Oil and Gas News Briefs Compiled by Larry Persily February 13, 2020

North Dakota oil could peak at 1.8 million barrels a day in 5 years

(The Associated Press; Feb. 11) - North Dakota's oil production may peak within five years as companies finish drilling the most prolific portions of the state's oil patch, state and industry officials told lawmakers Feb. 11. Mineral Resources Director Lynn Helms, the state's top oil regulator, said about 20% of drilling activity is now outside of the "core" areas of western North Dakota's oil producing region. "The end of (core area-drilling) is on the horizon; we can see it from here," Helms told lawmakers.

Though a typical well can have a lifespan of about three decades, the amount of oil that comes from it decreases by about half in the first two years, officials said. Helms said the outlook is for oil production to "plateau" for about a dozen years after a peak, then slowly decline by the end of the century to 1980 and 1990 levels of less than 150,000 barrels daily. The state is producing a near-record average of 1.5 million barrels of oil each day. In interviews, Helms and North Dakota Petroleum Council President Ron Ness estimated production would peak at about 1.8 million barrels daily if prices hold.

North Dakota is the No. 2 producer in the U.S. behind Texas. The state's oil production boomed in the past decade with improved horizontal drilling techniques into shale rock. Lawmakers are now studying potential uses for earnings from North Dakota's Legacy Fund, the voter-approved oil tax savings account that holds \$6.8 billion. Earnings from the fund increasingly have been targeted for spending or to balance the state budget.

Even if it wins government OK, oil sands project faces challenges

(Financial Post; Canada; Feb. 11) - Even if the Canadian government approves Teck Resources' proposed Frontier oil sands project in Alberta later this month, there are looming, unresolved economic questions that could determine whether the new mine is constructed. Most notably, this includes the price of oil. A federal-provincial review panel last year noted that Teck had assumed oil prices would exceed US\$95 per barrel, which is 90% higher than the Feb. 11 West Texas Intermediate price of about US\$50.

Last month, even Teck CEO Don Lindsey expressed skepticism about the project — which would cost an estimated C\$20.6 billion, produce 260,000 barrels of oil per day and operate for four decades — saying its fate depended on "three P's": oil prices, pipelines, and partners. "I think when you look at the economics of any big project, you're looking not necessarily at what (the oil price) is today," said Kevin Birn, vice president of North American oil markets at IHS Markit. "You're looking at the long term."

Where prices will go in the coming decades depends not only on supply and demand but whether the rail and pipeline capacity issues that have hit Alberta will be resolved. Last year Birn wrote that the price of oil needed for an oil sands producer to break even has been falling. In 2018, an oil sands miner without an upgrader required US\$65 per barrel to break even, compared to US\$100 in 2014. Teck has not disclosed a breakeven price for Frontier. Aside from prices, there are also questions about how Teck, which has a market capitalization of \$9.3 billion, would finance the \$20 billion project.

Despite state issues, FERC set to vote on LNG project in Oregon

(Bloomberg; Feb. 12) - Oregon appears on a collision course with federal regulators whose environmental review of what would be the U.S. West Coast's first liquefied natural gas export terminal is replete with factual errors, missing data, and a lax reading of environmental law, according to the state. The Federal Energy Regulatory Commission on Feb. 14 will announce whether it will grant permission to Calgary-based Pembina Pipeline to build its \$10 billion Jordan Cove Energy Project, including an LNG plant on the north spit of Coos Bay, Oregon, and a 229-mile pipeline across the state.

If FERC gives the go-ahead, it will trigger lawsuits that could take years to resolve. The pipeline would cross some 300 waterbodies — many containing endangered salmon — and more than 2,000 acres of forest including 750 old-growth acres, habitat for endangered species like the marbled murrelet (a small seabird) and the northern spotted owl, according to the FERC environmental impact statement. The EIS said the project would "likely adversely affect" 15 threatened or endangered species.

