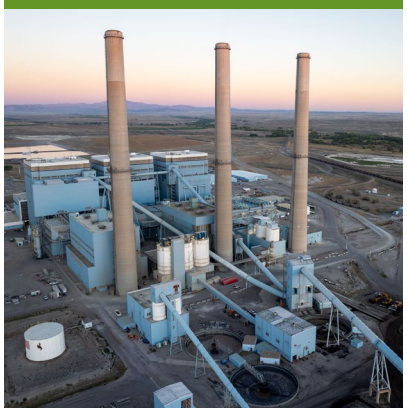
# 2025

## ANNUAL REPORT



# NORTH DAKOTA TRANSMISSION AUTHORITY

# PREFACE

The North Dakota Transmission Authority (Authority) was created by the North Dakota Legislative Assembly in 2005 at the request of the North Dakota Industrial Commission. The Authority's mission is to facilitate the development of transmission infrastructure in North Dakota. The Authority was established to serve as a catalyst for new investment in transmission by facilitating, financing, developing and/or acquiring transmission to accommodate new lignite, wind, natural gas and other energy development. The Authority is a builder of last resort, meaning private business has the first opportunity to invest in and/or build transmission.

By statute, the Authority membership is comprised of the members of the North Dakota Industrial Commission. Claire Vigesaa was appointed Executive Director of the Authority in July 2023. The Executive Director works closely with the Industrial Commission Administrative Office staff and receives direct general fund appropriation.

## NORTH DAKOTA INDUSTRIAL COMMISSION

**KELLY ARMSTRONG**
Governor

**DREW H. WRIGLEY**
Attorney General

**DOUG GOEHRING**
Agriculture Commissioner

## NORTH DAKOTA TRANSMISSION AUTHORITY

**CLAIRE VIGESAA**
Executive Director
ND Transmission Authority

# STATUTORY AUTHORITY

Statutory authority for the Transmission Authority is found in chapter 17-05 of the North Dakota Century Code. Section 17-05-05 N.D.C.C. delineates the powers of the Authority, including:

1) make grants or loans to borrow money

2) issue up to $800 million in revenue bonds

3) enter lease-sale contracts

4) own, lease, rent and dispose of transmission facilities

5) enter contracts to construct, maintain and operate transmission facilities

6) investigate, plan, prioritize and propose transmission corridors; and

7) participate in regional transmission organizations.

Before the Authority may exercise its power to construct transmission facilities, it must follow a process defined by statute to ensure public participation and comment. In particular, the Authority must publish a notice describing the need for the transmission project. Entities interested in construction of the facilities or furnishing services to satisfy the identified needs have 180 days to respond by filing a notice of intent. If the Authority receives a notice of intent from an interested entity, it may not exercise its power to construct unless the Authority makes a finding that doing so would be in the public interest. In making such a finding, the Authority shall consider the economic impact to the state, economic feasibility, technical performance, reliability, past performance, and the likelihood of successful completion and ongoing operation.

The Authority may finance approved projects through the issuance of bonds. Under current law up to 30 percent of the cost of a project may be financed by selling bonds that include the moral obligation of the State of North Dakota. In other words, up to $240 million of the Authority's $800 million total bonding authority may be sold with the moral obligation of the state. The moral obligation component enhances the marketability of the Authority's bonds.

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# EXECUTIVE SUMMARY

The Transmission Authority is one of 16 agencies, authorities, enterprises and grant programs operated under the direction of the North Dakota Industrial Commission. Karen Tyler serves as the Executive Director of the Industrial Commission providing administrative guidance and support for the North Dakota Transmission Authority. The funding for the operation of the NDTA is within the general fund appropriation to the ND Industrial Commission.

North Dakota is in an enviable position, North Dakota has rich soil for producing crops and grazing livestock. And more, North Dakota has rich energy resources from coal, natural gas and oil to favorable wind energy production. North Dakota leadership has worked hard to create a friendly business climate that encourages entrepreneurship, agricultural product processing, oil/gas development and other high-tech business. North Dakota's success has enabled sons & daughters to come home to good jobs, low taxes and safe living conditions.

As favorable as North Dakota is, the frigid weather in February serves as a serious reminder that we are very dependent on electricity. Interruption in flow of electricity impacts human life, human safety, food production, food processing and food preservation. Beyond our personal needs, health care, commerce, manufacturing, energy production and national security all require a reliable and uninterrupted electric power supply.

Because electricity is not easily or efficiently stored, a robust transportation system is needed to move electricity from the generator to homes and businesses; high voltage transmission lines leading to substations and ultimately to the distribution lines to homes and businesses. The electric grid is a delicate machine that requires critical planning and operation.

To address these concerns, the NDTA participates in both Regional Transmission Organizations (RTOs) serving North Dakota as well as the Midwest Reliability Organization to emphasize North Dakota's desire for an expanded and reliable grid. Further, the NDTA touts North Dakota's rich energy resources that include coal, oil, natural gas and wind; resources that will not only provide energy for North Dakota's growth, but the growth of our neighboring states and nation.

In the last year the NDTA hosted two grid reliability studies that outlined the devastating impacts of the Biden Administration's EPA initiatives: the proposed Mercury and Toxic Air Standards and the Greenhouse Gas Rules. The results of those two studies revealed a dire situation, the premature retirement of dispatchable coal generation would lead to capacity shortfalls as soon as 2028 in the Midcontinent Independent System Operator (MISO) footprint and as soon as 2030 in the Southwest Power Pool (SPP). The administration change in Washington D.C. has relieved this pressure and has enabled coal/gas generation formerly under attack to keep operating.

Because of unprecedented demand growth across the nation and in North Dakota, the NDTA is collaborating with the Energy & Environmental Research Center (EERC) to develop an analytical framework for supporting near-to-long-term planning and decision making around key issues facing North Dakota's electricity sector. Key issues investigated included the impacts of a changing resource mix, new policies and regulations affecting coal-based electricity, increasing penetration of renewable sources, lead times for transmission infrastructure build-out and load growth (large load impact) on resource adequacy and electric reliability within the state as well as the regional grid. The results of the study will help North Dakota identify areas of opportunity to serve new load from ag processing and oil/gas development to data centers.

We are thankful for the transmission and generation projects slated to be built in North Dakota over the next few years, details on these projects follow in the report. In addition to the transmission buildout, incumbent transmission owners are investigating Grid Enhancing Technologies (GETs); products and software that can enhance and maximize the operation of the existing grid.

The electric transmission grid reliability continues to be a critical area of interest for North Dakota, its industry and policy makers. We are thankful that North Dakota leadership comprehends the value of accredited generation capacity and the transmission network to move electrons from the generator to load. We appreciate the collaboration among the ND Industrial Commissioners, ND policy makers, the ND PSC, the RTOs, utility operators and industry to build a more resilient and reliable grid.

Claire Vigesaa

Claire Vigesaa

Executive Director

The chart below shows the relationship between the ND Transmission Authority within the ND Industrial Commission's industries, agencies and programs.

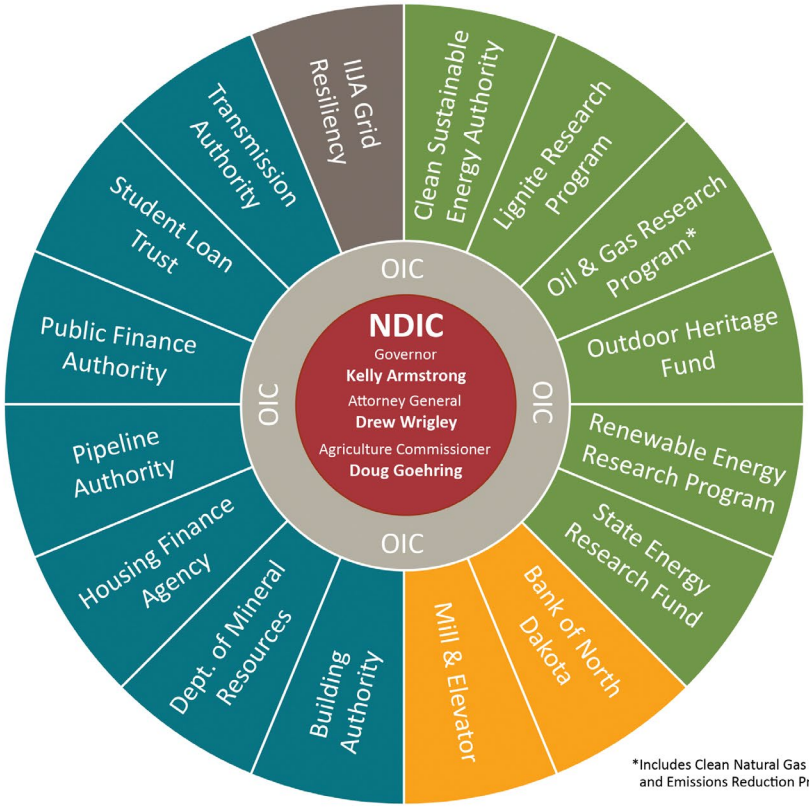
Industrial Commission

Industries, Agencies, and Programs

Legend

- Commission
- IC Admin Office
- Agency Role
- IC Grant Program
- State-Owned Enterprise
- Other Grant Program

January 2025




*Includes Clean Natural Gas Capture and Emissions Reduction Program

# BUDGET

The 69th ND Legislative Assembly appropriated $400,000 to the ND Industrial Commission general fund budget to operate the NDTA for the 2025-2027 biennium. The Legislative Assembly also appropriated $1,782,794 for the 15% match requirement for the IIJA Grid Resilience Formula Grant Program. This match enabled North Dakota to access $11,885,295 in DOE funds for grid enhancing project awards to utilities serving North Dakota consumers.

