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Cheap gas, renewables continue taking U.S. market share from coal

(Wall Street Journal; Oct. 13) - More than half a dozen large U.S. coal companies have filed for bankruptcy in the past year, a signal that the one-time energy king is fading as it faces competition from cheap natural gas and renewable-energy sources while also facing the retirement of coal-fired power plants. And more companies could soon follow the seven coal producers that have filed for Chapter 11 bankruptcy since October 2018.

The bankruptcies have affected thousands of workers and reshaped coal-mining areas across the U.S. and follow a larger wave of filings in 2015 and 2016. Mines dotting the Appalachian region and Powder River Basin, an arid terrain spread over Wyoming and Montana, have been flipped in bankruptcy to new owners or unloaded to lenders. "Even if you have a totally clean balance sheet, if you can't get the coal out of the ground at a price that works," said Fredrick Vescio, a director at investment bank Houlihan Lokey.

The recent run of failures comes as the coal market has continued to shrink despite action by President Donald Trump to roll back environmental restrictions on coal-fired plants. The decline has been driven largely by record production of inexpensive gas and the growth of wind and solar energy, which has displaced coal at power plants. Coal-based electricity powered 28 percent of the U.S. grid in 2018, down from 48 percent in 2008, according to the U.S. Energy Information Administration. The EIA projects coal's share of electricity generation to fall to 25 percent in 2019 and 22 percent in 2020.

Political challenges concern U.S. LNG industry

(S&P Global Platts; Oct. 15) - Political resistance to fossil fuels has buffeted the U.S. LNG export industry, which is mostly optimistic about increasing its shipments of recordhigh domestic gas output to world markets. LNG industry supporters at the Gulf Coast Energy Forum in New Orleans this week expressed concern about an array of policy challenges that could raise the stakes for a sector that has long grappled with environmental opposition to gas infrastructure projects.

The challenges have included a spate of efforts led by West Coast cities to electrify buildings and ban new gas hookups. Then there is the push by some of the candidates in the Democratic presidential primary, including Sen. Elizabeth Warren, for measures such as a ban on hydraulic fracturing and a hold on new gas export projects. To counter these developments, the industry needs to do a better job of addressing

environmental concerns and making the case for the role of gas in the energy mix, said Charlie Riedl, executive director of the industry trade group Center for Liquefied Natural Gas.

"If large institutional financial banks stop funding fossil fuel companies, that's going to be a real challenge," Riedl said. "If gas becomes the next coal, that's going to be a real challenge." Riedl pointed to changes in the gas industry's approach, including calls from the U.S. LNG sector to the entire gas industry to make greater reductions in carbon emissions in order to promote the climate benefits of gas. Meanwhile, a trade fight with China, a key LNG importer, has added to the industry's challenges. Earlier this year China raised tariffs on U.S. LNG to 25 percent. "We are collateral damage," Riedl said.

New York utility resorts to trucking in LNG to serve Long Island

(Natural Gas Intelligence; Oct. 15) - Even as the United States has more natural gas than it knows what to do with, some areas are relying on more costly solutions to meet their demand needs as regulatory setbacks have resulted in a lack of adequate pipeline infrastructure and storage. Sam Thigpen, founder and CEO of oil and gas end-use solutions provider Thigpen Solutions, said a harsh regulatory environment in the Northeast has prevented infrastructure from getting built.

"We're flaring ... (500 million cubic feet per day of gas) in the Permian, and yet New York can't get enough gas to heat their homes," Thigpen said Oct. 15 at the Gulf Coast Energy Forum in New Orleans. New York has denied key permits for several proposed gas pipeline projects. "Yes, we have a lot of gas, but we need to get it to where it's needed," Thigpen said. New York utility National Grid has taken matters into its own hands signing a five-year contract with Thigpen to truck in liquefied natural gas to serve its Long Island customers during periods of peak demand.

Thigpen Solutions plans to send two trucks an hour for up to eight hours on specified days, the CEO said. The company is still working out the best way to navigate New York traffic to make the deliveries. Long Island is one of three cities under a moratorium for new gas service. Looking beyond gas, under legislation passed this year, New York is required to generate 70 percent of its electricity from renewable sources such as wind and solar by 2030 and obtain 100 percent of its electricity from renewables by 2040.

