

2021 Legislature: The COVID Session

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Preserving Coal & Electric Reliability

CARES Act Funding Helps Oil Industry

State Responds to ESG Pressure



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On the cover: The COVID-19 pandemic has changed the way we do most things in and around North Dakota, including the legislature, as seen here in a recent session of the Senate in Bismarck. Photo credit: Poppy Mills, ND Department of Transportation



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Opening Remarks

From the Desk of the Western Dakota Energy Association's President



Shannon Holter President Western Dakota Energy Association Production Foreman, Murex Petroleum Member, Bowbells City Council

ere we are just over a year after the beginning of the COVID-19 shutdowns. As the country was uncertain about what was going to happen and how long it was going to affect us, oil prices started to fall. Hoping prices were going to stabilize or rebound, companies pushed forward as long as they dared. But then, one by one, drilling rigs started to stack out as contracts expired. Companies shifted to just keeping production going, hoping to hold on.

As more and more of the country continued to shut down, it was evident the oil industry was going to have to continue to adjust. Some companies performed massive layoffs, while others began to furlough employees with hopes of a quick turnaround. Furloughs would allow companies to bring back experienced employees without having to re-train or hire inexperienced people. I doubt most companies would have believed it would take nearly a year before they would finally be able to bring back all of the furloughed people.

With the drilling rig count as low as 10 rigs in operation and workover rigs being stacked out on a daily basis, the pandemic was taking its toll on the oilfield. Finally, the price began to stabilize a little—but it was still too low to operate most of the wells. Unfortunately, the number of drilling rigs appears to have leveled out around 15 for now. With prospects of the Biden Administration possibly imposing new rules on drilling and fracking on federal land, it could be a while before we see drilling activity pick

One Year Later: Oil Industry More Resilient Than Ever

With the drilling rig count as low as 10 rigs in operation and workover rigs being stacked out on a daily basis, the pandemic was taking its toll on the oilfield. Finally, the price began to stabilize a little but it was still too low to operate most of the wells.

up. With oil prices hanging around \$55 to \$60 per barrel, companies will be reluctant to fire up their drilling programs. Picking up a drilling rig for just one or two holes is not cost-effective due to moving expenses, rig cleaning costs, and pipe inspection costs. It's important to be able to spread the costs over more wells.

The federal *CARES Act* assistance ended up being a savior of sorts, as the state's Industrial Commission was able to use the money to put many people back to work plugging and reclaiming old, abandoned wells. Workover rigs, dirt contractors, truck drivers, cement companies, wireline companies, and others were able to retain employees. The pleasant fall weather was a bonus to help extend the project through late December, preserving a lot of people's jobs.

As prices slowly crept upward, companies were able to bring more of their shut-in wells back into production, putting more people back to work in the process. Being able to bring back experienced, furloughed people made the task a lot smoother than it could have been.

With the Biden Administration trying to push "green energy" and less coal and petroleum, we're likely in for a few stressful years ahead. But trying to shut down essential industries before new technology exists is just not a smart idea. The cold snap that crippled parts of the United States in February shows we're not ready to go green and demonstrated that we not only need to keep coal and petroleum in play, we need to continue expanding development to promote American energy independence. Coming through the pandemic, North Dakota's oil industry has proven it's up to the task.

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Opening Remarks

From the Desk of the Western Dakota Energy Association's Executive Director



Geoff Simon Executive Director Western Dakota Energy Association

e've all heard the expression that the definition of insanity is doing the same thing over and over again and expecting different results. That seems to be where we're headed with electricity markets. Many people recognize we have a growing problem with reliability, but no one seems to know what to do about it. Even more troubling, politicians are pushing policies guaranteed to make the problem worse.

California went through a series of rolling blackouts last summer in the midst of a heat wave. Renewable activists were quick to blame "climate change" for the outage, and in a sense they were right. Except it wasn't climate change, but rather California's policies aimed at preventing climate change. The state's utilities didn't cause the problem by building wind farms and installing solar panels. It was the closing of fossil fuel-fired and nuclear plants—without providing adequate backup alternatives—that forced California to shut off power to millions of customers.

