Testimony: LD 1634 Committee on Energy, Utilities and Technology David Vail, Brunswick February 28, 2022

Senator Lawrence, Representative Berry and Members of the Energy Utilities and Technology Committee. My name is David Vail, a retired professor of economics at Bowdoin College. I write in support of LD 1634, "An Act to Create the Maine Generation Authority." As I understand it, the bill, which was held over from the previous session, will be considered again by the Committee in the coming weeks.

The state's visionary "Maine Won't Wait" energy strategy sets out extremely ambitious and much needed goals: 80 per cent of the state's total energy from renewable sources by 2030 and 100 per cent by 2050. Renewable electricity generation will have to ratchet up very rapidly to meet the 2030 target and very thoroughly to achieve the 2050 goal. Transformation of electrical power will require a dramatic shift from the current system, where costs are dominated by "imported" fossil fuels, to one where the cost structure is dominated by the capital costs of additional solar, wind, tidal and storage capacity. In brief, "Maine Won't Wait" requires an implementation strategy that simultaneously accelerates the pace and reduces the cost of investing in renewables and storage. The Maine Generation Authority would be a landmark institutional innovation facilitating those twin objectives.

Plausible estimates of the total investment required to reach 100 per cent renewable electricity generation — while also expanding supply to electrify the economy — run to tens of billions of dollars. The cumulative cost will be far greater, and the burden on Maine rate payers much heavier, to the extent that additional capacity is privately financed at market interest rates and with required shareholder returns. The Maine Generation Authority would access capital at a far lower cost by issuing tax exempt revenue bonds, backed by the revenue stream from electricity sales.

To my mind, it is equally important that the MGA would have the ability to target its investments to the most effective mix of technologies and locations, rather than relying almost entirely on market incentives and private investor decisions. Two examples will illustrate. The Authority would be able to plan and target low cost capital, first, to battery systems and other energy storage technologies, offsetting the intermittency of wind and solar generation; and,

second, to large scale off-shore wind arrays, which will account for a big share of renewable energy investment heading toward mid-century. In this sense, the MGA's mobilization of low cost capital and its strategic investment targeting would fill gaps in the private, community and other renewable energy investments that are already taking off and projected to grow further.

The Maine Turnpike Authority has been cited as a successful example of this approach, combining quasi-public investment decisions and operational management with low interest borrowing. LD 1634 paves the way for an analogous approach to fully decarbonize Maine's power system and electrify Maine's economy over the coming three decades. I am convinced that only such an innovative institutional design can get us "from here to there" within the required time frame and at a tolerable cost to Maine's business, residential and municipal rate payers. I urge the Committee to bring LD 1634 to the full legislature.