Oil and Gas News Briefs Compiled by Larry Persily August 24, 2020

Oil states hurting as low prices cut into revenues

(E&E News; Aug. 20) - Oil-producing states are bracing for spending cuts as the coronavirus pandemic continues to put a damper on the industry. In North Dakota, oil production hovered near a seven-year low in June at 890,000 barrels a month. That's a slight increase from May but still about 40% below the state's output in December of 1.5 million barrels per day. Oil production tax revenues are 15% lower than forecast for the two-year budget cycle and a steep 83% drop in July, according to state budget figures.

Other oil-producing states are running into similar revenue shortfalls for everything from public schools to public facilities maintenance. Many of them were still recovering from the 2008-2009 recession and the drop in oil prices 2014-2016, said Lucy Dadayan, a senior research associate at the Urban Institute in Washington, D.C. Some analysts predict the oil crash could stretch into 2021. "The oil states are going to see challenges not only because of COVID but because of the steep declines in prices," Dadayan said.

The Oklahoma Legislature faced a \$1.3 billion gap when it met to write its budget for the 2020-2021 fiscal year, which started in July. Lawmakers avoided cuts to education but largely depleted the state's \$1 billion reserve fund, said Paul Shinn, a budget analyst at the Oklahoma Policy Institute, a progressive-leaning think tank. That could force them to reconsider education spending when they develop the 2021-2022 budget, he said. It also could reopen a bruising political battle that saw Oklahoma's teachers walk out of classrooms statewide in 2018 until lawmakers raised taxes on oil and gas production.

Phillips 66 refinery closure will end three generations of jobs

(The Tribune; San Luis Obispo, CA; Aug. 22) - The better living through chemistry era was in full force in 1955 when Union Oil built the Santa Maria refinery on the Nipomo Mesa in California. Dial telephones were still a year away for San Luis Obispo. The flash from nighttime atomic weapon blasts in the desert air above Nevada could be seen in San Luis Obispo County. Another era ended this week, too, when the refinery owner, Phillips 66, announced it planned to shut down the 45,000-barrel-a-day facility.

The company, which has owned the plant since 2012, pumps partially refined oil from the refinery to another in the Bay Area, where it was processed into market-ready fuels. But that Bay Area plant is being converted to a biofuel refinery, converting used frying oil into fuel. In 2023, the refinery and chemical plant in Santa Maria will be out of a job.

In the 1950s, Union Oil had a problem. The gasoline market was exploding, freeways were covering the state and the baby boom was underway. Unfortunately, the crude oil in California did not refine easily into gasoline — and Union had a lot of California oil. According to company biography books, "A Century of Spirit" and "The 76 Bonanza," one of the secrets to the company's success was a new refining process that catalyzed chemical byproducts out of the oil, leading to construction of the Santa Maria plant.

The Unicracker could deliver 120 barrels of gasoline from 100 barrels of feedstock. The Santa Maria plant cost \$5 million to build, part of a larger \$40 million expansion program. A sister chemical plant was built on site that made coke and removed sulfur from the oil. For over three generations the complex provided head-of-household jobs, ones that will be hard to replace. The story will end when the plant closes in 2023.

Federal agencies disagree on review of Oregon LNG project

(E&E News; Aug. 19) - A federal dispute over endangered species has stalled the embattled \$10 billion liquefied natural gas project proposed for Coos Bay on the Oregon coast, raising more questions about the LNG export hub. For months, the Federal Energy Regulatory Commission, U.S. Fish and Wildlife Service and NOAA Fisheries have sparred over whether a new biological assessment from FERC is needed for the Jordan Cove LNG project, specifically a short section of its 230-mile feeder gas pipeline.

Paul Henson, the FWS Oregon state supervisor, said in a letter to FERC on Aug. 18 that the project cannot proceed without additional information, essentially pausing the project. The disagreement centers on a 15.2-mile-long pipeline route alternative called the Blue Ridge Variation. FERC said in its environmental review that the variation would reduce harm to the northern spotted owl and marbled murrelet. However, the alternative would affect 75 water bodies rather than 16 along the original route, according to FERC.

In a letter earlier this month, FERC said the 2019 biological assessment for the pipeline contains all the information necessary under the federal Endangered Species Act. But Henson said the information provided by FERC "is not adequate to identify and analyze the effects of the Blue Ridge Alternative route to listed species." The Fish and Wildlife Service and NOAA Fisheries have said they do not have enough information from FERC to determine if the project complies with the Endangered Species Act.