There have been huge costs to consumers, beyond the fact they had no power for air conditioning in the midst of a summer heat wave. Californians have seen their electricity prices rise six times faster than the rest of the United States in the past decade due to the state's renewable expansion. The power bills of customers in North Dakota have gone up, too—a direct effect of renewable mandates in neighboring states. Now, the Biden Administration wants to spend \$2 trillion on renewables in the name of climate change, essentially doubling down on the mistakes made in California.

Although North Dakota political leaders have a better understanding of energy

America Has an Electric Reliability Problem and it's Getting Worse

The major problem driving instability in the electric grid is the failure of the industry and its regulators to assign value to the reliability that coal-fired power plants deliver.

policy, the state is not immune to the effects of grid instability. Because the state's utilities, both cooperatives and investorowned companies, are members of regional transmission organizations, parts of North Dakota were subjected to rolling blackouts in mid-February resulting from power failures in Texas. Over-reliance on renewables wasn't entirely to blame, although it played a role because ERCOT (the grid serving Texas) has plenty of wind generation. More to blame was poor planning. Texas utilities weren't prepared to handle the extreme cold and failed to respond quickly and correctly when wind farms and other facilities began to fail. They could learn a few lessons from North Dakota.

The major problem driving instability in the electric grid is the failure of the industry and its regulators to assign value to the reliability that coal-fired power plants deliver. State laws and regulations, and societal pressure in general, are forcing utilities to shut down reliable baseload generating plants in favor of heavily subsidized wind and solar farms. Wind and solar are considered "non-dispatchable" resources, which is the same as saying the wind doesn't always blow and the sun doesn't always shine. But because of federal subsidies, wind and solar companies have actually been able to offer negative prices for their power, displacing baseload plants on the grid. When those 24/7 plants are unable to generate electricity, they don't make money, yet they're somehow still expected to be there in times of peak demand, when wind and solar are typically not available.

The announcement last year by Great River Energy that it planned to shut down Coal Creek Station, the state's largest and most efficient coal plant, sent shockwaves through the region. It caught the attention of North Dakota's political leaders, who are working to attract a new owner of the plant, recognizing its important role in maintaining grid stability. Legislators are also studying the issue to develop a solution. In the meantime, North Dakotans should educate themselves to preserve electric reliability, because it appears the Biden Administration doesn't get it. And none of us want the lights to go out when it's -30°F. A

Preserving Coal & Electric Reliability:

Great River Energy is in exclusive negotiations with a single buyer to sell Coal Creek Station (pictured here) and its DC line.

North Dakota Seeking Ways to Keep the Lights On

By Geoff Simon

enewable energy advocates will deny it, but there is an inextricable link between the increasing penetration of wind and solar energy in the electric market, the closure of baseload power plants, and the increasing occurrence of rolling blackouts.

North Dakota policymakers understand the connection and are working on several different fronts to ensure the state has reliable power. The 2021 North Dakota Legislature took up several measures aimed at improving the economics of the state's coal-fired power plants and holding utilities accountable for maintaining an uninterrupted power supply.

COAL CREEK ELEVATED CONCERNS

The announcement last year that Great River Energy planned to shut down Coal Creek Station in the second half of 2022 sent shockwaves through central North Dakota. The 1,151-megawatt, lignite-fired power plant between Underwood and Washburn is the largest and most efficient coal plant in the region. Its two units have been producing reliable power for over 40 years. But GRE, a non-profit wholesale cooperative based in Maple Grove, MN, said the plant has been losing money for several years, undercut by lower-cost electricity from federally subsidized wind power that is backed up by cheap natural gas-fired generation.

Electricity from the plant is transmitted on a direct-current (DC) transmission line to around 700,000 customers, mostly in Minnesota. GRE had intended to replace the lost generation with 800 MW of wind power that would interconnect with the DC line, but action by McLean County pre-empted that plan. The McLean County Commission, anticipating the plant's possible closure, amended its zoning ordinances in a way that effectively blocked plans by GRE to tap into wind farms to be built in the area. The zoning change applied a one-mile setback from the Missouri River to transmission lines, which McLean County State's Attorney Ladd Erickson said was consistent with ordinances requiring similar setbacks for oil drilling operations. Erickson said the language was important to protect county recreation interests, but it also prevented GRE from moving new wind generation on the DC line, which he said protected the plant.

