Testimony before the JTC-EUT on
LD 1309: An Act to Increase the Membership of the Public Utilities Commission to 5 Members

In-person oral testimony given April 8, 2025.
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Madam Chair – Representative Sachs, Senator Lawrence, and Members of the Joint Standing Committee on Energy, Utility, and Technology,

I am Peter Fitzgerald, PE*, Director of Northeast Interconnections at INS Engineering, and I am testifying neither for, nor against LD 1309. (*PE means professional engineer)

With the exception of the final two paragraphs, my testimony is identical to what I submitted for LD 1270. It is included here for record purposes.

I grew up and currently live in Bucksport, ME; earned an associates at EMCC in Bangor; and completed my bachelor's in Electrical Engineering Technology at U-Maine Orono. For over 8 years, I designed protection and control systems for electrical substations with a focus on brownfields, because they had more unique challenges than new builds. After that I focused on generator grid interconnections and system planning for over 5 years. I worked primarily on projects in Maine and secondarily in other New England states.

At this time, I volunteer in the following roles. Please note that I am not speaking on behalf of these organizations.

- Board of Directors of the Maine Society of Professional Engineers (MSPE).
- Serve on the Resilience Committee for the Town of Bucksport .
- Coach/teach the RSU 25 (Bucksport) Middle School robotics program.
- Work with the DOE-backed GridWise Architectural Council (GWAC)
- Key contributor in a small GWAC working group writing a whitepaper on ways for states to make their grid planning more efficient. Most whitepapers don't contain information that is actionable in the immediate or short term, because they are either high-level or deeply technical. When our paper is completed later this year, it will provide specific, (relatively) simple, technical solutions that can be implemented in small steps. Our highest priority is our paper is useful and not overwhelming to those we are trying to help.

A lot has shifted in our state and on our grid over the past 5 years. The world is different than it was. Change is hard, and we naturally resist it, because stepping into the unknown is

uncomfortable. If we don't press forward with rigor, we will fall behind - standing still is no longer an option.

"The way we have done things" often feels like the safest option. It feels positive, but is it? Without a context supporting the statement, "the way we have done things" is a statement about the past that is logically neutral. For instance, what would you say if I asked this question, "I typically drive 45mph; is that a good speed?" There isn't enough context for you to answer my question. What road am I talking about? Is the speed limit 25mph or 45mph? What are the weather conditions? Similarly, "the way he have done things" could be good, bad, or largely irrelevant to what we are facing on the grid now.

There are no "easy" or "safe" paths forward in electrical system planning today. If something feels comfortable, we need to take a step back and figure out what we are missing. Questions should be asked about all options, including the status quo. The choices we make in the weeks ahead of us will shape the future. Do you understand how?

I have been involved in a lot of renewable energy interconnections in Maine including onshore wind, solar, offshore wind (OSW), batteries, hydro, and hybrid systems using two or more sources. I lead the ISO-NE interconnection application for the New England Aqua Ventus (NEAV) floating OSW pilot project. If it were proceeding, we would install an 11MW OSW turbine floating on a semi-submersible concrete hull, developed by the University of Maine. I lead the application for the Volturnus+ project that is similar, but a smaller scale version. It should be in the water this year.

Maine has a wealth of renewable energy resources, and they are in high demand across New England. It is becoming an even higher demand as we continue to have disruptions in energy across the world. ISO-NE is increasingly concerned about their ability to supply all of the electricity needed, due to delays in both transmission upgrades and generator interconnection, which are beyond their control. The best way we can help is to accept more responsibility as states. ISO-NE is focused on the overall reliability of the interstate power grid in New England. They do not do not perform cost/benefit analysis any anything that is outside of their jurisdiction and specialized skillset. The states are responsible for things such as: clean air and other social benefits, distribution grid planning and reliability, identifying scopes for Longer-Term Transmission Planning, and ensuring that the ratepayers of Maine are served by utilities in a just, reasonable, and equitable manner.

One of the factors that ISO-NE looks at in their system planning is the Expected Unserved Energy (EUE). This is the amount of energy that is loads are projected to need, that goes beyond what ISO-NE is projected to have available. ISO-NE doesn't build or control generators, they set the market prices that lead existing generators to come online and new generators to

interconnect. ISO-NE identifies transmission upgrades that are needed to decrease the EUE to an acceptable level that balances costs and reliability. When Maine is planning for the needs of their future system, this must be taken into account as well. A contract with a solar generator could be in the range of 3 to 5 cents/kWHr, which is equal to $30 to $50/MWHr. A contract with a battery generator is more expensive and it may be $100/MWHr, but only for 2-4 hours per day. What cost of energy does ISO-NE use when calculating the reliability impact of EUE? $3,500/MWHr. The cost of not being able to supply 1 MWHr is much greater than the cost of supplying it. Without proper state-level system planning for the generation that is needed, ISO-NE is forced to use the limited tools within their Tariff of jurisdiction to ensure that energy can be served to loads.

The following testimony is unique to LD 1309; it was not included for LD 1270.

Should the MPUC be increased from 3 to 5 Commissioners? Based on what I have described above, I can say with confidence that the MPUC needs more staff. I don't know enough about the internal structure and daily workings of the MPUC to recommend that they be Commissioners, support staff, or both. As the MPUC has already testified, they are stretched in their ability to cover the work they are responsible for. It is the responsibility of the MPUC to protect the people of Maine, in accordance with their governing documents. It is the responsibility of the Legislature to equip the MPUC with the resources they need to do their work. I am not saying that funding or staffing should be increased without any thought or discussion. Instead, I say; I am convinced that through open discussion and evaluation others will also reach the same conclusion.

The MPUC cannot fully protect the people of Maine without the proper fiduciary and staffing resources. Their responsibilities will continue to increase as the people of Maine drive innovation. This will cost more in the MPUC line item of the budget, but the people of Maine are worth protecting. The net benefit to our people will be positive, because the MPUC is essential to keep utility rate increases in check.

Thank you,

Peter Fitzgerald, P.E.
Principal Engineer | Director of Northeast Interconnections
INS Engineering LLC
Bucksport, Maine