

# North Dakota Transmission Authority

John Weeda, Executive Director

Claire Vigesaa, Deputy Director

## **HB 1014**

### **Education and Environment Subcommittee of the Senate Appropriations Committee**

#### **Testimony of Claire Vigesaa, Deputy Director**

#### **North Dakota Transmission Authority**

**March 10, 2023**

Good morning, Chairman Senator Sorvaag and members of the committee, for the record, my name is Claire Vigesaa, and I am the Deputy Director of the North Dakota Transmission Authority. I am testifying in support of House Bill 1014. House Bill 1014 was filed at the request of the Industrial Commission and the North Dakota Transmission Authority contract request is a line item in the bill.

We are respectfully requesting \$400,000 in appropriations for the 2023-2025 biennium. The North Dakota Industrial Commission acts in its capacity as the North Dakota Transmission Authority (NDTA) under NDCC 17-0502.

The scope of authority of the NDTA (NDCC-17-05) is quite broad, including the ability to:

1. Make grants or loans to facilitate transmission
2. Ownership of transmission facilities for public purpose
3. Issuing bonds for loans
4. Construction or maintenance of transmission facilities
5. Expertise for government entities and the public

While the scope is broad, most of the NDTA's energy is focused on monitoring electric transmission performance, trends, gaps and issues. The NDTA collaborates closely with the ND Public Service Commission, incumbent electric utilities, industry and developers to support a more resilience and reliable electric grid for North Dakota. Further, the NDTA keeps tuned to the Independent System Operator activities for both MISO and SPP. We participate in several meetings (committees/sub-

committees) a week with SPP and MISO, paying particular attention to topics and policy changes related to grid reliability, generation interconnections, transmission expansion, generation resource changes and baseload retirements.

The NDTA supports a private sector approach whenever feasible but is structured to fill gaps that occur. Most recently, in 2022, the NDTA used its ability to issue bonds for the financing of the NEXUS DC transmission line from the Coal Creek Station to the Minneapolis area. This critical financing tool was the vital link to keeping the Coal Creek Station a viable generator unit...providing a path to market for Coal Creek's new owner, Rainbow Energy. Had this transmission financing failed, the Coal Creek was slated to be shut down! Besides the preserving jobs at the plant, coal mine and ancillary services, the Coal Creek Station was and will continue to be a critical baseload generation facility...contributing to a resilient and reliable electrical grid. The winter storm event in December could have been "dark" days had the Coal Creek plant been shuttered!

You might ask, why has the grid reliability become a focus or concern for North Dakota and the nation as a whole? And why does North Dakota need to dedicate resources for a transmission authority? Fundamentally, a healthy grid is key to economic growth and prosperity of the region. Today's digital world doesn't work well with blinks, low voltage, brownouts or blackouts. North Dakota has had a history of stellar energy production and reliability; we want to keep it that way!

It is noteworthy that no new large baseload generation has been built in North Dakota since the 1970-early 1980s. Even though no new baseload generation has been built, the demand for electricity has grown dramatically; you don't need to look far to see the growth....from the growth of our large cities, the tremendous expansion of the oil/gas industry, growth in agriculture processing and energy consumption in agriculture production (more corn).

Rather, new electric generation projects have been primarily wind and simple cycle gas generation (peaking units). The generation, particularly wind, is distributed throughout the state while new gas generation has been primarily west of the Missouri River. The change in the distribution of generation, changes the flow direction and operation of the grid...compared to the traditional large base load centralized generation plans decades ago. In a nutshell, the electric transmission industry has becoming increasingly complex. Thirty years ago, weather impacted load...but not generation; today weather not only affects load but has a large influence on generation! The presence of wind matters!

Ironically, as large baseload generation is slated for retirement; national policy makers and industry are looking to electrify more of the economy through electric vehicle deployment etc. The grid infrastructure will need extensive additions and design alterations to address electrification of the economy.

Even today, we have areas of transmission congestion regularly in southeast North Dakota as well as the oil/gas production region in the Watford City/Williston area. The congestion in southeast North Dakota has a negative impact on generator owner's ability to produce and export energy. Congestion and transmission limitations in northwest North Dakota requires localized gas generation to operate to mitigate transmission performance. As we stand today, there are several transmission projects in the queue for North Dakota; a 345kV line from Fargo to Big Stone SD, a 345kV line from Jamestown to Ellendale, a 345kV line from Killdeer to Johnson's Corner and a 345kV line from Leland Olds Station around the east side of Lake Sakakawea to Tioga. Additionally there are two 230kV transmission lines planned from SASK Power south...one to Tioga and one to Wheelock. There are other projects slated to mitigate transmission reliability including a reactive device at Statcom, near New Town. Suffice to say, these projects are addressing the current need; **to accommodate future economic growth and prosperity for North Dakota, new transmission projects are needed to provide service to incumbent industry and needed to offer paths for new generation development.**

The reliability and resilience of the electrical grid is of great concern across the nation; we believe it is of utmost importance that North Dakota expend time and resources to assure that our electrical grid is strong and secure for the safety and wellbeing of its citizens and for the economic prosperity of the state.

The NDTA provides a vital educational and informational role for ND Leadership, the ND Public Service Commission, Investor-Owned Utilities, Electric Cooperatives, merchant generators, new developers and the related energy industries. The activity level of the NDTA has increased significantly due to the recent project to provide bonding for the NEXUS line and the promotion and administration of the DOE Grid Resiliency Grants coming our way. The NDTA work is done under contract (not FTEs) with two retired industry experts; John Weeda and Claire Vigesaa. The \$400,000 budget for the biennium provides the funding required to compensate for time, travel, meeting registration and educational events to promote a safe, reliable and resilient electrical grid.