

February 20, 2023

Submitted via Email

Committee on Climate and Energy Finance & Policy
Minnesota House of Representatives



RE: HF 1386 relating to Energy Storage

Honorable Chair Acomb & Members of the Committee:

I am sorry that I cannot be there in person, but I write to offer testimony in support of HF 1386. My name is Noah Roberts and I currently serve as the American Clean Power Association's Director of Energy Storage where I help coordinate and lead policy and advocacy efforts on behalf of the U.S. energy storage industry.

The American Clean Power Association is the leading federation of renewable energy companies expediting the advancement of clean energy as the dominant power source in America. The American Clean Power Association represents a wide diversity of voices across the clean energy industry—land-based and offshore wind, solar, transmission, and storage companies from manufacturing and construction businesses, developers, owners and operators, to utilities, financial firms, and power purchasers.

Energy storage refers to a technology class unlike any other electric grid technology or infrastructure. Energy storage has the unique capability to capture energy at one point in time, store the energy, and release the energy later when it is needed or when it is most useful to do so. It can provide electricity during times of peak demand, absorb excess energy from renewables during peak supply, reduce energy waste and increase grid efficiency, alleviate transmission congestion, serve as backup power for homes, businesses, and broader communities, and will be an essential component of our modernizing electric grid.

Energy storage will be critical for states transitioning to a clean energy future. Equally important will be thoughtful, proactive policies that lay a foundation and roadmap for the integration of energy storage into the state's energy mix. Similar to a renewable portfolio standard (RPS), states have used energy storage deployment targets to kickstart energy storage deployment, develop energy storage markets, and ensure their state is on a path to deploying adequate energy storage resources to complement renewable resources like wind and solar. Of the dozen plus states which have enacted legislation advancing the transition to 100% clean energy, nine have already adopted energy storage deployment targets. Minnesota is among the remaining five plus states where an energy storage deployment target will be considered by its legislature this year.

Not only are energy storage technologies commercially viable and scalable, but they have also become a leading grid-enhancing technology in states across the country with modernized policy frameworks. Over 4,000 megawatts of energy storage capacity was added in the United States in 2022. According to the U.S. Energy Information Administration, in 2023 the United States is expected to install more energy storage capacity than gas-fired power plants.

Out of the states with 100% clean energy laws that also have energy storage deployment targets, over 5,600 megawatts are already operational, and more than 8,000 megawatts are under construction or in advanced development. In Minnesota, market data indicates that the state has just 32 megawatts of energy storage capacity online and less than 20 megawatts of energy storage either under construction or in

advanced development. HF 1386 will ensure that Minnesota doesn't fall further behind in deploying energy storage resources.

Beyond enabling a clean grid, energy storage technologies are uniquely positioned to reduce energy system costs and over the long-term, lower rates for consumers. There are myriad ways that energy storage can reduce costs, including:

1. *Supporting the integration of more wind and solar generation.* Wind and solar are the cheapest sources of electricity. Energy storage supports the integration of higher and higher shares of renewables, enabling the expansion and incorporation of the most cost-effective sources of electricity generation.
2. *Reducing energy waste.* Energy storage can help eliminate energy waste and maximize the benefits of renewable energy. Energy storage is the only grid technology that can both store and discharge energy. By storing energy when there is excess supply of renewable energy compared to demand, energy storage can reduce the need to curtail generation facilities and use that energy later when it is needed.
3. *Improving grid efficiency.* Energy storage is instantly dispatchable to function both as generation and load, so it can help the grid adjust to fluctuations in demand and supply, optimizing grid efficiency, alleviating transmission congestion, and increasing grid flexibility. This reduces overall system costs.
4. *Limiting costly energy imports and increasing energy security.* As an in-state resource built and operated in Minnesota, energy storage can limit the need to utilize often more costly and more-fossil fuel intensive balancing resources from the broader grid. Energy storage improves energy security and maximizes the use of affordable electricity produced in Minnesota.
5. *Preventing and minimizing power outages.* Energy storage can help prevent or reduce the risk of blackouts or brownouts by increasing peak power supply and by serving as backup power for homes, businesses, and communities. Disruptions to power supply can be extremely costly and hazardous to health and safety. Energy storage makes the grid more resilient and reliable.

In a vertically integrated electricity market like Minnesota, setting an energy storage deployment target through legislation with an accountability mechanism of incorporating targets into the utility planning process will ensure the state has the clean, in-state capacity it will need for a resilient, reliable, and affordable grid of the future. HF 1386 includes proactive, prudent policies which will ensure that the state deploys the minimum energy storage resources it will need to accelerate and support the clean energy transition, while generating a more than \$3.5 billion investment in the Minnesota economy and creating as many as 2,000 family-supporting jobs.

By passing HF 1386, Minnesota can become a national leader in advancing a clean, affordable, and reliable electric grid for all Minnesotans.

On behalf of the American Clean Power Association, thank you for your time and consideration.

Sincerely,



Noah Roberts
Director of Energy Storage
American Clean Power Association