

March 11, 2025

Chairman Porter and members of the House Energy and Natural Resources Committee, my name is Tom Erickson, and I am the Chief Operations Officer at the University of North Dakota (UND) Energy & Environmental Research Center (EERC) as well as the EERC Director of the State Energy Research Center (SERC). I am submitting this testimony in support of Senate Bill (SB) 2143.

I have had the honor of leading SERC at the EERC since its creation, and I am extremely grateful for the opportunity that the North Dakota Legislature has afforded the EERC to better serve the people of North Dakota by providing critical fundamental (early-stage) research into promising new ideas that will serve the state in the future. SERC is focused on developing new ideas and methodologies that can enhance our energy production, decrease our impact on the environment, improve the lives of our citizens, and increase revenues to the state. The early-stage ideas that prove successful will attract additional research funding to advance them through further research and development, to demonstration, and on to commercial deployment in North Dakota.

Through the first three biennia that SERC has existed, we have funded over 60 new ideas to serve North Dakota. From those initial ideas, EERC researchers have been able to bring in an additional \$33 million in outside funding to further advance them. These same ideas have generated 15 new inventions, resulting in 11 U.S. patent applications and six U.S. patents granted. One of the ideas that SERC helped to advance, focused on reducing flaring in North Dakota, is already in the demonstration phase, with plans for large-scale deployment in the near future. This one SERC-funded concept alone could have impacts in North Dakota in the tens to hundreds of millions of dollars or more yearly. Although SERC has been in existence for less than 6 years, it has already seen tremendous success. However, with the current funding level, we have only been able to fund fewer than half of the innovative ideas brought forward by EERC researchers. Additional funding, as provided in SB2143, would allow for additional projects and provide even more opportunities and solutions for North Dakota.

Additionally, 10% of SERC funding is designated for use at the discretion of the North Dakota Industrial Commission (NDIC) for critical emerging topics. Just one of the activities under this initiative has resulted in over \$10 million coming to North Dakota, with significantly more in process, for energy grid enhancements through a federal solicitation written by SERC and administered through the North Dakota Transmission Authority (NDTA). These funds have also helped support grid modeling for NDTA and other efforts to enhance energy security and value-added energy in North Dakota. Additional SERC funding would increase the amount we utilize

at the discretion of NDIC. One such project that could be undertaken with this funding is the annual update of NDTA's grid resiliency plan.

SERC also plays an important role in advancing one of our most critical resources – future workforce – by funding the Energy Hawks Program, which provides North Dakota college students with the opportunity to spend a summer and become immersed in North Dakota's all-of-the-above energy landscape. The students learn about all forms of energy production and resources in North Dakota and spend a week touring western North Dakota to see the facilities firsthand. With additional SERC funding, we could increase the number of students that can participate in the Energy Hawks Program and/or utilize the information pulled together within the Energy Hawks Program to develop other education and outreach materials for additional audiences.

SB2143 also increases the sunset clause for SERC out to 2033. This extension would allow the EERC to plan effectively for utilization of SERC funds when developing multiyear plans as well as allow for the coordination and leveraging of SERC activities with similarly focused federal opportunities, which can have up to a 5-year timeline, resulting in a significantly higher impact to North Dakota.

The EERC is very grateful for the opportunity to lead SERC, and SB2143 would allow us to do even more to serve the people, industry, and leadership of North Dakota.