# Oil and Gas News Briefs Compiled by Larry Persily September 8, 2015

#### Australia LNG projects will struggle to break even at low prices

(Australian Financial Review; Sept. 6) - Six LNG projects under construction in Australia at a cost of \$200 billion will struggle to break even because of the oil-price slump, the International Energy Agency said, and there is little prospect of three in the planning stage going ahead. The agency said even if oil prices recover and average \$60 a barrel for the next few years, Australia's LNG industry will struggle to be profitable. "In a \$60 oil environment the Australian projects will continue, but you are probably not breaking even," IEA senior gas expert Costanza Jacazio said in an interview from Paris.

Singapore-based energy forecaster Fereidun Fesharaki said the economics of the planned LNG projects in Australia are a "tragedy" due in part to over-optimistic expectations that Asian buyers would continue to pay historically high prices. "I am looking at oil to average a maximum of \$75 a barrel over the next decade, and even then they just won't get a rate of return to justify the investment," said Fesharaki, a former energy adviser to Iran's prime minister and with close links to Asian LNG buyers.

The IEA argues that cost overruns and delays combined with the big drop in the oil price and wilting demand from Asian buyers will severely erode the profitability of LNG plants nearing completion. "Many of these projects were sanctioned in an environment of \$100-a-barrel oil, so clearly the impact on your earnings and profits has dramatically changed," Jacazio said. "You might just recover your operating costs, but the billions of dollars of sunk costs on the projects will take a lot, lot longer to recoup now."

For example, Origin's \$24.7 billion Australia Pacific LNG venture expects to start cargoes before the end of 2015. The company recently reported that its initial forecasts of earning about \$1 billion a year from the project had fallen to \$180 million a year at current prices. In addition, Fesharaki said, because spot prices are trading well below LNG contract prices, pressure is mounting for deals to be renegotiated lower, pointing to speculation that China's Sinopec wants to modify its contract terms on APLNG.

### Japanese utilities look to more efficient gas turbines to cut fuel costs

(Bloomberg; Sept. 3) - Japan's biggest power utilities are pushing ahead with plans to spend more on new turbines to improve the efficiency of their gas-fired power plants in an effort to lower fuel bills amid a protracted debate over the role of nuclear power. Chubu Electric Power signed an agreement with General Electric on Sept. 1 to upgrade eight turbines at a gas-fired plant in Joetsu City, about 130 miles north of Tokyo.

Tokyo Electric Power, the nation's biggest utility, is replacing eight turbines at its 3,352megawatt gas-fired facility in Yokohama. Kansai Electric Power in March completed installation of some of the most efficient turbines in the world at its Himeji No. 2 plant in southern Japan. The upgrades occur against the backdrop of rising electricity prices power bills in Japan have increased about 15 percent since the Fukushima meltdowns forced heavier use of costly fossil fuels — and a squeeze on profits at the utilities.

Tokyo Electric estimates savings of as much as 8 billion yen (\$67 million) a year once all the turbines at its Yokohama plant are replaced by January 2018. More than twothirds of TEPCO's current electricity generation is derived from LNG, compared with less than half before the Fukushima disaster. Japan's utilities would cut LNG use by more than a third if their fleet of gas-fired plants were to reach the same efficiency as TEPCO's Yokohama plant by 2030, according to utility and research institute data.

#### LNG glut closes opportunities until 2020s, Wood Mackenzie says

(Financial Post; Canada; Sept. 2) - The window to build liquefied natural gas projects in Canada and elsewhere has closed amid a worldwide supply glut, says global energy consultancy Wood Mackenzie. "There is a clear reluctance by companies to stand down, but the reality is that the window of opportunity closed over six months ago for everyone, not just for Canada," Noel Tomnay, vice president global gas and LNG research for Wood Mackenzie said in an interview.

