Oil and Gas News Briefs Compiled by Larry Persily January 23, 2020

U.S. natural gas industry 'a victim of its own success'

(Bloomberg; Jan. 19) – Back in October, President Donald Trump flew to Pennsylvania to hail one of the state's most important industries — not coal, but gas. Trump spoke at an industry event of the "astonishing increase" in shale gas production. The Appalachia region has spearheaded a historic expansion, turning the U.S. into the world's biggest gas producer while slashing prices for consumers and sounding the death knell for domestic coal. But the dark side of the gas boom is increasingly difficult to ignore.

Shale drillers are extracting so much gas that it's overwhelming demand. Prices briefly dipped below \$2 per million Btu on Jan. 17 — the first time since 2016. At that level, U.S. producers don't make money. It's forcing a wave of multibillion-dollar write-downs, layoffs and spending cuts. Still the industry is powerless to stop a wave of additional gas hitting the market as a byproduct of rising shale oil output. Even exports of liquefied natural gas are providing little relief, as the global LNG market also is oversupplied.

"The industry is a victim of its own success," said Devin McDermott, an analyst at Morgan Stanley. "You don't just have oversupply in the U.S. You have oversupply ... across the globe." Corporate distress is mounting. Chesapeake Energy, once in the vanguard of U.S. frackers, is struggling with more than \$9 billion of debt. It warned in November it may go bust. Producers are responding by taking an ax to capital spending but even that's not going to put much of a dent in output, which is forecast to rise 3% this year, another record, the U.S. Energy Information Administration said last week.

Natural gas continues to take market share from coal power plants

(Reuters; Jan. 21) - U.S. coal-fired power plants are facing a mild winter and slumping natural gas prices, further adding to their long-term problems with competitiveness and pushing more plants toward retirement. Warm weather is sapping total demand for electricity, while ultra-low natural gas prices mean more of the demand that remains will be satisfied by gas-fired units rather than coal plants.

Natural gas futures prices for deliveries to Henry Hub in Louisiana in March have fallen to just \$1.92 per million Btu, down from \$2.94 a year ago. Prices have plunged as a result of warmer-than-average weather this winter and U.S. gas production growth rates that have been running close to 10% year-on-year. For many power producers the

price of gas is now lower than coal, once differentials in transport costs and the efficiency of different types of power plants are taken into account.

Even before gas prices slumped this winter, the cost of fuel for gas-fired generators had fallen below their coal-fired counterparts. The result is that fewer coal-fired power plants remain open, and those still operating are running at reduced output and for fewer hours. In October 2019, the most recent month for which data is available, electricity production from coal generators was just 39% of their maximum capacity, down from 49% in October 2018 and 47% in October 2017.

U.S. natural gas futures drop below \$2, pressuring producers

(Wall Street Journal; Jan. 21) - The frackers have broken the natural gas market. The price of gas typically rises this time of year as temperatures plunge and homeowners dial up their thermostats. Instead, the price of the heating and electricity-generating fuel has dropped to multiyear lows. On Jan. 21, gas futures fell below \$2 per million Btu to their lowest level in nearly four years, highlighting how a persistent glut has buffeted energy investors and producers. This winter's mild weather has joined an oversupply of the commodity to push natural gas prices down to levels not seen since March 2016.

The shale boom, spurred by horizontal drilling and hydraulic fracturing techniques, has transformed the U.S. energy industry and flooded the market with oil and gas in recent years. The decline in prices has hit shares of energy companies, raising calls for them to curtail production. But few analysts see signs of the glut abating soon: The Energy Information Administration predicts dry gas production in the U.S. will rise 2.9% in 2020.

The fall in prices has come faster than analysts and traders had predicted. Colder winter temperatures typically drive up prices as homeowners demand more fuel to heat their houses. Instead, futures have continued falling this winter, underscoring investors' grim outlook. The move below \$2 adds more pressure to gas producers, whose shares have taken a beating in the past year. Shares of Pittsburgh-based EQT Corp., the nation's largest gas producer, have fallen more than 60% in the past 12 months.

