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Supply build pushes fundamental changes in global LNG markets

(Wall Street Journal; June 15) - As billions of dollars of investment continues to flow into natural gas production and exports globally, there are signs that supplies of the energy source have already caught up with demand. Prices of liquefied natural gas have fallen to record lows in Asia this year, enabling buyers to drive a harder bargain in contract negotiations. With the U.S. Gulf Coast due to start shipping LNG late in 2015, concerns about potential future shortages of gas have dissipated, at least for the near term.

Almost 5.8 trillion cubic feet of additional annual export capacity will be operational globally by 2020, about 40 percent above current levels. As the gas gushes, Asia's LNG market is being transformed and contract terms are changing. Until recently, LNG was mostly supplied under rigid conditions set out by gas producers. Buyers would typically have to commit to 20-year deals, at formulas linked to oil prices, with conditions such as bans on reselling cargoes that were enforced even after a shipment left port.

As markets have changed in buyers' favor, they are opting for shorter-term contracts, sometimes as little as one year. Pricing is becoming more flexible, too. "Buyers have the curse of choice. They can buy at an oil-linked price, they can buy at a (U.S.) Henry Hublinked price and they can buy on a European gas-based price," said Matthew Arnold, head of LNG at EDF Trading. Terms that were rarely disclosed publicly are becoming more transparent, industry sources said, and pricing is becoming less complex.

"Asian buyers are in a strong position to negotiate for further concessions," said analysts at BMI Research. Already, buyers in China, Japan and South Korea are using the prospect of LNG shipments from the U.S. as leverage in seeking lower prices and better terms from sellers such as Russia.

Sinopec wants to take minority stake in LNG projects

(Reuters; June 16) - Sinopec, the world's second-biggest oil refiner, is on the hunt for minority investments in U.S. shale oil and gas projects as it seeks to diversify China's supply sources, a senior company official said. The Chinese state energy firm is keen to take a 10 to 15 percent stake in projects to export liquefied natural gas, said Jack Yu, managing director of Sinopec D.C., which handles government relations in the U.S.

Previous talks over investing in the Freeport LNG export project in Texas fell through, he said. New deals, if they materialize, would come more than two years after Sinopec made waves with two big U.S. investments, paying more than \$3 billion for various shale stakes from Devon Energy and Chesapeake Energy. Yu says that although oil prices have fallen to half of what they were a year ago, valuations on U.S. assets remain elevated, limiting opportunities for bargain hunting. "The asking price is not low."

Sinopec is at the fore of China's drive to diversify energy supplies to meet growing demand. While it has been successful in sourcing more oil globally, it has made little headway building a global LNG portfolio, which is critical for reaching Beijing's target of a 10 percent share for natural gas in China's energy mix in 2020 — double the current share. "Not only do we want to be an LNG buyer, we also want to invest in projects and become shareholders," Yu said. Sinopec's one LNG investment under construction, the Australia Pacific LNG project, is a partnership with Origin and ConocoPhillips.

Shell-led LNG project in B.C. wins environmental approval

(Wall Street Journal; June 17) - A liquefied natural gas export plant proposed for the British Columbia coast cleared a joint provincial and federal environmental assessment June 17, moving the multibillion-dollar project closer to a decision by chief sponsor Shell and its partners on whether to begin construction. Dubbed LNG Canada, the planned facility is one of nearly two dozen terminals proposed for the B.C. West Coast that would ship LNG to energy-hungry markets in Asia.

None of these plants has been built yet amid concerns about operational costs and regulatory hurdles, but last week Malaysian state-owned energy company Petronas said it would move ahead with its LNG project in British Columbia, subject to obtaining additional approvals from provincial and federal authorities in Canada. As for the Shell-led project in Kitimat, down the coast from the Petronas site near Prince Rupert, Shell has said it would make its decision on construction by "mid-decade." The project is expected to cost up to \$40 billion (Canadian).

The federal environment ministry said its approval of Shell's plans was contingent on meeting 50 conditions "throughout the life of the project" to mitigate the effect on wildlife habitat, First Nations land use and human health. Environment Minister Leona Aglukkaq concluded that the environmental effects "are justified in the circumstances." Shell's Canadian unit owns half of the project in partnership with state-owned energy company PetroChina, 20 percent, and Korea Gas and Japan's Mitsubishi at 15 percent each.

