

March 3, 2022

Representative Jamie Long
Chair, House Climate and Energy Finance and Policy Committee
517 State Office Building
St. Paul MN 55155

RE: HF 1651, amended

Dear Rep. Long:

On behalf of Missouri River Energy (MRES), I wish to express our perspective on the amended bill HF 1651 presented to the committee on Thursday, March 3, 2022.

MRES is a municipal power agency that provides wholesale power to 61 municipal electric utilities; 25 of which are located in Western Minnesota (MN). MRES also serves member communities in Iowa, North Dakota, and South Dakota.

MRES, like other utilities in the nation, has moved, and continues to move, to cleaner, non-emitting resources. MRES has considerable investments in renewable resources, including ownership and contract rights to wind projects in Iowa, North Dakota, and MN; a one-megawatt (MW) solar project in South Dakota; a 43.1 MW hydro-electric power facility in Iowa; and a contract for 33 MW of non-carbon dioxide emitting energy from the Point Beach Nuclear Plant in Wisconsin. Additionally, MRES is researching potential energy storage options for the future of their members and their customer-owners' needs.

Although MRES believes that energy storage systems will play an important role in the future, we are concerned about the impacts of section 3 of the amended bill. This section requires an electric utility to install an energy storage system at the applicable substation when replacing a feeder line with a feeder line of higher capacity.

Electric distribution systems are passive, meaning they function without the need for human interaction or control. In contrast, battery storage systems, as envisioned in section 3, are active systems, meaning they would require human and/or sophisticated computer interaction to turn on/off the battery storage device to control its injection into the distribution system. Therefore, each battery system, as envisioned by this bill, would require a municipal electric utility to establish some type of a control center. If a utility is unable to control the battery device, it could inject power into the distribution system at inopportune times, resulting in excess power injected into the transmission system and causing significant reliability concerns. Additionally, it could cause an overload to the system, resulting in damage to the system or even blackouts.

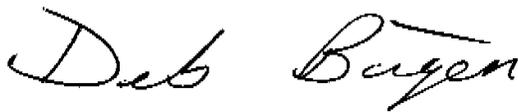
In order to safely manage the battery storage systems, municipal electric utilities would need separate operations staff who are skilled and trained to monitor and control the battery storage systems 24/7. While in

some cases, this would mean adding only minimal staff, in other cases, it would result in building out and staffing a fulltime operations center. The addition of staff, operations equipment, software, computers, and other necessary technology would increase costs for ratepayers. These additional costs come at a time when energy costs are rising already rising. Moreover, it creates a labor issue for small utilities which are already struggling to find qualified staff—particularly in greater Minnesota.

The mandate in section 3 also assumes that smaller, distributive storage is the most reliable and economic type of storage for a utility and its customers. However, that may not always be true. Because municipal electric utilities are owned and controlled by their customers, municipal utilities and their customers should be given the autonomy to evaluate which storage projects would reap the most benefits for their community in terms of grid reliability and cost effectiveness. For example, other utility-scale options (e.g. compressed air storage, pumped hydroelectric storage, etc.) may be more cost effective and provide better operations control for a municipal utility. Because small scale storage on feeder lines may not be the best option for a city and its utility, this preference should not be codified by the legislature.

MRES is committed to working with the bill author and chair of this committee to provide additional resources and data on how municipal electric utilities are planning for the future while still providing reliable, resilient, and affordable electricity.

Sincerely,

A handwritten signature in black ink that reads "Deb Birgen". The signature is written in a cursive, flowing style.

Deb Birgen
Vice-President, Government Relations
deb.birgen@mrenergy.com