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TESTIMONY BEFORE THE ENERGY, UTILITIES AND TECHNOLOGY COMMITTEE
"AN ACT TO REGARDING SOLAR POWER FOR FARMS AND BUSINESSES"
L.D. 1504
GOVERNOR'S ENERGY OFFICE

May 10, 2017

Senator Woodsome, Representative Berry, and Members of the Joint Standing Committee on Energy, Utilities and Technology: My name is Angela Monroe and I am the Acting Director of the Governor's Energy Office.

I appreciate the opportunity to testify today regarding L.D. 1504, "An Act Regarding Solar Power for Farms and Businesses." As with the prior solar bills discussed this session (L.D. 1444 and L.D. 1373), the Governor's Energy Office opposes this bill based both on general principles, as well as on specific provisions of the bill.

As this Committee has heard many times previously, in this legislative sessions and prior sessions, the Governor does not support the subsidies provided through Net Energy Billing (NEB) and does not agree with the premise that requiring significant subsidies to promote renewables is necessary, reasonable, or a prudent use of Maine's limited financial resources. As this Office has testified several times this

session, contrary to an oft-repeated misconception, Maine does not lag New England in renewable electricity generation. Maine is, in fact, a leader in this respect. As shown in the table below, nearly 70 percent of Maine's electricity generation comes from renewable fuel sources. This is in contrast to the New England average that is less than 20 percent.

2015 GENERATION

	NE Total	ME
Coal	4%	1%
Pumped Storage	0%	0%
Hydroelectric Conventional	6%	29%
Natural Gas	49%	25%
Nuclear	29%	0%
Other	2%	3%
Petroleum	2%	5%
Solar Thermal and Photovoltaic	0%	0%
Biomass & Wood/Wood Derived Fuels	7%	27%
Wind	2%	11%
TOTAL	100%	100%
Total % Renewable	16%	67%

Source: US Energy Information Administration

Further, Maine's contribution is well beyond its "share" of the New England load. Maine's electricity consumption accounts for only about 10% of the electricity in New England, but its renewable generation represents nearly half of all the renewable electricity generated in New England.

Renewable Generation By State in New England	(MWh)	
Maine	**7,809,182**	**46%**
New Hampshire	3,318,049	19%
Massachusetts	2,660,088	16%
Vermont	1,977,498	12%
Connecticut	1,107,374	6%
Rhode Island	238,804	1%
TOTAL	17,110,995	

Electricity Consumption By State in New England	(MWh)	
Massachusetts	54,621,088	45%
Connecticut	29,476,155	25%
Maine	**11,888,168**	**10%**
New Hampshire	10,999,149	9%
Rhode Island	7,664,718	6%
Vermont	5,521,109	5%
	120,170,387	

Source: US Energy Information Administration

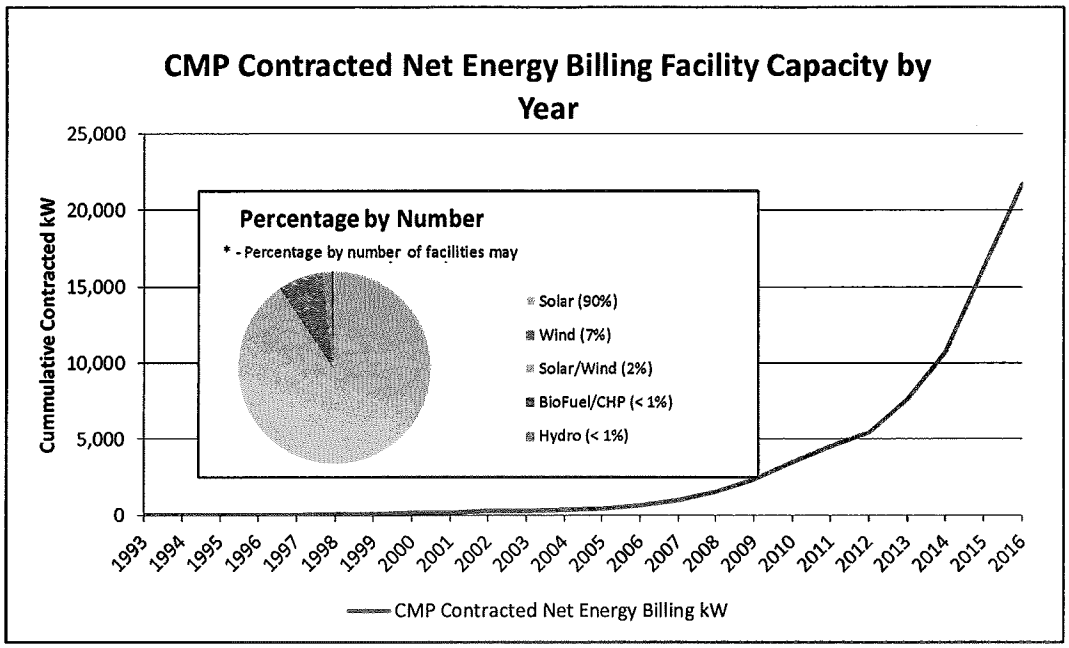
In addition, Maine's electricity is very clean. Less than 10% of all of the CO_2 produced in Maine is related to its electricity sector.[1] Maine's transportation sector, on the other hand, is responsible for approximately 54% of the CO_2 emissions in Maine. If reducing CO_2 is a priority, Maine would be better served to look for savings from the transportation, rather than the electricity, sector. Trying to make our already-clean electricity even cleaner is not a good use of Maine's limited financial resources.

