# Oil and Gas News Briefs Compiled by Larry Persily August 17, 2017

#### Final pieces of Australia's LNG construction boom move into position

(Reuters; Aug. 14) - The last massive component of Australia's multi-year \$180 billion liquefied natural gas construction boom arrived Aug. 14, stepping up a race between Shell and Japan's Inpex to start chilling gas for export in 2018. Company reputations are at stake, as well as first access to overlapping offshore gas fields. The two liquefaction plants will leapfrog Australia over Qatar as the world's largest exporter of LNG.

The Ichthys Venturer, a floating production, storage and offloading facility, traveled from a South Korea shipyard and will be moored 136 miles off Western Australia to handle condensate from the Ichthys field. Inpex, Japan's top oil and gas explorer, runs Ichthys LNG — the country's biggest overseas investment and first LNG megaproject. "This project is a huge source of pride for Japan and an important addition to ... energy supplies," said Tom O'Sullivan, head of energy consultancy Mathyos Japan. "All eyes are on Inpex to see if they can pull this off without more budget blow-outs and delays."

First production, due by March 2018, will be more than a year behind target. Costs have grown more than 10 percent to \$37 billion since the project's approval in 2012. Nearby, Shell's \$12.6 billion Prelude project — the world's largest floating LNG facility — is also behind schedule. Shell's facility, six times the size of the biggest aircraft carriers, arrived last month from its South Korea shipyard. Shell expects hook-up and commissioning to take up to 12 months, meaning start-up between April and July 2018. Ichthys is planned to produce 8.9 million tonnes of LNG per year; Prelude would make 3.6 million tonnes.

## First cargo expected next month from Wheatstone LNG in Australia

(Reuters; Aug. 16) - Woodside Petroleum expects the first cargo from the Wheatstone liquefied natural gas project in Western Australia to leave the dock in September, CEO Peter Coleman told analysts on a conference call Aug. 16. Commissioning of the project's first processing train is nearly complete, and the second train is expected to start up between March and May 2018, he said. Chevron is operator of Wheatstone. The plant's two trains will be capable of making 8.9 million tonnes of LNG per year.

Chevron owns a 64.14 percent stake in the \$34 billion Wheatstone project. Australia's Woodside holds 13 percent. Kuwait Foreign Petroleum Exploration owns 13.4 percent,

Kyushu Electric 1.46 percent, and a joint-venture of Japanese power utilities has a share of an 8 percent ownership stake.

#### Petronas CEO sees global LNG market rebalance in 2023

(Reuters; Aug. 15) - Malaysian state energy company Petronas expects the global liquefied natural gas market to remain oversupplied until as late as 2023, its chief executive said Aug. 15. Rising LNG production over the past two years, mainly from Australia and the United States, has exceeded market demand and depressed prices. Asian spot LNG prices are now down by about 70 percent from early 2014.

"Things are volatile, but at the moment we see 2023 (for LNG market balance)," CEO Zulkiflee Wan Ariffin told Reuters. The market will tighten when "demand centers in developing economies start growing ... as current low prices mean more take up" of LNG supplies, he said.

Petronas is the sole manager of Malaysia's oil and gas reserves, making it the world's third-biggest LNG exporter after Qatar and Australia. The company is now looking for new buyers for its LNG output, beyond its long-time customers in Japan and South Korea, the CEO said. "The Far East, that is our traditional market, but we are also looking at markets in the subcontinent in India, Bangladesh and Pakistan," he said. South Asia is emerging as the new hot spot for LNG, with Pakistan and Bangladesh set to join India as major consumers, helping to eat away some of the global oversupply.

# LNG partner takes its third write-down on Australia project

(The Observer; Australia; Aug. 15) – Australian natural gas giant Santos has cut \$1.1 billion (Australian) from the value of its Gladstone LNG project on Curtis Island as it continues to deal with low oil prices. The write-down was announced Aug. 14. It follows fellow Australian LNG player Origin Energy's decision last week to write down \$1.2 billion from the value of its Australia Pacific LNG project. Export sales contracts at both projects are linked to oil prices, reducing revenues amid depressed crude prices.