In its history, 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.

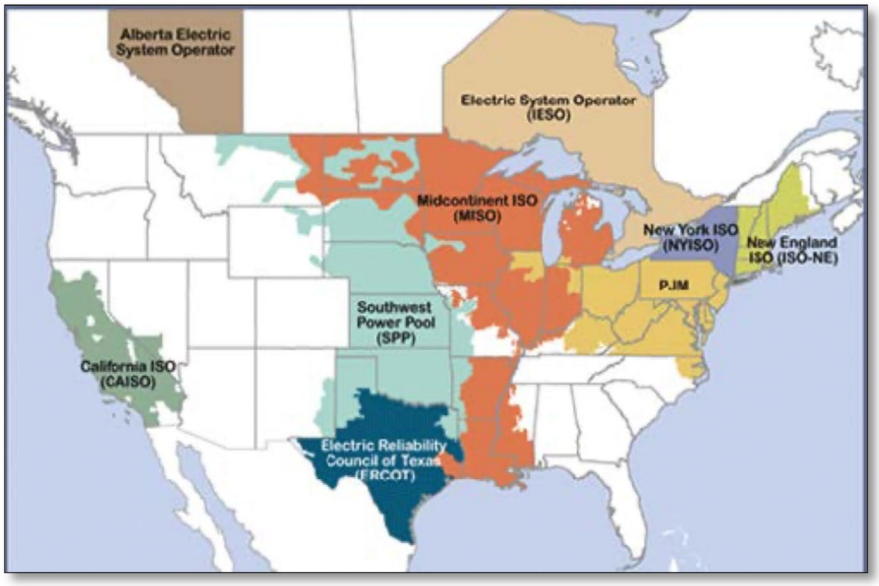

***Karen Tyler**, Executive Director of the ND Industrial Commission*
*Testifying in support of SB2014*

# ACTIVITIES

**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 conferences held by the MGA, MID-GRID 2035 quarterly meetings including a conference in Detroit, one in Minnesota that included a tour of Xcel's Prairie Island Nuclear facility and on in Knoxville TN at the Oak Ridge National Laboratory.

**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:** As shown on the map that follows, 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.




**NORTH DAKOTA PUBLIC SERVICE COMMISSION:** The NDTA appreciates the proximity to ND PSC staff and the open door to the three commissioners. We share/compare insights to mutually support a reliable grid and affordable energy for North Dakota. Meeting highlights include the semi-annual ND PSC meeting with MISO, SPP, and the MRO.

**ND ENERGY DEVELOPMENT AND TRANSMISSION COMMITTEE:** The NDTA presented to the interim committee discussing grid reliability concerns and shared highlights of the NDTA's generation resource adequacy studies on MISO & SPP.

**NORTH DAKOTA DEPARTMENT OF COMMERCE:** The NDTA meets quarterly with ND Department of Commerce staff to discuss economic development needs relating to electric generation and transmission. The NDTA also collaborates with the Department of Commerce staff on the ND State Energy Plan (the ND Grid Resiliency Plan portion). This report is updated annually with help from the EERC.

**GOVERNOR'S OFFICE:** The NDTA works closely with the Governor's energy staff, sharing information on grid related topics.

**ENVIRONMENT/SOCIAL/GOVERNANCE STEERING COMMITTEE:** As executive director of the NDTA, I was privileged to serve on the ESG steering committee. The committee was established by SB 2289, directing the energy development and transmission committee to study the ESG impacts and develop a state-wide energy policy. Charlie Gorecki-EERC and Kelvin Hullet-BND chaired the committee. Kayla Ver Helst, Sustainability Officer for the Bank of North Dakota served as the project lead for the ESG study. The completed report, STAND (Sustain, Transform, Authenticate North Dakota) was published in 2024.

**TRANSMISSION OWNERS & DEVELOPERS:** The NDTA purposed to meet with each transmission owner/developer at their office/headquarters. The meetings on site have proved to be very helpful; gaining a better understanding of the transmission owner's goals, challenges and initiatives.

**OUTREACH:** There is significant interest in learning about the electric grid and reliability. The NDTA is available to present to associations, communities, and other entities upon request. The NDTA fields regular calls from ND Legislative Leadership, trade associations and community leaders. The NDTA presented and/or participated in the following associations this past year:

American Coalition on Renewable Energy-Policy Forum, Washington D.C.

Xcel Energy Prairie Island Nuclear Facility Tour

BNI Coal Leadership Team Strategic Discussion Event – Center

Marathon Oil Community Advisory Panel Meetings – Mandan & Dickinson

Western Dakota Energy Association – Minot, ND

Lignite Energy Council – Bismarck, ND

ND Petroleum Council – Medora, ND

ND Reclamation Conference – Watford City

Stutsman County Commission Meeting - Jamestown

Midwest Reliability Organization Reliability & Security Summit – Oklahoma City

Bison to Bakken Educational Event – ND Heritage Center

Numerous Data Center Developer Discussions

Transmission & Interconnection Summit 2025 – Washington D.C.

Western Dakota Energy Association Round Table – Watford City

Bison – Bakken Energy Panel – ND Heritage Center

# STUDIES

In cooperation with the Attorney General's office, the NDTA produced reports from two studies in 2024. The first study, completed by the American Experiment, considered the impact of new Mercury and Air Toxic Standards (MATS) on the Midcontinent Independent System Operator, MISO. The results of the study showed that EPA proposed MATS regulations would render MISO unable to guarantee capacity for peak demand by 2029.

The second study, conducted by Always On Energy Research, considered the impacts of EPA's proposed greenhouse gas regulations on both MISO and the Southwest Power Pool (SPP). The results demonstrated that MISO would be unable to meet peak demand by 2028 and SPP by 2030 under the proposed regulations.

Both studies provided background information for the NDTA's declaration on the proposed impact of EPA's proposed regulation.

The NDTA is currently collaborating with the Energy & Environmental Research Center (EERC) and Power Systems Engineering to develop an analytical framework for supporting near-to-long-term planning and decision making around key issues facing North Dakota's electricity sector. Key issues investigated included the impacts of a changing resource mix, new policies and regulations affecting coal-based electricity, increasing penetration of renewable sources, lead times for transmission infrastructure build-out and load growth on resource adequacy and electric reliability within the state as well as the regional grid. The final report will be available in the 3rd quarter of 2025.

# GRID RESILIENCE GRANTS

## IIJA SECTION 40101(D) FORMULA GRANTS

| | |
|---|---|
| **FY22-FY23 Grant Subrecipients** | |
| Capital Electric Cooperative | $ 321,930 |
| Otter Tail Power Company | $ 4,432,088 |
| Northern Plains Electric Cooperative | $ 586,000 |
| McKenzie Electric Power Cooperative | $ 2,843,075 (returned) |
| **FY24 Grant Subrecipients** | |
| Burke-Divide Electric Cooperative | $ 550,000 |
| City of Lakota | $ 1,707,109 |
| Verendrye Electric Cooperative | $ 314,250 |
| KEM Electric Cooperative | $ 620,000 |
| City of Valley City | $ 1,053,000 |
| **Direct DOE Transmission Grants** | |
| Minnesota Power Allete (HVDC Modernization) | $ 50,000,000 |
| MISO/SPP (Joint Targeted Interconnection Queue) | $464,000,000 |
| North Plains Connector (High Voltage DC Line) | $700,000,000 |
| ***Transmission Siting and Economic Development Grants*** | |
| *Mott Community Center* | *$ 14,300,000* |
| *Amidon Fire Hall* | *$ 700,000* |
| MDU (Hettinger to Elgin 115kV upgrade) | $ 15,600,000 |
| Otter Tail Power Company (system automation) | $ 19,600,000 |


***Jordan Kannianen**, Deputy Director of NDIC Discusses Grant Match Request to Legislative Committee*

# MIDWEST RELIABILITY ORGANIZATION

There are approximately 249 companies registered with NERC in MRO's region. These companies are required to comply with mandatory NERC Reliability Standards and requirements, which MRO oversees. Membership with MRO is voluntary, free of charge, and is not based on a company's NERC registration status. MRO has two classes of members: Adjunct Members (The ND Transmission Authority is in this category) and Industry Members that qualify for one of seven industry sectors. Industry Sector Members are allowed to participate on the board of directors and MRO's organizational groups. Currently, MRO has 105 members, including 13 Adjunct Members. The 23-member hybrid board of directors includes four independent directors, two regional directors, and seventeen industry sector directors. The independent and regional directors are elected by all members, and the industry sector directors are elected by the seven sectors those directors represent. The board's Organizational Group Oversight Committee—a sector-based group of board members—oversees MRO's advisory councils and subgroups. The purpose of the organizational groups is to provide a forum for stakeholders across the region to discuss risk, develop risk mitigation strategies, expand outreach and awareness, promote information-sharing, and publish guidance for the region.