"The fact that wind isn't a threat to occupying that transmission line keeps a marketable plant and mine there for all of us," says Erickson.

Following the announced closing, state officials immediately went into action in pursuit of a new owner for the plant, one that would continue its operation, preserving the 240 jobs it provides, along with the 450 at North American Coal's nearby Falkirk Mine, which supplies lignite coal to the plant. It appears the recruitment effort may be successful. It was announced this spring that Great River Energy is in exclusive negotiations with a single buyer to sell Coal Creek Station and the DC line.

HELP FOR THE LIGNITE INDUSTRY

A big reason coal plants are struggling financially isn't just competition from subsidized wind power, but also that they are not compensated for ensuring grid reliability during periods of extreme heat or cold. Market reform is needed at the national and regional levels, but until that occurs, North Dakota policymakers are working on ways to help.

The legislature debated a law that would allow utility regulators to consider "qualitative benefits" of the generation assets each utility has in its portfolio. The North Dakota Public Service Commission drafted the language, which PSC Chair Julie Fedorchak said would assign greater value to "load-following" resources that can generate more or less power as demand fluctuates. Renewables, like wind and solar, don't possess those characteristics.

Legislators were also contemplating penalties for utilities that fail to meet the minimum generation capacity requirement and reserve margin. Outages are often followed by finger-pointing, with power market players blaming others for the problem. But Fedorchak says the penalty would make it clear it's the utility's responsibility to deliver reliable power.

"In this world of increasing integration, the lines have become much more blurry about who's ultimately responsible," says Fedorchak. "The intention is to clarify and enforce what utilities already believe to be true: that reliability is their responsibility."

One other method that's sure to help the lignite industry is to provide tax relief, and state lawmakers delivered that with the passage of *House Bill 1412*. The legislation provides a five-year reduction in the state's share of the coal conversion tax, while leaving intact the portion of the tax that supports communities in the coal-producing counties. It's estimated the measure will save the industry about \$40 million over the next two years.

The North Dakota Legislature enacted one other measure aimed at helping the coal industry. Because insurance risk premiums paid by coal companies have increased sharply in recent years-in some cases, as much as 300 percent-lawmakers approved Senate Bill 2287. The legislation directs the state Insurance Commissioner to study the availability, cost, and risks associated with insurance coverage in the lignite coal industry to include "consideration of whether the current insurance market adequately or appropriately calculates the risk factors specifically connected to the coal industry and whether there's a need for a state-based insurance product that insures against current risk factors at an appropriate cost."

THERE'S A LOT AT STAKE

North Dakota got an unwelcome taste of a rolling blackout in mid-February, related to an Arctic outbreak that swept into Texas and other parts of the south. The Southwest Power Pool, which operates the grid for much of western North Dakota, ran short of power, so instituted a "Level 3 Emergency Alert" and directed its transmission operators to shed load. Unfortunately for North Dakota oil producers, the Western Area Power Administration (WAPA), which operates Leland Olds Station is located four miles southeast of Stanton, ND, along the Missouri River. When it first went online in 1966, it was the largest lignite-based power plant in the western hemisphere.



the transmission system in the state, flipped switches that shut off power to vital energy facilities. Lynn Helms, director the North Dakota Department of Mineral Resources, said North Dakota lost 20 percent of its capacity to move natural gas.

"WAPA just got out their map and starting doing rolling blackouts geographically," says Helms. "They didn't realize when they did a rolling blackout in northwest North Dakota, they shut off the natural gas because you've got to have electricity to produce natural gas."

Helms says the state lost 30,000 barrels of oil and 60 million cubic feet of gas per day in Williams and McKenzie Counties as a result of the rolling blackout, costing producers and taxpayers millions of dollars.

PREPARING FOR A CARBON-CONSTRAINED FUTURE

If coal is to have an extended future, it would appear the industry will need

technology to capture carbon dioxide emissions from the plant. North Dakota business and government leaders are well aware of that fact and are pursuing both plans to develop carbon dioxide-capture projects and the means to finance them.