Further, this bill seeks to cement in statute Net Energy Billing (NEB) arrangements -- an antiquated billing practice, born as an alternative to expensive metering that now burdens other ratepayers who by forcing them to pay for their neighbor's NEB system. The NEB structure allows customers who can afford to install self-generation, to rely on the grid to provide their electricity at times when their generation is not producing enough electricity to serve their needs. Under NEB, these customers are, in essence, allowed to use the poles, wires, and electricity market like a battery to store their excess power for use at a later time. Because they do not pay for this use of the grid, other non-NEB customers (including those that cannot afford to install NEB equipment) are left to pay the costs of operating and maintaining the grid.

[1] Maine Department of Environmental Protection, "Sixth Biennial Report on Progress toward Greenhouse Gas Reduction Goals" January, 2016.

The bill seeks to ensure continuation of this unfair cost shifting in perpetuity by requiring the Commission to adopt new NEB rules that are "substantively equivalent to the rules in effect on January 1, 2017," except that the rules must be consistent with this bill's new provision for 35-A M.R.S §3209-A which prohibits the Commission from limiting the number of shares of a community or shared NEB project and specifies that NEB means a "billing and metering practice under which a customer is billed on the basis of net energy over the billing period." It is unclear whether this language is intended to prohibit the step-down netting approach provided in the Commission's new rule that would reduce, over time, the subsidies paid by other customers.

As we have noted in our previous testimony, NEB and the associated subsidies, are already increasing at an alarming rate. As shown below, in 2016, the installed capacity of CMP's NEB customers was more than 4 times the installed capacity of 2012. If this rate of increase continues and current market rates hold steady, by 2020, we will have over 80 MW of NEB installations that are compensated at a rate of roughly 3 to 5 times the market rate of power.



CMP Installed NEB Capacity (kW)					
Year	2012	2013	2014	2015	2016
Installed Capacity (kW)	5,407	7,564	10,721.00	16,261.00	21,765.00

Further, as shown in the table below, solar already receives significantly more subsidies than other resource types.

FINANCIAL INTERVENTIONS AND SUBSIDIES IN U.S. ENERGY PRODUCTION (2013)		
		$ per MMBTU
Coal	$	0.05
Natural Gas & Oil	$	0.05
Nuclear	$	0.20
Biomass	$	0.14
Geothermal	$	1.57
Hydropower	$	0.15
Solar	**$**	**18.63**
Wind	$	3.83

Data Source: U.S. Department of Energy, Energy Information Administration, Independent Statics & Analysis. (2015, March). Direct Federal Financial Interventions and Subsidies in Energy in Fiscal Year 2013. https://www.eia.gov/analysis/requests/subsidy/pdf/subsidy.pdf

Providing additional subsidies for solar may, and specifically in the case of this legislation, disadvantage other renewable resources that may be a better value than solar, particularly when all of the subsidies provided are taken into account.

In addition to these general concerns, we note a variety of more specific concerns with the proposed legislation. We will address the more substantial items here, but have attached a list of additional areas of concern with the language of the legislation that the Committee may want to consider clarifying if it moves forward with this legislation.

First, we have a concern with the 1 c/kWh "leg up" premium applied to solar installations associated with affordable multifamily housing. While the intention of this provision appears well-intended, there is nothing in the bill that would ensure any of the benefit provided by this premium, or the project itself, would flow to residents of such housing units. Moreover, implementing additional policies that raise these residents' electricity rates seems counterproductive to the presumed goal of lowering electricity costs for these customers.

Second, another well-intended provision that could have unintended consequences is the bill's incentives for solar installations for agricultural or forest products businesses. This is a prime example of where incentivizing one technology could disadvantage another technology with potentially more benefits. Providing subsidies for solar projects for the forest products industry could disincentivize combined-heat and power projects that could be expected to provide more benefit

to the forest products industry by providing an outlet for sawmills' waste stream. Therefore, this provision could do more harm than good for this industry.

Finally, undertaking the program reviews described under the proposed §3477 and Section 6 of the bill to determine the effects on ratepayers seems rather like closing the barn doors after the horse has escaped. We would suggest that these reviews should be conducted prior to implementing such policies and subjecting the ratepayers to unknown costs, for unknown benefits.

Thank you and I welcome any questions.

Additional concerns regarding language of L.D. 1405

- It is unclear what is intended by having a requirement in Section 1 of the bill that the Commission's NEB rulemaking be major-substantive and then a requirement Section 5 of the bill that these rules would be routine technical.
- It is unclear whether the bill credits in §3476(7) are intended to be only available to a single customer given the language that states, "[t]he bill credit to be allocated to a customer …" [emphasis added].
- The title of §3477 suggests the provisions are intended to apply to small businesses but the definition of eligibility would appear to include all non-residential customers.
- It is unclear whether "the lowest annual peak demand" referenced in §3477(3) is intended to mean only of the commercial classes with a demand charge, or whether it would also include small general service customer classes.
- It is unclear in §3478 what is intended, and what the benefit would be, from having 2 standard credit expiration dates.