Economic hit from virus in China could take \$3 off oil, Goldman says

(Bloomberg; Jan. 21) - Oil markets are likely to take a hit from China's deadly coronavirus, with aviation fuel suffering the most, if the SARS epidemic in 2003 is any guide, according to Goldman Sachs Group. The latest virus that originated in the Chinese city of Wuhan could result in global oil demand falling by 260,000 barrels a day in 2020 with jet fuel accounting for around two-thirds of the loss, Goldman said in a note. That would probably lead to a \$2.90 a barrel drop in oil prices, the analysts said.

The coronavirus is causing nervousness across financial markets, especially as it's spreading just as hundreds of millions of Chinese prepare to travel domestically and internationally for the Lunar New Year holidays. The potential disruption is adding another wildcard to global oil markets, which have already been roiled this year by tension in the Middle East and North Africa.

"The initial uncertainty on the potential scope of the epidemic could lead to a larger price sell-off than fundamentals suggest," Goldman analysts Damien Courvalin and Callum Bruce said in the note. Concern over the impact on oil demand is expected to counter jitters around supply disruptions across Libya, Iran and Iraq. The actual impact on global oil demand will depend on how quickly the coronavirus spreads to other regions and how contagious it is, the analysts said.

China unlikely to meet commitment to buy U.S. oil, LNG and coal

(Reuters commentary; Jan. 20) - The more you delve into China's commitment to buy an additional \$52.4 billion in U.S. energy over the next two years, the more it becomes apparent the goal is unachievable. China's imports from the U.S. this year would have to be more than double past record monthly imports of crude, liquefied natural gas and coal to reach that number. In addition to the logistical constraints, China has not lifted its 5% tariff on U.S. oil or 25% tariff on U.S. LNG, and Beijing has given no indication it will relax the tariffs or force refineries or utilities to pay higher prices for U.S. cargoes.

Even if China boosted imports of U.S. crude to more than 1 million barrels per day — worth around \$21.4 billion at current prices — it would be challenging to ship that much oil from the U.S. Gulf Coast to China. Given that a very large crude carrier holds about 2 million barrels, it would mean 15 of these vessels making the trip every month. There are questions over the availability of the ships and the costs of sailing them back empty to the U.S. to pick up more cargoes. And the ships are too big to transit the Panama Canal, likely meaning a longer sea voyage around the bottom of Africa, adding to costs.

Then there is the question of whether China's refineries can use the volumes of U.S. crude that would be required to meet the terms of the deal. Many Chinese refineries are optimized to process heavy, sour grades of crude, such as those from the Middle East, rather than the lighter, sweet oil typically exported by the United States. If China were to buy more than 1 million barrels per day of U.S. crude, it would have to stop buying most of the light crude it now gets from other countries — disrupting those trade relationships.

U.S. approves federal right of way for Keystone XL oil line

(The Associated Press; Jan. 22) - The Trump administration on Jan. 22 approved a right of way for the Keystone XL oil sands pipeline on federal land, moving the controversial \$8 billion project closer to construction, though court challenges still loom. The approval signed by Interior Secretary David Bernhardt covers 46 miles of the route across land in Montana that's controlled by the Bureau of Land Management and the U.S. Army Corps of Engineers, said Casey Hammond, assistant secretary of the Interior Department.

Those segments of federal land are a small fraction of the pipeline's 1,200-mile route, but the right-of-way approval was crucial for the project. The pipeline would transport up to 830,000 barrels of crude oil a day from western Canada toward terminals on the U.S. Gulf Coast. Project sponsor TC Energy (formerly known as TransCanada) said in a court filing that it wants to begin construction on the U.S.-Canada border crossing in Montana in April. Opponents have promised to challenge those plans in court.

First proposed in 2008, the pipeline has become emblematic of the tensions between economic development and curbing the fossil fuel emissions that are causing climate change. The Obama administration rejected it, but President Donald Trump revived it and has been a strong supporter. The stretch approved Jan. 22 includes all federal land crossed by the line, Hammond said. Much of the rest of the route is across private land, which TC Energy has been acquiring. TC Energy also needs other permits for the work.

BP considering more stringent climate targets in restructuring

(Reuters; Jan. 21) - Incoming BP Chief Executive Bernard Looney plans to expand the company's climate targets and is considering overhauling the structure of the oil and gas major in one of the biggest shake-ups in its 111-year history. The 49-year-old plans to adopt broader carbon emissions reduction goals that will likely include emissions from fuels and products sold to customers rather than just the far lower emissions from BP's own operations, said sources with knowledge of discussions with the new CEO.