The MRO's 2025 Regional Risk Assessment identified the top six risks to reliable and secure operation of the regional bulk power system. The risk level and descriptions follow:

1. Extreme: **Uncertain Energy Availability.** Increasing electricity demand coupled with rapid retirement of traditional power plants creates potential energy shortfalls. This is especially true when replacement generation is variable, weather-dependent and may not be available when needed.

   **Drivers:** Legislative policies, generator retirements, new resource constraints, demand growth, inadequate transmission.

2. High: **Generation Outages During Extreme Cold Weather.** The electricity grid faces significant challenges during extreme cold weather, which occurs more often and with greater intensity and duration. Recent events resulted in unprecedented customer load shed to maintain system stability.

   **Drivers:** Insufficient winterization, lack of fuel supply, gas/electric interdependencies, generator retirements.

3. High: **Nation-State Threats.** The strategic objections of nation-state-sponsored actors from China, Russia and Iran pose significant cyber threats to the North American bulk power system. Their objectives vary, but generally aim to weaken our military and economic systems.

   **Drivers:** Heightened geopolitical tensions, increasing sophistication of threat actors, insufficient internal controls.

4. High: **Supply Chain Compromise.** Occurs when a vendor is the vector for a threat actor who manipulates hardware, software, connected services, or software delivery mechanisms for financial gain. The risk is amplified by the limited number of vendors serving the industry.

   **Drivers:** Supply chain complexity, growing reliance on third-parties, lack of third-party controls and visibility.

5. High: **Malicious Insider Threat.** Malicious insiders (employees, vendors, contractors) with access to critical systems and intent to do harm, can disrupt bulk power system operations. This risk does not include insider intelligence.

   **Drivers:** Limited detective controls in place, lack of insider threat programs.

6. High: **Inadequate IBR and DER Performance and Modeling.** Inverter-Based Resources (IBRs) and Distributed Energy Resources (DERs) -wind, solar and battery—are a relatively new technology for generating electricity. Industry and manufacturers are learning how to reliability integrate these resources into the power grid.

   **Drivers:** Increasing reliance on IBRs to serve load, lack of visibility, lack of experience with technology.

# GRID RELIABILITY CHALLENGES

Over the past two years, FERC's 5-year load growth forecast for the USA has increased by almost a factor of five, from 23 GW to 128 GW. The main drivers are investment in data centers and manufacturing. Some high-end forecasts suggest that current load forecasts may not have caught up with growth. However, it is difficult to accurately predict how much manufacturing will be brought back to the USA and how "electrification" of transportation, manufacturing and processing will impact load given the change in Administration. The main drivers of electricity demand growth include:

Artificial intelligence is supercharging data center growth

Advanced domestic manufacturing

Electrification of buildings and transportation

Oil and gas development

Regardless, it will take all "hands on deck" to expeditiously develop generation capacity and transmission assets to meet load growth. Although there has been movement on regulatory relief here in the USA, global competition for transmission and generation building materials and equipment will present challenges for developers. That leads to the critical challenge of timing, failure to get generation and transmission in place to meet industry expectations will limit economic growth as well as hinder grid reliability.

# GRID ENHANCING TECHNOLOGIES (GETs)

A future-ready grid requires infrastructure built with the latest technologies, including everything from complex devices compatible with digital technology to fundamental capabilities, such as mapping out the flow of electricity. Grid-enhancing technologies (GETs) maximize the electricity transmission across the existing system through a family of technologies that includes sensors, power flow control devices, and analytical tools.

GETs are gaining traction and have the advantage of speed…compared to the time to build transmission! GETs enables increased transmission capacity, reduces congestion and accelerates generation integration. Great River Energy has one of the largest deployments of drone-installed dynamic line rating sensors in the USA. WAPA and Basin Electric Power Cooperative collaborated on the installation of DLR on WAPA's 230kV transmission line near Watford City. There are three major GETs solutions:

1. **Dynamic Line Ratings (DLR)** – Real-time monitoring of transmission line capacity based on environmental conditions.
    a. Real-time capacity monitoring: DLR adjusts transmission line ratings based on temperature, wind speed and grid conditions.
    b. Reducing congestion costs: DLR can unlock up to 60% more capacity, reducing charges and energy costs.
    c. Enhancing Grid Reliability: Accurate, dynamic ratings improve operational decisions and prevent overload risks.
    d. Support Generation Integration: DLR allows greater utilization of generation by adapting to environmental conditions.

2. **Advanced Power Flow Control (APFC)** – Optimizes power distribution using modular power electronics to enhance grid flexibility.
    a. Optimizing Power Distribution: APFC dynamically adjusts power flow across transmission lines, reducing congestion.
    b. Enhancing Grid Stability: APFC mitigates voltage fluctuations and supports frequency regulation.
    c. Modular and Scalable Deployment: APFC solutions can be installed incrementally and redeployed as needed.

d. Reducing Infrastructure Costs: APFC minimizes the need for costly new transmission lines by improving existing capacity.

3. **Topology Optimization Software (TTO)** – Reconfigures grid topology to reduce congestion and improve transmission efficiency.
   a. Dynamic Grid Reconfiguration: Software-driven topology changes optimize power flows and reduce congestion.
   b. Minimizing Renewable Curtailment: Topology optimization ensures maximum utilization of renewable generation.
   c. Fast and Cost-Effective Deployment: Unlike physical upgrades, software-based solutions can be rapidly implemented.
   d. Enhancing Operational Flexibility: Operators can quickly adjust grid configurations to improve efficiency and resilience.

# REGIONAL TRANSMISSION OPERATORS (RTOS)

North Dakota is served by two RTOs, Midcontinent Independent System Operator (MISO) and the Southwest Power Pool (SPP).

The MISO footprint covers the service territories of Otter Tail Power (OTP), Montana-Dakota Utilities (MDU), Great River Energy (GRE), Xcel, Missouri River Energy Services (MRES), and a small amount of transmission assets owned by Upper Missouri Power Cooperative. In addition, MISO has an agreement with Minnkota Power Cooperative that provides them with many of the same services. Western Area Power Administration (WAPA) and Basin Electric Power Cooperative (BEPC) are members of the Southwest Power Pool. SPP BEPC members Mountrail-Williams Electric Cooperative, Central Power Electric Cooperative, Roughrider Electric Cooperative and Mor-Gran-Sou Electric Cooperative have also joined SPP individually due to their transmission ownership.

Combined, North Dakota utilities and transmission developers are part of an extremely complex system that oversees the transmission of over 200,000 megawatts of electricity across 100,000 miles of transmission lines so that utilities can deliver power to homes and businesses in all or part of 20 states.

