Minutes of a Meeting of the Industrial Commission of North Dakota

Held on August 28<sup>th</sup>, 2024 beginning at 12:30 p.m.

Governor's Conference Room – State Capitol

Present: Governor Doug Burgum, Chairman

Attorney General Drew H. Wrigley

Agriculture Commissioner Doug Goehring

Also Present: This meeting was open through Microsoft Teams so not all attendees are known.

Agency representatives joined various portions of the meeting.

Governor Burgum called the meeting of the Industrial Commission to order at approximately 1:10 p.m.

Ms. Karen Tyler took roll call, and Governor Burgum, Commissioner Goehring, and Attorney General Wrigley were present.

Governor Burgum invited the room to stand and join the Commission in saying the Pledge of Allegiance.

## OFFICE OF THE INDUSTRIAL COMMISSION

Ms. Karen Tyler presented for consideration of approval the July 2<sup>nd</sup>, July 30<sup>th</sup>, and August 14<sup>th</sup>, 2024, Industrial Commission meeting minutes.

It was moved by Commissioner Goehring and seconded by Attorney General Wrigley that the Industrial Commission approve the July 2<sup>nd</sup>, July 30<sup>th</sup>, and August 14<sup>th</sup>, 2024, Industrial Commission meeting minutes.

On a roll call vote, Governor Burgum, Attorney General Wrigley, and Commissioner Goehring voted aye. The motion carried unanimously.

#### NORTH DAKOTA PUBLIC FINANCE AGENCY

Ms. DeAnn Ament presented for consideration of approval the following State Revolving Fund Ioan applications:

## i. Grand Forks – Clean Water \$6,922,000

The project is Phases 3 through 5 which will upgrade aging septic systems by installation and connection to the City's sanitary sewer system. The requested loan term is 30 years, and the City will issue an improvement bond payable with special assessment collections. The annual payment will average \$298,390.

It was moved by Commissioner Goehring and seconded by Attorney General Wrigley that the Industrial Commission approve the Clean Water State Revolving Fund Ioan request for \$6,922,000 for the City of Grand Forks.

On a roll call vote, Governor Burgum, Attorney General Wrigley, and Commissioner Goehring voted aye. The motion carried unanimously.

#### A RESOLUTION WAS MADE

## RESOLUTION APPROVING LOAN FROM CLEAN WATER STATE REVOLVING FUND

WHEREAS, the Industrial Commission has heretofore authorized the creation of a Clean Water State Revolving Fund Program (the "Program") pursuant to N.D.C.C. chs. 6-09.4 and 61-28.2; and

WHEREAS, the Clean Water State Revolving Fund is governed in part by the Master Trust Indenture dated as of July 1, 2011 (the "Indenture"), between the North Dakota Public Finance Authority (NDPFA) and the Bank of North Dakota (the Trustee); and

WHEREAS, the City of Grand Forks (the "Political Subdivision") has requested a loan in the amount of \$6,922,000 from the Program for phases three through five of the installation of a sanitary sewer collection system to serve areas currently on septic systems in need of replacement, which will remove the potential for underground nutrient shifts impacting the watershed; and

WHEREAS, the NDPFA's Advisory Committee is recommending approval of the Loan; and

WHEREAS, there has been presented to this Commission a form of Loan Agreement proposed to be adopted by the Political Subdivision and entered into with the NDPFA;

NOW, THEREFORE, BE IT RESOLVED by the Industrial Commission of North Dakota as follows:

1. The Loan is hereby approved, as recommended by the Advisory Committee.

2. The form of Loan Agreement to be entered into with the Political Subdivision is hereby approved in substantially the form on file and the Executive Director is hereby authorized to execute the same with all such changes and revisions therein as the Executive Director shall approve.

3. The Executive Director is authorized to fund the Loan from funds on hand in the Clean Water Loan Fund established under the Indenture upon receipt of the Municipal Securities described in the Political Subdivisions bond resolution, to submit to the Trustee a NDPFA Request pursuant to the Indenture, and to make such other determinations as are required under the Indenture.

4. The Commission declares its intent pursuant to Treasury Regulations '1.150-2 that any Loan funds advanced from the Federally Capitalized Loan Account shall be reimbursed from the proceeds of bonds issued by the NDPFA under the Indenture.

Adopted: August 27, 2024

#### ii. Southeast Water Users District – Drinking Water - \$5,666,000

The project will design and construct a new water treatment plant to improve water quality for users. The requested loan term is 30 years. The District will issue revenue bonds payable from user fees and the annual payment will average \$241,303.

It was moved by Commissioner Goehring and seconded by Attorney General Wrigley that the Industrial Commission approve the Drinking Water State Revolving Fund Ioan request for \$5,666,000 for the Southeast Water Users District.

On a roll call vote, Governor Burgum, Attorney General Wrigley, and Commissioner Goehring voted aye. The motion carried unanimously.

