Supplement # 1 Testimony on LD 1347

An Act to Eliminate the Current Net Energy Billing Policy in Maine

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To the Joint Standing Committee on Energy, Utilities and Technology

April 14, 2023

Senator Lawrence, Representative Zeigler, and other members of the Joint Standing Committee on Energy, Utilities and Technology: my name is Steve Weems, a Board Member of the Solar Energy Association of Maine; also founder of Dirigo Community Solar Group, a nonprofit association of 14 small, member-owned community solar farms. This is additional factual material (and related conclusions) designed to cut through some of the hyperbole heard at the public hearing on LD 1347. We apologize if this seems too basic.

Accounting for the Benefits and Costs of Distributed Energy Resources (DER)

There are two basic, distinct types of analysis. Both are important to consider for a full and accurate understanding of the impact of distributed energy resources (DER), which is a category that includes but is not limited to net energy billing (NEB).

1. Benefit-Cost Analysis. This is a comprehensive analysis that looks at all the benefits and costs of a distributed energy resource (DER), including utility system and societal (general population) benefits and costs. The results typically are expressed in a Benefit/Cost Ratio (BCR). Benefits considered in the "Maine Test" by the economic consultants to the Governor's Energy Office (GEO) for the DG Stakeholder Group work include: (1) avoided capacity costs; (2) avoided environmental and RPS compliance costs; (3) avoided transmission costs, (4) avoided distribution costs; and (5) avoided greenhouse gas (GHG) and NOx emissions (Source: ***Distributed Generation Successor Program in Maine***, *An Economic Assessment*, January 5, 2023, pages 14-19.)
2. Rate Impact Analysis. The rate, bill, and participation analyses encompass only the benefits and costs of DER that affect the utility bills of both participant and nonparticipant ratepayers. This is a subset of the factors considered in an overall benefit-cost analysis, which exclude societal benefits, because these are not reflected in utility bills, even though they benefit participant and nonparticipant ratepayers equally. (Source: same as above, pages 22-23.)

The foregoing was taken from the work of the economic consultants Synapse Energy Economics (Synapse) and Sustainable Energy Advantage (SEA) included in the Final Report of the Distributed Generation Stakeholder Group, dated January 6, 2023, as submitted to the EUT Committee. This is the latest and most comprehensive analysis of the net benefits and costs, and ratepayer impact, of distributed energy resources. A few important statements that can be made as a result are:

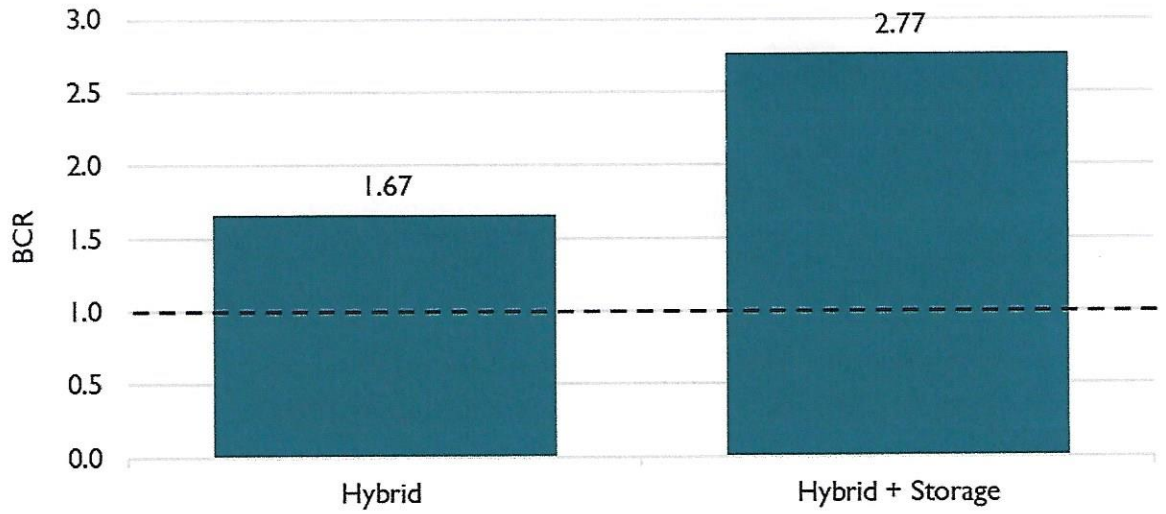
- This work was oriented toward the charge of the GEO and the DG Stakeholder Group to come up with a successor DER program, so virtually all the analysis relates to future program options. This corroborates the practicality and importance of such analysis.
- The limited analysis included about the existing NEB program (currently the only active DG program) did not take into account the limitation on the C&I Tariff enacted last year.
- Calculations about lost or foregone projected utility revenues are misleading, particularly if they are represented as negative ratepayer impact, because typically they are based on what might happen (undoubtedly an overstatement to some degree, for multiple reasons), and do not take into account the benefits of DER, including both avoided costs of the utilities (which reduce ratepayer impact) and benefits to all Maine people, including all ratepayers, which are not reflected in utility bills.
- It definitely is possible to quantify benefits, costs, and ratepayer impacts, despite the difficulty assigning a value to things like clean air and reduced climate change, especially when comparing the merits of future options.
- It appears eminently possible to structure a successor program that benefits all Maine people, which either reduces the rates paid by all investor-owned utility ratepayers or minimizes any net negative impact of future DER development. (See attached chart of the potential beneficial impact on ratepayers of the recommendation of the DG Stakeholder Group, as well as all Maine people.) This is included as an illustration only.