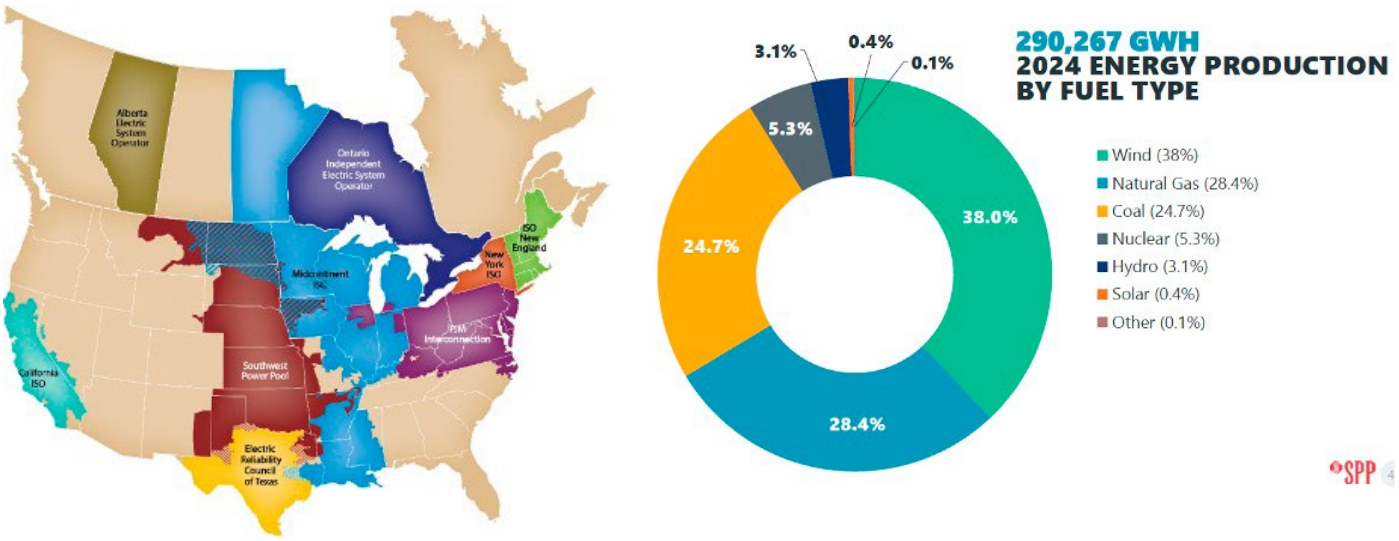
MISO and SPP also operate the power markets in their respective territory. Pricing for selling electricity into the grid and for buying electricity from the grid is managed by them. This process determines which generating units that have been bid into the market by Market Participants (MP) will be providing generation at any point in time and which units will provide various ancillary services to sustain voltage, assure reliability, etc.

WAPA is the Transmission Operator for the SPP transmission network in North Dakota. ND PSC Commissioner Randy Christmann serves on the SPP Regional State Committee. ND PSC Commissioner Jill Kringstad represents the ND PSC on the MISO Advisory Committee. Victor Shock, Director, Public Utilities Division, and PSC staff Chris Hanson, Leif Clark, Robert Frank and Adam Ranfandt participate in RTO committee work.

Both MISO and SPP acknowledge the Administration's support for baseload generation and the pressure relief (proposed EPA regulations) on coal & fossil fuel generation. Avoiding premature shutdown of coal facilities will provide much needed capacity for demand growth. SPP and MISO are both pursuing expedited resource study approaches to speed the interconnection queue process, adding much needed new generation capacity to the grid.

## SOUTHWEST POWER POOL (SPP)

The Southwest Power Pool serves members in all or part of 14 states and provides additional energy services in 23 states and provinces. Its service territory covers 557,546 square miles and includes 5,292 substations and 72,884 miles of transmission lines. SPP has 63,908 MW of accredited generation capacity (accredited as of June 2024). SPP's coincident peak load of 56,184 MW occurred on July 31, 2023.




SPP's 2024 Integrated Transmission Plan builds a more reliable and resilient grid, levelized cost across the SPP footprint, provides relief of operational congestion and facilitates generation interconnection, resource adequacy and delivery point additions including:

2,333 miles of new transmission lines

1,495 miles of 345 kV

293 miles of 765 kV

495 miles of rebuilt transmission line

89 new transmission projects

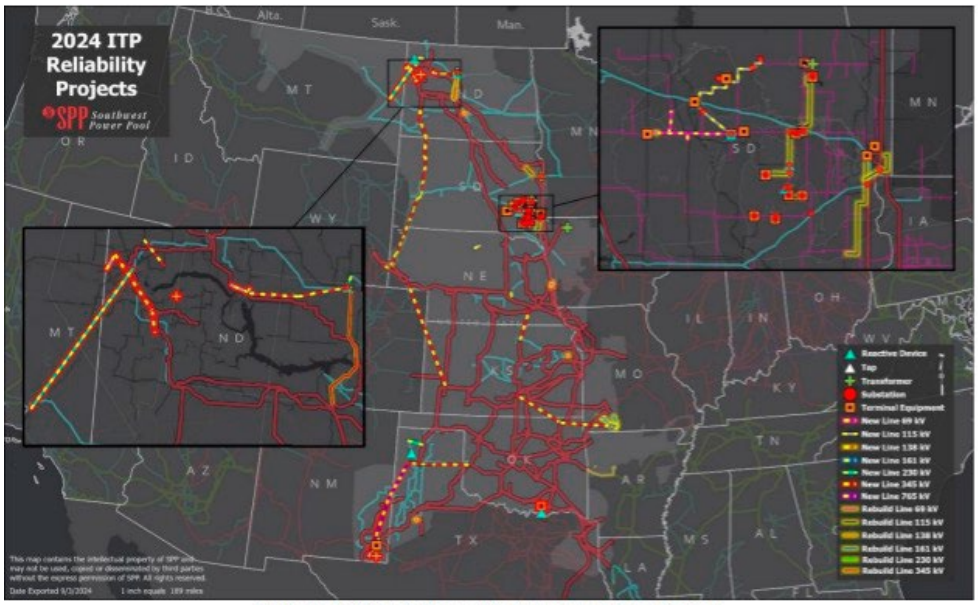
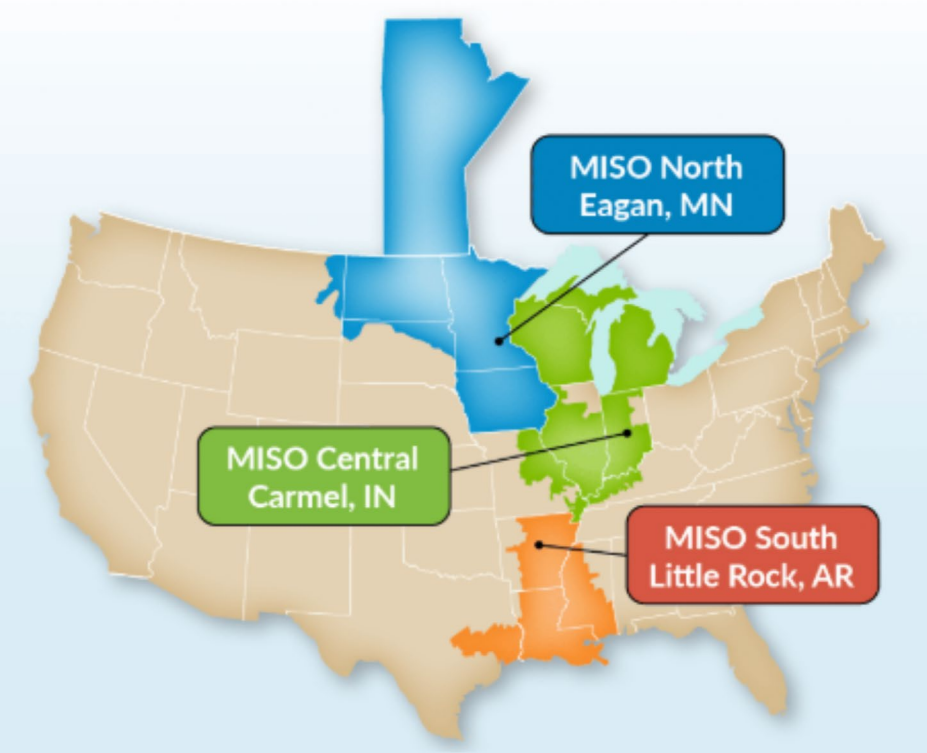



*Figure 1.1: 2024 ITP Thermal & Voltage Reliability Projects*

The total cost of the Integrated Transmission Plan project list is $7.68 billion. The benefit-to-cost ratio is over 8, supporting the benefits of the Plan.

## MIDCONTINENT INDEPENDENT SYSTEM OPERATOR (MISO):

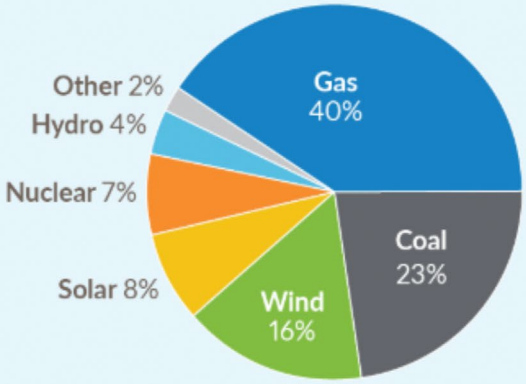
The Midcontinent Independent System Operator serves across 15 states and the Canadian province of Manitoba. MISO serves a population of 45 million and has 77,000 miles of transmission line in its network. MISO's record peak demand of 127.1 GW occurred on July 20, 2011.