#### A RESOLUTION WAS MADE

#### RESOLUTION APPROVING LOAN FROM DRINKING WATER STATE REVOLVING FUND

WHEREAS, the Industrial Commission has heretofore authorized the creation of a Drinking Water State Revolving Fund Program (the "Program") pursuant to N.D.C.C. chs. 6-09.4, 61-28.1, and 61-28.2; and

WHEREAS, the State Revolving Fund is governed in part by the Master Trust Indenture dated as of July 1, 2011 (the "Indenture"), between the North Dakota Public Finance Authority (the "NDPFA") and the Bank of North Dakota (the "Trustee"); and

WHEREAS, Southeast Water Users District (the "Political Subdivision") has requested a loan in the amount of \$5,666,000 from the Program to design and construct a new iron and manganese removal water treatment plant to improve water quality for users in Dickey, LaMoure and Logan Counties; and

WHEREAS, NDPFA's Advisory Committee is recommending approval of the Loan; and

WHEREAS, there has been presented to this Commission a form of Loan Agreement proposed to be adopted by the Political Subdivision and entered into with the NDPFA;

NOW, THEREFORE, BE IT RESOLVED by the Industrial Commission of North Dakota as follows:

1. The Loan is hereby approved, as recommended by the Advisory Committee.

2. The form of Loan Agreement to be entered into with the Political Subdivision is hereby approved in substantially the form on file and the Executive Director is hereby authorized to execute the same with all such changes and revisions therein as the Executive Director shall approve.

3. The Executive Director is authorized to fund the Loan from funds on hand in the Drinking Water Loan Fund established under the Indenture upon receipt of the Municipal Securities described in the Political Subdivisions bond resolution, to submit to the Trustee a NDPFA Request pursuant to the Indenture, and to make such other determinations as are required under the Indenture.

4. The Commission declares its intent pursuant to Treasury Regulations '1.150-2 that any Loan funds advanced from the Federally Capitalized Loan Account shall be reimbursed from the proceeds of bonds issued by the NDPFA under the Indenture.

Adopted: August 27, 2024

Ms. Ament presented a memo of State Revolving loans approved by PFA Advisory Committee.

## i. Drayton – Clean Water - \$350,000

The purpose of this project is to replace water meters with meters compatible with meter reading software to accurately bill for water that will be purchased from rural water once the switch is made in the summer of 2024. The requested term is 20 years. The City will issue revenue bonds payable with water and sewer user fees, and the average annual payment will be \$20,396.

Ms. Ament presented a memo on the sale of a \$200,920,000 State Revolving Fund Program Bonds, Series 2024A.

The Authority competitively sold the Series 2024A Bonds on August 23, 2024 to make loans to political subdivisions of the State of North Dakota and certain other entities (the "Borrowers") through the purchase of certain obligations issued by such Borrowers, for use in connection with the financing or refinancing of water pollution control and drinking water projects, and pay costs of issuance related to the Series 2024A Bonds. The Authority received six bids, as summarized below.

<u>Bidder</u>	Net Interest Cost	True Interest Rate
Jefferies LLC	\$84,058,349.79	3.3992%
BofA Securities	\$84,597,878.66	3.4265%
Wells Faro Bank, N.A.	\$84,724,866.32	3.4330%
Morgan Stanley & Co, LLC	\$85,055,507.15	3.4497%
J.P. Morgan Securities LLC	\$85,082,369.28	3.4511%
Mesirow Financial, Inc.	\$85,206,259.01	3.4574%

Jeffries LLC was the successful bidder for the issuance. The Authority's financial adviser provided the opinion that the pricing was fair and favorable to the Authority.

## DEPARTMENT OF MINERAL RESOURCES

Mr. Mark Bohrer presented for consideration of approval the following cases:

i. Order No. 33694 issued in Case No. 31008 regarding the confiscation of all productionrelated equipment and salable oil at the Oltmans Ocelot 1-21 well in Stark County, ND.

It was moved by Commissioner Goehring and seconded by Attorney General Wrigley that the Industrial Commission approves Order No. 33694 issued in Case No. 31008 authorizing the confiscation of all production-related equipment and salable oil at the Oltmans Ocelot 1-21 well (File No. 36308), NENW Section 21, T.139N., R.96W., Wildcat Field, Stark County, ND, operated by Freedom Energy Operating, LLC, or any working interest owner, pursuant to NDCC §§ 38-08-04 and 38-08-04.9., and providing such other and further relief.

On a roll call vote, Governor Burgum, Attorney General Wrigley, and Commissioner Goehring voted aye. The motion carried unanimously.

 Order No. 33664 issued in Case No. 30992 regarding an application of Zargon Oil (ND) Inc. authorizing the conversion of the E.J. Feland 25-6 well in Bottineau County, ND for the injection of fluids for enhanced oil recovery.

It was moved by Commissioner Goehring and seconded by Attorney General Wrigley that the Industrial Commission approves Order No. 33664 issued in Case No. 30992 approving the application of Zargon Oil (ND) Inc. for an order authorizing the conversion of the E.J. Feland 25-6 well (File No. 6738), with a location in the SENW of Section 25, T.163N., R83W., Bottineau County, ND, Haas-Madison Unit, for the injection of fluids into the unitized formation pursuant to NDAC Chapter 43-02-05, and such other relief as is appropriate.

# On a roll call vote, Governor Burgum, Attorney General Wrigley, and Commissioner Goehring voted aye. The motion carried unanimously.