Offshore oil service companies head into bankruptcy

(Bloomberg; Aug. 19) - Offshore oil servicers are going bust at the fastest pace in three years as explorers spurn high-cost drilling amid the worldwide slump in commodity prices. The debacle, triggered by the pandemic-driven drop in oil prices, has already

claimed some of the biggest companies that supply rigs, transportation and other support services to deep-water drillers. Noble and Diamond Offshore Drilling have filed for bankruptcy since the start of the oil downturn, while Valaris filed on Aug. 19.

Other firms including Transocean — the world's biggest owner of deep-water oil rigs — are exploring strategic options as they seek to stave off default, leaving more than \$30 billion of debt at risk. The industry turmoil has sparked the biggest wave of restructurings since 2017, when the effects of the last oil-price downturn reverberated through the industry. "Offshore drilling is structurally damaged, and recovery is not imminent," Bernstein analyst Nicholas Green wrote Aug. 19 in a note to investors.

"The March oil price crash may, ironically, help to drive an eventual turnaround, if it forces sector restructuring and clears out of the weakest names," Green wrote. The increase in bankruptcies exposes a supply-and-demand problem for an industry that leans on ships and helicopters to ferry equipment and crews to rigs in the middle of the ocean. Higher-cost offshore projects aren't profitable with oil around \$40 a barrel, leaving too many vessels chasing a dwindling pool of business. Unless the economic picture improves, more filings are likely to follow as producers sideline offshore projects.

Colorado analysis says oil and gas industry needs to cut emissions

(The Colorado Sun; Aug. 19) - Some of the biggest cuts in Colorado's greenhouse gas emissions will come from the electricity and transportation sectors, but hitting the state's goal of a 26% reduction in emissions from 2005 levels in the next five years will depend on curbing emissions from the oil and gas industry, according to a state analysis. "To meet these goals, we are definitely going to need a significant reduction for the oil and gas sector," said Garry Kaufman, director of the state Air Pollution Control Division.

Kaufman presented his division's analysis on sector-by-sector emissions and possible reductions to a subcommittee of the Air Quality Control Commission on Aug. 18. The commission was given the task of creating a greenhouse gas reduction plan under legislation that set the targets of a 26% reduction over a 2005 baseline by 2025, 50% by 2030 and 90% by 2050. "We do believe we're on a path to achieve both the 2025 and 2030 targets," Josh Korth, a state climate analyst, told the subcommittee.

Environmental advocates, however, were cool to the analysis. "It was very concerning to see that many of their projected numbers seem based on wishful thinking and hopeful optimism, not on actual regulatory proposals or firm commitments," Jeremy Nichols, climate and energy program director for Wild Earth Guardians, said in an email. In December, the commission adopted tougher rules for emissions from oil and gas operations, requiring leak detection and repair, and reporting the size of methane emissions. The commission this fall will start to focus on emissions from fracking sites.

Record flow of U.S. oil to China planned for September

(Bloomberg; Aug. 21) - U.S. crude oil exports to China are set to reach a record next month in a sign that Beijing is stepping up purchases to meet its commitments under a landmark trade deal reached in January. Chinese crude buyers have chartered about 19 tankers for September to send roughly 37 million barrels of oil to China, according to provisional tanker fixtures. That's equivalent to about 3½ days of total U.S. output.

If the cargoes proceed as planned, the exports would surpass a record set in May at 35.2 million barrels, according to U.S. Census data compiled by Bloomberg. The May volume was also the most by any U.S. oil buyer for a given month, data show. Under Phase 1 of the deal, the world's largest oil importer promised to buy an additional \$200 billion of U.S. goods and services in 2020 and 2021, including \$52 billion in energy products. Purchases so far have lagged that target. A review of the deal that was set for Aug. 15 was canceled, and has yet to be rescheduled.

All but one of the tankers, which can carry about 2 million barrels each, will originate on the U.S. Gulf Coast. Unipec, the trading arm of Chinese's largest refiner Sinopec, has booked some of those tankers, while a few others were chartered by PetroChina, a subsidiary of China National Petroleum Corp. The sailings could get canceled or rerouted if market fundamentals change.

Saudis suspend deal to build petrochemical complex in China

(Bloomberg; Aug. 21) - Saudi Arabia's state oil company has suspended a deal to build a \$10 billion refining and petrochemicals complex in China, according to people familiar with the matter, as the company slashes spending to cope with low oil prices. Saudi Arabian Oil Co., or Aramco, decided to stop investing in the facility in China's northeastern province of Liaoning after negotiations with its Chinese partners, the sources said. The uncertain market outlook was behind the decision, they said.

