

# Oil and Gas News Briefs

## Compiled by Larry Persily

### October 31, 2016

#### **Chevron says LNG overrun due in part to poor construction estimates**

(Sydney Morning Herald; Oct. 30) - Chevron has suffered a significant cost overrun at the Wheatstone gas export project off western Australia at the same time one of the projects in Queensland, Australia Pacific LNG, has confirmed it may not reach full capacity for another six months due to gas-supply constraints. Addressing analysts after the release of its latest results, Chevron said the giant Wheatstone project would cost \$34 billion (US) to complete, significantly more than the 2011 estimate of \$29 billion.

Chevron cited the overheated construction market at the time work commenced for part of the overrun, along with difficulties in building key modules. "Late module delivery ... was one of the primary drivers behind the cost increase," Chief Financial Officer Patricia Yarrington told analysts. "The contractor was unable to effectively manage the size and the scale of the work." Chevron also said it had failed to estimate the quantity of materials needed for the project, since it took the investment decision when only 15 percent of the engineering had been done "and so the rest was based on rules of thumb," Yarrington said.

Separately, ConocoPhillips, which has a 37.5 percent stake in the Australia Pacific LNG project in Queensland, said it may not be until May 2017 before the two-train, coal-seam-gas-fed plant in eastern Australia hits full capacity. "I expect it will be sometime in the second quarter before we have enough gas supply from the upstream side to be able to run both trains at full tilt," said Al Hirshberg, head of production, drilling and projects at ConocoPhillips.

#### **Conoco-operated Australia LNG plant expects full capacity mid-2017**

(Reuters; Oct. 27) - ConocoPhillips, operator of the Australia Pacific Liquefied Natural Gas plant, said it expects the project to reach its full capacity of 9 million metric tons a year in the June quarter of 2017. APLNG started shipping from the second of its two production units earlier this month, and is now focused on ramping up coal-seam gas supplies from fields operated by its Australian partner Origin Energy.

Origin has said it expects to start reaping benefits from its investment in the \$20 billion (US) project in the next fiscal year. APLNG, co-owned by ConocoPhillips, Origin Energy and China's Sinopec, is the largest of three coal-seam-fed LNG projects to have

opened on Curtis Island off Australia's east coast over the past two years. Its first liquefaction train started up a year ago, with the first export cargo in January 2016.

## **Opponents file lawsuits to block LNG project in British Columbia**

(Reuters; Oct. 27) - Canadian aboriginal and environmental groups filed lawsuits on Oct. 27, seeking to overturn government approval of a liquefied natural gas project led by Malaysia's Petronas that they say will hurt the environment and destroy crucial salmon habitat. The challenges, filed in the Federal Court in Vancouver, allege that the government's environmental assessment is invalid and that the project will have significant and adverse environmental effects that were not considered.

In September, Canada gave the green-light for the Pacific NorthWest LNG project near Prince Rupert, B.C., despite critics' concerns of environmental damage. The project is majority-owned by Malaysia's state oil and gas firm Petronas. The government said it will review the information outlined in the lawsuits and take appropriate steps, but stood by its decision made after a three-year evaluation. Opponents said they plan to rally international opposition and hold civil disobedience events to disrupt plans to build the facility near critical salmon habitat at Flora Bank.

"We attempted for a long time to be engaged on the project, to be consulted and worked with to accommodate the interests that we have," said Glen Williams, chief negotiator for the Gitanyow aboriginal community. "That didn't occur, or at least very little. They denied us that process. That's what we'll be seeking for in court." The litigants are the Gitwilyoots tribe of the Lax Kw'alaams, the Gitanyow First Nation and SkeenaWild Conservation Trust. Petronas and its partners are reviewing the permit conditions, market factors and economics before making an investment decision on the project.