Economists oppose pipeline, LNG project in Quebec

(CBC; Canada; Oct. 15) - A group of economists is opposing the C\$14 billion natural gas pipeline and liquefied natural gas terminal proposed for the Saguenay region in Quebec, about 50 miles from the St. Lawrence River and its access to the Atlantic. The

40 economists signed an open letter, published Oct. 15, objecting to the Énergie Saguenay project. "Since Canada is having trouble reducing its greenhouse gas emissions, it should stop facilitating projects that will grow emissions," the letter says.

The project proposes to construct a pipeline across a 485-mile stretch of the province and build of a gas liquefaction plant as well as a marine terminal to ship the LNG to overseas markets. GNL Québec is the company promoting the project, and Gazoduc is the company developing the new infrastructure that would transport and liquefy gas from Alberta. The developers say that using hydroelectricity to power the LNG plant would make the project clean — but the economists say this is difficult to back up.

Additionally, the letter takes exception to another environment claim by project backers. The letter states that although the companies behind the project claim the gas will replace more polluting energy sources like coal, there is no guarantee that it would not replace conventional gas or even renewable electricity. Claims the project will create 6,000 jobs during construction and 1,100 thereafter, the letter says, also need to be put into perspective, adding that jobs promised in the region will be filled almost exclusively by workers from outside or by workers leaving their current job to work on the project.

U.S. LNG helps provide boost to global spot-market sales

(S&P Global Platts; Oct. 15) – U.S. LNG exports, sold on unrestricted, destination-free terms, are seen as a game changer for the global market in recent years. But this view neglects the role played by China's rising demand, and the changes taking place among traditional LNG buyers in Northeast Asia, which are driving the rapid establishment of what is essentially an LNG trading hub among four major importing nations: Japan, China, South Korea, and Taiwan.

The global LNG market is becoming more liquid and spot-sales oriented. In addition to U.S. supplies that are unconstrained by destination restrictions — limiting buyers' ability to resell cargoes — the greater flexibility on the demand leg can be ascribed to surging demand in China, whose LNG buyers in recent years have been under-contracted and consequently more willing to enter into more immediate, short-term trade than longer-established import markets, adding to the volume of spot-market sales.

The combination of these supply-and-demand factors has enabled portfolio players and traders to play a more active role in the spot market. The growth in destination-free cargoes has also created an environment where buyers are pushing sellers to allow for more destination flexibility for LNG cargoes under long-term contracts. Spot-trade volumes have surged as a result. Spot deals collected by S&P Global Platts in Northeast Asia have jumped 57 percent in 2019 year-on-year from January through September to 392 cargoes. This follows an 82 percent jump in 2018 versus 2017.

China's gas demand up 10% this year, down from 17% rate last year

(Reuters; Oct. 15) - China's natural gas demand is expected to reach 10.8 trillion cubic feet this year, an increase of just 10 percent from 2018, an official of state-run Sinopec Gas said on Oct. 15, as a slowing economy hits consumption. China is the world's second-largest importer of liquefied natural gas after Japan, producing 5.6 tcf of gas last year and importing 4.4 tcf, of which 2.6 tcf was LNG with pipeline gas filling the rest.

"Due to the macroeconomic situation and the government's easing its push for the coalto-gas program, China's gas consumption growth is slowing," said the official, reading prepared remarks on behalf of Wu Gangqiang, the firm's deputy chief economist. "We expect the consumption growth for this year is around 10 percent," he added. That figure compares with annual growth of 17 percent from 2017 to 2018.

In its steady push to clear smoke-blanketed skies, China is forcing homes and industrial plants to cut their use of coal, which fuels emissions of greenhouse gases and toxic sulfur dioxide in favor of cleaner energy, such as renewables and gas. China's gas demand is expected to reach 18 tcf by 2030, led by city gas, industrial and gas-powered utilities, while demand from chemical plants is expected to decline, the official said.

China will move LNG by rail on trial basis

(Reuters; Oct. 15) - The gas and power group of China National Offshore Oil Corp. (CNOOC) is working with a rail company to ship liquefied natural gas in LNG containers on rail flatcars on a trial basis, a senior company executive said Oct. 15. During the two-year trial, CNOOC will send LNG from the Guangxi, Zhuhai, Zhejiang and Tianjin LNG import terminals to central China via trains, said Wang Si, head of the company's LNG container transport project.