Qatar and Australia led the first two waves of LNG development with the U.S. spearheading the third wave, even as Canadian and East African proposals were stalled. "Canada's biggest competitor is not the U.S., it is probably Mozambique," Tomnay said, noting there could be a role of niche, "strategic resources" for investors in the next wave of development that will cater to demand after 2022. Proposed LNG projects are under pressure as prices are stuck in the \$7 to \$8 per million Btu range, compared to the \$11 to \$12 needed long-term to make project economics work.

LNG deliveries to the key markets of China, Japan and South Korea are also weakening at the same time that new LNG capacity is being built. "The outlook for longer-term incremental LNG demand growth in China is also being negatively affected. And with lower industrial output and power generation competition increasingly characterising other key Asian LNG markets, like South Korea, Asian buyers are not in a hurry to finalise new LNG contracts," Tomnay said in the Wood Mackenzie report.

Rosneft CEO says LNG plant delayed to after 2020

(Reuters; Sept. 4) - Rosneft now plans to launch a plant to liquefy natural gas on Russia's Pacific Island of Sakhalin after 2020, Chief Executive Igor Sechin said. That's at least two years behind the initial schedule. Rosneft, and partner ExxonMobil, have been planning to build an LNG plant to produce and export the fuel from their leases in Russia's Far East. The project would be the second on Sakhalin Island, following a Gazprom-led LNG plant that opened in 2009.

Sources told Reuters in April that Rosneft may have to delay development of its LNG plant on Sakhalin for at least two years, as prices fell and financing all but dried up due to Western sanctions against Russia due to the country's role in Ukraine. Rosneft signed an agreement with ExxonMobil in 2013 that aimed at starting production of 5 million metric tons of LNG per year in 2018 on Sakhalin.

### Russia, China sign more energy deals, but analysts skeptical

(Bloomberg; Sept. 4) – Russian President Vladimir Putin's long-heralded visit to Beijing this week yielded five framework energy deals that boost Russia's hopes of strengthening ties with China as relations sour with the U.S. and Europe. Yet if history is any guide, most of the accords won't bear fruit. "Heads of agreements are multiplying at a furious pace," Sergei Tsyplakov, head of the Sberbank's office in China, said by e-mail. "Practice shows that out of 10 agreements, we get one or at most two contracts."

The agreements initialed this week by Rosneft, Gazprom and Novatek are largely nonbinding. Putin is turning to China, the largest energy importer, as U.S. and European Union sanctions over the conflict in Ukraine limit Russia's access to foreign financial markets and drilling technologies. While Russia's need for credit and new markets increases as it enters its first recession since 2009, Beijing is stalling on further deals as it grapples with its own industrial overcapacity and a volatile stock market.

Gazprom, the world's biggest gas exporter, said Sept. 3 that it has delayed to 2016 the deadline for signing a contract to supply China from West Siberia gas fields. That deal, valued at about \$170 billion at current prices by UBS Group, would have made China Gazprom's largest customer. Framework agreements have a tendency to languish. It's been almost a year since Rosneft signed a deal with China National Petroleum Corp. for joint development of the largest greenfield oil development in post-Soviet Russia.

### Chinese investment fund takes 9.9% stake in Yamal LNG

(Natural Gas Asia; Sept. 3) – China Silk Road Fund has bought a 9.9 percent equity stake in the Yamal LNG project. The framework agreement was concluded between Novatek and the investment fund Sept. 3 in Beijing, in the presence Russian President Vladimir Putin and People's Republic of China President Xi Jinping, the Russian firm

said in a statement. According to the agreement, the transaction is scheduled to close after certain conditions are satisfied, including the receipt of all necessary approvals.

Following completion of the deal, estimated at \$1.4 billion, the shareholder structure for Yamal LNG will be Novatek (50.1 percent), Total (20 percent), China National Petroleum Corp. (20 percent) and Silk Road Fund (9.9 percent). The Yamal project, under construction in Russia's Arctic, is scheduled to start production late 2017. Novatek and its partners have been looking for financing to complete the \$27 billion project since U.S. sanctions against Russia had made it hard to attract investors.