## **Consultancy says Canadian LNG developers should merge projects**

(Bloomberg; Oct. 27) - Canada's liquefied natural gas developers should band together and merge their projects like producers in Papua New Guinea are trying to do as a price crash has limited investments for new, individual export terminals, according to global consultancy IHS Markit. Producers must put together economically viable projects and green-light them now so they can start up by 2022, when the market will be in deficit, said Bob Fryklund, the consultancy's chief upstream strategist.

Companies involved in Canadian projects should share facilities to produce LNG, like ExxonMobil has proposed for its venture in Papua New Guinea with Total and Oil Search, Fryklund said. "Papua New Guinea is going to end up with one liquefaction plant," and some companies owning individual trains. "That is probably the model that

will happen in Canada,” Fryklund said Oct. 27 in an interview in Tokyo. “It’s a competitiveness issue, there is still some consolidation going on among the operators.”

Shell, ExxonMobil and Chevron are all involved in separate LNG proposals in British Columbia. Malaysia’s Petronas received conditional approval last month for its project proposed near Prince Rupert, B.C., though it has not yet decided whether to move forward with the multibillion-dollar project. As a result of a worldwide supply glut and low prices, the LNG industry hasn’t approved a new onshore greenfield development since December 2013, according to Wood Mackenzie analyst Chong Zhi Xin.

### **India searching for low-priced LNG to feed power plants**

(Bloomberg; Oct. 27) - India is scouting for new liquefied natural gas contracts globally as part of a push to secure cheap supplies for its underutilized gas-fired power plants. Australia, Qatar and Iran could all be potential suppliers of long-term LNG contracts, India’s Power Minister Piyush Goyal said Oct. 27 in Sydney. The global search for LNG comes as India’s gas-fired plants, which can generate nearly 25 gigawatts of power, run at less than a quarter of capacity because of a shortage of the fuel at affordable prices.

“I think gas needs to be between \$5 and \$5.50 landed at my power plant. That is what I’m looking for in the medium- to long-term,” Goyal said. “Otherwise I won’t be able to start those gas plants.” That highlights India’s difficulty in switching from coal to gas, undermining its efforts to cut carbon emissions and promote clean energy. “As of now, I don’t have any credible offer on the table, but I am fairly confident from talking to people across the world that if not Australia, maybe Qatar will give it to me, or Iran,” Goyal said.

Energy consultancy Wood Mackenzie said India may struggle to attract the interest of LNG producers at those low prices. “From an LNG producers’ perspective, India has always been seen as a very price-sensitive buyer and not a premium buyer like Japan, Korea or Taiwan,” said Saul Kavonic, an analyst at Wood Mackenzie. “It is a struggle to see why producers would want to lock in such a low price.”

### **Low LNG prices helping to spur demand by small-scale projects**

(Reuters; Oct. 29) - Indonesia's ambitions to build small-scale liquefied natural gas regasification terminals for new power plants scattered across the country will get a boost from new developments in the sector, said infrastructure firm Atlantic, Gulf and Pacific Co. The LNG industry, traditionally based on expensive mega-projects, has up to now struggled to develop small-scale investments, said Derek Thomas, Atlantic, Gulf and Pacific's director of advanced modular infrastructure.

But new solutions and reductions in costs are set to stimulate demand in Southeast Asia for these smaller projects, which are expected to reach a demand capacity of 2.5 million to 3 million metric tons of LNG per year by 2020, Thomas estimated. Indonesia's state utility PLN last year requested proposals on new power plants in the country and has since short-listed 11 parties to construct 21 small-scale LNG receiving terminals located on islands in the eastern part of the archipelago.

"There is a lot of inherent demand in countries like Indonesia, Philippines and Vietnam," Thomas said, adding that portfolio players with access to multiple sources of LNG are keen to take stakes in such projects to secure outlets for their supplies. Interest in the sector has also been sparked by an LNG price slump. Asian spot prices have fallen by about 65 percent since early 2014, to about \$7 per million Btu. "Lower prices are going to facilitate (that small-scale demand), because people who wanted to do this couldn't afford it at \$20, but are now seeing it as very viable," Thomas said.