The aim is to catch up with and possibly outdo rivals as investor pressure over climate change mounts, the sources said. More stringent climate targets could lead to BP selling its most carbon-intensive businesses such as oil and gas fields in Angola and Canada, the sources said. As part of the climate push, Looney is also looking at a broad reorganization aimed at cutting costs, with one idea being explored to merge parts of the upstream production division with refining and petrochemical operations.

The new CEO and his advisers have held closed-door meetings in recent weeks to outline the strategy, according to sources. They said he would outline his "ambitions" for the company in a speech Feb. 12, a week after he takes over as CEO. Any strategy will require a fine balancing act and is not without risk for a company whose efforts in

the early 2000s to build a large renewables business, branded "Beyond Petroleum," ended with huge losses. BP will have to rely on revenue from an expanding oil and gas business to fund its green ambitions while maintaining generous dividends for investors.

Central banks not immune to climate change risks, report says

(Financial Post; Canada; Jan. 20) - Climate change could lead to "green swan" events and trigger the next systemic financial crisis, according to a report by the Bank of International Settlements. BIS — often called the central banks of central banks — has borrowed the swan terminology from economist Nassim Nicholas Talib who famously coined the "black swan" thesis focused on unpredictable events that are hard to measure and can have catastrophic economic consequences.

"Climate change poses unprecedented challenges to human societies ... our community of central banks and supervisors cannot consider itself immune to the risks," François Villeroy de Galhau, governor of the Banque de France, said in a foreword to the report. "The increase in the frequency and intensity of extreme weather events could trigger non-linear and irreversible financial losses." Switching to low-carbon technologies and sources, however, could be a major hit on most fossil fuel producers, warns the BIS.

"For instance, stranding fossil fuels may require the U.S. and Canada to immediately stop extracting unconventional oil, with potentially significant impacts on the output of their national economies," the BIS said in its report published this morning. Quoting a 2018 report by environmental economists J.F. Mercure and others, the BIS noted that Saudi Arabia could keep selling oil in a low-carbon scenario given its competitive prices, whereas Canadian and U.S. unconventional oils could be stranded much faster.

IEA warns oil and gas industry: Boost investment in cleaner energies

(Reuters; Jan. 20) - Oil and gas companies must boost investment in low-carbon energies or face an increasing backlash that could threaten long-term profits and social acceptance, the International Energy Agency said Jan. 20. In a report presented at the World Economic Forum in Davos, the IEA said oil and gas companies face a critical challenge as the world increasingly adopts cleaner energies to curb global warming.

Energy-related greenhouse gas emissions rose to a record high in 2018. About 15% of global energy-related emissions come from the process of getting oil and gas out of the ground and to consumers, the IEA said. The Paris-based agency, which advises industrialized nations on energy issues, said oil and gas companies are facing increasing demands to explain how they intend to reduce emissions. "Doing nothing is simply not an option," IEA Executive Director Fatih Birol said in a statement.

The companies are under pressure to cut emissions from their operations and from their products as used by customers, as well as increasing investments in cleaner energies. "The first immediate task for all parts of the industry is reducing the carbon footprint of their own operations," Birol said. A large part of the emissions can be brought down relatively quickly and easily, such as reducing methane leaks. The IEA said another key move would be to boost investments in cleaner fuels — such as hydrogen and biofuels.

Unpaid oil and gas property taxes grow for Canadian municipalities

(Calgary Herald; Jan. 20) - Unpaid property taxes from oil and gas companies have spiked by 114 percent within the past year, said the group representing Canadian rural counties and municipal districts. Roughly C\$173 million in property taxes is currently owed to rural municipalities from oil and gas companies, the Rural Municipalities of Alberta (RMA) determined in a survey of its members.

That's a \$92 million increase from last March when a similar survey found municipalities were at an \$81 million loss from unpaid property taxes. The spike has the RMA calling on the province to help municipalities recoup the money. "Many oil and gas companies are unable or unwilling to pay municipal property taxes due to the ongoing downturn in the price of oil and Alberta's challenges in market access and receiving a fair price for its resources," the municipal group said a Jan. 20 news release.