B.C. official believes conditions will be met for Petronas LNG

(Financial Post; Canada; June 13) - With other LNG projects waiting in the wings, the conditional investment decision by the Petronas-led Pacific NorthWest LNG venture could be the biggest boost for Canadian energy since the early days of the oil sands. B.C. Natural Gas Development Minister Rich Coleman, appointed to help get the LNG sector off the ground in a province generally hostile to energy production, transportation and infrastructure, said he is confident the venture's conditions will be met.

The legislature will convene in July to approve the project development agreement on tax and royalty terms, meeting the first condition, Coleman said. The second condition is a positive regulatory decision by the federal government, following completion of a review by regulators focused on mitigating damage to a salmon spawning area near the

project site in front of Prince Rupert. If the review is completed after the summer, federal Cabinet approval may have to wait until after the October federal election.

If conditions are met in the coming months, construction could start in the second half of the year and the first LNG cargo could sail in 2019, Coleman said. British Columbia had to lower its expectations on fiscal terms to encourage the industry's start-up, particularly a reduction in a new tax on LNG profits. Ottawa did its part by allowing accelerated depreciation for tax purposes. Aboriginal communities have been offered billions in cash and benefits, including jobs and contracting, though not all have accepted the deals.

Opposition party leader criticizes B.C.'s LNG tax deal

(Vancouver Sun columnist; June 15) - With B.C.'s governing Liberals preparing to reconvene the legislature to approve a project development agreement for a liquefied natural gas plant led by Malaysia's Petronas, opposition party leader John Horgan is signaling that the New Democrats will likely be voting no. "We'll have to take a good hard look at what they've got on the table," he said, referring to the government promise to release the full text of the agreement with the Petronas-led consortium.

"But based on what I know, I'm pretty disappointed with where we've gone on this file," Horgan said. "There are a whole host of giveaways from a government desperate to get a deal at any cost." He cited the Liberal decision to lock in natural gas royalty rates on a long-term basis. Plus he challenged the move to indemnify Petronas and its investor-partners against any future changes in provincial taxes and regulations that would negatively impact the LNG sector.

"Any tax changes that have an impact on Petronas will be frozen from this point until the end of the project," complained Horgan. "I didn't sign on for that. I signed on for getting the most value we could for the people of B.C., and what the Liberals have done is focused on the needs of Petronas." Horgan "signed on" to LNG last fall, when he led his caucus to vote in support of the government's proposal for a new tax on LNG profits. He has continued to support LNG development, with the debate coming over "fair share."

Federal court denies motion to stop work on Maryland LNG project

(The Baltimore Sun; June 17) – A federal appeals court has refused to halt construction of a liquefied natural gas export facility in southern Maryland while it weighs a legal challenge to the project's approval. A three-judge panel of the U.S. Court of Appeals for the District of Columbia denied an emergency motion for a construction stay on the Dominion Cove Point LNG project, saying opponents had not met the strict legal requirements for such action, nor given "strongly compelling" reasons for doing so.

Environmental and local citizen groups had asked the court to stop construction while their lawsuit proceeds over Federal Energy Regulatory Commission approval of the project last year. They contend that residents are suffering from noise, dust and truck traffic related to the work, and that some are trying to sell their homes because of the

disruption. The motion was filed by Earthjustice on behalf of the Patuxent Riverkeeper, the Maryland Sierra Club and Chesapeake Climate Action Network.

The environmental and citizen groups filed suit last month contending that FERC violated federal law by failing to consider how construction of the facility would pollute the air and water and contribute to global climate change. An Earthjustice spokesman said opponents will continue to pursue the lawsuit. Construction continues on schedule, a Dominion spokesman said. The company has said it expects to finish work on the \$3.8 billion project by 2017 and begin liquefying natural gas piped to the site.

Gazprom says answers next year on possible LNG plant expansion

(Reuters; June 16) - Gazprom, 50 percent owner in Russia's only liquefied natural gas plant, Sakhalin-2, hopes to be able to answer questions about the plant's expansion next year, Deputy CEO Alexander Medvedev said June 16. "FEED (front-end engineering and design) work is being conducted now. After the preliminary stage, which should be finished this autumn, and the main one, due next year, all answers should be given," he said at a briefing about possible expansion of the Far East plant.