CMP has a three-year rate plan pending at the PUC, to become effective in 2023, with an estimated half of the potential increase allocated to "energy policy objectives of the State of Maine." (This includes but is not limited to NEB.) According to the company, this half would result in an increase in its average residential customer electric bill of $2.32 in 2023, $1.39 in 2024, and $1.18 in 2025. It seems unlikely that CMP under-estimated its costs, nor does this reflect what the PUC will approve. These figures belie the scary future cost figures being espoused by certain people. The CMP figures do not indicate a crisis, and support the value of having a smooth transition in adopting a successor program that will minimize future impacts.

Attachment

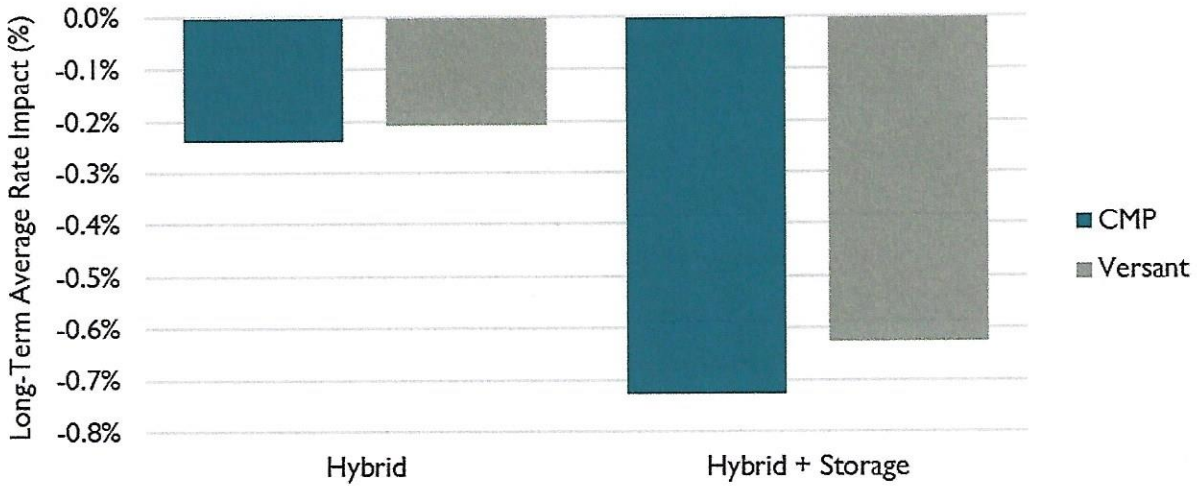
Consistent with the figure above, the increase in costs to deploy storage are sufficiently outweighed by the increase in benefits, demonstrated by the BCR's for the two options shown below.

Figure 18. Benefit Cost Ratios of Hybrid and Hybrid + Storage Case



The same pattern can be seen for long-term rate and bill impacts. The Hybrid + Storage Case results in greater rate reductions than the Hybrid case due to the increased capacity benefits.

Figure 19: Long-term average rate impact for Hybrid and Hybrid + Storage



Similarly, the bill impacts for both non-participants and participants are also minimal.

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LD 1347

Please find supplemental testimony from the Solar Energy Association of Maine and Dirigo Community Solar Group as submitted on Friday,
april 14.