city. Northwest Regional Airport passenger traffic is on track to break records. Construction in the city has also picked up. So far in 2019, 150 construction permits worth \$15 million have been issued. The mayor and chief administrative officer have reaffirmed their commitment to travel to Victoria this fall to lobby provincial legislators for financial help to deal with social issues, including revenue sharing to affected communities.

## **Alberta government to review energy regulator, liabilities for old wells**

(Calgary Herald columnist; Sept. 10) - The Alberta government is about to embark on two reviews that could have a profound impact on the province's oil and gas industry. One will look into the Alberta Energy Regulator. The other one will examine liability management issues that stem from aging oil and gas wells, including an estimated 90,000 inactive wells scattered across the province. There's plenty to consider.

Environment Minister Jason Nixon and Energy Minister Sonya Savage announced Sept. 6 their departments will begin a review of the energy regulator. The government cites industry statistics that it takes up to twice as long in Alberta than in Saskatchewan — and up to four times as long as in Texas — to get a well approved. News of the review comes after a string of controversies and questions have dogged the regulator, from executives traveling on the agency's dime to their homes outside the province to ongoing investigations by Alberta's Public Interest Commissioner and auditor general.

Equally important is that the province will soon conduct a liabilities management review of energy development. It's a critical issue for Albertans due to a jump in the number of orphan wells created during the industry downturn, the potential price tag to clean them up, and the impact of a court ruling holding companies in bankruptcy responsible. Estimates of industry liabilities — including remediating oil sands mines — have ranged all over the map from a total of \$58.6 billion to figures well in excess of that amount.

## **Cruise ship destinations push back against emissions**

(Bloomberg; Sept. 11) - Concerned about too much tourism and air pollution, Barcelona — Europe's No. 1 cruise destination — and the Croatian city of Dubrovnik are planning to limit the number of cruise ship visits. Southampton, Britain's top passenger port, wants liners to run on shoreline electricity and turn off their engines while docked. "It's a very visible thing: a big funnel chucking out black soot and smoke. People think, I'm breathing all that in," said Christopher Hammond, Southampton City Council leader.

With their brochures and websites brimming with photos of pristine blue waters and unsullied shorelines, cruise companies are profoundly aware of the importance of a spotless image. The biggest players say they've made sustainability improvements such as banning some single-use plastics and increasing use of locally sourced foods, but cutting emissions is more complicated. Most ships burn a thick, sulfurous mix of the goo that's left over after gasoline, and other higher-value fuels are refined from crude oil.

The most popular alternative is liquefied natural gas, which can reduce sulfur oxide and nitrogen oxide emissions by 90 percent and carbon dioxide by 20 percent. Carnival, the cruise industry leader, launched the first LNG liner this year, and about three dozen more are being built, according to shipping auditor DNV GL. To clean up their fleets,

cruise lines are adding scrubbers that capture sulfur emissions, but critics don't like them because they produce acidic water that gets dumped in the ocean. "Scrubbers effectively turn air pollution into water pollution," said Kendra Ulrich, of Stand.earth.

## **U.S. challenges Saudi Arabia as world's top oil exporter**

(CNBC; Sept. 12) - The International Energy Agency expects the U.S. to challenge Saudi Arabia's position as the world's leading oil exporter after briefly overtaking the OPEC kingpin to claim the number one spot earlier this year. "Booming shale production has allowed the U.S. to close in on, and briefly overtake, Saudi Arabia as the world's top oil exporter," the IEA said in its monthly report Sept. 12.

The U.S. momentarily surpassed Saudi Arabia as the leading oil exporter in June after its crude exports surged above 3 million barrels per day, the IEA said. At the same time, Saudi Arabia cut back on both crude and refined product exports. The oil-rich kingdom reclaimed the top spot in July and August as the U.S. was affected by hurricane-related disruptions. The ongoing trade dispute also made it difficult for U.S. shale shipments to find markets in recent months, the IEA said.

The report comes as the U.S. is pursuing "energy dominance," regardless of what happens to oil prices. The U.S. has more than doubled oil production to over 12 million barrels a day in the past decade, making it the world's largest producer. It now appears set to flood the market with even more oil, putting downward pressure on prices as the market is already struggling to cope with too much supply. Over the final three months of the year, the U.S. "is expected to see a further build out of export infrastructure that should allow for up to 4 million barrels a day in crude exports," the IEA said.

## **Lower prices slow down growth in U.S. oil production**

(Reuters; Sept. 13) - U.S. crude oil production remained close to a record level in June but growth has slowed significantly since the end of last year in response to lower oil prices and the slowdown is set to extend into 2020. Crude output averaged 12.1 million barrels per day in June, essentially unchanged from record levels in May and April, according to data from the U.S. Energy Information Administration published Sept. 12.

The shale boom has moderated in response to lower oil prices since the start of the fourth quarter of 2018, and the deceleration is expected to continue through 2019 and 2020. Output in the three months between April and June was up by almost 1.6 million barrels a day (15 percent) compared with a year earlier. But annual growth has slowed from a peak of 2 million barrels per day (21 percent) in August-October 2018.



Record output in the first half of this year is the delayed response to the drilling boom and period of high prices in the middle of 2018. Prices typically affect production with a delay of about 12 months — given the time needed to contract rigs, move them to the site, drill and complete wells, and hook them up to gathering systems. Current output reflects high prices last year, when WTI prices were above \$65 and even \$70 per barrel, rather than the much lower prices that are currently prevailing, with WTI trading at \$55.