The plant's current capacity is about 10 million metric tons of LNG per year. Shell, a 27.5 percent owner (which built the plant but later ceded control to Gazprom), has called for expansion. Japan's Mitsui and Mitsubishi are also shareholders. As to a potential gas supply for the plant expansion, Gazprom has held extended talks on gas purchases with ExxonMobil and Russia's Rosneft, which hold gas reserves but which would prefer to build and operate their own LNG export facility in the region.

United Arab Emirates plans to import more gas for power plants

(Bloomberg; June 14) - The United Arab Emirates, an OPEC member that's a net importer of natural gas, will need increasing amounts of the fuel to burn in power plants if demand continues rising at the current pace, the country's energy minister said. "There is growth of around 6 percent, sometimes more, in energy demand," Suhail Mohammed Al Mazrouei said at a news conference in Abu Dhabi. "We will require huge amounts of gas primarily coming from imports," he said, without estimating the amounts.

The U.A.E. is also targeting nuclear power and renewable sources such as solar and wind to create a broader base of energy supply, Mazrouei said. Like other oil-rich Middle Eastern states, the country provides subsidized energy to a growing population even as its revenue from crude sales has declined. Oil prices fell by about half last year amid a supply glut. The U.A.E. imports about 2 billion cubic feet a day of natural gas by pipeline from Qatar to meet about 30 percent of its energy requirements.

Dubai, the U.A.E.'s largest emirate after Abu Dhabi, imports liquefied natural gas by ship at a terminal with capacity to expand to 800 million cubic feet a day, according to the government's Dubai Supply Authority. Abu Dhabi plans an LNG terminal in the

emirate of Fujairah to receive as much as 9 million tons of LNG a year, about 1.2 billion cubic feet a day, once it starts in 2018. The U.A.E. will assess the need for additional imports after building this facility, Mazrouei said.

IEA forecasts drop in European gas production, boost in LNG imports

(Interfax Global Energy; June 15) - Europe's falling gas production over the rest of the decade will spur growth in LNG imports to help make up the difference, according to the International Energy Agency. Europe's annual gas production will continue to decline, falling in total by almost 1 trillion cubic feet between 2014-2020, the IEA said in its 2015 Medium-Term Gas Market report. Meanwhile, its LNG imports are predicted to double.

"Europe's LNG intake will roughly double between 2014 and 2020, surpassing 90 billion cubic meters (almost 3.2 trillion cubic feet) and covering 65 percent of the region's incremental import requirements," the report said. European gas production will fall 25 percent below its 2010 level by 2020, the IEA said. The U.K., Norway and the Netherlands will account for the bulk of the decrease.

The sharp drop in oil and gas prices will result in substantial cutbacks in investments, particularly from 2016, with Norway's gas production set to decline slightly between 2014 and 2020 as project development activity decreases, according to the IEA. Dutch gas production fell by 18 percent on an annual basis in 2014, according to IEA figures. Dutch gas output is expected to fall by an additional 175 bcf a year by 2020 because of the production cap on its largest field and declining output from smaller fields.

Companies cancel or delay \$200 billion in oil and gas projects

(Reuters; June 16) – Deep-water oil projects and complex gas facilities worth about \$200 billion have been canceled or put on hold worldwide in recent months due to the sharp drop in oil prices over the past year, consultancy Ernst and Young said June 16. Further project cuts and delays are likely as the industry braces for an extended period of low oil prices as a result of a supply glut. "There is an expectation that volatility is with us for a reasonable period of time to come and companies need to cope with that," the consultancy's Andy Brogan said in a presentation.

International companies have responded rapidly to the near halving of oil prices since last June, slashing capital spending in order to boost their balance sheets and maintain dividend payouts. "Portfolios reviews are happening more frequently and probably with more rigor," Brogan, the global oil and gas transactions leader at Ernst and Young, told the World National Oil Companies Congress. However, delays in multibillion-dollar projects that can take up to 10 years to develop could create a shortage in the future.

The main 24 mega-projects that have been put on ice or scrapped are spread across the globe. For oil, many of the projects are complex, deep-water fields in the Gulf of Mexico, the North Sea, West Africa and Southeast Asia. Among the most expensive are

liquefied natural gas facilities such as the Arrow LNG project in Australia, with shareholders Shell and PetroChina, and BG Group's Prince Rupert LNG project in British Columbia. Most oil mega-projects benefit from the advantage of returning value within 3 to 4 years of first investment vs. up to 12 years for LNG projects, Brogan said.