"Santos has lowered its Brent oil price forecasts to US\$50 per barrel in 2017," rising slowly to \$70 in 2021, the company said. "As a result of the changes in assumptions, Santos expects to recognize an impairment of Gladstone LNG of approximately US\$870 million (A\$1.1 billion) after tax, predominantly due to lower oil prices." It is the third write-down for Santos, which has a 37.5 percent stake in the project. The three adjustments total more than \$3 billion in reduced value on the company's books.

"It would appear that investors in Origin and Santos can look forward to further material write-downs in Santos' Gladstone LNG venture and in Origin's Australia Pacific LNG

joint venture," said Bruce Robertson, a gas analyst at the global Institute for Energy Economics and Financial Analysis. The Gladstone and Australia Pacific projects both started operations in late 2015. The investment decisions on each were made in 2011, when oil prices averaged above \$100 per barrel.

#### Australia LNG operator wants to learn from U.S. shale

(Bloomberg; Aug. 16) - After amassing \$1.2 billion in write-downs on its first liquefied natural gas project, Australia's Origin Energy is looking to the U.S. shale revolution for answers. The operator of Australia Pacific LNG, Origin has sent executives to the United States to study and replicate the shale sector's ability to thrive even as oil strains to top \$50, CEO Frank Calabria said Aug. 15. Origin plans to roll out a leaner operating model for the LNG facility and improve the results from its unconventional gas wells.

"We have looked quite extensively at what is going on in an industry that is rapidly advancing over there," Calabria said of U.S. shale. After investing "a lot of capital" in the LNG project that started up in 2015 and lowering its long-run oil price forecast to \$67 a barrel last week, the company is focused on replicating the lead of U.S. unconventional producers that have reduced costs and improved productivity. ConocoPhillips and Sinopec also hold stakes in the LNG plant on Australia's East Coast.

Origin is among companies including Australia's Santos that have written down the value of LNG export projects built in Queensland state amid sluggish oil prices that have dragged down LNG prices.

# U.S. industry group asks Trump to halt more LNG export approvals

(Bloomberg; Aug. 15) - President Donald Trump's effort to boost U.S. energy is facing pushback from manufacturers who say exporting more natural gas may undercut his "America First" jobs focus. The Industrial Energy Consumers of America asked the administration Aug. 16 for a moratorium on federal approvals of additional liquefied natural gas exports. The association, which represents U.S. manufacturers that depend on cheap energy to fuel their factories, sent a letter to Energy Secretary Rick Perry.

The dispute between oil and gas companies and manufacturers is but one among business groups over Trump's agenda. Oil companies oppose Trump's idea to require that steel pipelines be made in the U.S.; agriculture producers oppose some of his trade policies; and refiners have opposed sanctions on Venezuelan oil imports. In its letter, the energy consumers group said growing LNG exports could drain as much as two-thirds of U.S. gas resources by 2050.

The group doesn't disclose its members, but its 2015 tax filing says it represented Dow Chemical, Corning and other factory owners. The first LNG export terminal in the continental U.S. opened in 2016 in Sabine Pass, La., with five more under construction and several more holding export rights but uncertain whether to proceed to construction amid weak global pricing. The natural gas industry rejects the fear that the U.S. doesn't have enough gas supplies to meet domestic needs and also serve future export growth.

#### Cheniere is setting up China office to market U.S. LNG

(Reuters; Aug. 14) - U.S. natural gas exporter Cheniere Energy is setting up an office in Beijing to help it clinch long-term supply deals with Chinese buyers, industry sources said. Cheniere, which held extensive talks with China earlier this year, will be the first operator of a U.S. liquefied natural gas export facility to establish a presence in the country. China is the world's third-largest buyer of LNG.