But the final EIS doesn't address many of the state's comments from the draft EIS. The state said the final EIS accepts inadequately mitigated impacts on endangered species; contains no analysis of climate-change impacts on local communities; and is wrong to say applicants like Jordan Cove are "encouraged" — not required — to get certain state permits. But the state has very limited authority to address greenhouse gas emissions from burning gas in Japan or its production in fracked wells in the U.S. or Canada. FERC said such lifecycle greenhouse gas analyses are beyond the scope of the EIS.

Anti-pipeline protests disrupt rail shipments in Canada

(Bloomberg; Feb. 12) – Escalating protests against a Canadian gas pipeline are putting rail cargoes of grain, propane, lumber, and consumer goods in jeopardy and prompting consternation among executives and lawmakers. Demonstrators are blocking rail lines and other key infrastructure to support parts of the Wet'suwet'en Nation, an Indigenous group that opposes construction of the C\$6.6 billion Coastal GasLink pipeline from gas fields in northeast British Columbia to a coastal liquefied natural gas export terminal.

Cenovus Energy, which ships a significant portion of its Alberta oil production via rail, said the protests pose a serious threat to Canada's economy. "There is a significant risk, not just to my business, but to the Canadian economy if these protests continue to shut down ports and shut down rail," CEO Alexander Pourbaix said Feb. 12. Cenovus shipped about 120,000 barrels of crude a day via rail in January, executives said.

The intensifying protests are "of concern," said Canadian Prime Minister Justin Trudeau, adding that his administration will be looking at possible next steps. "We recognize the important democratic right, and we will always defend it, of peaceful protest," Trudeau said. "We are also a country with a rule of law, and we need to make sure those laws are respected." Canadian National Railway said in a statement Feb. 11 that it will have to shut down "significant" parts of its network due to the protests. Blockades in Ontario and British Columbia have disrupted passenger traffic as well as freight shipments.

Louisiana law makes it a felony to protest oil and gas pipelines

(News Orleans Time Picayune, The Baton Rouge Advocate and Pro Publica; Feb. 7) -As the Bayou Bridge Pipeline was under construction in 2018, Anne White Hat ventured into the Louisiana swamp to protest the line, which brings Texas oil to coastal refineries. Though she had permission to be there from some of the more than 100 people who jointly own the tract, she didn't have permission from all. She was arrested on two felony counts related to trespassing. She posted a \$21,000 bond and was released.

Two years later the district attorney still hasn't decided whether to proceed with the two counts of unauthorized entry of critical infrastructure. The maximum penalty is five years in prison and a fine of up to \$1,000. Ironically, a court later ruled the pipeline company had been trespassing at the time of White Hat's arrest. The company had not obtained easements with all landowners to begin construction, nor had it been granted authority to do so through eminent domain. Its penalty was a \$450 fine paid to the landowners.

"This is yet one more in a long line of examples of how Louisiana laws are first made by oil and gas corporations and then are ignored by the same corporations if they feel like it," said Bill Quigley, a law professor at Loyola University who is representing White Hat pro bono. Louisiana has blazed a trail for other states in discouraging environmental protests by raising the legal stakes for those who trespass on or near "critical" oil and gas infrastructure — which includes refineries, chemical plants, and ports.

In 2004, it was the first state to make that crime a felony. Louisiana's pioneering law can be traced to corporate lobbyists. BP and DuPont were among the firms that produced a 2003 guide handed out to state officials, arguing that tough penalties would discourage attacks by terrorists that could cause economic disruptions. In 2018, Louisiana legislators added oil and gas pipelines to the list of infrastructure deemed critical.

Energy Department proposes 50-year terms for LNG export licenses

(S&P Global Platts; Feb. 11) - The U.S. Department of Energy is offering to extend LNG export authorizations through 2050 in response to a request from Cheniere Energy. Under the proposal, issued Feb. 10, companies that hold licenses to export LNG to countries that lack free-trade agreements with the U.S. could apply to extend their terms to 2050. Companies with pending applications could amend their requests to stretch out their terms to that date. The department in the future would adopt a standard term lasting through 2050 unless an applicant seeks a shorter term.