Mr. Ed Murphy gave a presentation of the North Dakota Geological Survey Quarterly Report. (The full report can be found on the Geological Survey website).

## Wilson M. Laird Core and Sample Library

During the second quarter of 2024, geologists from two oil companies, the Geological Survey and EERC, professors from West Virginia University and Minnesota State University-Moorhead, and graduate students from UND studied 10,164 feet of core. Additionally, 1,066 feet of core was sent to the Williston Basin Petroleum Conference core workshop in Bismarck for a quarterly total of 11,230 feet. A total of 4,972 feet of core was photographed generating 6,577 standard photographs and 3,241 feet of core was photographed with a tripod generating 256 photographs for the subscription site.

#### Williston Basin Petroleum Conference

Twenty-five hundred people attended the 31st Williston Basin Petroleum Conference in Bismarck from May 14-16. The conference began in 1993 as the International Williston Basin Horizontal Well Workshop and was sponsored by the North Dakota and Saskatchewan Geological Surveys. The conference was created as an opportunity for geologists and engineers in both Canada and the United States to share their successes and failures regarding the relatively new technology of horizontal drilling. In 2006, the North Dakota Petroleum Council was brought in as a partner as a means of taking much of the time-consuming conference preparation away from the Geological Survey on the even numbered years when the conference was held in Bismarck. At that time, the conference was rebranded as the Williston Basin Petroleum Conference & Prospect Expo.

Over the years, the North Dakota conferences have grown significantly in both size and content. In 1993, it had a handful of booths, a dozen presentations (compared to 56 presentations in 2024), and 179 attendees. During the first 15 years of the conference, attendance averaged 385 participants, but jumped to an average of 2,850 over the last 16 years, with a high of 4,250 in 2014.

## Critical Minerals Drilling Project

During the 68th Legislative Session, the Geological Survey received \$500,000 in one-time funding to complete a 50-hole drilling project in western North Dakota targeting coals within and immediately beneath the Bear Den Member of the Golden Valley Formation and the Rhame bed at the top of the Slope Formation. Two geologists spent 400 hours correlating the coals from thousands of electric logs in

an effort to choose ND Trust Lands surface and mineral tracts that held the most promise for intercepting these target zones. Additionally, hundreds of hours were spent obtaining a permit from ND Trust Lands, securing contracts with drilling and logging companies, field checking the proposed drill sites, contacting Trust Lands lessees and the surface owners of Trust Lands mineral tracts, and procuring drilling supplies. Seventy-five tracts were chosen, 25 Trust Lands surface and mineral tracts and 50 tracts with Trust Lands minerals and private surface.

To date, we have spent over 800 hours on drilling preparation and anticipate another 800 hours will be spent drilling/coring the holes. The drilling project is scheduled to start the first week in September and is anticipated to take two truck-mounted rigs, three weeks to complete.

## Woolly Mammoth in Northwestern North Dakota

Mr. Ed Murphy reported the following: In August of 1988, I was doing fieldwork in Bowman County when I was asked to investigate a site in northwestern North Dakota where woolly mammoth bones were reportedly encountered while digging the foundation for a garage. By the time I received the information, the slab had been poured, the garage was built, and there were no bones left at the surface. I met with the high school science teacher at the job site and got the names of the three construction workers who had encountered the bones. The homeowner said he would allow us to remove the slab to go after the bones as long as we got it poured back in during the month of September. I contacted a number of agencies and professors at ND universities, but no one had the time, nor the funds, to undertake the job on such short notice. Last December, after thinking about this for thirty-five years, I contacted the homeowner and obtained permission for the Geological Survey and the State Historical Society to investigate the site. We went up there in May and the Historical Society conducted groundpenetrating radar and resistivity surveys, both inside and around the perimeter of the garage. Preliminary interpretation of the ground-penetrating radar confirmed the location where two of the three construction workers said the mammoth bones were encountered. The homeowner allowed us to dig along the outside wall at this spot and 100 kindergarteners through 6th graders, along with a handful of 7th and 8th graders, from the nearby town came by on one of the last days of school to see what we were doing. Clint Boyd gave each grade a short presentation and showed them a woolly mammoth tooth and archaeologists Margaret Patton and Brittany Brooks explained how the groundpenetrating radar and resistivity surveys work. We allowed each student to participate in the dig by removing a shovelful of the foundation backfill from the site. That backfill turned out to contain several pieces of bone and tusk. In addition, when we got below the fill, we found three, undisturbed bones. We covered those bones with plaster to protect them until the paleontology and archaeology crews can get back up there this fall to do a detailed excavation.

#### STATE ENERGY RESEARCH CENTER

Mr. Charles Gorecki presented the State Energy Research Center Annual Report. (The full report can be found on the website).

North Dakota is blessed with abundant energy opportunities (including coal, oil and gas, wind, biofuels, and solar), exceptional agricultural production, and a highly skilled workforce. To keep North Dakota globally competitive while focusing on resource and environmental stewardship, new and more efficient energy production technologies and methods are needed. This includes innovative energy and agricultural synergies and the creation of new value-added products from raw materials and energy by-

products/wastes. Recognizing this need, the 66th Legislative Assembly of North Dakota, through Senate Bill SB2249, named the University of North Dakota (UND) Energy & Environmental Research Center (EERC) the State Energy Research Center (SERC) of North Dakota. SERC is built on the EERC's long history as a leader in critical energy research, with the purpose of serving the state of North Dakota by developing technologies to ensure a prosperous energy future for the state.