Aramco declined comment. The oil-price crash and the impact of the COVID-19 pandemic on energy demand have changed the math for energy company projects around the world. Aramco plans deep cuts to its capital spending as it tries to maintain a \$75 billion dividend amid low crude prices and rising debt. The kingdom — Aramco's main recipient of those dividends — is suffering a major squeeze on its public finances.

Saudi Arabia wants to increase market share in Asia and has encouraged Chinese investment in the kingdom. The Saudis were set to team up with Norinco and Panjin Sincen to form Huajin Aramco Petrochemical Co. The kingdom was going to supply as much as 70% of the crude for the 300,000-barrel-a-day refinery. The Chinese side will press ahead with the project, which also includes an ethylene cracker and a paraxylene unit, according to sources. The joint venture remains an option for the future, they said.

States sue to block new LNG-by-rail regulations

(WHYY; Philadelphia; Aug. 21) - Fourteen states — including Pennsylvania, New Jersey, and Delaware — and the District of Columbia have filed a legal challenge to a new federal rule that would allow trains to carry liquefied natural gas across the country. The states' move coincides with a petition filed by environmental organizations that also hope to block the rule, which was approved in late July by the U.S. Pipeline and Hazardous Materials Safety Administration.

Both legal challenges say the rule, set to take effect Aug. 24, should be overturned because it poses health, safety, and environmental risks. Environmental advocates have nicknamed the proposed LNG rail cars "bomb trains," for their potential explosive capacity. The rule could prove to be particularly important for Pennsylvania and Delaware because a proposed LNG export terminal in Gibbstown, New Jersey, would use rail cars to carry LNG from northeastern Pennsylvania to the Delaware River port.

Federal safety and environmental studies on the impact of LNG rail transport — the kind that are typically carried out before the implementation of new regulations — have not yet been conducted, opponents said. "There's never been a full risk assessment done," Tracy Carluccio, of the Delaware Riverkeeper Network, said Aug. 20. Under current rules, it's considered too dangerous to transport LNG in regular tank rail cars. LNG can be transported only by truck or — with special approval by the Federal Railroad Administration — by rail in small tanks mounted on top of rail cars.

U.S. natural gas prices up strongly, but producers are wary

(The Wall Street Journal; Aug. 21) – U.S. natural gas prices have shot up since late June, and speculators are betting they will keep climbing. But the companies that control the country's spigots aren't so sure. Appalachian energy producers are taking a cautious approach to reopening the taps they shut in the spring when the coronavirus pandemic torpedoed prices in an already glutted market.

The companies flooded the market in recent years and have effectively become the swing producers in the newly global market for U.S. shale gas. Their reticence to chase rising prices is supporting the market. But by keeping gas in the ground, they risk missing out on a rare period of climbing prices that could quickly reverse. "Given the way the world is now, you're more likely to see producers respond to weak pricing rather than a response to strong pricing," said Anna Lenzmeier, who studies Northeastern gas markets for BTU Analytics, a Lakewood, Colorado, research firm.

Producers operating where Pennsylvania, Ohio, and West Virginia meet — a region that includes some of the most prolific gas wells ever drilled — are particularly responsive to price swings, Lenzmeier said. The huge volumes they can bring to market with minimal drilling enable them to meet demand fast. September futures ended Aug. 20 at \$2.35

per thousand cubic feet, up 6% from a year ago. Gas for December, when fuel demand picks up, has risen to \$3.13. Prices reached a 31-year record low in June at \$1.63.

Shell's Prelude floating LNG factory has shipped just 1 cargo

(Australian Broadcasting Corp.; Aug. 21) - Shell's massive floating liquefied natural gas factory off Australia's coast has been in shutdown since February and industry analysts are divided on whether the facility, estimated at \$12 billion to \$17 billion, has a future. It has produced just one LNG cargo in its first three years. Prelude is the largest floating object ever built and billed as the solution to getting gas out of the nation's most remote undersea fields. At 1,600-feet long, it risks becoming the world's biggest white elephant.

"It is a big deal and also a big embarrassment, and that's one of the reasons why you're not hearing much from Shell," said Tim Treadgold, a resources industry analyst who writes for Forbes magazine. But Curtin University energy economist Roberto Aguilera in Perth said that assessment is too pessimistic. "There is no doubt the facility has had trouble. It's a unique technology, very complex," Aguilera said. "It would seem unlikely that they would cut their losses after so much effort and so many billions of dollars."