Cheniere, which operates two Gulf Coast LNG export terminals, in July 2018 urged DOE to consider going beyond the 20-year term that had become standard, maintaining that the additional years could prove decisive for foreign buyers deciding between U.S. LNG and other long-term sources. In proposing to extend license terms, DOE pointed to the study it commissioned from NERA Economic Consulting, published in 2018, which said unconstrained export volumes would not be inconsistent with the public interest.

Industry welcomed the proposal. Charles Riedl, executive director for the Center for LNG, said Feb. 10 it would enable U.S. gas to compete on a level footing with global competitors and give customers, builders, and investors greater security and comfort in the regulatory process. But the Sierra Club's Nathan Matthews disagreed. "This is just a giveaway to industry. The LNG export industry doesn't need this and has been happy to build and operate LNG export facilities even when only guaranteed a 20-year term."

Lowest prices in 4 years hit U.S. gas producers

(Reuters; Feb. 11) - U.S. shale gas producers are ripe for further spending cuts and write-downs, investors and analysts said, with prices at four-year lows and China's rejection of some gas imports weighing on earnings. U.S. gas production is at record levels, outpacing domestic needs and leading to global supply glut. At the same time China, the world's largest importer of gas, has turned away shipments with its demand forecast to rise at the slowest pace in four years amid the coronavirus outbreak. As a result, several large gas producers have reduced the value of their production assets.

EQT, the largest U.S. gas producer, said it would take a write-down of as much as \$1.8 billion, following CNX Resources, Shell, and Chevron in reducing the value of gas assets. "I think we've seen a good number of write-downs and I think we will see more as people start to factor in lower-for-longer prices," said Richard Soultanian, president of energy-consulting firm NUS Consulting. U.S. gas futures fell 5% on Feb. 10 to \$1.77 per million Btu, a four-year low, far below the \$2.50 some producers need to profit.

That is not stopping companies from new drilling, however, as roughly half of the growth in U.S. gas output is coming from oil drillers that produce it as a by-product of crude

output, according to S&P Global Ratings. Gas production is forecast to rise 3% this year to an average 94.7 billion cubic feet per day, according to U.S. Energy Information Administration projections.

China's force majeure could add to cancelled LNG cargoes

(S&P Global Platts; Feb. 10) - The impact of China's coronavirus outbreak on the LNG market is expected to worsen in coming weeks as activity in China's key manufacturing hubs struggles to rebound, keeping a lid on gas demand and triggering more LNG trade flow disruptions. This has raised the odds of more Chinese LNG importers reneging on supply contracts, and suppliers raising concerns about more cargo cancellations after state-run CNOOC, China's largest LNG importer, declared force majeure last week.

Suppliers including commodity traders like Trafigura and Mideast gas producers have received force majeure notices from CNOOC, market sources said. Disputes are possible, with oil majors like Total and Shell pushing back at the force majeure declarations. Legal experts said the ability of a Chinese buyer to seek force majeure protection depends on the situations covered in their LNG contracts, and answering this in the current market is complicated as not all events trigger a force majeure.

Contracts also exclude certain events from being force majeure, such as the inability of a party to pay or a breach of law, or even changes in downstream markets and reduced gas demand. Earlier this month, the China Council for the Promotion of International Trade issued force majeure certificates to local companies to protect them from the fallout of the coronavirus outbreak. "As many as 35 February cargoes could be subject to force majeure declarations," ship broker Poten & Partner estimated in a report Feb. 7.

