P.O. Box 2747 Fargo, ND 58108



March 2, 2023

House Concurrent Resolution 3034 Testimony in Support House Energy and Natural Resources Committee Chairman Porter & Committee Members March 2, 2023

Chairman Porter, members of the committee, I am Pam Gorman Prochaska, Director of Nuclear Regulatory Policy & Strategy for Xcel Energy. We support the North Dakota Legislatures interest in studying HCR 3034.

As we look beyond 2030, we need carbon-free technologies that are dispatchable—available anytime or 24/7—to maintain system reliability while operating high-levels of variable wind and solar energy resources. New low and carbon-free dispatchable technologies on the horizon include:

- Advanced nuclear energy, both fission and fusion
- Natural Gas Peaking Plants
- Carbon capture, utilization, and storage
- Advanced wind and solar energy systems
- Long-duration storage and advanced demand efficiency
- Advanced geothermal
- Zero-carbon fuels, such as hydrogen and ammonia

As the only utility in Minnesota operating nuclear power plants, we understand the important role that our existing nuclear fleet plays in our carbon free vision. Our nuclear fleet operates at a greater than 95% capacity factor and we have been able to reduce operation and maintenance costs by more than 30% since 2013, while maintaining the highest safety standards. As we look to future technology, the addition of advanced nuclear energy resources has the potential to provide similar dispatchable energy to our portfolio.

We also believe it is important to examine the back end of the fuel cycle as part of a North Dakota study. Our current nuclear Minnesota host communities did not agree to be the host site for the indefinite storage of spent nuclear fuel. We should better understand the work by the Department of Energy on a consent-based siting program as well as private initiatives to build and operate consolidated interim storage.

As the second-largest energy-producing state in the nation, North Dakota offers opportunities for a wide range of energy production. As a proactive producer and a model state for energy policy and innovation, advancing this study will support North Dakota's future and development of the energy sector while meeting the need for energy security.

Xcel Energy aspires to provide our customers 100 percent <u>reliable</u>, carbon-free electricity in the coming decades as we transition from our current resource mix. To fulfill this aspiration, we will continue to increase renewable energy resources along with technologies that enable renewable integration.

Filling a gap for carbon-free dispatchable energy is important to our company, our customers, and our communities. For these reasons we support this advanced nuclear study and its potential impacts on North Dakota jobs, community impacts and the environment. Also, please know that if a North Dakota nuclear study is selected, Xcel Energy would welcome an interim committee tour at one of our nuclear plants.

On behalf of Xcel Energy, we thank you for the opportunity to provide testimony.