The move follows an agreement in May between the U.S and China to boost trade. Global LNG demand is expected to double by 2040 to about 71 billion cubic feet per day (540 million tonnes a year), up from 32 bcf a day in 2015, the U.S. Energy Department estimates, driven by the growing economies of Asia, particularly China and India.

Cheniere is currently the only company able to export large cargoes of LNG from the continental U.S., giving it a leg up to ink long-term contracts with China. Five additional U.S. export terminals are under construction and expected to start up between late 2017 and 2020. Maggie Jia, senior marketing manager with Cheniere Asia who worked previously for Japanese trading house Mitsui, will head the Beijing office, sources said. Cheniere also hired Chris Li, who formerly worked with China National Offshore Oil Co. and with China's energy policy-setting agency, the National Energy Administration.

## Federal court rejects Sierra Club challenge to Texas LNG project

(The Hill; Aug. 15) - A federal court has rejected a challenge to a major liquefied natural gas export terminal in Texas. The Court of Appeals for the District of Columbia ruled Aug. 15 that the Department of Energy conducted the necessary environmental and economic reviews before it approved the Freeport LNG export project. The Sierra Club had challenged the department's review of the project, saying the agency did not comply with federal environmental laws before approving the terminal in 2014.

The Sierra Club also said the department's determination that the project is in the "public interest" was flawed. The court batted down both contentions, ruling that the department followed procedures outlined in the National Environmental Policy Act. The court also rejected the Sierra Club's argument that the department should have

considered the indirect environmental impacts from U.S. natural gas production to feed the export project.

In upholding the decision that the project is in the public's interest, the court affirmed that the department properly considered domestic economic impacts, foreign policy goals and energy security. All exports to non-free-trade nations are required to attain a public-interest determination. The court decision is the latest development in a lengthy legal fight over the Freeport terminal, which is due to come online next year. Opponents have raised, and lost, similar legal arguments against other U.S. LNG projects.

### Middle East demand growth for LNG could be slowing down

(Bloomberg columnist; Aug. 15) - Conventional wisdom says that Middle East natural gas demand will continue to surge. In the 10 years through 2016, consumption rose by 25 billion cubic feet a day. BP's 2017 energy outlook sees Mideast demand rising to 73 bcf a day by 2035. Liquefied natural gas exporters are relying on the region's appetite to justify ambitious expansion plans. But this is about to change.

The region's economic boom from the early 2000s on, fueled by high oil prices, led to rapid growth, construction of new cities and demand for air conditioning, winter heating, cooking, desalinated water and all the other comforts of life. Governments pursued energy-intensive industrialization, seeking to diversify their economies into sectors like petrochemicals, aluminum, steel and cement. They subsidized gas, power and water.

At the same time, cheap gas, a byproduct of local oil output, was increasingly fully utilized. The region began to import liquefied natural gas, but exporters eyeing the market should not see it as a bottomless well of demand. Low oil prices have led to subdued growth, even recession in places, and less money for new infrastructure. The oil and gas price downturn has made governments aware of the high cost of subsidies.

Higher natural gas prices and the shortage of domestic supply have led governments to turn to alternative sources such as nuclear power and solar. Gas will still have a leading role, of course. But demand growth, and especially LNG imports, are going to slow a lot.

# **Egypt starts reducing its need for LNG imports**

(Reuters; Aug. 13) - Egypt is planning to import 80 cargoes of liquefied natural gas during the 2017-18 fiscal year that began in July, Petroleum Minister Tarek El Molla told Reuters on Aug. 13, down from the 118 cargoes imported last year. Egypt has been trying to speed up the development of recent gas discoveries with a view to halting LNG

imports by 2019. The country started imports in 2015 as declining domestic gas production failed to meet local demand.

Egypt expects to increase its gas production by 1 billion cubic feet per day by the end of the financial year to reach 6.2 billion cubic feet. "We were planning to import 154 cargoes of LNG in 2016-17 but we only imported 118 cargoes because of the increase in gas production," Molla said. Gas production will get a big boost from Italian national oil company Eni's Zohr field, discovered in 2015 with an estimated 30 trillion cubic feet of gas in place. That field is expected to come into production at the end of 2017.