China is the world's second-largest importer of LNG but lacks sufficient gas pipeline and storage infrastructure to cover the entire country. While trucks carrying insulated LNG tanks can serve distances of 300 miles, trains will serve longer distances of over 600 miles, Wang said. Each of the LNG tanks, about 40 feet long, can carry 17 to 18 tonnes of LNG, with trains able to move 50 such tanks at a time, he said.

CNOOC, China's largest LNG importer, aims to move 1 million tonnes per year of LNG by rail in 2020, increasing to 2 million tonnes per year by 2023, Wang said. Each tank can hold about 1 million cubic feet of gas as LNG. It would take about 58,000 fully loaded tank trips to move 1 million tonnes of the fuel. The trial is pending approval from China Rail Co., Wang said. CNOOC also plans to use the tanks for LNG storage as they are about 30 percent cheaper than current storage facilities, Wang said.

Hong Kong company plans to build gas storage facilities in China

(Reuters; Oct. 15) - Hong Kong-listed Towngas plans to build about 39 billion cubic feet of natural gas storage capacity in China by 2026, a senior company official said on Oct. 15. China, the world's largest gas importer, needs underground gas facilities to address the imbalance between lower gas demand during the summer and a spike in demand during winter for heating. China last year used about 10 trillion cubic feet of gas.

Towngas will build 10 underground storage facilities with a total capacity of 16 bcf in the first phase by 2023, and 15 more with a total capacity of 23 bcf in a second phase by 2026, said Zhu Jianying, senior vice president at Towngas. The storage facilities, which will link the pipelines of state-owned PetroChina and Sinopec, will be built in Changzhou city and Yixing city in Jiangsu province in eastern China. The company already runs a gas storage facility, which started operations in October last year, with a capacity of 3 bcf, which Zhu said will be expanded to almost twice that size by this winter.

China plans new LNG import facilities in coal and steel region

(Reuters; Oct. 15) - China's Yantai Port Group aims to launch two jointly owned liquefied natural gas import and storage facilities by 2022 and expects government approval for them this month, two sources said. Shandong province, where the Yantai port is located, is an industrial and petrochemical hub in China. It has one quarter of the country's steel capacity and is also a big coal-consuming region, though it is yet to house a gas-fueled electricity generating plant.

Yantai Port is building the two facilities, one with capacity to hold 5 million tonnes of LNG and another at 6.5 million tonnes. Yantai LNG, which holds a 19 percent stake in the project, is jointly owned by Chinese businesses Poly-GCL Petroleum Holding Group, Pan-Asia International Energy Distribution Center and Yantai Port. Land reclamation has started, one of the sources, who declined to be identified, told Reuters. The two facilities could hold more than three full-size carrier deliveries of LNG.

Phase 1 will cost \$1.1 billion and will comprise an LNG-dedicated port area, an LNG carrier berth and storage tanks. A second phase, expected to launch by 2025, will comprise of two LNG carrier berths and enough tanks to double its annual capacity.

LNG producers look to India to help soak up oversupply

(Reuters; Oct. 14) - Global oil and gas majors are looking to India, the world's thirdbiggest oil importer, to buy some of their excess liquefied natural gas as the nation improves its gas import and distribution infrastructure and strives to reduce emissions. Spot LNG prices have more than halved since last year due to a global oversupply as producers battle for market share. The Indian market looks set to grow, however, and could provide some price relief for producers as it soaks up more of the supply.

India is investing \$60 billion in gas infrastructure, including setting up cross-country pipelines and LNG import terminals to connect gas-starved regions to supply hubs. "India is emerging as a major demand center for gas. India is going to be a very exciting market. ... We see it as an important energy market for decades to come," Peter Clarke, senior vice president of global LNG at ExxonMobil, told Reuters at the India Energy Forum by CERAWeek on Oct. 14.

Exxon signed a memorandum of understanding with India's biggest state-owned oil refining company, Indian Oil Corp., on Oct. 14 to explore "new models of delivering cost-effective gas in India." Exxon also has a deal to supply LNG to Petronet LNG, India's biggest gas importer, under a long-term agreement from its Gorgon LNG export project in Australia. India currently meets half its gas needs through LNG imports.