### **Indonesia keeps working toward reducing natural gas prices**

(The Jakarta Post; Indonesia; Oct. 25) - The Indonesian government has been unable to find a solution that will reduce end-user natural gas prices to below US\$6 per million Btu, as President Joko "Jokowi" Widodo's deadline looms closer. Jokowi earlier this month ordered his Cabinet to slash gas prices for 10 industrial sectors and one industrial zone starting next year. The average price of \$8.36 has been deemed too high by gas users and an obstacle as the country tries to boost its industrial sector.

Currently, only seven industries enjoy the lower gas prices, but the government plans to add pulp and paper, food and beverages, and textiles to the list. The Energy and Mineral Resources Ministry's director general of oil and gas, IGN Wiratmaja Puja, said Oct. 24 that the average selling price in the gas upstream sector is \$5.90. Transmission and distribution fees of about \$2.46 are added, totaling \$8.36 for the end-user.

Wiratmaja said it is possible for the government to reduce costs through operational efficiencies in existing gas contracts, while the government hopes that capital expenditure can also be slashed for gas projects that do not yet have signed contracts. Another option is to cut the government's non-tax and tax revenues from the upstream sector. However, cutting both could result in state losses of about \$1.26 billion per year.

### **South America imported 600 bcf of gas as LNG in 2015**

(The Oxford Institute for Energy Studies; Oct. 26) - South America has long been isolated from other natural gas markets, focusing instead on achieving self-sufficiency and regional integration. As a consequence, it has never been the focus of gas industry discussions until the region decided to turn to liquefied natural gas in 2008 following

shortages of gas production, tensions over price renegotiations and shortfalls of contracted deliveries, according to a paper by the Oxford Institute for Energy Studies.

Imports reached 600 billion cubic feet of gas as LNG in 2015. Despite relatively small volumes on a global scale — representing less than 5 percent of world LNG trades — if the pace continues the region could become a player, taking more gas and reducing the scale of flows to Europe, the swing market for LNG, the U.K.-based think tank said.

But the main conclusion of the institute's research is that South America is not expected to be a major future LNG market unless there are extreme climatic conditions (such as drought impacts on hydroelectric power generation), which will not happen every year. But LNG will remain necessary to supply much-needed supply flexibility, additional volumes, security of supply and to reach new markets far from infrastructure.

### **Tokyo Gas looks to expand into Vietnam, Indonesia**

(Nikkei Asian Review; Oct. 25) - Faced with competition at home, Japan's top gas provider has launched an aggressive growth strategy that belies its traditional, conservative image. The grand plan for Tokyo Gas is to secure stakes in shale gas projects in North America and export the fuel to Southeast Asia, where it is laying the groundwork by expanding its presence in countries including Vietnam and Indonesia.

In Vietnam, the company has signed partnerships with local companies to construct a liquefied natural gas import terminal. It also plans to work on developing gas delivery infrastructure. Vietnam's gas production has long satisfied its domestic demand, but with its economy growing rapidly the country now seeks to boost imports.

Back home, the gas market for Greater Tokyo is expected to grow 2.2 percent over five years from fiscal 2015, driven by a trend of consumers switching from oil to gas and an expansion of areas covered by the gas distribution system. However, the liberalization of the gas market means the 131-year-old company must brace for fierce competition from new entrants. Tokyo Gas is pegging its hopes to Southeast Asia, seeing operations there as a "growth driver," said Michiaki Hirose, president of the company.

### **Questions arise if U.S. gas exports will impact domestic prices**

(Bloomberg; Oct. 27) - Americans wondering about life with liquefied natural gas exports can look to eastern Australia for a worst-case scenario. As Australia is set to overtake Qatar as the world's largest exporter of LNG, its domestic gas market is showing growing vulnerability to price spikes. In July, as cool temperatures boosted heating demand, Australians in the southern state of Victoria paid more for domestic gas than customers in Japan paid for Australian LNG shipped 4,400 miles.