The availability of commercially deployable technologies and concepts to serve the state in the future is dependent on continually creating innovative ideas. Exploratory research feeds research and development, eventually leading to demonstration and commercialization.

Funding for SERC activities, up to \$7.5 million per biennium, is provided from a small portion of the oil and gas production and extraction taxes. Currently, SERC funding has been directed by the Legislature through June 30, 2029, and activities will continue according to the scope of work with the North Dakota Industrial Commission (NDIC) through that date.

SERC was given the mandate to provide practical, pioneering technologies and methods to support North Dakota's energy opportunities and benefit the state's economy and environment. Three corresponding work tasks were created to execute SERC's mandate:

- Task 1 Perform Exploratory Research for North Dakota Energy
- Task 2 Provide Prompt Expertise for North Dakota
- Task 3 Advocate and Educate Through Outreach

# Task 1 Annual Summary

Over the past year, 53 fundamental research concepts were identified and evaluated, with 18 new projects ultimately selected for SERC funding. These projects are listed below, along with the four projects that were ongoing at the time of last year's annual report. Six projects were completed this past year, resulting in 16 projects ongoing.

In addition to those projects, the EERC began a new exploratory research effort this year entitled "SERC Strategic Initiatives." These topical initiatives were selected for their strategic relevance to the state of North Dakota, its energy and other industries, its environment, and its people. It is anticipated that the strategic topics within this effort may change based on evolving opportunities and value to the state. The strategic initiatives that began this year are listed below:

- Maximizing National Security Opportunities with North Dakota's Energy Industries (ongoing)
- Critical and Novel Materials to Support North Dakota's Energy (ongoing)
- Strategic Operational Development to Support North Dakota Energy Research (ongoing)
- Enhancing the Nexus Between North Dakota's Energy Opportunities and Tribal Nations (ongoing)

To date, inventions from SERC have resulted in 11 U.S. patent applications submitted (not including an additional 21 continuation, continuation in part (CIP), divisional, or foreign applications), six U.S. patents received, one signed license agreement, and one license agreement at the final stages of negotiation at the time of this reporting.

# Task 2 Annual Summary

North Dakota Grid Resiliency Plan Completion and Update:

In the fall of 2023, the EERC completed a North Dakota Grid Resiliency Plan for the North Dakota Transmission Authority (NDTA) as part of a larger project for the North Dakota Department of Commerce (effort discussed in the previous SERC annual report). The resiliency plan evaluates risks and threats that various hazards pose to the North Dakota electric grid and addresses gaps in improving grid resiliency. It also focuses on a resilience assessment framework that evaluates the current resilience strategies and provides recommendations for improving grid resiliency in the context of emerging catastrophic threats to the regional grid. Following the plan's completion, NDTA requested that the EERC update the resiliency plan based on feedback received from the federal government. At its April 2024 meeting, NDIC approved the use of \$87,000 of Task 2 funding to update the state grid resiliency plan. To accomplish the update, the current plan will be reviewed and revised or updated as needed. Key activities performed throughout the year included the following:

- Recent grid reliability assessments by Southwest Power Pool, Midcontinent Independent System Operator, the North American Electric Reliability Council, and the Federal Energy Regulatory Commission were reviewed, and relevant data have been gathered.
- The generation and transmission adequacy sections in the existing grid resiliency report were updated based on the latest data.
- Demand growth data for North Dakota began to be collected, and the risk profiles were reviewed to determine if any changes or updates are needed.

## North Dakota 20-year CO<sub>2</sub> EOR Forecast

At its November 2023 meeting, NDIC approved the use of \$135,000 of Task 2 funding to execute a project focused on enhanced oil recovery (EOR). This project is forecasting incremental oil production associated with CO2 EOR in North Dakota's conventional and unconventional reservoirs. The forecast focuses on realistic development scenarios in the 2024–2045 time frame and includes the projected CO2 availability and demand and a prediction of yearly net CO2 use and incremental oil production. The EERC is working with the Bank of North Dakota and the North Dakota Tax Department to evaluate the economic impacts of a broad EOR program in the state. Key activities performed throughout the year include the following:

- Potential realistic development scenarios were outlined, and the forecasting of incremental oil
  production associated with CO2 EOR was performed using analytical models. Both
  unconventional and conventional reservoirs were investigated, with a focus on potential
  development in the 2025 to 2044 time frame (20 years).
- The unconventional reservoirs included in the study were the Bakken and Three Forks Formations of the Bakken petroleum system. The conventional reservoirs included in the study were 21 fields representing approximately 28% of conventional oil in place.
- Technical activities for this project were completed, and a draft final report was prepared and submitted to the Bank of North Dakota and the North Dakota Tax Department for their review.
- The EERC will present the findings of this work at a future NDIC monthly meeting.