Total buys stake in Indian gas distributor as it expands LNG portfolio

(Reuters; Oct. 14) - French energy giant Total said Oct. 14 it will buy a 37.4 percent stake in Indian gas distribution company Adani Gas, as it looks to capitalize on India's push for cleaner sources of energy. Total will pay about \$866 million for the stake, ramping up its presence in a market that is expected to become the world's second-biggest driver of global demand for liquefied natural gas, after China.

Total is the third foreign oil major to enter India's gas sector after BP and Shell. They have come at a time when India is spending heavily to cut its carbon emissions. Prime Minister Narendra Modi has set a target to more than double the share of gas in India's energy mix to 15 percent by 2030, while Total has embarked on a series of deals this year to expand its LNG portfolio. Acquiring a stake in Adani Gas also gives Total potential access to two import and regasification LNG terminals in India.

"Total's investment in Adani is undoubtedly a show of faith in India's gas demand growth," said Nicholas Browne, research director at energy consultancy Wood Mackenzie, which projects India's gas demand will double to 2.6 trillion cubic feet a year by 2030. Wood Mackenzie expects LNG to cover about half the demand, or just under 30 million tonnes a year of LNG, equivalent to 10 percent of today's global market.

Higher price needed for deep-sea gas in India, BP CEO says

(The Economic Times; India; Oct. 14) - BP Chief Executive Office Bob Dudley on Oct. 14 said there are 100 trillion cubic feet of yet-to-be-discovered natural gas reserves in India that would be enough to meet half of the nation's gas demand through 2050. BP,

in partnership with India's Reliance Industries, is investing about US\$5 billion to bring about 1 billion cubic feet a day of new domestic gas onstream in mid-2020, he said.

But exploitation of gas reserves will depend a lot on the economics, as developing the deep-sea resources does not come cheap, Dudley said. "It's going to take a lot of exploration and will require economics to be right. ... You need to do whatever you can do to replace coal with clean gas, and that will reduce emissions. And you can use India's gas instead of buying expensive (imported) LNG." Receiving a sufficient price for new deep-sea gas production is important, he said of developing the domestic resource.

India, Dudley said, has the right government policy framework of allowing a higher price for gas produced from difficult areas such as the deep sea. The government sets the maximum price allowed for domestically produced gas but allows a higher price for gas from difficult areas, such as deep-sea gas. For the next six months, the deep-sea gas maximum is US\$8.43 per million Btu, more than double the rate for other domestic gas.

Louisiana LNG developer claims it can deliver \$6 LNG to India

(The Economic Times; India; Oct. 16) –Tellurian, which has signed an initial agreement to sell liquefied natural gas from its proposed Louisiana terminal to Petronet LNG, will deliver the LNG to India at a price of \$6 per million Btu, a top executive said, signaling a much lower price than what the Indian government allows producers to charge for domestic gas from difficult fields, such as offshore.

The government-set gas ceiling price for conventional onshore, domestic production is \$3.23 per million Btu, but the ceiling for gas from difficult fields is \$8.43. "We can produce gas in Haynesville (Louisiana) at \$2 and it will land in India at around \$6 or less," said Tarek Souki, senior vice president for LNG at Tellurian, which is looking to make a final investment decision on the project next year — a year later than planned.

Petronet's memorandum of understanding with Tellurian envisages the company taking an 18 percent stake in the Driftwood LNG project for a reported \$2.5 billion, along with taking 5 million tonnes of LNG per year. Souki said his company can produce gas and deliver it to the liquefaction plant for \$2 per million Btu, liquefy it for about the same cost, with shipping costs to India at around \$1.50 to \$1.75. Tellurian is among a dozen proposed U.S. LNG export projects, all promoting themselves to sign up customers.

Pakistan cancels bidding for 10-year LNG supply

(Reuters; Oct. 15) - State-owned Pakistan LNG has canceled a tender to buy liquefied natural gas over a 10-year period and may turn to the spot market instead, two sources

said Oct. 15. The company issued the tender in early June to import 240 LNG cargoes for delivery over 10 years at the country's second LNG import terminal. But it has decided to cancel the tender due to inadequate demand for the fuel, a source said.

"So, for now, (the company) has decided to stop the process of long-term commitment until it receives long-term demand for LNG," the source said. Pakistan is expected to be a significant growth driver in global LNG demand. Pakistan LNG's canceled tender had been keenly watched in the industry. The company was expected to publish the lowest prices offered by bidders, providing a valuable insight into the opaque LNG market.

