



March 15, 2022

Re: HB 1249 Electric Grid Resilience And Reliability Roadmap

Dear Representative Burnett, Representative Hooton, Senator Rankin, and Chair Valdez,

The Colorado Renewable Energy Society, with hundreds of corporate and individual members throughout the state, is proud to support your bill HB22-1249 to create a roadmap for electric grid resilience and reliability. Thank you for advancing it and the report date from 2025 to mid 2024. We want a sound report, but also want to move forward as quickly as possible knowing the severity of the climate crisis we are in.

We support the bill for three main reasons:

- As climate change and other threats increase, we're all concerned about resilience and reliability of our electric supply. It's very important to recognize that 'distributed energy resources' managed by microgrids are far superior to large-grid supplied power for 'hardening' electricity service and maintaining essential services at hospitals, fire stations, civil communications centers, and other critical infrastructure.
- Russia's invasion of Ukraine highlights ongoing and increasing cyber threats, which are especially concerning; microgrids can isolate the potential harm.
- Microgridding supports our necessary transition to a clean energy economy. **We recommend that the bill be amended to necessarily provide for the following in the Roadmap:**
 - The capability to "island" or isolate microgrids from neighboring microgrids and larger grids. This is very important for overall resilience and reliability.
 - Maximum deployment of renewable energy. It's crucial that microgrid design rely on renewable energy to the fullest extent possible. Backup systems can be designed to use renewables first, and only use fossil-fuel-generated power as a last resort. This protocol will hasten our overall transition to clean energy.

Thanks again. Great bill!

Vince Calvano and Steve Szabo
CRES Policy Committee



March 17, 2022

Mr. Alex Valdez, Chair
House Energy and Environment Committee
Colorado General Assembly
200 E. Colfax Avenue
Denver, CO 80203

RE: HB22-1249 Electric Grid Resilience And Reliability Roadmap

Dear Chairman Valdez and Members of the Committee:

I am writing on behalf of AIA Colorado, the Colorado chapter of the American Institute of Architects, in support of HB22-1249 to develop a roadmap for improving electric grids in the state. This bill aligns with the AIA's commitments for a carbon neutral future and increasing community resilience.

In particular, the focus of this bill on microgrids is relevant to the architecture profession. Emergency and backup power systems are common for buildings deemed to be critical in a power outage, but these are currently implemented on a building-by-building basis. As renewable energy sources and battery storage become more common, these will affect design decisions for both new and existing buildings. Understanding a community's needs will also help architects make informed decisions when microgrid-based emergency power systems are available beyond the diesel generators we most commonly install today. This roadmap will also help communities and building owners start conversations with architects and engineers when new backup power options become available to install.

The roadmap approach of HB22-1249 is the correct next step in better understanding what microgrid and resiliency opportunities exist in Colorado and our many different communities across the state. Having such a roadmap will inform how to plan new local electric grid infrastructure and how buildings will be best leverage new technologies we know are on the horizon. We ask the committee to vote in support of this bill.

Sincerely,

A handwritten signature in black ink, appearing to read "Nikolaus Remus".

Nikolaus Remus, AIA
AIA Colorado Advocacy Engagement Director



March 15, 2022

House Energy & Environment Committee
Colorado General Assembly
200 E. Colfax Avenue
Denver, CO 80203

Re: HB22-1249 Roadmap for electric grids in the state

Dear Members of the House Energy & Environment Committee:

My name is Ann Sutton, living in Westminster CO. This testimony represents the position of the League of Women Voters of Colorado (LWVCO) in Support of the bill to produce a grid resilience and reliability Roadmap for our state.

The Roadmap priorities are clearly aimed at development and deployment of microgrids for the goals of adding resilience and reliability to the electric grid. It will identify critical infrastructure needs for serving our communities including emergency services, health-care services, public works, communication.

The League supports predominant reliance on renewable energy resources and we support action by appropriate levels of government to encourage the use of renewable resources and energy conservation through funding for research and development.

The Roadmap may include recommendations to the legislature for a proposed statutory definition of "microgrid."

The Fiscal Note of February 23 describes a microgrid as "groups of interconnected electric loads and distributed energy resources with clearly defined electrical boundaries that can be connected to or disconnected from the electric grid. The microgrid functions as a single, controllable entity with respect to the electric grid." The National Renewable Energy Laboratories note that "Advanced microgrids enable local power generation assets—including traditional generators, renewables, and storage—to keep the local grid running even when the larger grid experiences interruptions or, for remote areas, where there is no connection to the larger grid. " These descriptions do not place restrictions on the distributed energy resources that can be included in microgrids. We encourage the sponsors to make renewable energy a top priority when evaluating the resources for microgrids that might be installed.

The LWVCO is committed to justice and inclusion for vulnerable groups including residents of disproportionately impacted communities. In the bill, communities at highest risk from power outages or interruptions will be identified and engaged in the decision-making process.

We thank the sponsors for bringing this timely initiative to the legislature and thank the Committee for its careful consideration.

Sincerely,

A handwritten signature in blue ink that reads "Ann Sutton". The signature is written in a cursive style and is set against a light blue rectangular background.

Ann Sutton Volunteer Lobbyist
League of Women Voters of Colorado
1410 Grant Street, Suite B-204
Denver, CO 80203