#### Indonesia struggles to attract oil and gas investment

(Bloomberg; Aug. 14) - Once a cornerstone of the economy, Indonesia's oil and gas sector is in a slump, even as the country's appetite for energy soars. Hit by a drop in global prices, changing regulations and competition from neighbors that are proving more attractive to international energy companies, Southeast Asia's biggest economy is facing a decline in oil revenue and steadily rising fuel imports.

The oil and gas industry is sounding alarms over the decline of a sector that five years ago accounted for almost 6 percent of Indonesia's gross domestic product and last year contributed only 3 percent. Exploration investment in Indonesia shrank to \$100 million in 2016 from \$1.3 billion in 2012, according to government data. A lack of drilling success and commercialization issues have weakened the outlook and spending is likely to drop further, said Johan Utama, a Southeast Asia oil analyst with Wood Mackenzie.

"Indonesia has a reputation as being a difficult place to do exploration and development, not so much because of the potential, but more because of the sheer difficulty in getting approvals and permits," said Tony Regan, an oil and gas consultant in Singapore. The drop has also reduced the industry's contribution to Indonesia's coffers. A decade ago, oil and gas provided a quarter of government revenue. Last year, it fell to 3 percent.

The government plans to offer incentives such as tax-free import of drilling equipment and simpler cost recovery. It is also revising its tax structure. But some of the reforms have reduced the attraction of investing in the country, the industry said. Earlier this year, the government said it was ending its reimbursement for all costs associated with exploration and production. The constantly changing regulatory environment "paints a picture of Indonesia as not being a stable place" for exploration, Utama said.

#### North Dakota flared 222 million cubic feet of gas a day in June

(EnergyWire; Aug. 15) - Gas flaring in North Dakota's Bakken Shale oil field has been creeping back up, blunting the state's efforts to tame a problem that came to symbolize the excesses of the oil boom. The volume of gas burned in flares reached 222 million cubic feet a day in June, a 31 percent increase from the same month last year when the volume was 170 million cubic feet. That's still far lower than the peak in 2014, but critics said the increase shows the limits of North Dakota's industry-friendly regulations.

The flares release carbon dioxide and raw methane, both of which contribute to global climate change. Methane from flares is the biggest source of greenhouse gas emissions from North Dakota's oil and gas sector, according to the Environmental Defense Fund. Landowners have objected to the waste of gas from their property, and residents who live in the oil field worry that the emissions from gas flaring could cause health problems, said Don Morrison, president of the Dakota Resource Council.

Like other fields, the Bakken Shale produces large amounts of gas along with its crude. Unlike other fields, though, it has historically lacked the pipelines and processing plants to get gas to market. After North Dakota in 2014 adopted regulations to limit flaring, the industry invested billions of dollars in infrastructure to move the gas to market. In the past year, though, the oil bust has forced producers to shift their drilling into the most productive parts of the field, which also produce the most gas. That has resulted in more gas being flared, even though the percentage has stayed roughly flat.

## Australia LNG operator agrees to supply local power plant

(The Australian; Aug. 14) - Santos and its Gladstone LNG project have struck a deal to supply gas to a South Australia power plant in a move the oil and gas company hopes will ward off the federal government's looming restrictions on liquefied natural gas exports. Santos said it signed a deal to sell gas to the Pelican Point power station that is owned by Engie, the French power company. Gas deliveries will start in January.

Australia-based Santos is a 30 percent owner and the operator of the Gladstone LNG project on the country's East Coast; it started operations in 2015. GLNG draws gas from its own coal-seam gas reserves and also purchases gas from other producers in the region, putting it more at risk than other LNG export plants fed entirely by their owners' own gas reserves. The government intends to activate its new Australian Domestic Gas Security Mechanism to limit LNG exports if there is a domestic supply shortage.