"Rural municipalities also have little recourse to recover unpaid taxes from companies that have declared bankruptcy, as municipalities rank below the Alberta Energy Regulator in priority for seizing the assets of a bankrupt company," the group said. "If Alberta's property tax system is not amended to prevent oil and gas companies from refusing to pay property taxes, many rural municipalities will struggle to remain viable," RMA President Al Kemmere said in the news release.

Industry group says Alberta orphan-well regulations are inadequate

(Calgary Herald; Jan. 18) - A group tasked with cleaning up thousands of abandoned energy sites in Alberta said the province's rules for ensuring polluters reclaim their wells before selling them are inadequate. The industry-funded Orphan Well Association leveled the criticism in a letter to Alberta's energy regulator, which is considering a proposed transfer of hundreds of toxic natural gas wells, pipelines and other facilities from an energy giant to a much smaller company.

"The (association) has seen a dramatic increase in the number of orphan properties over the last several years," said the Dec. 5 letter. "The (association) believes that the current regulatory system for assessing the overall financial viability of asset transfers is

not adequate and needs to be augmented." An Alberta Energy spokesman said new policies are coming by April. "These policies will ensure the cleanup of inactive wells is addressed by producers — not on the backs of taxpayers — while still ensuring an environment for industry to be successful," the spokesman said in an email.

Shell has agreed to sell 284 Alberta sour-gas wells, 82 pipelines, and 66 facilities to a subsidiary of Calgary-based Pieridae Energy, which has a market value less than the price of the assets and a stock price under \$1. The Alberta Energy Regulator will rule on the license transfers. Major energy companies have shared concerns over the transfer. "If the license transfers are allowed, there is a high probability that Pieridae will be unable to respond to circumstances should any operational, health, safety or environmental problems arise," Canadian Natural Resources told regulators.

Canadian Indigenous people divided over new oil sands project

(Reuters; Jan. 21) - A proposed Canadian oil sands mine has split the country's Indigenous people, compounding the challenges facing Prime Minister Justin Trudeau's government as it decides whether to approve the project. Teck Resources would build the C\$20.6 billion (US\$15.76 billion) Frontier mine 68 miles north of Fort McMurray, Alberta, capable of eventually producing 260,000 barrels of crude oil per day.

The mine, which would be one of the largest in Alberta's oil sands, requires federal approval, even as the Trudeau government has promised to reduce Canada's greenhouse gas emissions to net zero by 2050. A decision is due by the end of February. Trudeau has set a priority of improving the country's relations with indigenous people, many of whom live in poverty and substandard living conditions.

All 14 First Nations and Metis communities that would be directly affected have signed agreements with Teck, supporting the project in exchange for undisclosed economic benefits. But other indigenous groups staunchly oppose it, saying the impact of more oil moving across Western Canada affects many more communities. "We get zero benefits, but 100% of the environmental impacts," said Chief Gerry Cheezie of Smith's Landing First Nation headquartered in Fort Smith, Northwest Territories. If approved and Teck makes a final decision to build Frontier, it would start production in 2026.

U.N. committee says it didn't know of Indigenous support for gas line

(Vancouver Sun; Jan. 19) - A Canadian First Nations chief is criticizing a recent directive from a U.N. anti-racism committee after the organization called for the shutdown of an Indigenous-backed gas pipeline only to later admit that it did not seek Aboriginal views on the project. In December, the Committee on the Elimination of Racial Discrimination released a directive calling for three large-scale natural resource

projects in British Columbia to be "immediately" shut down, including the Coastal GasLink natural gas pipeline that would feed into the LNG project in Kitimat, B.C.

The LNG project has signed benefit agreements with 20 indigenous communities along its 415-mile route. But in an interview with Reuters, the U.N. committee chair, Noureddine Amir, admitted that the committee did not study First Nations views toward the project, saying he "did not know" that most communities supported it. He further said he did not seek out additional information on the project because the role of the committee does not involve investigative work.

Haisla Nation Chief Crystal Smith, whose community has signed a benefits agreement with Coastal GasLink, said: "I frankly find it condescending to the work the 20 nations have done in the past six or seven years to get the project to where it is today." She said the U.N. directive points to the bombastic quality of discussion around resource projects in Canada, which have received intense scrutiny over the past decade largely due to a perception of widespread First Nations opposition. The gas pipeline is opposed by some indigenous people, most notably the hereditary chiefs of the Wet'suwet'en.