With U.S. consumers increasingly dependent on gas for power generation, lawmakers and analysts say the country may be at risk as U.S. gas exports are projected to reach 13.5 billion cubic feet a day in 2020. “You’ve got (U.S.) industrial demand, power demand and export demand that we’ve never seen before, all of which poses significant upside risk to prices,” said Jason Schenker, president of Prestige Economics in Austin, Texas. “Power and gas prices are going up. Enjoy it while it’s cheap.”

Almost three-dozen LNG tankers have left the U.S. Gulf Coast since the first cargo in February. At the same time, the U.S. sent a record 3.6 bcf a day in July via pipelines into Mexico. Meanwhile, U.S. gas prices more than doubled from this year’s low to more than \$3 per million Btu in October as power generators, burning a record amount of gas, nearly wiped out a national surplus. Last month, 12 U.S. senators asked the Energy Department to slow LNG export approvals until it can investigate impacts on prices.

### **Made-in-India requirement creates problems for LNG tanker bids**

(Live Mint; India; Oct. 19) - India’s bid to construct liquefied natural gas carriers locally under the Made-in-India plan has collapsed again, with state-run natural gas firm GAIL (India) scrapping a tender — the second in less than two years — to contract for as many as nine new ships from global fleet owners to transport LNG from the U.S. Two Japanese-led consortiums had submitted bids before the Oct. 15 deadline set by GAIL, which said the groups deviated from bid terms and their proposals were rejected.

The bidders had wanted GAIL to spare them from paying huge penalties that could arise from potential non-performance of the India-built LNG tankers — essentially, they wanted GAIL to assume a larger share of the potential risks on locally built ships. GAIL has not been willing to take on that risk. Confirming the development, a GAIL official said the company would come out with a new tender to contract for the ships, but had no comment whether the terms would be amended.

The contract, estimated to be worth \$7 billion over the life of the charters, involved contracting for nine new LNG tankers for delivering LNG from the U.S. GAIL itself will not order the tankers directly from shipyards; it plans to contract with fleet owners for the ships, with the owners contracting for construction. The prime minister’s Made-in-India plan requires that three of the nine tankers be built at Indian shipyards, which have never built an LNG carrier. That requirement has plagued GAIL’s bidding since 2014.

## [Oil companies focus on lower risk, more accessible prospects](#)

(Wall Street Journal; Oct. 26) - In June, BP announced what it deemed an “important” new discovery in Egypt. It turned out to be a modest gas find that didn’t even rank in the top 50 discoveries since 2012. The fact that BP and its partner Eni hailed it as a major success is a sign of the times. For years, oil and gas companies committed ballooning sums to seeking mammoth reserves in difficult locations. But their record was spotty, and a dearth of major finds was followed by the oil-price slump that began in 2014. It prompted companies to cut costs and shift away from expensive, high-risk exploration.

Worldwide, oil-exploration spending last year was the lowest since 2007. There has been less conventional oil and gas (as opposed to shale or oil sands) discovered in the past 2½ years than in 2012 alone, according to U.K.-based consultancy Wood Mackenzie. Companies are increasingly focusing their exploration on less risky and more easily accessible reserves — and spending some of the money they used to commit to exploration to buy discovered resources from smaller companies.

Many projects now focus on lower-risk, lower-reward prospects as companies hope for incremental gains near existing infrastructure that they can bring online quickly and cheaply. It is a major shift for companies that designed their exploration strategies to find enough conventional oil and gas to replace all the barrels they pump every year, said Andrew Latham, Wood Mackenzie’s vice president of exploration research. Some in the industry, however, say the decline in exploration spending will eventually contribute to an oil drought — and higher crude prices.