Santos said the Australian Energy Market Operator had identified the resumption of the Pelican Point power station as critical to supporting electricity needs in South Australia, where blackouts last summer spurred more focus on growing power problems. The deal comes four months after Origin Energy, a partner in a different Australia LNG

project, signed up to provide gas to Engie in 2018-19 for the power plant and retail customers.

#### Permian output expected to hit record 2.6 million barrels a day

(Bloomberg; Aug. 14) - Oil output from major U.S. shale plays is poised to reach a fresh record next month, further complicating OPEC's efforts to support oil prices. The gain is being led by the oil-rich Permian basin of Texas and New Mexico, where production has risen steadily over the past two years. The U.S. Energy Information Administration projects Permian output to rise by 64,000 barrels in September, reaching a record of 2.6 million barrels a day.

The forecast comes just as Saudi Arabia and Iraq, the two biggest producers of the Organization of Petroleum Exporting Countries, promised to strengthen their commitment to cutting production. Crude output in the U.S. meanwhile has climbed in nine of the past 10 months. Shale drillers such as Pioneer Natural Resources and Devon Energy have been taking advantage of price rallies near \$50 a barrel to hedge their output, with some producers locking in prices as far out as 2023.

The EIA expanded its monthly forecasts to include the Anadarko shale region, which spans 24 Oklahoma and five Texas counties. The region, a well-established oil and gas producing area, has seen an uptick in improved drilling and completion technology.

# OPEC may need to hold back supplies for several years

(Bloomberg; Aug. 15) - When OPEC and Russia first embarked on their strategy to clear a global oil glut, it was expected to succeed within six months. It now looks like the battle could last for years. The Organization of Petroleum Exporting Countries and its partners plan to wrap up their production cuts next spring, already nine months later than originally expected. Yet oil prices are faltering again as world inventories could remain oversupplied even after the end of 2018. Draining the surplus could take years.

"They're going to have to dig in for the long haul," said Neil Atkinson, head of the International Energy Agency's oil markets and industry division. "Rebalancing is a stubborn process." Oil prices have lost 11 percent in London this year as the production cuts that OPEC, Russia and other partners started in January have failed to disperse a world surplus. The producers will meet in November to decide whether further action is needed beyond spring 2018.

The cutbacks have been undermined amid recovering output from OPEC members exempt from the deal — Libya and Nigeria — and as U.S. shale producers prove they can keep drilling despite lower prices. As a result, OPEC's current production is higher

than what is needed for most of next year, the IEA said Aug. 11. "If OPEC wants to keep oil prices in the \$50s and hit \$60, the organization will have to keep a lid on supply for several more years," said Sarah Emerson, energy principal at ESAI in New York.

#### Britain will need more dirty electricity if it ditches gas and diesel cars

(Bloomberg; Aug. 13) - Britain's goodbye to fossil-fuel cars by 2040 could boost the need for dirtier natural gas-powered generating stations. The government's goal to replace gasoline and diesel cars with those powered by electricity could see the construction of so-called open-cycle gas-fired power stations, said Carsten Poppinga, senior vice president of trading and origination at Statkraft, the Norwegian utility that operates hydro power plants and wind farms across the U.K.

Such units can keep the grid from buckling from the strain of people charging cars in peak demand periods. The catch? While the plants can start generating power almost instantly, and cost less to build, they don't recycle waste heat, making them emit more greenhouse gases per megawatt than the combined-cycle generating stations that comprise the largest share of the U.K.'s daily power output.

Britain may have no choice but to use the less environmentally friendly option. With little spare generation capacity, the nation is vulnerable to power shortages, particularly on cold winter days when wind and solar energy may be in short supply. Still, the flexibility of the plants will help more intermittent renewables enter the system, bolstering the shift toward cleaner energy, according to Drax Group, a utility that is planning four such open-cycle plants in the U.K., which it calls "rapid-response gas."