Australia most exposed to risk that China will reduce LNG imports

(S&P Global Platts; Feb. 10) - Australian LNG exports are most exposed to cargo cancellations by Chinese buyers on account of the ongoing coronavirus outbreak and deteriorating gas demand, although January volumes were unaffected, analysts said. The view comes on the back of Australia's emergence as the world's largest exporter of LNG on an annual basis last year, overtaking Qatar. Overall, Australia also took over as the largest gas supplier to China in 2019 after toppling Central Asia's pipeline sales.

China's state-run CNOOC, the country's largest LNG importer, declared force majeure last week — potentially allowing it to walk away from contractual commitments — amid concerns that more of its customers could back away from contracts, cutting CNOOC's need for LNG. This is particularly concerning for Australian producers that largely supply China under long-term contracts. Almost three dozen cargoes of Australian LNG landed in Australia in January, energy consultancy EnergyQuest said Feb. 10. "China is an incredibly important buyer of Australian LNG. In January, 36% of Australian exports went to China, just behind volumes to Japan. The East Coast (Australia) projects are most exposed to China," EnergyQuest chief executive Graeme Bethune said. "Australian cargoes are likely to be hit hardest by force majeure declarations as they are some of the most expensive supplies to China. Australia also accounts for just under half of Chinese imports," shipbroker Poten & Partners said in a report Feb. 7.

China's lockdown likely qualifies as force majeure

(Reuters; Feb. 10) - As the coronavirus outbreak in China shows no signs of abating any time soon, some companies that buy and sell goods in the Chinese market are considering the legal defense of force majeure. Force majeure refers to unexpected external circumstances that prevent a party to a contract from meeting its obligations. The underlying event must be unforeseeable and not the result of actions undertaken by the party. Natural disasters, strikes, and terrorist attacks can all be force majeure events.

Legal experts said that the coronavirus likely qualifies, but any company invoking force majeure would need to show that it is effectively impossible to perform its contractual duties as a result of the outbreak. A company is not excused from an obligation just because it has become more costly or time-consuming, said John Scannapieco, a Nashville, Tennessee-based lawyer who advises companies on Chinese transactions. The coronavirus is "not carte blanche to say force majeure," said Scannapieco. "You have look at the facts and circumstances."

Force majeure clauses rarely mention diseases, but more frequently provide relief in the event of unforeseen "acts of government," said Vanessa Miller, a U.S. lawyer at Foley & Lardner. Chinese authorities have ordered lockdowns and closed factories in the wake of the coronavirus, so the "act of government" language could allow some firms to invoke force majeure, she said.

Analysts forecast weaker gas demand growth in China

(Reuters; Feb. 12) - Several analysts have cut their gas demand forecasts for China, the world's top gas importer, as the fast-spreading coronavirus outbreak is expected to depress industrial, commercial, and transportation appetite over the next few months. Estimates for the impact varied among five analysts who provided their views for China's gas demand to Reuters. Two of them expect demand to expand by just 6% this year, compared to a nearly 10% growth in 2019.

Lower growth will likely affect liquefied natural gas imports the most as they are typically more expensive than pipeline gas imports, analysts said. China's LNG demand is only expected to grow 4% year-on-year in 2020, compared with previous estimates of 13%, analysts from Bernstein said. The outbreak has added further pressure on Asian LNG spot prices, which hit a record low below \$3 per million Btu last week. Prices were already weak as demand slipped in Asia due to a mild winter and a prolonged trade war between China and the U.S., while new LNG projects have kept supplies flowing.

"A prolonged period of low spot prices could also spark contract renegotiations between suppliers and customers in Asia, where contracts are oil-linked, and slow down prospective projects," analysts at Fitch Ratings said. Asian spot LNG prices are now trading at \$1 below U.S. LNG producers' cash breakeven of \$3.80 cash costs, which is not sustainable and could reduce the supply of U.S. LNG, Bernstein analysts said.

