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- To: Joint Standing Committee on Energy, Utilities and Technology
- From: David von Seggern, Sierra Club Maine
- Date: April 3, 2025
- Re: Testimony, neither for nor against, on LD 912, *An Act to Address the Use of Electricity by Data Centers*

Senator Lawrence, Representative Sachs, and members of the Energy, Utilities, and Technology Joint Committee:

I am David von Seggern of Westbrook, Maine and am testifying in regard to LD 912, "An Act to Address the Use of Electricity by Data Centers" on behalf of the Sierra Club of Maine, representing over 22,000 supporters and members statewide. I am co-lead of their Clean Energy Team. Founded in 1892, Sierra Club is one of our nation's oldest and largest environmental organizations. We support the intent of the bill, along with the amendment proposed by the bill's sponsor; but we recommend that the Committee adopt a stricter amendment which we describe below and then report their recommendation that the bill pass as amended.

LD 912 addresses one of the growing problems in our energy transition and is judiciously put forth for consideration in this legislative session. Data centers for our digital age are multiplying at a growing rate and challenging our electrical grids in the US to provide power to all users. LD 912 would limit the offtake of electrical power from the grid to data centers in Maine. This type of restriction on a particular business sector is, insofar as we know, the first of its kind in Maine.

The intent of LD 912 is appropriate to the times, and Sierra Club Maine supports this intent. The proposed legislation is in line with a movement called Bring-Your-Own-Power¹ (BYOP) within the data-center industry itself. However, we believe LD 912 does not go far enough. We argue for a nearly complete prohibition of offtake of electrical power from the grid in Maine by data and computing centers. This would require these facilities to develop their own renewable energy. "Renewable

https://www.datacenterfrontier.com/energy/article/55277929/the-power-play-how-data-centers-and-utilities -are-reinventing-energy-strategies

¹ Data Center Frontier, "The Power Play: How Data Centers and Utilities Are Reinventing Energy Strategies", 2025.

energy" is a term that for these purposes should not include large-medium hydroelectric power– that is from dams of any significant height – or nuclear energy or large-scale commercial biomass, all of which are opposed by the Sierra Club.² This would take the form of power supplies *behind the meter* (BTM). BTM refers to power supplied by the user of that power as opposed to using power from the utility-maintained grid.³ Our reasons are given here below.

Data centers in the US accounted for approximately 2.5% of the overall US power load in 2023.⁴ Rapid growth of up to 7% annually is predicted for this energy-consumption sector. Some analysts believe this may be a conservative estimate, given the rapid deployment of Artificial Intelligence (AI) capabilities in the US. This growth is of a nature that reasonable constraints should be put around the need for electrical supply to operate data and computing centers, lest the electrical grids not be able to supply the modest increases in demand due to growth of established home, business, and industry power supply needs.

Due to the relatively high cost of grid electricity in Maine, we don't anticipate a rush of data-center installations in Maine that would use grid-supplied electricity. Currently, Maine is reported to have only 3 data centers.⁵ Nonetheless, LD 912 begins to set limits if such facilities are needed in the future and draws attention to the fact that data centers are potentially an increasingly large offtaker of commercial electricity. We simply call for amending LD 912 such that data centers cannot offtake but a small quantity of the Maine electrical supply and are essentially forced to develop their own BTM supply.

Such an amendment should be acceptable to data center developers. Most of these entities are large corporations seeking to increase their capacity to run AI and similar applications with extensive databases. They normally have the cash on hand or the borrowing credentials to finance the extra cost of the power generation needed BTM. A properly designed generation facility using the BYOP concept, say in the form of solar PV plus battery storage, could supply a very high proportion of the demand of a data and computing center. Within the mix of all the other demands on the power grid, the excess needs of such centers on the electrical grid would then amount to only a very few percent of the overall annual Maine grid supply.

² Sierra Club, "Energy Resources Policy",

https://www.sierraclub.org/sites/default/files/Energy-Resources-policy_0.pdf

³ Data Center Frontier, ibid.

⁴ Grid Strategies, "The Era of Flat Power Demand is Over", 2023. <u>https://gridstrategiesllc.com/wp-content/uploads/2023/12/National-Load-Growth-Report-2023.pdf</u>

⁵ Aterio, "Maine Data Center Inventory", 2025. <u>https://www.aterio.io/insights/us-data-centers/me</u>

Maine worked hard in recent years to decarbonize our electrical grid, and it is continuing to add solar and wind power at an accelerating pace to the supply side.⁶ We certainly don't wish to have a situation where increased electrical needs of data and computing centers outpace our ability to install new renewable energy generation. This could revert us to a situation where we fall back on non-renewable sources of grid power that emit global-warming substances, such as CO2, CH4, and black soot, throughout the life cycle of their use, from extraction to burning.

LD912 introduces an important concept into our energy future — a limitation on the supply of electricity to a certain industry. We support such a limitation for data centers. Firstly, the benefits of all the new computation implied by AI algorithms and large database mining have yet to be widely demonstrated. Secondly, we believe that we should not encourage unlimited usage of power in society because supplying that power at ever increasing rates requires more infrastructure that can be costly to ratepayers, intrusive to our communities, and damaging to our environment.

In conclusion, we support the intent of LD912 but strongly suggest that it be amended to restrict the power supply for data centers to be almost wholly BTM renewable energy as defined above. Each data center should be held responsible to report their overall electrical consumption annually and their BTM production. The remainder is what is taken from the grid. A penalty should be imposed for exceeding some fractional limit on grid versus BTM power, and this penalty could be invested in grid upgrades which support the needs of general ratepayers.

Sincerely,

David von Seggern

⁶ Governor's Energy Office, "Maine Pathways to 2040: Analysis and Insights", 2025. <u>https://www.maine.gov/energy/sites/maine.gov.energy/files/2025-01/Maine%20Pathways%20to%202040</u> <u>%20Analysis%20and%20Insights.pdf</u>