

April 4, 2023
Senator Mark Lawrence, Chair
Representative Stanley Paige Zeigler, Chair
Committee on Energy, Utilities, and Technology
100 State House Station
Augusta, Maine 04333

Re: Testimony on LD 1232, "An Act to Increase Adoption of Solar Power in Maine"

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

ReVision Energy wishes to submit written testimony in support of LD 1232. Founded right here in Maine in 2003, ReVision Energy is a local, employee owned, certified B Corporation with over 385 employees across our five branches in New England, with 220 staff in Maine at our Montville and South Portland locations. Our mission is to lead our community in solving the environmental problems caused by fossil fuels while alleviating social injustice. Our vision is to see New England as thriving place where our children, grandchildren, and future generations can enjoy a clean environment and just society. In 2022 alone, we installed 10,000 kilowatts of residential solar and nearly 24 megawatts of commercial solar.

We believe Section 1 of this bill, which focuses on solar-ready buildings, to be an effective step forward in advancing the state's climate goals. We support this provision with the current square footage recommendation of 25,000 square feet, however, we urge the committee to consider the inclusion of smaller buildings by reducing that square footage threshold, and to even consider requiring all newly constructed buildings to be solar-ready. We recommend this consideration for the following reasons:

- First, our state—and this body—has codified ambitious climate targets with a goal of achieving net zero carbon emissions by 2045. To meet these, we will need to build as much clean energy generation as we possibly can, and quite frankly, every new building should be powered by clean energy. We cannot afford to be adding new inputs of fossil fuel powered buildings into these equations.
- Second, while eliminating a square footage threshold may appear aggressive, ensuring
 rooftops are solar-ready is a thoughtful solution to address concerns regarding land use
 pressure that are often associated with larger ground mounted solar. Making all
 buildings solar-ready is an opportunity to site as much solar as we can directly on the
 built environment, while avoiding potentially costly retrofitting down the line. A hundred
 years ago, we never would construct a new building without a chimney, right? Let's set
 our built environment up for the essential systems it will need the years to come.
- Third, this legislation would rarely, if ever, increase construction costs. The assumption could be made that a rooftop would need to meet additional specs to be solar-ready and thus material and construction costs would increase, however that is largely untrue as the weight of solar panels is surprisingly low. On a pitched roof where panels are mechanically attached, the uniform dead load of panels is typically less than three pounds per square foot (psf) (about the weight of a layer of asphalt shingles), and on a flat roof where an array is ballasted, the weight would be typically be around five psf. For comparison, the snow load we must design for here in Maine is typically 50-90 psf, and therefore it would be very rare that a solar design would add structural requirements and



- any corresponding costs. Ultimately, the additionality would be in renderings—completing drawings to outline reserved array area on a roof plan.
- Finally, large commercial construction (buildings over 25,000 square feet) makes up a relatively small part of new construction overall in our state (and thus a small fraction of energy use, too), so to ensure this legislation meets its intent and is assuredly impactful, we suggest applying the solar-ready requirement to all buildings.

Lastly, when it comes to adding language around specific requirements for interconnection, we recommend looking to the International Energy Conservation Code (IECC) for sample language. Appendix CB does include language regarding making buildings electrically interconnection-ready (for example, within CB 103.6, CB 103.8).

Section 2 of the proposed bill addresses an important—and often overlooked—challenge for the clean energy transition: small generator interconnection. While we appreciate the Sponsor's work in calling attention to this issue, we are not convinced that the proposed change between level 1 and level 2 interconnections meaningfully addresses the issues being faced by small customers with respect to interconnection today.

As practitioners on the ground, project interconnection is no longer a theoretical problem, it is a reality for our business and our customers and a critical obstacle to achieving the State's clean energy goals. We support the effort to make this process easier for all solar customers, large and small.

The exorbitant cost and unreasonable project delays associated with utility interconnection for large scale (2-5MW) distributed generation solar projects have received a fair bit of attention in the press, at the Legislature and at the Maine Public Utilities Commission (PUC) in the last several years. Unfortunately, we're now witnessing the same issues impacting individual homeowners and small businesses owners here in Maine who are trying to make an investment in their own renewable energy system to offset the volatility and rising costs of fossil fuel energy sources. Right now, ReVision Energy has several dozen customers, both residential and small commercial, who are being denied the right to interconnect a solar system because the utilities refuse to follow the PUC's Chapter 324 interconnection rules. Unlike large project developers for whom utility barriers may be just an unfortunate cost of doing business, these individual homeowners and small businesses cannot afford to hire lawyers or lobbyists to advocate on their behalf on issues that are highly technical and complex. Dispute resolution alone can cost nearly as much as a small system itself. The structural information and resource asymmetry between individual customers and monopoly utilities, coupled with a lack of bandwidth and specialization at the PUC makes it nearly impossible for individual customers—Mainers across the state—to find fair relief. The utility interconnection system is clearly badly broken, inequitable and needs both evaluation and improvement.

Fortunately, as you know, the PUC commissioned a report from the Interstate Renewable Energy Council (IREC) regarding small project interconnection challenges as a result of your passage of LD 1100, 'An Act To Support the Continued Access to Solar Energy and Battery Storage by Maine Homes and Businesses' in 2021. LD 1100, which prescribed this study, included a provision (Sec. 1. 35-A MRSA Subsection 3474, Subsection 3, Section 2) mandating that 'within six months of the effective date of this Act, the commission shall conduct a proceeding and issue an order relating to the near-term reforms identified in the evaluation conducted under this section," and even more, "Within one year of the effective date of this Act, the commission shall determine and adopt cost allocation methods for interconnection studies and upgrades that ensure on-site solar energy generators do not bear prohibitive costs...." LD



1100 was signed into law by the governor on June 17, 2021, however, to date, nearly two years later, neither time-bound provision has taken place.

Rather than amending one part of one screen within the PUC's Chapter 324 rules, we ask this committee to revisit the thoughtful intentions you set forth and ultimately passed into law in LD 1100 and build upon them to ensure action. We strongly support the two post-study requirements outlined above and seek both rule modernization (which has already been identified by IREC) and enforcement mechanisms to ensure all customers are receiving the same screening processes.

Thank you for your consideration of our perspective. We welcome further discussion, and we are available to address any questions you may have.

Sincerely,

Fortunat Mueller President, Co-Founder

ReVision Energy 207.221.6342