## Task 3 Annual Summary

This task is focused on outreach activities to advocate for and educate about North Dakota's energy industries. Within this task, opportunities to collaborate with other North Dakota institutions of higher education were created. During the last year, the primary education and outreach activities have been related to the Energy Hawks Program.

## Energy Hawks:

The multidisciplinary Energy Hawks Program brings together students from a variety of academic programs and institutions to collaborate on identifying value-added opportunities for North Dakota energy. Highlights from the Energy Hawks Program over the last year are discussed below.

## Public Engagement Presentations

With the objectives of energy outreach and education, as well as recruiting Energy Hawks applicants, a panel discussion entitled "Energy Hawks Present: The Future of Energy" was planned and carried out on the UND campus by the Energy Hawks Program as follows:

- The event held March 14, 2024, was open to the public and featured EERC and UND College of Engineering and Mines research staff as panel members engaging in discussion focused on current and future energy issues, facilitated by a former Energy Hawks intern. Information on the Energy Hawks Program was also provided.
- An estimated audience of 30 UND students attended and engaged the panelists with questions. Learnings from this panel discussion were captured to support similar events that may be held in the future.

## 2023 Program

The 2023 Energy Hawks Program consisted of 14 students: 13 from UND and one from Minot State University (Figure 8). Bismarck State College (BSC), North Dakota State University (NDSU), Williston State College, NHS College, and Dickinson State College declined the offer to participate in 2023. The 14 students spent 10 weeks learning about all forms of North Dakota energy. The 2023 program consisted of a team-building workshop at the EERC, a weeklong in-person tour of western North Dakota's energy industry, and on-site and hybrid on-site/virtual participation at the EERC. Three concept research projects were developed and presented by the 2023 Energy Hawks to EERC research staff.

Mr. Gorecki presented a report on  $CO_2$  Enhanced Oil Recovery Forecast prepared under Contract SERC-2019 Task 2.

The goal for the study is to forecast plausible  $CO_2 EOR$  development scenarios (5-20 million tons  $CO_2$ /year) in North Dakota's unconventional and conventional reservoirs over 20 years.

## <u>Bakken</u>

- Incremental oil recoveries ranged from 337 million barrels (MMbbl) to 1 billion barrels (Bbbl) under low- and high-CO<sub>2</sub>-availability scenarios, with an average of 694 MMbbl under the baseline CO<sub>2</sub> scenario of 10 million tonnes (MMt) CO<sub>2</sub>/year.
- CO<sub>2</sub> supply demands ranged from 93 to 294 MMt, depending on the scenario.
- If EOR were operated to maintain higherCO<sub>2</sub>-utilization rates or we achieved greater IOR ratios, greater than 15 MMt CO<sub>2</sub>/year would be needed (CO<sub>2</sub> supply constrained).

## **Conventional Reservoirs**

• Incremental oil recoveries were 105 MMbbl, and CO<sub>2</sub> supply demand was 88 MMt.

## Bakken CO2 EOR Development Assumptions

- **Baseline case:** CO<sub>2</sub> was limited to 10 MMt of CO<sub>2</sub>/year. The baseline case assumed 6 thousand cubic feet (Mcf)/bbl (0.3 tonnes/bbl) and an increased oil recovery (IOR) ratio of 1.3.
- Low-/high-CO<sub>2</sub>-availability cases: Two additional sensitivity cases were considered using 50% less (5 MMt CO<sub>2</sub>/year) and 50% more (15 MMt CO<sub>2</sub>/year).
- **High-CO<sub>2</sub>-utilization case:** The high-CO<sub>2</sub>-utilization case used 3x more CO<sub>2</sub> per incremental barrel than the baseline case (17.3 Mcf/bbl, or 0.9 tonnes/bbl) to explore a scenario where operators were incentivized to store CO<sub>2</sub>.
- **High-IOR case:** The high-IOR case increased the IOR from 1.3 to 1.6, and CO<sub>2</sub> utilization was 9.6 Mcf/bbl (0.5 tonnes/bbl).

## Conventional 20-Year CO2 EOR Performance

- Maximum daily oil rate: 23 Mbbl/day
- Average daily oil rate: 14 Mbbl/day
- Cumulative incremental oil production over 20 years: 105 MMbbl
- Maximum and average CO<sub>2</sub> utilization were 17,000 and 12,000 tonnes of CO<sub>2</sub>/day, respectively
- Cumulative purchased CO<sub>2</sub> over 20 years: 88 MMt CO<sub>2</sub>

## NORTH DAKOTA TRANSMISSION AUTHORITY

Mr. Claire Vigesaa presented the following reports (The full reports can be found on the website):

i. Transmission Authority Annual Report

## <u>Budget</u>

The 68th ND Legislative Assembly appropriated \$300,000 to operate the NDTA for the 2023-2025 biennium. The Legislative Assembly also appropriated \$1,124,856 for the 15% match requirement for the FY22/FY23 IIJA Grid Resilience Formula Grant Program. This match enabled North Dakota to access \$7,499,037 in DOE funds for grid enhancing project awards to utilities serving North Dakota consumers.

The NDTA accessed funds from both the NDIC lignite litigation budget as well as the Enhance, Protect & Preserve fund to commission a ND Transmission Capacity Study and EPA rule impact studies on Mid-Continent Independent System Operator (MISO) and the Southwest Power Pool (SPP).