Minnkota Power Cooperative is advancing plans for Project Tundra, which would capture carbon dioxide from Milton R. Young Station, a 705-megawatt coal plant, and sequester the carbon dioxide in underground strata. Similar technology could be employed by the future owner of Coal Creek Station. The legislature is on board with the plan, passing a bill that creates a Clean Sustainable Energy Authority, intended to support cutting-edge, clean energy projects. Lawmakers are also prepared to lend financial support to such projects, authorizing up to \$250 million to establish a revolving loan fund for "clean, sustainable" energy projects. A





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Recovering from the Pandemic: *CARES Act* Funding Helps Oil & Gas Sector

By Jim Timlick

orth Dakota's oil and gas sector was hit by a double whammy in 2020. First, oil and gas prices dropped precipitously as a result of a surplus spurred by a standoff between Russia and Saudi Arabia over crude oil supply. That was soon followed by the COVID-19 global pandemic that resulted in a dramatic drop in demand for oil and gas products.

The situation was so dire that an estimated 9,500 workers in North Dakota's oil patch filed for unemployment last spring, which represented approximately 13 percent of the 72,000 people employed in the sector. Unemployment in the rest of the state was between three and four percent at the time.

The industry received a much-needed lifeline when the state announced in May 2020 it would spend \$66 million in federal coronavirus aid to assist oil companies and workers impacted by the pandemic. The funding was provided through the *CARES Act* (Coronavirus Aid, Relief & Economic Security), which was created in response to economic fallout from the pandemic.

Those funds were spent on three separate COVID-19-related job creation efforts: plugging abandoned wells; reclaiming abandoned



well sites; and a well completion incentive program. Work on the first two projects began last summer and is expected to be completed later this year, after being paused due to winter weather. The wells completion project began late last year and is scheduled to wrap up before the end of 2021.

A total of 375 wells will be plugged as part of the initiative, which will create 1,380 fulltime jobs. The reclamation project will see at least 239 abandoned wells and other oilfield sites restored and will generate the equivalent of 1,925 full-time positions. The completion incentive project is expected to see up to 80 wells completed and will generate 400 full-time jobs and over \$7.8 million in sales tax revenue.

Brad Bekkedahl, a member of the North Dakota Senate and finance commissioner for the City of Williston, says the projects will go a long way toward stabilizing the economic situation for many people in western communities linked to the oil and gas sector. It will also provide a much-needed bridge for oil companies until prices stabilize again, he adds.

"We think there's going to be an environment when the economics return enough to continue the growth of the industry out west, which will continue to contribute to the growth of our communities," he says.

One of the secondary benefits of the well completion project, according to Bekkedahl, is that it will bring on added production and capacity at a time when production is falling and new wells aren't being built due to the current price environment. In addition, the 80 new wells will bring in enough in sales and production taxes to more than pay for the program, he adds.

In a recent episode of the *Director's Cut* monthly podcast series, North Dakota Oil & Gas Division director Lynn Helms said *CARES Act* funding was critical in completing new wells on Fort Berthold Reservation and other parts of the state in the latter part of 2020.

"In the absence of *CARES Act* money, we would have had little to no completion activity in December," Helms said.

Shawn Wenko, executive director of Williston Economic Development, says the *CARES Act* funding came at a critical time for the community.

Williston's population has recently swelled to about 33,000 people, and the area is currently in growth mode, meaning it needs to retain as many skilled workers as it can. Without the *CARES Act* funding, Wenko says there was a very real risk that Williston could have lost workers to other states where there were more plentiful job opportunities. The oil and gas sector won't be the only element of the local economy to benefit from the three projects that are underway. Wenko estimates they could help maintain or create an additional 300 to 500 jobs in other industries, including many small businesses.

In addition, plugging nearly 400 abandoned wells will have a tremendously



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"Any time you can go in and plug these abandoned wells and reclaim the land, that's a positive for climate change," says Wenko, adding several area farmers have already indicated interest in the reclaimed lands once they become available.



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North Dakota Responds to ESG Pressure: State Policy Discourages "Social Investments"

By Geoff Simon

t's beyond inexplicable, but it's happening. There is a growing movement in the United States to reject investments in the fuel and food that are essential to modern society.