India considers participating in Russian Arctic oil and gas projects

(Russia Today; Jan. 18) - India is considering participating in Russian oil and liquefied natural gas projects in the Arctic, as cooperation could open vast opportunities for India in the resource-rich region. "We are establishing cooperation in geological exploration, joint development of oil and gas fields on the territories of the two countries, including offshore projects, which will eventually allow India to become the first non-arctic state to extract resources in the Arctic," Russian Foreign Minister Sergey Lavrov said.

India, one of the largest and fastest-growing LNG markets, wants to get Russian gas from the Arctic to help satisfy its energy demand. It could join the Arctic LNG-2 project under development by Russian gas producer Novatek, according to India's Minister for Petroleum and Natural Gas Dharmendra Pradhan. "We are looking into all the opportunities to get LNG from this region," Pradham said.

The interest in Russian gas comes as India turns away from joint projects with neighboring Pakistan. New Delhi has refused to sign a memorandum of understanding on the Iran-Pakistan-India gas pipeline construction amid escalating tensions with Islamabad. "We don't want to deal with Pakistan. We are more interested in Russian LNG." Pradhan said.

OPEC agrees not to count condensate against Russia's oil output

(Bloomberg; Jan. 20) - For the first time in Russia's alliance with OPEC, the country is changing the way it makes oil production cuts. This quarter, Russia — one of the architects of the original deal to curb oil output between the Organization of Petroleum Exporting Countries and its allies — will be allowed to exclude a type of light oil called condensate from the production data it submits to the group.

Russia's condensate output has been growing as the nation's biggest gas producers, Gazprom and Novatek, brought new fields online and ramped up output at existing ones. It's part of a strategy to boost both piped and liquefied natural gas exports from Russia to Europe and Asia. This rising condensate output has put pressure on Russia's compliance with the OPEC+ deal.

The country argues that its condensate, which accounts for 7% to 8% of total oil output, should be also excluded from its production-cuts target because countries within the cartel don't include it. OPEC agreed, and during its December meeting allowed all non-OPEC allies to exclude condensate from their production data. Russia had failed to fully comply with the OPEC pact for most of 2019, with condensate growth just one of the reasons given by the government for exceeding their quota. That now appears resolved.

China wants in on ice-class LNG shipbuilding for Russian project

(High North News; Norway; Jan. 22) - China's Hudong Zhonghua shipyard plans to build ice-capable liquefied natural gas carriers for Novatek's Arctic LNG-2 project. It would be the country's first foray into building the highly specialized ships, putting it in competition with Russia's Zvezda shipyard and South Korea's Daewoo Shipbuilding. Last month, Russia's gas giant Novatek and its shipping partners took delivery of the last of 15 ice-breaking carriers to serve the Yamal LNG terminal off the Arctic coast.

With the opening in a few years of the Novatek's next project, Arctic LNG-2, the company is looking for the timely construction of an additional 15 carriers. While the vessels for Yamal were built by Daewoo Shipbuilding, China aims to secure contracts for this next batch of vessels. The country's largest shipyard, Hudong Zhonghua, a subsidiary of the China Shipbuilding Industry Corp., has bid for up to 10 vessels.

As part of Russia's policy to reinvigorate its domestic shipbuilding, Novatek had planned to procure all 15 vessels for Arctic LNG-2 from the Zvezda shipyard in Russia's Far East. The shipyard entered into a partnership with Samsung Heavy Industries for the transfer of technology, as Zvezda has little experience constructing ice-capable carriers. However, despite Samsung's help, concerns remain about Zvezda's ability to deliver the ships on time. Novatek has requested a waiver from having to contract with a Russian shipyard and has asked that 10 of the vessels be built by Chinese or Korean shipyards.

Osaka Gas looks to resell unneeded U.S. LNG cargoes

(Reuters; Jan. 21) – With weaker demand at home, Japan's Osaka Gas has offered two of its contracted liquefied natural gas cargoes from the Freeport LNG project in Texas for delivery into Europe, sources said. Mild weather in Japan and a weaker Chinese economy have helped to drag down the global LNG market to multi-year lows and forced Asian sellers to seek alternative markets. Europe is the most likely destination for these cargoes, given cheaper freight rates than to Asia, a Japan-based trader said.