The NDTA has financed one project, Rainbow Energy's purchase of the NEXUS HVDC line that originates at Coal Creek Station and terminates in the Minneapolis area. The bond financing's term is 20 years with interest at a rate of 3.55% per annum secured by the mortgaged property.

## **Activities**

IIJA GRID RESILIENCY GRANTS: The \$7,499,037 DOE award (for FY22 & FY23) under the Bipartisan Infrastructure Law – Section 40101(d) created a new activity for the NDTA. The 68th ND Legislative Assembly voted to provide the 15% state match, \$1,124,856. The ND Industrial Commission entered a contract with EERC to provide grant administrative support. Applications were solicited in October 2023 for projects in North Dakota that would "prevent outages and enhance the resilience of the electric grid". Twelve applications were received, totaling \$17,355,257 in requests. Outside technical reviewers scored the applications; the NDIC granted four awards at their December 2023 commission meeting.

GRID RESILIENCE AND INNOVATION PARTNERSHIP (GRIP) – DOE GRANT: For the GRIP opportunity, a state entity is required to be the primary applicant. The NDIC, at their December 2023 commission meeting moved to accept that role for the North Dakota Association of Electric Cooperatives grant application. That application did not get DOE encouragement to move forward. However, Grid United's GRIP project application received DOE encouragement to apply. In March 2024, the NDIC moved to support collaboration and participation with the Montana Department of Commerce for Grid United's GRIP application to support the North Plains Connector project.

MIDWEST GOVERNORS ASSOCIATION (MGA): The MGA established an initiative (MID-GRID 2035) for regional transmission education and planning to position the Midwest as a modern energy producer and low-cost energy provider, with the goal to establish a long-term transmission grid vision for the region. The NDTA participated in three conferences held by the MGA, MID-GRID 2035 quarterly meeting at SPP Headquarters – September 2023, the MGA Transmission Summit in Detroit – November 2023 and the MGA Transmission Summit in Welch, MN – April 2024.

MIDWEST RELIABILITY ORGANIZATION (MRO): On October 25, 2023, the NDTA became a member of the MRO in the Adjunct Sector. MRO's primary responsibilities are to: ensure compliance with mandatory reliability standards by entities who use, own or operate the North American bulk power system; conduct assessments of the grid's ability to meet electric power demand in the region; and analyze regional system events. Additionally, MRO creates an open forum for stakeholder experts in the region to discuss important topics related to addressing risk and improving reliable operations of the grid. MRO serves as a vital link between grid owners, users, operators, and other stakeholders who share common reliability interests in the region. The organization presents opportunities to learn with electric grid operators in the region. Board representation from our constituents include Darcy Neigum-MDU, JoAnn Thompson-Otter Tail Power Company, Lloyd Linke-WAPA, Priti Patel-Great River Energy, and Sandra Johnson-Xcel Energy.

REGIONAL TRANSMISSION ORGANIZATIONS: North Dakota is served by two regional transmission organizations, Mid-Continent Independent System Operator (MISO) and the Southwest Power Pool (SPP). The NDTA attends numerous committee meetings for both MISO and SPP to keep abreast of initiatives that impact grid reliability, particularly for North Dakota. Both RTOs are undergoing transformative shifts due to significant load growth, changing generation mixes and transmission development.

#### **NDTA Studies**

The North Dakota Transmission Authority periodically conducts independent evaluation of factors that affect the grid reliability of electric transmission in North Dakota. In 2024, three studies were commissioned, the Impact of EPA's MATS Rule on Generation Adequacy, DOE's Final Carbon rule impact study on MISO & SPP, and a North Dakota Transmission Capacity Study. The first study provided an analysis of the proposed Mercury and Toxic Air Standards rule. The study revealed dire consequences to grid reliability and generation resource adequacy. The MATS rule would essentially shutter ND Lignite

coal generation, a critical dispatchable generation resource. The graph below shows that by 2026, MISO would depend on intermittent resources for power reserve margins and by 2029, would be dependent on intermittent generation resources to meet peak demand.

The second study, Final Carbon rule impact study, on MISO and SPP manifested even more dire consequences to grid reliability and generation resource adequacy. As noted in the slide below, the study shows that MISO will be dependent on non-dispatchable generation to meet projected peak demand in winter 2028. The study also shows that SPP would have dire consequences from the proposed EPA Carbon Rule; depending on non-dispatchable generation in 2028 for winter peak demand and post 2030...impossible to meet demand.

The third study, the North Dakota Transmission Capacity Study, assessed the capacity of the ND transmission grid. The first phase of the study was completed in February, this phase summarized the current proposed generation and transmission projects in the state and reported their impact on ND transmission capacity. The second phase will provide key analyses of ND transmission capacity: steady-state power flow analysis. The study developed long-term transmission models to perform steady-state assessments of ND transmission capacity. The study is to be completed in the third quarter of 2024.

ii. Resource Adequacy in North Dakota Annual Report

## Risks to Grid Reliability

The North American Electric Reliability Corporation (NERC) has identified five significant evolving and interdependent risks to grid reliability. Those five include:

Energy Policy: With increase legislative focus on decarbonization, decentralization and electrification, energy policy is expected to drive rapid change. NERC emphasizes that there is great need to increase coordination and collaboration among all policy makers, regulators as well as the operators and owners of the bulk electric system. With the higher proportion of variable and renewable fueled resources, resource adequacy and capacity accreditation must be critically assessed.