North Dakota's energy sector, and increasingly its agriculture industries, find themselves trying to cope with the ESG Movement. ESG criteria (environmental, social, and governance) are standards that "socially conscious investors" use to screen potential investments. ESG practitioners tend to view oil, natural gas, and coal as "unsustainable," despite the fact hydrocarbon fuels continue to provide about 80 percent of the energy used in America. Regardless of whether ESG makes sense or not, energy and agriculture make up the bulk of North Dakota's economy, so the state is doing what it can to respond.

The 2021 Legislature enacted *Senate Bill* 2291, which aims to send a message about the state's investment policies. The original version of the bill directed state agencies to avoid contracting with companies that support ESG practices and to look into divesting

state funds from investments in companies that boycott energy or ag commodities. However, because that task would have been quite difficult, the measure simply prohibits the State Investment Board from considering "social investments."

The legislation also directs the state Commerce Department to study ESG, including evaluating the level of involvement the state has with companies that use ESG in their ranking when making business or investment decisions. The study will also look at "implications for the state as it relates to the boycott of energy or production agriculture commodities by companies that intend to penalize, inflict economic harm on, or limit commercial relations." The Commerce Department plans to contract with an outside firm to perform the analysis.

Commerce Director James Leiman, who calls ESG "the biggest problem the state is going to have since the great depression," expects the study to examine ways the state can help businesses improve their ESG scores.

"We want to find the low-hanging fruit, see where we can add the most value and also educate our companies—small, medium, and large—on what they can be doing to not only score better but to also position themselves to better handle additional regulatory burdens," says Leiman.

IMPLICATIONS FOR ENERGY INDUSTRY

ESG has been a concern in the oil and gas industry for several years already, according to Ron Ness, president of the North Dakota Petroleum Council. He characterizes it as a behind-the-scenes attack on fossil fuels, intended to dry up capital investment.

"Make no mistake, this is a masked effort by well-financed obstructionists to cut off the funding," says Ness. "They're doing it through various mechanisms, infiltrating boards and banks, and now we may see a reversal of (Trump Administration) efforts to limit discriminatory lending practices."

ESG has also been a key factor in sharply rising costs for the coal industry, according to Jason Bohrer, president of the Lignite Energy Council. He says ESG has made it exceedingly difficult to obtain reasonable financing for coal industry projects.

"Banks and insurance companies are increasingly applying these non-financial factors as part of their analysis," says Bohrer. "As a result of a lack of understanding of the standards, practices, and benefits the fossil fuel industry provides, there are currently trillions of dollars in investment capital that are now out-of-reach for important investments in oil, gas, and coal."

Bohrer notes that the use of ESG criteria has hurt the lignite industry by drastically increasing insurance premiums and other unnecessary costs by millions of dollars over the past few years. He says recent rolling blackouts should give pause to those pushing fossil fuel divestment. Bohrer says most would agree that "keeping the lights on when it's freezing is more important than virtue signaling about climate change."

Ness says collectively the state and its industries can send a message about the value of their products.

"Recognize the significance of this from North Dakota as a producing state," says Ness. "The energy industry is up against it and it's not going to be any different for agriculture, and as a producing state, we need to band together."







2021 Legislature:

By Geoff Simon

rior to the COVID-19 pandemic, virtual platforms such Microsoft Teams, WebEx, and Zoom were handy tools for conducting webinars, but, for most people, they were a bit of a novelty. However, during the 2021 North Dakota Legislature, they became an everyday tool, essential for providing at-risk individuals and other members of the general public with access to the lawmaking process.

With financial assistance from the federal *CARES Act* (Coronavirus Aid, Relief & Economic Security), the legislature was able to equip every committee room with video cameras, large display screens, and computer equipment that allowed committees to accept remote testimony from throughout the state. Video tutorials were developed by Legislative Council that instructed would-be witnesses how to submit written testimony electronically and provide oral testimony in a virtual

The COVID Session

setting. All committee hearings and floor sessions were live-streamed on the legislature's web site, and every word spoken has been recorded in a video archive.