*MISO's reliability footprint and regional control center locations.*

## INSTALLED CAPACITY

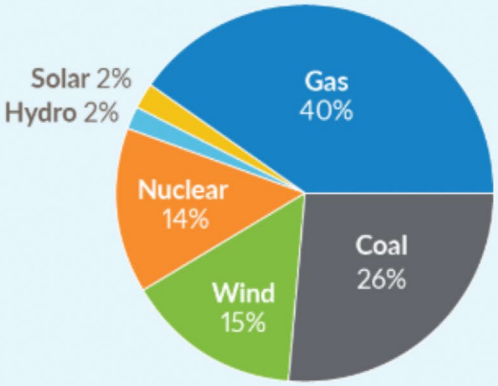
March 2025




203 GW

## ENERGY PRODUCTION

January-December 2024



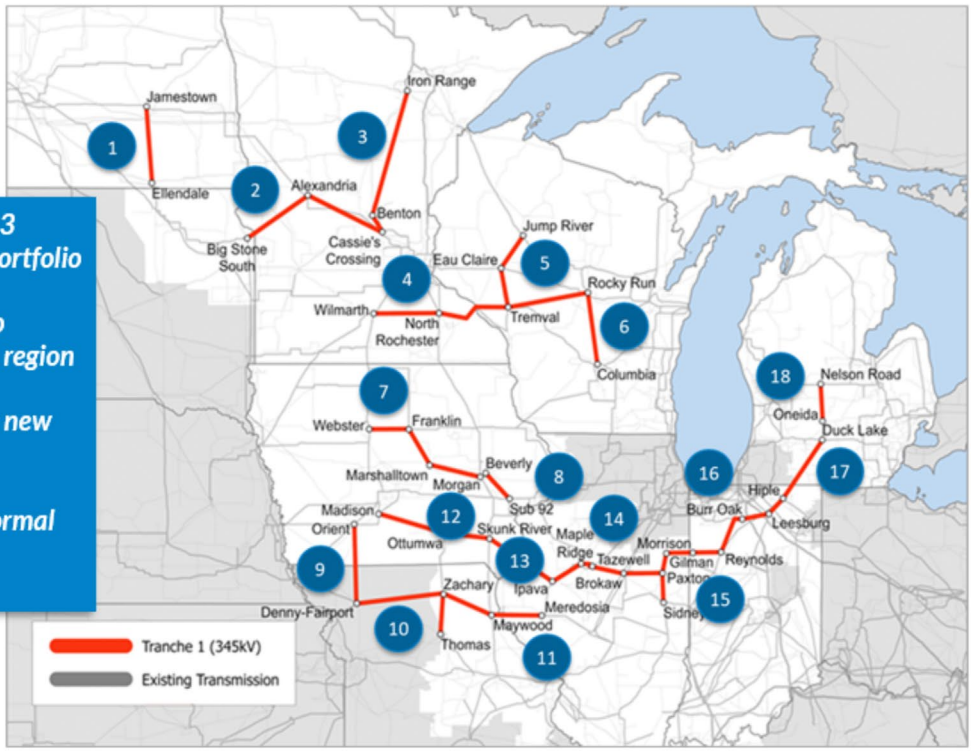

638 Million MWh

*Other: Diesel, Biomass, Storage, Demand Response Resources

Tranche 1 of MISO's Long Range Transmission Plan included 18 projects across the MISO Midwest subregion estimated to cost $10.3 billion. The JETx project was one of the 18 projects in Tranche 1.

## MISO Board of Directors approved Tranche 1 in July of 2022 which included a 345kV portfolio across the footprint with widespread benefits

- *18-projects, $10.3 billion Midwest portfolio with a 2.6-3.8 Benefit/Cost ratio spread across the region*
- *Over 2,000 miles new transmission*
- *More than 200 formal meetings*




### Regionally Cost Allocated Project Reporting Analysis

Tranche 1 / Multi-Value Project - Project Status, January 2025

| # | Project Name | State | Estimated In Service Date | | Status | | Cost | | Explanation |
|---|---|---|---|---|---|---|---|---|---|
| | | | MTEP Approved | Current Date | State Regulatory Status | Const. | MTEP Approved (2022$; M) | Current Cost (2022$; unless noted) | |
| 1 | Jamestown - Ellendale | ND | 2028 | 2028 | ● | | $439 | $439 | |
| 2 | Big Stone South - Alexandria – Big Oaks* | SD/MN | 2030 | 2030 | ◐ | | $574 | $574 | |
| 3 | Iron Range - Benton County – Big Oaks* | MN | 2030 | 2030 | ● | | $970 | $970 | |
| 4 | Wilmarth - North Rochester – Tremval (includes Mankato to Mississippi segment) | MN/WI | 2028 | 2028 | ◐ | | $689 | $685** | |
| 5 | Tremval - Eau Clair - Jump River | WI | 2028 | 2028 | ◐ | | $505 | $505 | |
| 6 | Tremval - Rocky Run - Columbia | WI | 2029 | 2029 | ◐ | | $1,050 | $1,050 | |
| 7 | Webster - Franklin - Marshalltown - Morgan Valley | IA | 2028 | 2028 | ◐ | | $755 | $755 | |
| 8 | Beverly - Sub 92 | IA | 2028 | 2028 | ○ | | $231 | $231 | |
| 9 | Orient - Denny - Fairport | IA/MO | 2030 | 2030 | ◐ | | $390 | $318** | |
| 10 | Denny - Zachary - Thomas Hill - Maywood | MO | 2030 | 2030 | ◐ | | $769 | $511** | |
| 11 | Maywood - Meredosia | MO/IL | 2028 | 2028 | ◐ | | $301 | $301 | |
| 12 | Madison - Ottumwa - Skunk River | IA | 2029 | 2029 | ○ | | $673 | $673 | |
| 13 | Skunk River - Ipava | IA/IL | 2029 | 2029 | ◐ | | $594 | $592** | |
| 14 | Ipava - Maple Ridge - Tazewell - Brokaw - Paxton East | IL | 2028 | 2028 | ◐ | | $572 | $572 | |
| 15 | Sidney - Paxson East - Gilman South - Morrison Ditch | IL | 2029 | 2029 | ◐ | | $454 | $516** | |
| 16 | Morrison Ditch - Reynolds - Burr Oak - Leesburg - Hiple | IL/IN | 2029 | 2029 | ◐ | | $261 | $675** | Cost change under Variance Analysis review |
| 17 | Hiple - Duck Lake | IN/MI | 2030 | 2030 | ◐ | | $696 | $520** | |
| 18 | Oneida - Nelson Rd. | MI | 2029 | 2029 | ◐ | | $403 | $403 | |
| | | | | | | Total | $10,324 | $10,288 | |

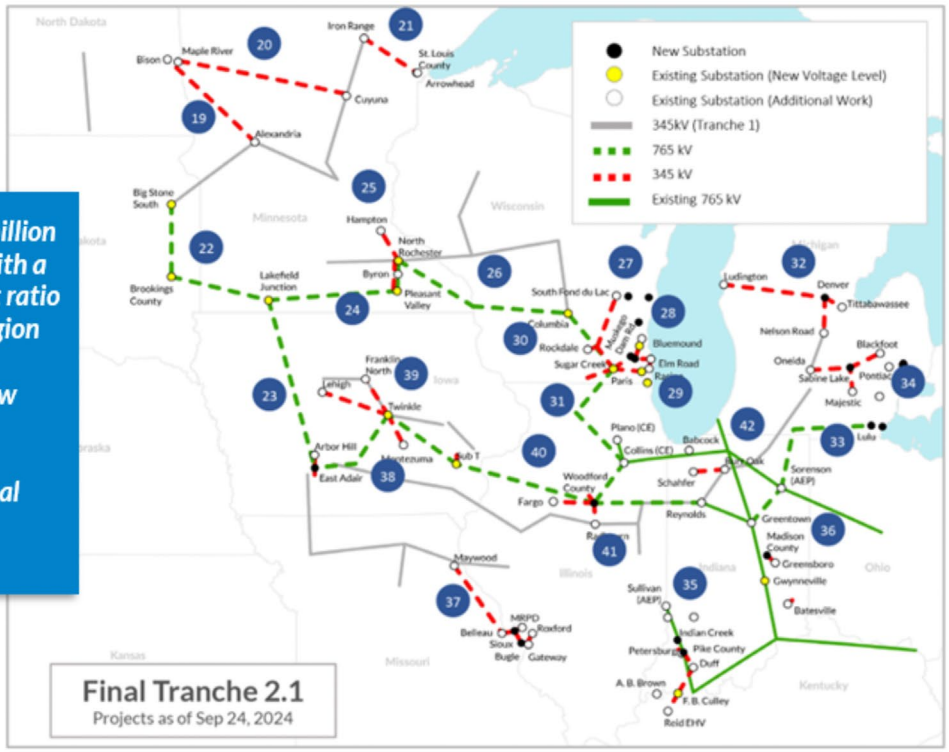
**State Regulatory Status Indicator Scale**
○ Pending
◐ In regulatory process or partially complete
● Regulatory process complete or no regulatory process requirements