Grid Transformation: NERC recommends that operators ensure sufficient operating flexibility; ensuring that flexible ramping/balancing capacity is available to meet the changing patterns of variability and new characteristics of system performance.

Extreme Weather Events: As for extreme weather events, NERC recommends that grid operators conduct special assessments of extreme event impacts and creating simulation models to establish protocols/procedures for system recovery and resiliency. Further, planning and construction of transmission infrastructure should be accelerated.

Security: To combat both physical and cyber security threats, recommendations include the facilitation/development of planning approaches, models, and simulation to reduce the number of critical facilities. Ultimately mitigating impacts relative to the exposure to attacks.

Critical Infrastructure Interdependencies: Recent storm events have exposed weaknesses in the coordination of natural gas supplies as well as water resources and digital communications.

## Transmission Capacity Study

Power Systems Engineering (PSE) was commissioned to complete a North Dakota Transmission Capacity Study. The first phase of the study included research into available recent transmission studies covering North Dakota. PSE reviewed those studies, identified projects, and formulated conclusions based on the results. Included in this phase was a summary of the currently proposed generation and transmission projects in the state and their reported impact on ND transmission capacity.

The second phase of the study focuses on key analyses of ND transmission capacity: steady-state powerflow analysis and optional dynamic stability analyses. PSE will develop near-term, and long-term transmission models to perform steady-state assessments of ND transmission capacity. The study is to be completed in the 3rd quarter of 2024.

## ND Grid Resiliency Report

The NDTA supports the development of the ND Grid Resiliency Plan, a section in the North Dakota State Energy Security and Resiliency Plan. The report is updated annually with help from the EERC staff. Threats to North Dakota's electric grid include extreme weather events, changing generation fuel mix, resource adequacy, supply chain interruptions, aging infrastructure, and physical/cyber-attacks. This report provides information that will help communities ensure that the electric grid infrastructure is more resilient when catastrophic events occur. North Dakota utilities have a long history of expeditious and safe system restorations following floods, winds and ice storms. The 2023 December Ice Storm manifested the collaborative spirit among investor-owned utilities and cooperatives working to safely restore vital electric service to North Dakotans.

The LEGAL UPDATE, which included a litigation status report and a federal regulatory update was presented by Phil Axt and John Reiten.

#### NORTH DAKOTA MILL AND ELEVATOR

Ms. Cathy Dub presented the Report on Fiscal Year 2024 Transfers to the Agricultural Products Utilization Fund and the General Fund.

FY 2024 Transfers

	<u>Dollars</u>	<u>Percent</u>
FY 2024 Profit	\$ 20,795,168	
Ag Product Utilization Fund	\$ 1,039,758.	41 5.0%
General Fund	\$ 9,877,704.85	50% of remaining profits
Total Transfers	\$ 10,917,463.26	

\* Transfers made Monday, July 22, 2024

Mr. Vance Taylor presented the 4<sup>th</sup> Quarter and Full Year 2024 Operations Report.

Operations in the 4<sup>th</sup> Quarter led to a profit of \$5,767,217 compared to a profit of \$5,923,246 in last year's 4<sup>th</sup> Quarter. For the year we had a profit of \$20,795,168 compared to \$17,238,265 last year. Sales for the 4<sup>th</sup> Quarter were \$122,415,824 compared to \$125,978,112 last year. Sales for the fiscal year came in at \$504,415,675. This is 5.3% less than last year. Operating costs for the 4<sup>th</sup> Quarter are \$14,061,483 compared to \$14,875,571 last year, a decrease of 5.5%. Year-to-date operating costs are \$50,226,703 compared to \$48,487,503 last year, an increase of \$1,739,200. For the 4<sup>th</sup> Quarter we experienced a profit of \$5,767,217 compared to a profit of \$5,923,246 last year. Gross margins as a percent of gross sales for the Quarter was 17.0% compared to 17.5% last year, a decrease of .5%.

Mr. Taylor presented for consideration of approval the 2025 Capital Plan, which includes new capital projects with a total cost of \$9,780,000.

It was moved by Commissioner Goehring and seconded by Attorney General Wrigley that the Industrial Commission approve the North Dakota Mill and Elevator FY 2025 capital expenditures plan as presented.

On a roll call vote, Governor Burgum, Attorney General Wrigley, and Commissioner Goehring voted aye. The motion carried unanimously.

Mr. Taylor presented for consideration of approval the 2025 Gain Share Plan.

It was moved by Commissioner Goehring and seconded by Attorney General Wrigley that the Industrial Commission approve the North Dakota Mill and Elevator FY 2025 gain sharing plan as presented.

On a roll call vote, Governor Burgum, Attorney General Wrigley, and Commissioner Goehring voted aye. The motion carried unanimously.