Prelude was born out of Woodside Petroleum's failed attempts to bring the undersea gas in northwest Australia's Browse Basin to an LNG processing hub on the Kimberley coast. When Woodside pulled the pin on the project in 2013 as forecast costs went stratospheric, Shell was already building Prelude in a South Korean shipyard. A floating LNG factory seemed to solve the problems that plagued building new onshore facilities. Production began in 2018 and Prelude was expected to export 3.6 million tonnes of LNG per year. But full capacity has never been reached and only one cargo has left Prelude, shipped in June 2019. Shell declined to say when Prelude would restart output.

COVID-19 safety issues delay repair work at Shell's Prelude LNG

(The Wall Street Journal; Aug. 22) – Shell spent billions of dollars developing one of the world's most challenging energy projects, a floating gas terminal 1,600 feet long. The coronavirus pandemic is posing a new problem: How to get workers to safely start it back up. After years of delays, cost overruns, technical problems and safety concerns, Shell last year loaded its first liquefied natural gas from the enormous vessel off the coast of Australia. But production was halted in February because of an electrical fault. Efforts to restart are now being slowed by social-distancing requirements, Shell said.

The plight highlights how the coronavirus has complicated operations at some of the world's largest energy projects. Work camps and oil-and-gas platforms in remote sites

where staff live in close quarters are vulnerable to the spread of the virus, and there have been outbreaks this year at facilities in Kazakhstan, Mozambique, and offshore in the Gulf of Mexico. It also illustrates how the destruction in energy demand caused by coronavirus lockdowns, and resulting lower prices, is challenging the economics of megaprojects that companies approved when oil and gas prices were higher.

The largest facility of its kind ever built, Prelude was supposed to be the first of several megavessels Shell planned in an effort to tap hard-to-reach gas deposits out at sea. But the company quickly decided Prelude would be a one-off effort as costs escalated, according to a person who worked on the project. "They went with this very large, very complex, not off-the-shelf technology; they developed it as a bespoke project, and I guess we'll know over the next 20 years, was that a successful decision," said Jason Feer, head of business intelligence at consulting firm Poten & Partners.

Rosneft tells Putin its low-sulfur Arctic oil is 'the best in the world'

(Barents Observer; Norway; Aug. 20) - It contains only 0.02% sulfur, Rosneft CEO Igor Sechin said as he handed Russian President Vladimir Putin a small bottle of oil from the Zapadno-Irkinsky Arctic field. It is the first oil extracted from one of the wells at the site, Sechin said at the Aug. 18 meeting. "This is premium-quality oil, among the best in the world, the best in the world," he said.

Development of the Zapadno-Irkinsky field is part of Rosneft's new grand Arctic project, called Vostok Oil. If the company gets its way, it will be one of the biggest energy projects in the Arctic ever. Sechin showed Putin a film of the project that is planned to include about 1,200 miles of new long-distance pipelines as well as 4,300 miles of branch pipelines. In addition, the development would include three new airports, 10 helipads, and about 50 new ice-class tankers, reported Interfax, a Russia news agency.

The Vostok project also includes a major new seaport and terminal on the coast of the Kara Sea. Shipments could exceed 2 million barrels per day by 2030. The terminal is scheduled to start operations in 2024. According to Sechin, the Vostok Oil project has a resource potential of up to 36 billion barrels of light-quality oil. Resources are based in 15 fields in the Taymyr region. The estimate also includes resources of the Payakha fields, as well as the East Taymyr cluster where Rosneft cooperates with BP.

Australian gas producer pushes back against price criticism

(Sydney Morning Herald; Aug. 20) – Kevin Gallagher, managing director of Santos, Australia's second-largest oil and gas producer, said Aug. 20 he would be "very happy" to be transparent and provide information on pricing if requested, but urged authorities to also consider the cost of natural gas production. He was responding to criticism from

the country's competition watchdog, which said Australia's gas exporters are failing to pass on lower global prices to local customers on long-term contracts.

Manufacturers across Victoria and New South Wales have been struggling with high gas prices and are voicing anger that local supply contracts were far more expensive than liquefied natural gas, much of it from Australia, sold at Asian spot-market prices, which have crashed this year. The Australian Competition and Consumer Commission this week added its support to their concerns, saying domestic customers were "paying too much" for long-term contracts compared to rock-bottom LNG export prices and called for the government to compel producers to open their books.