*Big Oaks Substation was formally known as Cassie's Crossing
**Some or all facilities reported in nominal (year of occurrence) dollars

Tranche 2.1's portfolio focused on creating a 765 kV transmission "highway" within the MISO region to maximize value based on land use, line distances, transfer levels and costs. Tranche 2.1 includes two 345kV transmission line projects that reach into North Dakota, the Maple River to Cuyuna transmission line and the Bison to Alexandria transmission line. The total cost of Tranche 2.1 is estimated to be $21.9 billion with a benefit-to-cost ratio between 1.8 and 3.5. MISO is currently working on "Futures" in preparation for the next Tranche phase.

## MISO Board of Directors approved Tranche 2.1 in Dec of 2024 which included a region-wide 765kV backbone with widespread benefits

- *24-projects, $21.9 billion Midwest portfolio with a 1.8-3.5 Benefit/Cost ratio spread across the region*
- *Over 3,600 miles new transmission*
- *More than 300 formal meetings*



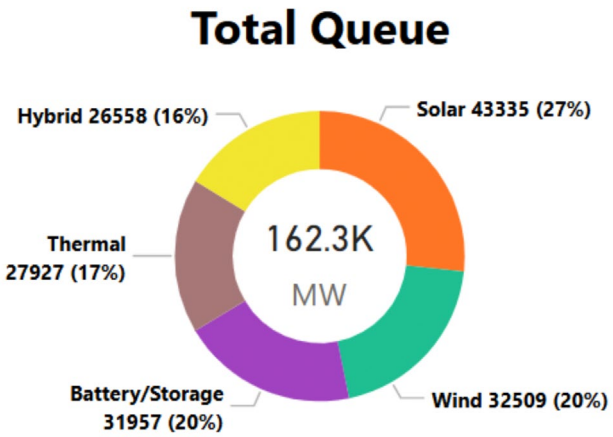

MISO's Long Range Transmission Planning: misoenergy.org/planning/transmission-planning/long-range-transmission-planning

# GENERATOR INTERCONNECTION QUEUE (GI)

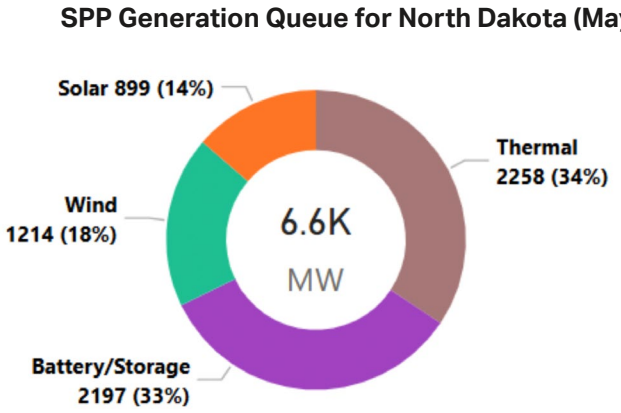
The generation interconnection queue represents new generators who are waiting in line to be analyzed and connected to the grid. These queues have been overwhelming the last few years; however, both MISO SPP have made great strides in clearing the backlog.

Both MISO and SPP have implemented an "Expedited Resource Addition Study" (ERAS) process. RTOs are experiencing falling reserve margins coupled with lengthy interconnection reviews that slow the process of bringing power supplies online. Future capacity forecasts indicate need for action to ensure the timely addition of new generation and the study process timeline reduction. The ERAS process is a targeted temporary process to speed Generation Interconnection Agreements, providing resources essential to reliability of the grid.

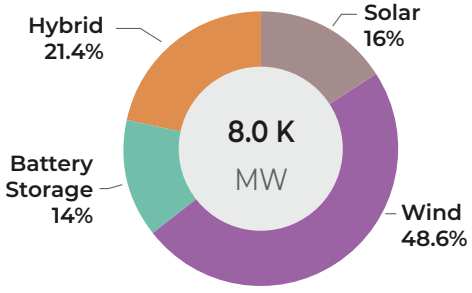
SPP's region wide generation queue as of May 2025 is represented by fuel type in the graph below. The total queue represents 701 projects totaling 162,285.61 MW of installed capacity.




SPP's total generation queue as of May 2025 in North Dakota is represented by fuel type below. North Dakota's generation queue includes 28 projects totaling 6,568 MW of installed capacity.




MISO's generation queue (8,026 MW active queue) for North Dakota is as follows:




MISO has 250MW of wind with an approved Generators Interconnection Agreement but not yet operational

# NORTH DAKOTA GENERATION PROJECTS

**Montana Dakota Utilities** has executed a 150 MW off-take/ ownership interest in the 250 MW Badger Wind project which is scheduled to be on-line the end of 2025.

In January 2025, **Minnkota Power Cooperative** announced the newest addition to its wind power fleet – a 370-megawatt (MW) wind farm to be developed near New Rockford, North Dakota. The development, named Flickertail Wind Farm, will be owned and operated by PRC Wind, while Minnkota will purchase all energy produced under a long-term agreement. The project is scheduled to begin construction by 2027.

**Otter Tail Power Company** announced two solar farm projects, a 50 MW farm near Solway MN and a 295 MW farm near Abercrombie, ND. Otter Tail has signed an agreement with Flickertail Solar Project LLC to buy the development assets once the permits and regulatory approvals are received and other contractual requirements are met.

As part of its latest Integrated Resource Plan order in Minnesota, **Otter Tail Power Company** also received approval to add 200 MW of new wind generation and between 20 MW and 75 MW of battery storage by the end of 2029. Specific projects have not yet been identified, but Otter Tail is actively engaging with developers to find projects that will meet these plans.

**Basin Electric Power Cooperative** has been adding natural gas generation in Northwestern North Dakota at their Pioneer site. Six 18.8 MW reciprocating engine generators came online in April 2025. Two 250 MW natural gas combustion turbines will be added to the fleet and commercial, one in May 2025 and the second one in August 2025. Looking ahead, Basin plans to construct a 1,470 MW combined cycle generating facility near Epping, called the Bison Station. That facility is projected to come online in 2030.

On their renewable front, Basin is working to repower the North Dakota Prairie Winds site near Max, ND. The eighty 1.5 MW wind turbines will be upgraded and capable of 1.6 MW of production. The units will be able to produce more energy at lower wind speeds.

## NUCLEAR ENERGY STUDY

The 69th North Dakota Legislature initiated two bills that support nuclear generation studies. Senate Bill 2159 authorized study by removing a prohibition against EERC studying nuclear energy that was in section 15-11-40 (4) of the North Dakota Century Code. SB 2159 was a companion bill to HB 1025. HB 1025 was a Legislative Management Study – Advanced Nuclear Energy. This bill sets up a study for the 2025-26 interim. Legislative management shall study the feasibility, siting and deployment of advanced nuclear power plants in the state. The Study will consider siting, grid connectivity, land use considerations, economic impacts, temporary and permanent nuclear waste store, small modular and micro nuclear reactors and provisions of the North Dakota Century Code that place restrictions on advanced nuclear energy development, if any.

## LIGNITE POWER PLANT OF THE FUTURE STUDY-SEPTEMBER 2024

Pursuant to Section 17 of House Bill 1014, enacted during North Dakota's 68th Legislative Assembly, the Energy & Environmental Research Center (EERC) worked with the North Dakota Industrial Commission (NDIC) through its Lignite Research Program (LRP) to conduct this study regarding future lignite electrical generation facilities. The legislature directed that the study include consideration of an energy demand forecast for dispatchable electricity generation and the regulatory environment for future lignite electrical generation facilities, an analysis of the economic impact of future lignite electrical generation facilities and the value-added products or services that may result from those facilities, and other factors related to the development and operation of future lignite electrical generation facilities. Key takeaways from the study include:

- Lignite generation remains the backbone of the regional electric grid.
- Forecasts for sustained load growth in the region necessitate retention and development of dispatchable energy resources.
- Lignite remains a cost-effective fuel for electric power generation.