The Capitol and committee hearings remained open to the public, but in the interest of safety and avoiding a "mass spreader event," all people entering the building were required to wear a mask and submit to a temperature screening. Anyone with a reading of 100.4°F or greater or experiencing virus symptoms was generally not allowed to enter the building. The legislature instituted a mask rule for all areas of the Capitol controlled by the legislature, and social distancing rules limited the number of individuals who could physically attend the meetings. Because most committee rooms in prior sessions were quite cramped, areas of the Judicial Wing of the Capitol were remodeled to create four new, larger committee rooms.

BONDING AND LEGACY FUND THE DOMINANT ISSUES

The opening day of the 2021 session featured the traditional state-of-the-state message delivered by Gov. Doug Burgum, who laid out an ambitious plan for investments in North Dakota to position the state for a prosperous future. Burgum called for the passage of a \$1.25 billion bonding package, emphasizing the opportunity presented by low interest rates to finance roads, bridges, water supply systems, career and technical education centers, and other one-time infrastructure projects. The governor's bonding proposal, and others pitched during the session by Republican and Democrat lawmakers, would finance the bonding package with a portion of earnings from the state's Legacy Fund.

The legislature's budget forecast was updated in March, guiding the process of balancing the budget in the remaining weeks of the session. The most significant component is the oil price and production forecast. The legislature predicts that price and production for the remainder of the 2019-21 biennium will be \$50 per barrel with production falling to 1.1 million barrels per day. The estimated price and production forecast for the 2021-23 biennium has crude prices holding at \$50 per barrel but expects production to decrease from 1.1 to 1.0 million barrels per day.

School funding and the need for school construction assistance were hot topics, as usual. Because of the availability of federal assistance from the Elementary and Secondary Schools Emergency Relief fund, the legislature was leaning toward not increasing the \$10,036 per pupil payment provided through the state's Foundation Aid formula. The legislature did approve consideration of a study that will examine the feasibility of using up to one percent of Common Schools Trust Fund assets annually for school construction grants.

Energy policy was a frequent topic, some of which is described in other articles in this issue, but perhaps the most intriguing was the establishment of the Clean Sustainable Energy Authority in *House Bill 1452*. The Western Dakota Energy Association (WDEA) testified in support of the authority, which will include a voting member appointed by WDEA. The authority's charge is promoting technologies aimed at preserving the fossil fuel industry by making its products clean and "sustainable." That would include carbon sequestration, enhanced oil recovery, and the potential development of a petrochemical industry in the state.

There remains one major item on the legislature's plate to resolve in 2021.

...perhaps the most intriguing was the establishment of the Clean Sustainable Energy Authority in House Bill 1452. The Western Dakota Energy Association (WDEA) testified in support of the authority, which will include a voting member appointed by WDEA.

Lawmakers will reconvene later this year for a session on redistricting, redrawing the boundaries of legislative districts to reflect growth and shifts in the state's population. The state is currently broken down into 47 legislative districts, each with about 15,000 people. The outcome of the redistricting session will undoubtedly mean additional legislative representation for western North Dakota.







Understanding What All Sides Need: Brosz Engineering

Response of the business—and now, in seven offices across the Dakotas, the company's strength is knowing and understanding the people.

After joining the company in the 1990s as an intern, Gary Brennan has since been with Brosz Engineering for 25 years. As Dan Brosz, founder of the company, began to phase into semi-retirement, Brennan began to phase into the position of president. He became co-president in 2019 and officially moved into the president position in January 2020, when Brosz retired.

Brosz Engineering is a consulting engineering practice that specializes in civil engineering and surveying, along with services for private developers, landowners, and businesses across North Dakota.

"We understand the clients better; we understand their needs and the impacts the industry has on them," says Gary Brennan. "And we understand the needs the energy producers have. Since we operate on both sides of the industry—the client-based and the government-based—we see the big picture of all parties affected."

Brosz Engineering has been providing survey and design services for oil and gas companies in North Dakota for over two decades and has offices strategically located in Bowman, Stanley, and Watford City to serve clients.

Recently, Brosz Engineering partnered with Randall Community Water District to complete the construction of the U.S. Highway 18/281 Pipeline Relocation project. Brosz provided planning assistance, permitting, design, and construction administration services for this project. In 2019, the company provided the City of Bowman, ND with an updated virtual zoning map, which will be updated continually with data from the city as it changes and grows. Brosz Engineering plans to continue growing its industry capacity to reach more clients across the Dakotas and into Montana, Minnesota, Nebraska, and Iowa.