"When spot prices are low it's because there's an oversupply in the (LNG) market ... so they are below the cost of supply," Gallagher said. "To expect us to sell below the cost of supply is nonsensical." Long-term gas prices have to be high enough to justify the risk, he said. "If someone wants a 10-year contract, that means for the next 10 years we have to drill wells that produce gas. Not every well will be successful. We take that risk," he said. "We take the risk of government intervention like royalty changes during that period, and if we fail to supply to the customer there are penalties ... we take the risk."

Final train ready to enter service at LNG terminal in Georgia

(Reuters; Aug. 21) - Kinder Morgan asked U.S. energy regulators this week for permission to put in service the 10th and final liquefaction train at its nearly \$2 billion Elba Island liquefied natural gas export plant in Georgia. Kinder Morgan said the unit would be ready for service on Aug. 27, according to a filing Aug. 20 with the Federal Energy Regulatory Commission. The first liquefaction train entered service in October 2019. Each train is capable of producing about 0.3 million tonnes per year of LNG.

The first export cargo from Elba left in December. Elba, however, has not exported a cargo since January as governments worldwide take steps to reduce the spread of the coronavirus, cutting into energy demand. Elba is 51% owned by units of Kinder Morgan and 49% by EIG Global Energy Partners. Shell has a 20-year contract to use the facility.

OPEC+ sets numbers for countries to 'repay' overproduction

(S&P Global Platts; Aug. 20) - OPEC+ members that exceeded their production quotas will have to cut their output by a combined 2.31 million barrels per day as compensation by the end of September, the alliance's data shows, keeping a lid on output as compliant members are easing back from their historic output restraints. Under the

OPEC+ supply accord, any production over quotas in May, June, and July must be offset by deeper cuts of an equivalent volume in August and September.

The coalition has not revealed how members will implement those additional cuts, as countries have until Aug. 28 to submit their plans. A key monitoring committee cochaired by Saudi Arabia and Russia met online Aug. 19, exhorting all members to adhere to their commitments to speed the market's rebalancing from the COVID-19 collapse. Iraq had the biggest excess at 851,000 barrels per day over the three months, while Nigeria was over its cap by 315,000 barrels per day, according to OPEC+ data outlined in an internal report seen by S&P Global Platts.

Russia was noncompliant by 283,000 barrels per day, followed by Kazakhstan at 189,000. Saudi Arabia, Kuwait, Algeria, Oman, Malaysia, and Bahrain all came in under their quotas during the three months and do not have to make any compensation cuts, the report shows. The OPEC+ alliance in May implemented the largest coordinated production cut in the oil market's history at 9.7 million barrels per day — about 10% of pre-pandemic demand. Prices have stabilized around \$45 per barrel in recent weeks.

German utility wants payment soon for coal-plant closures

(Reuters; Aug. 21) - German utility RWE wants the compensation from the government for phasing out its coal power generation to be paid out as quickly as possible, it said on Aug. 21. "RWE wants to ensure that the contract negotiated with the government can be signed immediately because (the) first power plant closures are to take place at RWE as early as the end of the year, unlike at other operators," a company spokeswoman said. The lower house of parliament is expected to approve the legislation next month.

The legislation pledges to pay out 50 billion euros (\$59 billion) to help mining companies, power plant operators and affected regions cope with Germany's transition to more renewable energy. The country has committed to cut greenhouse gas emissions by 55% by 2030 from 1990 levels. RWE is due to receive 2.6 billion euros for the phased closure of its brown (low-energy content) coal mines and power stations. While phasing out coal generation, RWE is expanding in renewable power, where it has become Europe's third-largest player after an asset swap deal with rival E.ON.

Iraq wants to reduce gas flaring, boost oil production

(S&P Global Platts; Aug. 24) - Iraq is targeting to reach an oil production capacity of 7 million barrels per day, compared with 5 million currently, and to stop flaring natural gas as well as putting a halt to importing fuel from Iran by 2025, Oil Minister Ihsan Ismaael

said on Aug. 23. OPEC's second-largest oil producer is also increasing its oil export capacity to 6 million barrels per day from the current level of more than 3.8 million, Ismaael told the state-run Iraqi Media Network television station.

Iraq has implemented nearly 80% of all gas projects that will help reduce gas flaring and imports from Iran, he said. Ar Ratawi, the country's biggest gas project, which has been delayed due to a lack of financing, will initially produce 300 million cubic feet per day and will ultimately reach 1 billion cubic feet per day, which could produce 1.2 gigawatts of electricity. Using more of its domestically produced gas would help Iraq become more self-reliant. After Russia, Iraq flares the largest quantity of gas in the world with some 632 bcf burned in 2019, according to a World Bank study published on July 21.