- Technology options exist to build new, highly efficient lignite-fired electrical generation with post combustion carbon capture.
- Coal gasification and polygeneration provide myriad opportunities to develop value-added products and expand the market in conjunction with low-carbon electric generation.
- The prevalence of critical minerals and REEs in North Dakota's lignite reserves is a significant opportunity for the mining industry as support for domestic sourcing continues to increase.
- Regulatory certainty and financial support are critical to push the development of a future lignite generation facility to commercialization.
- The status of federal regulations remains ambiguous given changes in presidential administrations and approaches to GHG and other environmental rules as well as legal challenges, while the 45Q tax credit continues to drive private sector interest in pursuing CCUS.
- Tremendous opportunity exists for the lignite power sector to provide CO2 for EOR, driving low-carbon oil production and continuing to increase return on North Dakota's Bakken Formation.

# NORTH DAKOTA TRANSMISSION PROJECTS

Transmission line development is an exhaustive process, often taking 8-10 years from idea to operation. The load growth, particularly in Western ND has been phenomenal but challenging for the power supplier and transmission developers. Today, there is significant transmission congestion in the Watford City/Williston region as well as in Southeast North Dakota. Fortunately, there are several transmission projects approved and well on their way to construction to alleviate the congestion and accommodate load growth, improve grid reliability and consumer security. The various utility projects are as follows:

## GREAT RIVER ENERGY

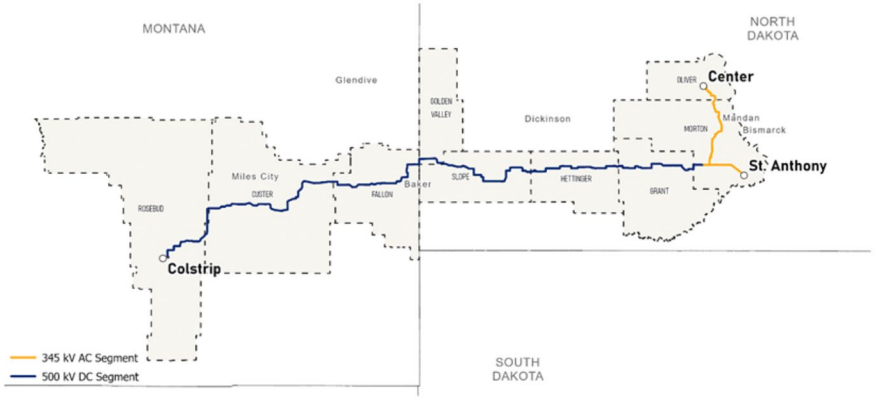
Utilities in the upper Midwest continue to focus on reliability and seek opportunities to reduce congestion on the transmission grid.  GRE and other members of Grid North Partners in 2023, identified several projects to reduce congestion by employing technology such as dynamic line ratings (using real-time environmental factors such as wind speed and temperature to adjustment of transmission line power transfer capability) and replacement of substation elements that were limiting the flow of power. GRE and other utilities are replacing and where possible upgrading transmission lines and replacing substation equipment based on age and condition of those elements. This is an ongoing effort that will take several decades to complete.

GRE is engaging in an effort to determine with more particularity outage data and the root cause of the outage and identifying either capital projects or maintenance work orders to reduce the number and/or duration of future outages. GRE meets with its members on a regular basis to better understand the impacts of outages and develop long term solutions that meet their needs.

GRE partnered with Prisma Photonics on a pilot project leveraging GRE's existing overhead fiber optic cables as sensors to detect system anomalies and extreme weather events. The project includes monitoring five transmission lines connected at four substations. Prisma's solution installs optical interrogator units inside substation control buildings and connects to existing fiber optic cables on GRE's transmission lines. The Prisma system utilizes the fiber optic cable as a continuous acoustic sensor, detecting weather events such as wildfire, extreme wind, icing, galloping, and electrical system events including short circuits and partial discharges. The system can also detect vandalism and vegetation contact through vibrations on the transmission line.

## GRID UNITED

Grid United and ALLETE's North Plains Connector project is an approximately 420 mile, 525kV HVDC transmission line that will span two states, from Colstrip, MT to St. Anthony, ND & Center, ND. The line will have 3,000 MW of capacity and connect three electric transmission regions: the Western Electricity Coordinating Council, MISO and SPP. North Plains Connector expects construction to begin in 2028, with commercial operation in 2032.




## BASIN ELECTRIC POWER COOPERATIVE

Basin's current transmission activity includes the following projects.

| | |
|---|---|
| Round up to Kummer Ridge 345kV– 33 miles | 2024-completed |
| Leland Olds – Crane Creek - Tande 345kV -161 miles | 2026 |
| Wheelock to SK 230kV 53 miles | 2027 |
| Tande – SK 230kV 59 miles | 2027 |

There are a couple projects that have come out of SPP's 2024 ITP portfolio in Basin's territory. These include the Patent Gate – Pioneer 345 kV project and the Leland Olds – Logan 230 kV to 345 kV conversion and Logan – Crane Creek 345 kV project.

## WESTERN AREA POWER ADMINISTRATION (WAPA)

WAPA's Upper Great Plains (UGP) transmission facilities are under the functional control of the Southwest Power Pool (SPP) Regional Transmission Organization. WAPA-UGP's facilities are included in the annual SPP transmission assessments as appropriate. SPP's recently published 2024 Integrated Transmission Planning assessment identified a portfolio of transmission projects comprised of reliability, winter weather, economic, short circuit, and operational projects that will mitigate many system issues.

To address the rapid load growth in North Dakota, SPP staff recommended a network of new and upgraded lines across the state. One of the major projects in the WAPA footprint is a new 439-mile, 345 kV line from Belfield to Maurine to New Underwood to Laramie River that brings large economic benefits to North Dakota and the SPP region. This project aims to address the extra high voltage deficiency in this area and benefit rural communities in western Nebraska and the Dakotas. Another major project for North Dakota is a new 230 kV line from Dawson County, Montana, to Williston, North Dakota, that would provide reliability and economic benefits and greatly reduced congestion on the area's 115 kV system.

Other age and replacement projects identified by WAPA-UGP in the North Dakota area include a Fargo bus upgrade, Charlie Creek to Garrison transmission line rebuild, and Jamestown reactor replacement. These projects will increase capacity, alleviate congestion, increase storm resilience, and provide for continued stability in their local areas. These updates seek to increase transmission reliability in North Dakota, ensure worker safety and line reliability, and aid in controlling voltage and providing stability to the region.

WAPA-UGP markets and transmits federal hydropower from the region's Pick-Sloan Project dams. Operated by the U.S. Army Corps of Engineers, the Garrison Dam's five turbines, with a total installed capacity of 583 MW, produce around 2 million MWh annually. Garrison continues to receive unit maintenance and protective relay replacements on all units.

## RAINBOW ENERGY CENTER

May 1, 2025 brought three years of ownership of Coal Creek Station and the HVDC line from Coal Creek Station to the greater Minneapolis area in Minnesota by Rainbow Energy Center and Nexus Line, respectively. Both assets combined allow for a unique business plan leveraging Rainbow Energy Center's status as an independent power producer. Expansion projects underway allow for continued growth in operations at the site of Coal Creek Station, including the construction of two new substations. The Arc Substation construction was completed in November of 2023 and the Rainbow Substation is anticipated to be completed in the fall of 2025. These additional assets will allow for expansion of generation and implementation of additional on-site load. Current infrastructure has allowed the integration of 205 MW of interruptible on-site load with an opportunity for additional megawatts to come online in the coming year. Integration of on-site load and incremental generation allow flexible and efficient use of the Nexus Line's HVDC system, contributing to the reliability of the overall transmission system.

## MINNKOTA POWER COOPERATIVE

Minnkota Power Cooperative (MPC) continues to be engaged in several projects and continuous improvement activities in North Dakota. MPC's Distribution Substation Automation and Modernization program couples the need for addressing aging infrastructure with improving system reliability by modernizing infrastructure and adding last mile communication capabilities to their over 200 delivery points, while also providing real time visibility to help drive system resiliency. The Sub-Transmission Line Rebuild program has also shown increased value to their members with reduced outages, improved load serving capabilities, while also expanding the reach of their fiber optic communication system. In addition, new high voltage interconnects to add additional system flexibility to the sub-transmission system are being completed south of Grand Forks, as well as in proximity to Warsaw/Ardoch area. These enhancements along with leveraging new innovative technologies related to drones and advanced outage detection abilities are resulting in improving reliability metrics for the membership. Due to the support of their members and Minnkota's continued investments, strategic initiatives, and continuous improvement projects, 2024 marked the best system reliability performance in the past 25 years.