Ichthys gas project offshore Australia close to full production

(S&P Global Platts; Feb. 7) - The Ichthys liquefied natural gas project, offshore northern Australia, is "very close" to reaching plateau production rates with more than 200 cargoes of LNG, liquid petroleum gas (mostly propane) and condensate (natural gas liquids) loaded since start-up in 2018. Meanwhile, the operator is considering new drilling and expansion, said Hitoshi Okawa, Australia managing executive officer at Japan's Inpex. Ichthys, which produces gas from an offshore field and pipes it to an onshore liquefaction plant, is loading three LNG cargoes a week, Okawa said.

The LNG plant has two liquefaction trains, with capacity to produce 8.9 million tonnes per year of LNG. "We're getting there, very close, not completed. We are on the way and very close to the plateau production," Okawa told S&P Global Platts in an interview on the sidelines of an industry conference in Italy. Much of Inpex's share of production from Ichthys is sold under long-term contracts to buyers in Japan and Taiwan, but low LNG spot prices remain a concern for the portion not sold on such contracts, he said.

Okawa played down the delays and cost overruns that hit the \$45 billion project, stressing its complexity and its 552-mile pipeline to shore in Darwin, Northern Territories. All 18 production wells initially planned are in production and a second phase of drilling will start "shortly," Okawa said. Inpex holds a 66% stake in Ichthys, alongside Total, Taiwan's CPC and several Japanese utilities. At peak production, Ichthys is expected to produce up to 150,000 barrels a day of condensate and LPG.

BP will take all of the output from offshore West Africa LNG project

(S&P Global Platts; Feb. 12) - BP's own gas marketing arm has agreed to buy all the liquefied natural gas to be produced at its planned Greater Tortue Ahmeyim LNG

project offshore Mauritania and Senegal, it said Feb. 12. BP Gas Marketing has agreed to take 2.45 million tonnes per year from Phase 1 of the project for an initial term of up to 20 years and will be the sole offtaker for LNG from the first phase.

The sales-and-purchase agreement followed a competitive process involving all partners in the project, BP said. Greater Tortue Ahmeyim is designed in its first phase to produce 2.5 million tonnes per year before expanding to 10 million tonnes in later phases. It is based on an estimated 15 trillion cubic feet of offshore gas and is expected to produce its first gas in 2022. BP and its partners took the final investment decision for the project in late December 2018.

BP is the project operator with a 60% stake in the development in Senegal and 62% in Mauritania. U.S.-based Kosmos Energy holds 30% and 28% stakes, respectively, and Mauritania and Senegal's national oil companies each hold 10% stakes. BP CEO Bernard Looney said last year there was potentially some 50 tcf to 100 tcf of gas in place across the region.

Depressed LNG prices could hurt coal industry long term

(Reuters' columnist; Feb. 9) - The collapse in the spot price of liquefied natural gas in Asia is a short-term phenomenon that may well end up having a longer-term impact, especially on thermal coal. The LNG spot price dropped to \$2.95 per million Btu for the week ended Feb. 7, the lowest price in records stretching back to 2010. It has lost 57% of its value since the pre-winter peak of \$6.80 in mid-October and is down 74% from the peak price in 2018 and 86% from the all-time high of February 2014.

While it's unlikely that LNG will stay at the current depressed pricing indefinitely, the trend toward structurally lower prices appears sustainable and will likely accelerate the shift away from long-term, oil-linked contracts to shorter-term, more flexibly priced deals. This change in LNG pricing should give pause to any would-be developers of coal power projects, especially Japan where 9.3 gigawatts of coal-fired plants are under construction. Perhaps the economics have shifted enough to re-think coal versus gas.

In all likelihood, it would be possible to sign long- or medium-term LNG supply pacts that are not linked to the price of oil, but rather to other instruments such as U.S. Henry Hub natural gas benchmark or European gas prices or even coal. This could give Japan the security of fuel supply it desires, but virtually eliminate the problem LNG has always had — its high cost relative to coal. That could be good for gas, not so good for coal.