It was moved by Attorney General Wrigley and seconded by Commissioner Goehring that under the authority of North Dakota Century Code Sections 6-09-35, 44-04-18.4, 44-04-19.1, 44-04-19.2, the Industrial Commission enter into executive session for the purposes of Mill and Elevator confidential business, to discuss confidential business related to a public-private partnership, and for Bank of North Dakota confidential business.

On a roll call vote, Governor Burgum, Attorney General Wrigley, and Commissioner Goehring voted aye. The motion carried unanimously.

The Commission is meeting in executive session regarding Mill and Elevator confidential business pursuant to N.D.C.C. 44-04-18.4 to consider those items listed on the agenda. Only Commission members, their staff, Commission staff, and Mill and Elevator staff will participate in that executive session.

After the Mill and Elevator executive session, the Commission will meet in executive session regarding confidential business related to a public-private partnership pursuant to N.D.C.C. 44-04-18.4 to consider those items listed on the agenda. Only Commission members, their staff, Commission staff, and Department of Commerce staff will participate in that executive session.

After the public-private partnership executive session, the Commission will meet in executive session regarding Bank of North Dakota confidential business pursuant to N.D.C.C. 6-09-35 and 44-04-19.2 to

consider those items listed on the agenda under Bank of North Dakota confidential business. Only Commission members, their staff, Commission staff, and BND staff will participate in that executive session.

Any formal action taken by the Commission will occur after it reconvenes in open session.

Governor Burgum reminded the Commission members and those present in the executive sessions that the discussions must be limited to the announced purposes which is anticipated to last approximately 1 hour and 30 minutes.

The executive session began at approximately 3:30 p.m.

Meeting Closed to the Public for Executive Session Pursuant to NDCC 6-09-35, 44-04-18.4, 44-04-19.1 and 44-04-19.2.

#### NORTH DAKOTA MILL AND ELEVATOR EXECUTIVE SESSION

Industrial Commission Members Present Governor Doug Burgum Attorney General Drew H. Wrigley Agriculture Commissioner Doug Goehring

Mill and Elevator Members Present

Vance Taylor Cathy Dubb

Office
Office
Office
Office

#### PUBLIC-PRIVATE PARTNERSHIP DISCUSSION

Industrial Commission Members Present Governor Doug Burgum Attorney General Drew H. Wrigley Agriculture Commissioner Doug Goehring

**Commerce Members Present** Josh Teigen

Others in attendance John Reiten Governor's Office

Zach Greenberg	Governor's Office
Karen Tyler	Industrial Commission Office
Reice Haase	Industrial Commission Office
Brenna Jessen	Industrial Commission Office
Erin Stieg	Industrial Commission Office

#### BANK OF NORTH DAKOTA EXECUTIVE SESSION

## **Industrial Commission Members Present**

Governor Doug Burgum Attorney General Drew H. Wrigley Agriculture Commissioner Doug Goehring

#### **BND Members Present**

Don Morgan Kirby Evanger Rob Pfennig Craig Hanson

#### Others in attendance

John Reiten	Governor's Office
Zach Greenberg	Governor's Office
Jace Beehler	Governor's Office
Karen Tyler	Industrial Commission Office
Reice Haase	Industrial Commission Office
Brenna Jessen	Industrial Commission Office
Erin Stieg	Industrial Commission Office

The executive session ended at 5:46 p.m. and the Commission reconvened in open session.

During the Mill and Elevator executive session, the Commission discussed the Mill's 2025 Strategic Plan. No formal action was taken in that executive session.

## It was moved by Commissioner Goehring and seconded by Attorney General Wrigley that the Industrial Commission approve the 2025 North Dakota Mill and Elevator Strategic Plan.

# On a roll call vote, Governor Burgum, Attorney General Wrigley, and Commissioner Goehring voted aye. The motion carried unanimously.

During the public-private partnership executive session, the Commission discussed that item listed on the agenda. During the Bank of North Dakota executive session, the Commission discussed those items listed on the agenda under Bank of North Dakota confidential business.

No formal action was taken during either executive session.

#### **BANK OF NORTH DAKOTA**

Mr. Rob Pfennig presented the Second Quarter 2024 Performance Highlights.

Second quarter 2024 ended with assets of \$10.7 billion driven by continued growth in the loan portfolio. The loan portfolio grew to nearly \$6 billion.

Year-to-Date net income as of June was \$100 million. Interest Income exceeded budget by \$5.4 million primarily due to higher rates on securities as well as rates and volumes in the commercial participation program offset by lower than budgeted balances at the Federal Reserve. A combination of higher average deposit balances, rates, and larger Federal funds purchased, contributed to the higher interest expense. Non-Interest Expense is \$2.3 million under budget. This consists of several operating components largely due to timing of incurrences, specifically with IT projects, loan servicing expenses, legal, and other service-related expenses.

Mr. Don Morgan presented the Commission members the May and June Nonconfidential Committee and Advisory Board minutes for their review.

With no further business, Governor Burgum adjourned the meeting of the Industrial Commission at 6:04 p.m.

North Dakota Industrial Commission

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Brenna Jessen, Recording Secretary

Reice Haase, Deputy Executive Director

Karen Tyler, Interim Executive Director