Carnival orders four 6,600-passenger LNG-powered cruise ships

(Cruise Industry News; June 15) - Carnival Corp. June 15 announced it has finalized a multibillion-dollar contract to build four next-generation cruise ships with the largest guest capacity in the industry — and the first to burn liquefied natural gas at sea. The contract with Germany's Meyer Werft is part of larger previously announced agreement with shipbuilders Meyer Werft and Italy's Fincantieri for nine ships between 2019-2022.

The four new ships will feature a new "green cruising" design. The ships will be the first in the cruise industry to be powered by LNG. The company said two of the ships will be manufactured for AIDA Cruises at Meyer Werft's shipyard in Papenburg, Germany, and two will be built in Finland. Additional information, including which new ships will be added to each of Carnival's brands, will be made available at a later date. Each of the four ships will have a total capacity of 6,600 guests and exceed 180,000 gross.

Oceangoing freight company sees boom time from LNG projects

(Truck News.com; June 14) - If just one or two of the LNG projects proposed for British Columbia get the green light, there will be a profound impact on transportation in the province — both good and bad — said Jonathan Whitworth, CEO of international containership operator Seaspan and the keynote speaker at the B.C. Trucking Association conference June 12 in Whistler, B.C. It would be the biggest boost for Canada's energy industry since the early days of the Alberta oil sands boom.

Seaspan stands to reap considerable benefit from the province's investment in energy resource extraction. Whitworth pointed to the proposed LNG Canada project in Kitimat to illustrate the impact on transportation resources. LNG Canada has indicated plans to build a 7,000-person camp in Kitimat, requiring 1,800 buildings to be pre-manufactured and then moved to the location. "That's like 500 barge voyages or 1,800 truckloads. That's huge. That's a life-changer."

But there will be a downside too. The projects will draw material and human resources out of other industries. "If one or two of these projects go, good luck trying to get tires or finding a mechanic to service your engines. There are going to be some tough issues that are going to come up," Whitworth warned. Banking on at least some of the LNG projects going to construction, Seaspan is purchasing three large barges in Asia to haul large construction pieces and has a 16,000-ton barge under construction in China.

North Dakota oil production down from December peak

(Reuters; June 16) - North Dakota's crude oil output has peaked, according to the latest production data published by the state government, as the slump in prices takes its toll. The state produced 1.17 million barrels per day in April, down from a peak of 1.23 million in December, the Department of Mineral Resources reported June 12. The state's rapid growth in production has stalled and current output is the same as it was in September 2014.

In the seven months between February and September 2014, output increased by 233,000 barrels a day, while in the seven months from September 2014 to April 2015, output actually edged down 18,000. Prices are by far the most important cause of the downturn, according to state regulators, followed by tax changes, tougher flaring rules and new regulations on oil conditioning to remove the most volatile components from crude to make it safer to transport by rail.

Falling production comes as no surprise: The number of rigs drilling for oil in the state has declined by more than 60 percent since September.

Canadian drillers association predicts steep job loss this year

(Calgary Herald; June 15) – An additional 2,500 direct and indirect jobs are expected to disappear from the Canadian drilling sector in 2015 compared with a prediction made just six months ago, says a group that represents oil and gas drillers. In a news release June 15, the Canadian Association of Oilwell Drilling Contractors said it expects the number of drilling operating days this year will fall to half of the total last year and the number of jobs will do the same — dropping from 49,950 in 2014 to 25,110 this year.

President Mark Scholz linked lower oil field activity to uncertainty surrounding potential royalty policy changes in Alberta, liquefied natural gas activity in British Columbia and ongoing depressed commodity prices. "We're very much engaged in meeting with the Alberta government. We're very much interested in being part of the overall discussions when it comes to significant energy policy changes," he said. The newly elected government has vowed to review Alberta's royalty system within the next six months.

In January, the association estimated 22,579 jobs would be lost this year as 6,612 wells are drilled, a 43 percent drop from 2014. It calculates the number of jobs by multiplying by an average of 135 jobs per rig. It now predicts just 5,531 wells this year, about 49 percent of the 11,226 wells drilled last year. It figures the average number of rigs working this year at 184 out of a fleet of 768, or about 24 percent.