Bids on the two cargoes are due by Jan. 22. Osaka Gas and JERA Co, a joint-venture between Tokyo Electric and Chubu Electric, are expected to each take half of Freeport LNG Train 1's total contracted capacity of about 4.64 million tonnes per year. Under the contracts, the companies are allowed to sell and deliver the LNG wherever they choose.

LNG developer wants more time for permit; Oregon denies extension

(Willamette Week; Oregon; Jan. 21) - The Oregon Department of State Lands Jan. 21 rejected a request for an extension on a key permit for the proposed Jordan Cove liquefied natural gas terminal and pipeline project. The \$10 billion project, which would include a 229-mile pipeline from southern Oregon to Coos Bay, has been on the drawing board for more than a decade. Unions want the project to proceed, but environmentalists and some affected landowners oppose the project.

Pembina, the Canadian energy company behind Jordan Cove, applied for what's called a fill-removal permit in December 2017. That state permit applies to river and wetlands crossings and dredging in Coos Bay. The state lands office faced a Jan. 31 deadline for the permit decision, but the company asked for an extension to March 31. The state rejected the extension, saying Pembina had failed to provide a variety of information about environmental impacts, mitigation, and outstanding legal issues it had requested.

"We will make a decision on Jan. 31, 2020, based on the record in front of us," Vicki Walker, director of the state lands office, said in her Jan. 21 letter to the company. The permit is one of several the developer needs before deciding whether to go ahead with the project in addition to still needing to line up customers and financing.

Mitsubishi and Mitsui contract for first LNG-fueled ferries in Japan

(NGV Journal; Jan. 17) - Mitsubishi Shipbuilding, a group company of Mitsubishi Heavy Industries, has concluded a contract with Mitsui O.S.K. Lines (MOL) to build two LNG-fueled ferries, the first such project in Japan. The ships will be built at the Shimonoseki Shipyard with successive completion and handover scheduled for the end of 2022 to early 2023. Ferry Sunflower will operate the vessels on its Osaka-Beppu route.

The ferries will be more than 650 feet long and about 92 feet wide, with gross tonnage at approximately 17,300 tons. Maximum capacity will be 763 passengers, and 136 40-foot-long trucks and 100 cars. The main power plant will be a high-performance dual-fuel engine able to operate on both LNG and heavy oil, the first for a Japanese ferry.

New field drives Norway's oil production to 9-year high

(Financial Tribune; Iran; Jan. 19) - Start-up of the massive Johan Sverdrup oil field sent Norway's oil production rising to a nine-year high in December 2019, data from the Norwegian Petroleum Directorate shows. In December the third month of operation of Equinor's newest field in the North Sea, Norway's oil production averaged 1.759 million barrels per day, the highest oil production offshore Norway since January 2011.

The huge field is already producing 350,000 barrels of oil per day, two months after coming online, an Equinor senior executive told Reuters last month. Daily oil production in the first phase of development is estimated at 440,000 barrels per day with the project expected to reach that level by the middle of this year. Peak production with the second development phase is expected to reach 660,000 barrels. At its peak Johan Sverdrup will account for about a third of Norway's oil production, operator Equinor said.

U.S. and Canadian oil company bankruptcies up 50% in 2019

(Reuters; Jan. 22) - The number of oil company bankruptcies rose 50% in 2019 over the previous year, as a slide in prices continued to shake producers in the United States and Canada, Dallas law firm Haynes and Boone said in a report released on Jan. 22. U.S. and Canadian oil and gas exploration and production company bankruptcies totaled 42 in 2019, up from 28 in 2018, the law firm said.

"Following a steep drop in oil prices in the fourth quarter of 2018, there was a sharp increase in the number of filings in 2019," the report said. A total of 208 oil and gas production companies have filed for bankruptcy between 2015 and 2019, according to the report. "This increase in year-over-year filings indicates that the reverberations of the 2015 oil price crash will continue to be felt in the industry through at least the first half of 2020," Haynes and Boone said. Oil field service companies were again hit hard with the number of bankruptcies nearly doubling from twelve in 2018 to twenty-one in 2019.