"Our business plan is a bit different than other companies in the industry," says Zachary Gaaskjolen, a manager with Brosz Engineering. "We have offices in both big cities and small counties, and a lot of us are from A site pad Brosz Engineering designed for an oil well location in the Bakken.





Gary Brennan, president, Brosz Engineering

rural areas ourselves. Coming from that, we understand what the landowners want, what the county wants. We all drive down the same roads every day."

Gaaskjolen began with the company in 2004 and has since moved to a managerial position in Stanley, ND, where he played an instrumental role in implementing the Brosz Engineering office there. When Dan Brosz introduced him to the Western Dakota Energy Association (WDEA) through this move to Stanley, Gaaskjolen knew it was a valuable group to be associated with. After being on the city council in Stanley for several years, Gaaskjolen joined the WDEA's executive committee.

"We have weekly meetings with the executive director to keep updated on all the intricacies of our communities, to discuss the various bills and legislatures concerning our industry, and to create a long-standing relationship between all our members," says



Gaaskjolen. "The WDEA is a united voice for energy."

Brosz Engineering became a member of the WDEA when Brosz was acting president of the company and has maintained its membership since then. "The WDEA brings together our shared interest and is truly beneficial to all the sides of the industry Brosz Engineering covers," says Brennan.

"Knowing who was involved in the organization and how they worked between the industry and the government was crucial to us. After Dan introduced me to the association, it was clear the WDEA provided a voice for all the right people: the people who we, as a company, want to support and the people we want to reach," says Gaaskjolen. "The WDEA actually makes a difference in the industry. They're more than just a membership to join, so you can go to a conference; there's a lot of work being done in the back-end that makes this so worth it. They really care."

Regional Roundup



UTILITIES COULD BE PENALIZED FOR OUTAGES

North Dakota legislators and coal country representatives continue to battle with the state's utilities in an effort to establish policies in law that will prevent future power blackouts.

Members of the House Energy & Natural Resources Committee were presented with an amendment to SB 2313 that would allow the Public Service Commission to assign "qualitative benefits" of generation resources and their role in ensuring grid reliability. PSC Chair Julie Fedorchak says different forms of generation have different attributes and that value should be recognized.

The legislation contains a provision, opposed by investor-owned utilities, that would allow the PSC to disallow cost recovery or impose penalties if a public utility fails to provide reliable service. Fedorchak says the PSC should have authority to make sure the utilities are doing what's best for the state's consumers.

The Western Dakota Energy Association (WDEA) testified in support of the amendment. WDEA Executive Director Geoff Simon says it's important that the legislature send a message to utilities and the regional transmission organizations serving the region that when it comes to keeping the lights on, the state means business.

Hazen resident Anna Novak, whose husband works in the coal industry, echoed Simon's comments. Novak says there is a lack of accountability among electric industry participants, and the proposed amendment would correct the situation.

The language in the bill would apply only to the state's three investor-owned utilities and not the electric cooperatives. A subcommittee was appointed to try to work out differences between the utilities, the PSC, and other interested parties.



STATE BUDGET FORECAST LOOKS BRIGHTER

State budget forecasters don't expect a surge in drilling activity anytime soon, but based on the current rig count, production is expected to remain fairly stable around 1.1 million barrels per day in the coming biennium.

The legislature's House and Senate Appropriations Committee heard presentations in mid-March from financial consultants Moody's Analytics and IHS Markit to assist the state's budget planners in determining how much revenue the state can expect to collect in the next two years.

Moody's Analyst Dan White says oil demand is gradually recovering from losses due to the pandemic, and crude prices have increased as well. But White says he expects North Dakota oil producers to remain cautious about investing capital in expanded drilling until they're confident prices will remain in the \$50 per barrel or higher range.

White says Moody's believes the price of crude oil will generally remain in the \$55 to \$65 range but expects it to slip in coming months as more supply is brought into the global market.

State OMB Director Joe Morrissette told committee members the consensus view among members of the state Revenue Advisory Committee was that oil prices would average \$53.50 in the coming year and fall to \$48.75 the following year, with production remaining flat at 1.1 million barrels per day.