## MONTANA DAKOTA UTILITIES

Montana Dakota Utilities (MDU) is a partner with Otter Tail Power Company in the JETx 345 kV transmission project from Jamestown to Ellendale. Both ends of the line will have expanded substations, with MDU expanding and upgrading their Ellendale Substation.

MDU plans to upgrade the Hettinger to Elgin transmission line from 69 kV to 115 kV. The in-service date for the new transmission line is 2028.

MDU has several other projects that have been recently completed. They include:

- Rebuilding the Crosby to Zahl 60 kV transmission line
- Rebuilding of the Halliday to Dodge 41.6 kV transmission line
- Substation upgrades at Beulah, Ellendale, Wishek , Merricourt and Tioga

## OTTER TAIL POWER COMPANY

Otter Tail Power Company (Otter Tail) is working on several major transmission grid enhancement projects in North Dakota. These include:

**Jamestown – Ellendale 345 kV Project**
In partnership with Montana-Dakota Utilities, Co. (MDU), Otter Tail is developing a new 95-mile, 345 kV transmission line from Jamestown, ND to Ellendale, ND, that will be double circuit capable. Both ends of the line will have expanded substations, with Otter Tail expanding the Jamestown substation. In addition, Otter Tail will also be replacing the 345/230 kV transformers at the Maple River 345 kV Substation near Fargo, ND, as an underlying upgrade.

**Maple River – Cuyuna 345 kV Project**
Otter Tail is collaborating with Great River Energy (GRE) and Minnesota Power (MP) to construct a new, approximately 165-mile 345 kV transmission line from the Maple River substation near Fargo, ND, to MP's Cuyuna substation in Crow Wing County, MN. The project is planning to be constructed with double circuit

capable structures. As part of this project, Otter Tail will further expand the Maple River substation to accommodate the new 345 kV line.

**Forman – Hankinson 230 kV Rebuild**
Otter Tail is also undertaking a project to rebuild the existing 37-mile, 230 kV line between the Forman Substation near Forman, ND, and the Hankinson Substation, near Hankinson, ND.

**Bison – Alexandria 345 kV Project**
A second 345 kV circuit along the existing 135-mile transmission line from the Bison 345 kV substation near Mapleton, ND, to the Alexandria substation near Alexandria, MN, is to be constructed by Otter Tail, Great River Energy, Minnesota Power, Missouri River Energy Services and Xcel Energy.

**Big Stone South – Hankinson – Bison 345 kV Project**
As part of the Joint Targeted Interconnection Queue study completed by MISO and the Southwest Power Pool (SPP), Otter Tail and Xcel Energy are moving forward with the development of a new, approximately 75-mile, single circuit 345 kV line from Otter Tail's Hankinson Substation near Hankinson, ND, to Xcel's Bison Substation near Mapleton, ND. Substation improvements are planned at both of the endpoint substations with the most significant improvement involving the construction of a new 345 kV switchyard at Otter Tail's Hankinson Substation. In addition, Otter Tail will continue the new single circuit 345 kV line from Hankinson, ND, a distance of approximately 75-miles, to its Big Stone South Substation near Big Stone City, SD.

**Other Projects**
To address concerns with aging infrastructure, Otter Tail is also performing several different transmission line upgrades across its system; some of which are located in North Dakota. For example, 41.6 kV transmission line upgrades are currently underway between Buffalo and Colgate as well as between Rugby and Bottineau.

Otter Tail has also launched a "Next-Generation Grid Resiliency Plan" that will increase inspections of transmission and distribution poles by 63%. The program also includes investment in an Intelligent Vegetation Management System which uses satellite imagery for vegetation analysis, as well as drone-based inspections of 750 miles of transmission lines and 250 substation assessments using ultrasonic technology to evaluate potential component failure.

Lastly, Otter Tail was a successful DOE GRIP applicant and is currently working through grant negotiations. Once finalized, Otter Tail will be directing those grant funds toward an updated load management system.

## MINNESOTA POWER ALLETE

Minnesota Power Allete has embarked on a HVDC Modernization Project on their HVDC line from Center ND to Duluth, MN; increasing the transmission capacity from 550MW to 900 MW with potential to increase to 1,500 MW. The project work occurs at either end of the HVDC line at the converter stations. The modernization project will also enable electricity to flow either direction and is slated to be complete at the end of the decade.

The new voltage source converter station will look simililar to this one when completed.

*-Photos Courtesy of Siemens*


## XCEL ENERGY

Xcel Energy is working to develop the grid of the future ensuring that generation outlet and resource adequacy is met now and into the future. Xcel Energy is working on the following projects:

Xcel Energy is completing the 2nd circuit from the Brookings Co-Twin Cities 345 kV line to help with the congestion concerns in southwest Minnesota.

Xcel Energy is involved with three projects from the MISO Long Range Transmission Plan (LRTP) Tranche 1 projects. These projects will help address transfer capabilities across the MISO system from the west to east towards the load centers.

1. Big Stone-Alex new 345 kV line, completion of the 2nd circuit from Alex-Monticello 345 kV CAPX line
2. New 345 kV line from Wilmarth-North Rochester-Tramval
3. New 345 kV line from Tremval-Eau Claire-Jump River

Xcel Energy is also involved with several 765 kV sections and 345 kV sections of approved projects from MISO Tranche 2.1 that was approved in December 2024. These projects will help the region add much needed capacity for load serving and generation outlet.

Xcel Energy is working on the MISO LRTP Future Trance 2.2 that will building on the Tranche 1 and 2.1 projects to complete a long-range vision plan for the upper Midwest region.

## CENTRAL POWER COOPERATIVE

Apple Creek Distribution Substation – South Bay Addition – They will add a 43.8-13.2kV, 14 MVA distribution substation bay within the existing Apple Creek substation to provide capacity and redundancy in the vicinity of Lincoln, ND.

Bismarck North Circuit Switcher 362 & 462 Replacement – These two fault clearing devices are at the end of their useful life and will be replaced with new 115kV SF6 power circuit breakers.

Kensal Substation Replacement and Kensal Tap to Kensal to Glenfield 43.8kV Transmission Line Project – These projects include construction of approximately 34 miles of new 43.8kV transmission line which will provide looped transmission service to the replacement Kensal distribution substation and the existing Glenfield distribution substation.

Mallard 115kV Substation Capacity Related Transformer Replacement – Central Power ordered a larger transformer for the initial Phase 1 Mallard rebuild project that occurred in 2023 but that transformer was delivered to the Carrington 115kV substation after the Carrington transformer failed. They now plan to replace the smaller 1993

transformer at Mallard with a new larger unit and they will relocate the existing Mallard transformer, which still has a significant life expectancy and value, to the Gibbs 115kV substation.

Max 115kV Substation – Circuit Switcher 362 Replacement – The Max 115kV transformer protection circuit switcher has been deteriorating over the last few years and they plan to replace it with a new 115kV power circuit breaker.

Neal 115kV Substation Equipment Replacement – The Neal 115-43.8kV transformer along with four 43.8kV breakers and the 43.8kV potential transformers are reaching the end of their useful life. They plan to install a new larger 115-43.8kV transformer on a new pad within the Neal substation and to replace the four breakers along with the potential transformers in their existing locations.

New Rockford Distribution Substation Replacement – The Central Power New Rockford distribution substation was built in 1950, and the structures are a compact design with very tight clearances between substation components. Central Power plans to build a larger modern replacement for the New Rockford distribution substation south of the existing substation directly adjacent to the existing transmission line.

Ward 230kV Substation Control System Replacement – The control and protection system for Central Power's part of the substation, which is jointly owned with WAPA, will be replaced as part of a planned equipment replacement rotation. The project will involve designing, building, programming, and replacing the existing control and protection system for the 115kV and 43.8kV portions of the substation using modern microprocessor-based relays and control equipment.

Woodworth to Robinson to Tuttle 43.8kV Transmission Line Rebuild - The 20 mile 43.8kV transmission line between Central Power's Woodworth and Robinson substations was built in 1972 while the 12 mile 43.8kV transmission line between Central Power's Robinson and Tuttle substations was built in 1978. These lines are unshielded with a history of galloping and broken insulators. They plan to build a complete replacement in or near its existing location.

**NORTH DAKOTA TRANSMISSION AUTHORITY**
**STATE CAPITAL, 14TH FLOOR**
**600 E. BOULEVARD AVE. DEPT. 405**
**BISMARCK, ND 58505-0840**
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***DISCLAIMER***

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*Thanks for the Energy Information Administration (EIA), Southwest Power Pool (SPP), Midcontinent Independent System Operator (MISO), area utilities and WIND and their members especially.*