The Chinese government established the Silk Road Fund last year to make infrastructure and natural resource investments, particularly in Asia.

### **Opposition grows against LNG plants in Port of Brownsville, Texas**

(The Monitor; McAllen, Texas; Sept. 2) - More Lower Rio Grande Valley (Texas) local governments have gone on record opposing plans for development of liquefied natural gas facilities at the Port of Brownsville. The South Padre City Council adopted a resolution Sept. 2 opposing the LNG projects, as did the Laguna Vista Town Council on Sept. 1 and the Port Isabel City Commission Aug. 25. The Laguna Madre Water District, which provides water and sewer services to South Padre Island, passed a resolution Aug. 7 opposing development of LNG facilities at the port.

The South Padre Island Business Owners Association voted Aug. 26 to oppose LNG development at the port, though the South Padre Island Chamber of Commerce, the Brownsville Chamber of Commerce and other business groups have endorsed the three proposed LNG export terminals. Supporters say it will create large numbers of jobs and boost economic development. Critics argue the plants would have a devastating impact on the environment and South Padre Island's tourism and recreation economy.

All three proposed LNG plants are in the Federal Energy Regulatory Commission prefiling stage, which is early in the environmental review process. Any final investment decisions are likely at least a couple years away, pending environmental approval, construction plans, costs and customers.

## Debate over Oregon LNG moves to local land-use permit hearing

(The Daily Astorian; OR; Sept. 3) - A crowd of concerned citizens sporting red anti-LNG shirts and protest buttons packed the Warrenton Community Center Sept. 2 to oppose Oregon LNG's plans to develop a natural gas pipeline and terminal on the Skipanon Peninsula at the entrance to the Columbia River. Before the public hearing on the

company's land-use permits could begin, city police officers asked that several dozen people leave the room, which is designed to hold 135 people.

The folks who stayed listened as attorneys, consultants and impassioned locals traded arguments for and against Oregon LNG's proposed \$6 billion project. The speakers made their case before Daniel Kearns, a Portland land-use attorney appointed by the city to decide whether the company's applications meet city code. The project would include a gas liquefaction plant, LNG storage tanks, a loading terminal for oceangoing tankers and an 87-mile pipeline to an existing natural gas pipeline in Washington state.

Supporters cast the project as a boon to the city, an opportunity to provide well-paying jobs, stimulate the local economy and increase tax revenues by millions of dollars. Opponents cast it as a hazardous undertaking that could, among other problems, hold up traffic, drive down property values, disrupt fishing activities, pollute the environment and amplify the dangers posed by a Cascadia Subduction Zone earthquake and tsunami. The hearing officer's decision is expected by early November.

### B.C. appeal board cancels water license for fracking operations

(Vancouver Sun; Sept. 6) - The Fort Nelson First Nation has won a potentially precedent-setting decision from the B.C. Environmental Appeal Board that cancels the water licence of a natural gas fracking operation in northeast B.C. The appeal board — in a decision that took 20 months to deliver — concluded the science behind the licence was fundamentally flawed and the province did not consult the First Nation in good faith. Both the province and the company involved, Nexen, had argued using the water would have no significant adverse environmental effects and there was adequate consultation.

Calgary-based Nexen, owned by Chinese state-controlled CNOOC, also made a plea that cancelling the water licence would jeopardize hundreds of millions of dollars in investments. But in a Sept. 3 decision, outlined in a 120-page report, a three-member appeal board panel canceled the licence that allowed Nexen to extract water from a small lake about 55 miles northeast of Fort Nelson. The panel allowed Nexen to use the water it already has in storage.

Nexen had been issued a licence by the B.C. Oil and Gas Commission to take up to 660 million gallons a year. The appeal board said internal ministry correspondence showed the province intended to issue the water licence regardless of promised meetings with the Fort Nelson First Nation, and had no intention to substantially address concerns that might have been raised by the First Nation.