'If gas is a bridge fuel, how long is the bridge'

(S&P Global Platts; Feb. 11) - The natural gas sector faces growing uncertainty about its role in a decarbonizing economy, and ensuring a place in the energy transition will require grappling with a patchwork of decarbonization strategies in different parts of the country and aggressively curbing greenhouse gas emissions. That was the consensus of market participants and regulators on a panel about the future of gas at the National Association of Regulatory Utility Commissioners' annual winter meeting in Washington.

A critical question that panelists flagged is whether it will be policymakers or markets that take the lead role in addressing the issue. "If gas is a bridge fuel, how long is the bridge? How should we decide that and how should that affect our planning?" Cheryl LaFleur, a former Federal Energy Regulatory Commission chair, said Feb. 10. "The answers to these questions have implications ... for the permitting of natural gas infrastructure (of) pipelines and LNG terminals."

"The U.S. is not experiencing one energy transition," said Jason Klein, vice president of Energy Transition Strategy at Shell. "We are experiencing at least 50 different energy transitions. The right answer for California is not going to be the right answer for Texas." Meanwhile, overarching federal guidance on the role of gas in the energy transition appears unlikely, said Sarah Ladislaw, senior vice president and director of the Center for Strategic and International Studies' Energy Security and Climate Change Program.

Oil traders look at chartering tankers for storage at sea

(Houston Chronicle; Feb. 10) - Three of the world's largest oil traders are seeking to store crude on tankers at sea as the industry tries to deal with a glut that's emerged since the outbreak of the coronavirus in China. Vitol, Shell, and Litasco are among firms asking about hiring supertankers for storage purposes as a sharp drop in Chinese demand due to the coronavirus prompts requests for cargo deferments, according to people familiar with the matter, shipbrokers and oil traders.

While the emergence of floating storage will come as little shock to an oil market whose main source of demand growth — China — has been hit hard by the virus outbreak, it shows the scale of the buying weakness. Storing doesn't look profitable on paper and keeping barrels at sea would normally be more expensive than land-based options. For Shell and Vitol, the requests are simply to find ships to store barrels for a several weeks or months. Traders sometimes ask for cargo charters to include storage options.

It's not clear if any of the companies has booked a vessel yet, and traders will sometimes ask for prices to calculate the viability of a trade. Chinese refiners have cut the amount of crude they're turning into fuels by about 15% — a reduction of about 2 million barrels a day — as the deadly outbreak hinders the movement of people and hits

demand for travel. Costs of chartering a very large crude carrier with capacity of 2 million barrels were \$30,000 to \$33,000 a day, said two shipbrokers.

Falling demand and low prices could threaten global oil politics

(Bloomberg commentary; Feb. 11) - The coronavirus outbreak is already threatening oil markets. The fear of lower demand — from a disease-stricken China, and globally as the economic impact widens — has destabilized prices, sending crude to its lowest levels in more than a year. For major oil-producing countries, the declines threaten economic shocks that if long-lasting could lead to the kind of political and regional instability that was avoided during the last steep oil-price drop.

A catastrophic situation for the oil industry might see prices dropping into the \$30-to-\$35 per-barrel range for Brent and lasting several months. This situation presents a threat for oil producers that would be significantly more severe than they faced when prices last dipped into the low \$40s and mid-\$30s in 2015-2016. In the feared coronavirus scenario, producers such as Saudi Arabia, Russia, and the United Arab Emirates would face low prices in conjunction with lower production, severely curtailing their revenue.

Should this low-demand/low-production scenario come to pass, countries such as Saudi Arabia, Russia, and others would face direct hits to their coffers. Their deficits would rise; the services provided by their governments to satisfy the populations might be reduced; and their economies would suffer. If it lasted long enough, economic instability could have political consequences. If prices drop significantly and don't recover quickly, the U.S. could see another oil bust, resulting in bankruptcies and layoffs. With the crisis still raging and so many unknowns, it's prudent to consider all possibilities.