The House and Senate Appropriations Committees adopted a new revenue forecast in mid-March. The current legislative forecast expects oil prices realized by North Dakota producers to remain around \$40 per barrel through the coming biennium and production to decline to 1.1 million barrels per day this year and drop to 1 million barrels per day in the second year of the biennium.



Tools of the Trade

ENDRESS+HAUSER LAUNCHES MICROPILOT FWR30 RADAR LEVEL SENSOR

Endress+Hauser recently launched the Micropilot FWR30, its first cloud-connected radar to provide full transparency in the storage and transport of liquids. As the world's first 80 GHz wireless IIoT sensor, it combines both high-end technology and user-friendly digital services in one cost-effective device. The instrument's continuously recorded measurement data can be accessed anytime, anywhere, due to the device's cloud connection, with communication made possible by an integrated SIM card.

Installation can be done in under three minutes. An integrated battery allows operation without an external power supply, an advantage for measuring points that are difficult to access. This compact device is perfect for stackable tanks and enables a plugand-play solution.

In addition to the measured level, users receive information on the location of their storage tanks and containers via the cellular communication system. The instrument provides facts where previously only assumptions were possible, helping users optimize logistic and storage processes and save time by providing continuous and easy access to inventory information.

The Micropilot FWR30 can be used for level measurement and inventory management of mobile and stationary plastic tanks. In addition, the tracking of mobile storage tanks is also possible. The free radiating measuring device covers measuring ranges up to 50 feet and temperatures between -4°F and +140°F. Because it uses non-contact measurement, the Micropilot FWR30 can be used in all liquid media, and it's resistant to corrosion, abrasion, viscosity, and toxicity.

Users can choose from a portfolio of services that include Netilion Value and SupplyCare Hosting. All digital software applications can be used on various end devices such as desktop, tablet, or smartphone and comply with the highest security and data protection requirements.

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NEVADANANO POWERS BLACKLINE SAFETY'S **G7 WEARABLES**

NevadaNano is working with Blackline Safety Corp. to modernize combustible gas detection systems, ensuring the safety of workers. NevadaNano's signature line of microelectromechanical systems-based gas sensors, the Molecular Property Spectrometer (MPSTM) Flammable Gas Sensors, are integrated into Blackline's portfolio of cloud-connected G7 connected safety wearables.

NevadaNano MPS sensors represent a major innovation in sensor technology because of their accuracy and long-term stability. The sensors simultaneously and accurately monitor the environments for the lower explosive limit (LEL) levels of the 12 most common combustible gases, delivering a TrueLELTM reading for individual gases and gas mixtures. By taking combustible gas detection monitoring further, NevadaNano delivers enhanced worker safety and virtually no false alarms. The MPS sensors deliver a lower cost of ownership than traditional catalytic bead and non-dispersive infrared sensors because they are immune to poisoning and their readings never drift. They come with a five-year life expectancy and are designed to integrate into existing safety devices.

NevadaNano's detection technology is the first new approach to flammable gas detection in over 40 years. The MPS sensors' innovative technology brings enhanced reliability and performance to gas detection for industrial safety in oil and gas, petrochemical, utilities, mining, and public safety, among other applications.

"Together, we're offering a new level of safety for workers in dangerous environments without the distraction of more false alarms," says Sean Stinson, Blackline Safety's vice-president of sales and product management. "MPS defines a new era of insights for businesses through the exclusive MPS gas classification system, coupled to Blackline's location-enabled and cloud-hosted data analytics software."

The MPS sensor places detected gases into one of six classifications that Blackline's G7 streams directly to its cloud infrastructure, where it becomes available for interactive visualization in Blackline Analytics. For the first time, refinery personnel are able to see where hydrogen was recently detected and not present previously.

www.nevadanano.com

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Hess is a leading global independent energy company engaged in the exploration and production of crude oil and natural gas. We are one of the largest producers of shale oil and gas in North Dakota and have a leading position in the core of the Bakken. Our employees work with suppliers, landowners and communities to find new approaches and apply innovative technologies that enable us to operate safely, improve efficiencies, protect the environment and make a positive impact on the lives of those we touch.

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