New drilling techniques could add even more to U.S. gas production

(Wall Street Journal; Sept. 1) - The U.S. may have far more natural gas than anyone imagined, all reachable at a profit even with today's low prices. Experimental wells in Louisiana by explorers including Comstock Resources and Chesapeake Energy are proving highly lucrative thanks to modern drilling techniques and the sheer volume of gas that can be coaxed out of the ground. The trick is supersizing the horizontal drilling and fracking techniques that worked so well elsewhere and applying them in new areas.

The gains come from extending the lateral portions of wells by thousands of feet and pumping them full of enormous volumes of sand, chemicals and water to flush out more hydrocarbons. So far, the impressive results have been confined to a small area in a single Louisiana parish near the Texas border. But if the approach works across the giant Haynesville Shale, which spans 120 miles across both states, the era of low American natural gas prices could extend for decades into the future, experts say.

"There's a large likelihood that the United States will be enjoying very low gas prices for a very long time, maybe 20 years," said Mark Papa, who has monitored the Haynesville as a partner at Riverstone Holdings, one of the biggest energy-focused private-equity firms in the U.S. "This is a brilliant example of how the cost of supply continues to come down," said Robert Clarke, a research director at consultancy Wood Mackenzie. Newer Haynesville wells are larger, producing more and are being drilled more quickly, he said.

#### Planning helped Norwegian town prepare for LNG plant

(Toronto Star; Sept. 4) - Age Tessem has lived in Hammerfest, Norway, most of his life. Which means he has seen enormous changes in the past 10 years from petroleum development. Home to about 10,000 and well above the Arctic Circle, Hammerfest sits on the shores of the Barents Sea. Its houses, schools and shops perch on rocky slopes surrounding a bay, looking toward nearby Melkoya Island, where Europe's first liquefied natural gas export plant opened in 2007, changing the fortunes of this part of Norway.

The town is no longer a fishing hub; it's a huge fuel station. Natural gas is transported by a seabed pipeline from the Snohvit offshore field, liquefied on Melkoya Island and exported by tankers worldwide. The island plant has reinvigorated Hammerfest, which only a few years ago seemed to be dying. For Tessem, 39, who is a teacher's aide in a primary school, the plant has meant a better-equipped school and more teachers. And there are more daycare and kindergarten facilities. There's also a brand new and architecturally stunning cultural center with dancing schools and music studios.

Brynar Isaksen agreed. He's a contractor who has also lived in Hammerfest all his life. "There are better schools, water pipes, roads, more young people moving in," he said. "Some of the people who had moved away are coming back." How did this happen? "We made a deal with Statoil (the project operator) to fund our planning department for five years so that we could increase staff and the municipality could be better prepared for all the changes," said Odd Edvardsen, Hammerfest's head of planning.

#### Gazprom strikes deals to boost its presence in Europe

(Reuters; Sept. 4) - Russia's Gazprom has bolstered its industrial presence in the heart of Europe with two major gas deals that were announced Sept. 4 despite ongoing tensions with Moscow over the conflict in eastern Ukraine. The first of the deals, an asset swap with German chemicals group BASF that gives Russia greater access to gas trading and storage in Germany, was a surprise as the companies had abandoned it only nine months ago, citing a "difficult political environment."

Pressed on what had changed since, BASF declined to respond directly. Its oil and gas production unit Wintershall, which will secure more stakes in Siberian gas fields under the swap, said only that it was convinced that Russian gas would help ensure energy security in Europe. The second deal would double the capacity of the Nord Stream pipeline to deliver Russian gas to Europe through the Baltic Sea, bypassing Ukraine.

The German government warned against interpreting the deals as a sign that relations with Russia were improving, saying there was no link with the Ukraine crisis or Western sanctions against Moscow. "These are company decisions that the German government has no influence over and does not try to influence," said Martin Schaefer, a spokesman at the foreign ministry. The European Union has talked about loosening Russia's grip on the EU's gas supply. It currently supplies one-third of the gas used by the bloc.