Testimony of Garrett Goldfinger
NextEra Energy
2023 North Dakota Legislature Special Session - Policy Committee
October 23, 2023

Mr. Chairman and members of the committee, for the record my name is Garrett Goldfinger. I serve as Director of Hydrogen Development for NextEra Energy Resources. I have worked to develop and build energy projects for the past 15 years, focusing on bringing new technologies to market including LNG, gas and oil-fired power plants, and nuclear power.

I'd like to thank you for the opportunity to speak before you to support legislation that will create a fertilizer post-production incentive enabling the development of an electric fertilizer manufacturing plant here in North Dakota.

NextEra Energy Resources is currently developing such a fertilizer plant using advanced electrolyzer technology that would bring North Dakota significant benefits, including major infrastructure investments and stability to the agricultural supply chain.

North Dakota has a wealth of untapped electric resources and currently exports half of the electricity generated in the State. Electrolyzer projects allow the State to realize critical economic benefits by adding load to the grid, relieving transmission congestion, providing revenues to in-state electric utilities, and providing grid resiliency and reliability. All this while unlocking the massive economic potential of North Dakota's robust and diverse energy resources.

This project will use advanced electrolyzer technology, efficiently using electricity to convert water into hydrogen. That hydrogen is then combined with nitrogen from the air and synthesized into ammonia, serving as the base building block for downstream fertilizer products, such as urea.

This technology only requires electricity and water as feedstocks and does not require natural gas. The unique nature of this process allows the facility to be sited in the heart of North Dakota's highest corn yield counties, which have the highest demand for fertilizer and insufficient access to natural gas resources.

Support and interest from both the agriculture and electric power industries, as well as the local community, highlights confidence in feasibility of the project and the economic growth it will provide.

Over the past 6 months, NextEra Energy Resources has spent millions of dollars in project development including funding grid studies, securing land positions, and advancing engineering design. All this highlights **our** belief in the feasibility of this project.

We have secured multiple site options where we are currently conducting permitting, transmission, water, wastewater, and engineering studies. These sites stand in close

proximity to one another, each with unique advantages, ensuring efficient development and multiple pathways to project construction.

We have engaged in early discussions with localities and agencies to ensure there is sufficient capacity to support the water and wastewater requirements for this project without impacting the needs of other industries or communities.

NextEra Energy Resources has also explored load studies with local electric suppliers for seamless integration into North Dakota's electric infrastructure and framework.

The benefits of this project to North Dakota cannot be understated.

Providing a secure and in-state supply of nitrogen fertilizer would create cost and supply stability in North Dakota, inviting further fertilizer production investment in the state with potentially billions of dollars of total investment in the sector.

North Dakota is also not the only underserved State in the Upper Midwest lacking in-state fertilizer production. This opportunity can provide the initial investment to catalyze electric fertilizer manufacturing growth in the State, flipping the State from a net importer to a net exporter of fertilizer to the region.

Given the diverse energy resources in the State and geological sequestration potential, this program is a strong compliment to proposed blue hydrogen projects out West. Passing this bill will catalyze electric fertilizer projects, complementing other programs targeting natural-gas fertilizer production and driving significant economic growth as part of an "all of the above" energy diversification strategy. This strategy will keep North Dakota agriculture cost-competitive while reducing carbon intensity.

This type of electric fertilizer project will be fundamental in lowering the carbon footprint of the agriculture industry while providing potential benefits to renewable diesel and ethanol plants by serving to lower the total carbon intensities of North Dakota biofuels. This would position North Dakota as not just a national leader in clean energy agricultural practices, but a global leader.

Therefore, I humbly ask the committee to support the proposed legislation for a fertilizer post-production incentive program focused on scaling electrolyzer technology in the State.

Through this legislation, which would enable the development of electric fertilizer projects, North Dakota would build on its position as a leader in energy and establish the State as a leader in the hydrogen economy.

Thank you for your time and consideration of such a critically important program.