Testimony of Kay Aikin
In Support of LD 2113
Before the Joint Standing Committee on Energy, Utilities and Technology

Senator Lawrence, Representative Sachs, and members of the Committee:

My name is Kay Aikin. I am the CEO of Dynamic Grid, a Maine-based energy systems company. I serve nationally on the U.S. Department of Energy–sponsored GridWise Architecture Council, a leadership body focused on grid architecture and system transformation, and as a Senior Advisor to an international coalition advancing building and energy system transformation through the United Nations Environmental Programme. I submit this testimony in strong support of LD 2113.

At its core, LD 2113 is about **systems thinking** and the governance of **complex infrastructure systems**.

The electric grid is no longer a linear system in which load forecasts drive infrastructure, expanded infrastructure produces reliability, and rates are simply to recover costs. Today's grid is a **complex, adaptive system** shaped by interacting forces: electrification, distributed energy resources, digital controls, customer behavior, climate risk, regulatory incentives, and long-lived capital investment.

In complex systems, outcomes are driven less by individual projects than by **how decisions are sequenced, coordinated, and governed over time**.

Right now, Maine does not fully plan or govern the electric grid as such a system.

- We have a State Energy Plan.
- We have integrated grid planning requirements. We have a Non-Wires Alternatives process that is fragmented and structurally weak.
- And we have utility rate cases that commit ratepayers to billions of dollars of infrastructure with operating lives measured in decades.

These processes are not aligned across all of the different stakeholders both governmental, advocacy, customers and utilities. As a result, Maine frequently decides ***what to build*** before clearly defining ***what problem the system is trying to solve***. Once capital investments are approved, ratepayers carry the financial consequences regardless of whether lower-cost, more flexible, or more resilient alternatives were available.

LD 2113 addresses this structural failure directly.

- It does not mandate technologies.
- It does not pre-approve spending.
- And it does not weaken reliability or resilience.

Instead, it establishes a clear principle of good system governance: **long-range strategy must precede and inform investment decisions**, not follow them. We don't build a home by sending out the carpenter to a raw piece of land, a plan is developed that is followed, and if a change needs to be made, the stakeholders confer and make an informed change.

Why Systems Thinking Matters in Grid Planning

In my work supporting governments and regulators across the United States and internationally, a consistent pattern emerges: when regulation and grid planning focuses primarily on near-term infrastructure needs, systems become more expensive, less flexible, and harder to adapt to change.

By contrast, leading jurisdictions are shifting to **future-oriented planning** approaches. These approaches begin by defining desired long-term outcomes, affordability, reliability, resilience, equity, and decarbonization and then work backward to identify the most cost-effective pathways to reach those outcomes. This is sometimes described as “building back from the future.”

A critical tool in this process is **energy system mapping**: explicitly identifying how infrastructure, operations, markets, regulatory incentives, institutional roles, and cost recovery interact. System mapping makes visible what traditional siloed planning obscures; misaligned incentives, hidden cost drivers, and opportunities to meet system needs without unnecessary capital expansion.

This is not abstract theory. It is a practical method increasingly used to reduce long-term system costs while improving reliability and resilience.

Learning from Other Jurisdictions

Internationally, Australia’s success in integrating high levels of distributed energy did not come from technology mandates. It came from treating the grid as a system, aligning long-term planning with regulatory decision-making, and valuing flexibility and customer participation as system resources.

Within the United States, regulatory reform efforts in several states have shown that utilities respond to new governance signals. When long-range plans are formally adopted, performance expectations are clear, and affordability is embedded in planning, utilities innovate. When plans are advisory and disconnected from rate cases, capital programs tend to expand by default.

The lesson is consistent: **structure shapes behavior**. LD 2113 is about correcting the structure.

What LD 2113 Enables

LD 2113 ensures that Maine’s long-range grid strategy is:

- Explicitly tied to the State Energy Plan;
- Developed with stakeholder and expert input;
- Formally adopted and used as a reference point in future regulatory proceedings; and
- Supported by performance-based mechanisms that reward outcomes Maine cares about.

It does not substitute judgment for analysis, nor does it constrain the Public Utility Commission's authority. Instead, it improves the quality of the information and strategic context within which decisions are made.

Conclusion

Without better alignment between planning and investment, Maine risks locking in unnecessary costs and limiting future options—precisely at a moment when flexibility and adaptability are most valuable.

LD 2113 does not change who builds the grid. It changes how Maine decides what should be built, when it should be built, and why.

By embedding systems thinking into grid governance, LD 2113 helps ensure that reliability, affordability, and resilience are delivered together—not traded off against one another.

For these reasons, I strongly urge the Committee to support LD 2113.

Respectfully submitted,
Kay Aikin