Bolivia losing its profitable role as gas supplier to neighbors

(Bloomberg; Oct. 14) - For two years, Bolivia pushed to boost natural gas production, a longtime key to its prosperity, by drilling for new discoveries on its southeastern lowlands. The result: A 5-mile deep dry hole. There's arguably no more apt symbol for the situation facing Bolivia and Evo Morales, the fiery leftist president who is seeking reelection after 14 years in office. Over the years, profitable gas sales to Brazil and Argentina have helped Morales cruise through downturns in global commodities, triple Bolivia's minimum wage and boost social programs. But no more.

With cheap liquefied natural gas imports flooding its coastal neighbors, the landlocked country's gas exports have plunged 25 percent this year through July. And without new discoveries, Bolivia's aging wells will be increasingly less profitable. Meanwhile, both Brazil and Argentina are aggressively working to produce their own gas. "This government hasn't made any new discoveries," said Freddy Castrillo, hydrocarbons secretary for the department that produces about 55 percent of Bolivia's gas.

"The scenario for prices is completely unfavorable, production is down, and our main clients — Brazil and Argentina — are becoming our main competitors," Castrillo said. Long known as Latin America's economically capable socialist, Morales is facing his toughest reelection campaign yet ahead of a first-round Oct. 20 vote. The country's oil and gas income has fallen to about 20 percent from 35 percent over the past five years.

U.S. shale oil boom likely to slow down in 2020

(Bloomberg; Oct. 14) - America's shale oil boom got the world accustomed to soaring production. Now growth has slowed, and a cloud has formed over the industry. Wells from the Permian Basin in Texas to the Bakken in North Dakota turned farmers and ranchers into millionaires. Drivers enjoyed cheap gasoline, decent-paying jobs sprung up in small towns and new technology attracted investment, keeping drillers busy.

It's true that the end of the boom has been foretold before. For years the good times came with the warning that a litany of financial and engineering issues would doom the revolution. Such naysaying was proven wrong again and again by the industry's resilience. Producers were able to borrow cheaply, fine-tune operations and trim costs along their supply chains. But the tea leaves look different this year.

Money isn't as plentiful for an industry that in the past decade burned through nearly \$200 billion. Investors are restless. Returns are weak. Production growth has run at a pace of 3 percent this year after gaining nearly 21 percent from 2017 to 2018, according to the U.S. Energy Information Administration. Estimates for 2020 vary, but even the most optimistic forecaster has the percentage change nowhere near the glory days.

Investors have had enough. They're demanding companies spend less and pay more dividends. Bank funding is getting tighter. Access to capital is vital to drillers because of shale wells' rapid decline rates. Fracking production falls as much as 70 percent in the first year, compared with as little as 5 percent from conventional drilling, meaning new wells are constantly needed. Once cash for drilling dries up, production quickly follows.

Russia not getting as much from Saudi Arabia as it expected

(Bloomberg; Oct. 13) - Russian President Vladimir Putin's visit on Oct. 14 to Saudi Arabia, only his second since he came to power two decades ago, underscores the new depth in ties between the Kremlin and the traditional U.S. ally. Yet there's also growing frustration in Moscow at the lack of tangible economic benefits. Putin has built a personal bond with the de facto Saudi ruler, Crown Prince Mohammed bin Salman, famously sharing a high-five greeting with him at the Group of 20 summit last year.

But since the landmark deal with OPEC, under which Russia anchored itself to the Saudi-dominated oil cartel in order to stabilize prices, promises of multibillion-dollar investments and other deals have largely failed to materialize. "The Russian-Saudi relationship is good on the surface but it's lacking substance," said Alexey Potemkin, CEO of Moscow Policy Group, consultants on Russia-Gulf cooperation. "The Saudis promised that in return for the OPEC+ deal, Russia would get lucrative investments and great business opportunities, which unfortunately has not happened," he said.

Plans by Saudi Aramco to jointly develop liquefied natural gas in the Arctic with Russia's Novatek have come to a halt. The Saudi energy giant had expressed interest in acquiring a 30 percent stake in the Arctic LNG-2 project, but the deal was put on hold earlier this year. Instead, Novatek sold 10 percent to two Japanese companies in June.