## [Global deepwater oil production up 25% from a decade ago](#)

(U.S. Energy Information Administration; Oct. 28) - Global deepwater oil production reached 9.3 million barrels a day in 2015, a 25 percent increase from nearly 7 million barrels a day a decade ago, according to the U.S. Energy Information Administration. Shallow water (less than 400 feet) has been less expensive and technically challenging for operators to explore and drill, but changing economics and the exhaustion of some shallow offshore resources has helped push producers to deepwater or, in some areas, ultra-deepwater (at depths of 15,000 feet or more) resources, the EIA said Oct. 28.

Globally, offshore oil production accounted for about 30 percent of total oil production over the past decade. Advancements in drilling technology, dynamic positioning equipment, and floating production and drilling units have made prospects viable that were previously unreachable, the EIA report said.

In areas with deepwater operations, production has grown significantly, and in many cases overtaken shallow-water production, the EIA said. The majority of deepwater or ultra-deepwater production occurs in four countries: Brazil, the U.S., Angola and Norway. Each of these countries has realized an increasing share of oil production from

deepwater or ultra-deepwater projects over the previous decade. The United States and Brazil together account for more than 90 percent of global ultra-deepwater production.

### **Dakota oil line meant to solve a problem, but it started a movement**

(Calgary Herald; Oct. 27) - Indigenous protesters have banded together with major environmental groups to fight Dakota Access, a \$3.8 billion pipeline to connect Bakken shale oil fields in North Dakota with a hub near Patoka, Ill. If completed, the line could handle 570,000 barrels of oil a day — nearly half of North Dakota's daily production. But though much of the pipe is already in the ground, the project itself is in jeopardy.

Protesters have confronted construction teams on pipeline sites near the Standing Rock Sioux Reservation, south of Bismarck, ND, and lawyers have tied up the project in litigation. The protest camps have drawn what some are calling the largest gathering of Native American tribes in history. Thousands of people, from what organizers say is more than 200 tribes, have come from all over the United States — and some from much further — to join the occupation. One organizer has called it the beginning of a new Native Civil Rights Movement, and organizers are hoping it will spread.

The pipeline is a catch-up of sorts. Oil production in North Dakota has exploded in the past 13 years, from less than 30 million barrels a year in 2003 to more than 429 million barrels in 2015. But the infrastructure didn't keep up. For years, more than half the oil leaving North Dakota was moved by rail. Dakota Access, owned by a consortium of energy companies, including Calgary-based Enbridge and Energy Transfer Partners out of Texas, was supposed to solve that problem.

### **Oil production up 3.2 percent at Russia's Far East Sakhalin fields**

(Platts; Oct. 20) - Russia's Far East Sakhalin-1 project expects that its 2016 crude output will total 175,000 barrels per day, about 3.2 percent higher than last year, holding production at that plateau "as long as possible," Wayne Warwick, president of Exxon Neftegas, the project operator, told S&P Global Platts. "It's good news ... as we are always battling the natural decline of the fields " he said, adding that further work at the project would be focused on maintaining crude output at current levels.

Sakhalin-1 production grew 9 percent last year, according to statistics by the Russian energy ministry. The project includes three offshore fields northeast of Sakhalin Island, in the Sea of Okhotsk. Sakhalin-1 exports its crude under the premium-quality, light-sweet Sokol blend, trading at a premium to benchmark Dubai, going mostly to Japan (58 percent) and South Korea (13 percent).



Sakhalin-1 shareholders include ExxonMobil subsidiary Exxon Neftegas and Japan's Sodeco, each with 30 percent, as well as Russia's Rosneft and India's ONGC Videsh at 20 percent each. The consortium hopes to accelerate talks on gas production, which has been stalled for years due to a lack of a decision on how to market the gas, which has no access to pipelines or an LNG plant. "We really are looking forward to deciding on which option we chose. We do not want to study options forever," Warwick said.