LD 1730 An Act Regarding Beneficial Electrification Policy of the State

January 12, 2026

Testimony of Carl Wilcox
Minot

Honorable Senator Lawrence and Representative Sachs and Energy, Utilities, and Technology Committee Members,

I'm in support of LD 1730. It is a step in the right direction; but it specifically excludes net metering which is bad policy to lower Maine's electricity rates. For the current and future betterment of Maine residents, the legislation needs to include net metering.

My Background:

I'm a licensed practicing environmental engineer Maine # 8090. I was born in Maine in 1962 and until the fall of 2023, I lived and then owned the family farm in New Gloucester, except for a 10-year period during which I obtained a MS degree in engineering from Purdue University and then lived in Portland for a few years prior to purchasing the family farm in 1991. From 1959 until about 1974 my father was commercial hog farmer, likely the largest in Maine. We had a few hundred hogs. Farrowing our own piglets and purchasing feeder pigs at auction in Delmarva peninsula with the market hogs processed in a Somerville, Mass packing house. That ceased when the northeast packing houses closed due to farm policies enacted by the Nixon administration that favored Midwest factory farming resulting in the collapse of the New

England commercial hog slaughtering plants that necessitated the closure of New England's commercial hog farms.

From our hill farm we could see ¾ of a mile of road frontage observing CMP work over the years. In 1967 CMP bisected our farm with the construction of the Western Connector from Surowiec transmission substation in North Pownal to western Maine tying back into Rumford. As a kid lying in bed at night, I could hear the hum of a transformer at Surowiec and see the red blinking light of its radio transmission tower 2.2 miles distant through the woods. All electrical power transmitted from a line stretching from Freeport to Porter on the New Hampshire border flowing either north or south passes through Surowiec, the largest substation in Maine. Surowiec was greatly expanded in the early 1970s with two 345 kV lines from newly constructed Maine Yankee with two 345 kV lines constructed continued to Buxton to transmit Maine Yankee power to southern New England. Surowiec during the Maine Power Reliability Project (MPRP) in 2012 was expanded again with a 345 kV line from the Larabee Lewiston substation where the high voltage DC (HVDC) New England Con-Connect (NECC) from Quebec ends. The MPRP also constructed a new 345 kV line from Surowiec to the Raven Farm substation in Yarmouth/Cumberland that connects to the now little used 850 MW expensive oil-fired Wyman Power Plant discharge substation. A pre-MPRP 345 kV transmission line extends from Raven Farm to substations: South Gorham, MaGuire Road in Kennebunk. From there a 345 kV line extends into southern New Hampshire. The construction of the 2012 345 kV line from Surowiec North Pownal to Raven Farm in Yarmouth completed a third 345 kV route to southern New England. This transmission line infrastructure constructed circa 2012 is now 13-years later at capacity only because of the New England Con-Connect project and its

1,200 MW being discharged into Larabee substation. As part of the NECC project ISO-New England required CMP to upgrade the cable size of two 115 kV transmission lines from Lewiston to Surowiec.

On a personal level, in 2019 on the family farm I owned from 1991 until 2023, I had a 5 kW solar system installed on my barn. It worked great. So I'm familiar with solar and direct metering. Shortly, after I bought my present much smaller home in Minot, I had two heat pumps installed to provide "whole home heat pump heating" as defined by Efficiency Maine.

This lengthy introduction has two purposes. One to show I didn't fall off a turnip truck last week and these very expensive transmission and distribution expansion projects could be avoided or pushed into the future or if needed done at greatly reduced in cost if net metering is allowed for small solar generation. Following are a few examples of CMPs taking advantage of Maine consumers, and it is obvious the zero-export requirement of LD 1730 is a continuation of that abuse.

SMART METERS – BAD DEAL FOR MAINERS

In 2009 CMP started its 2-year smart meter installation program that cost $196 million which the taxpayer funded $96 million through the American Recovery and Reinvestment Act of 2009. With inflation, the project cost $296 million in today's dollars. CMP rate payers and federal taxpayers have paid for its entirety. CMP rates did not go down after its implementation. CMP customers have gotten very little out of it except for the ability to net meter with respect to time of use.

The pre-2009 analog meters could run backward if power was put to the grid from a home with no interconnection agreement. The power would not be “banked” beyond the month. If your home’s power production to the grid was less than home’s usage, the power production would be effectively net metered with banking by default for the meter reading period. If your home had put more to the grid than your home used, you lost the excess generated power sent to the grid. Of course, prior to 2009, technology did not exist to generate power that was economically competitive with CMP’s delivered power. So analog meters running backward was not a thing. Now smart meters do not run backward, unless CMP in their home office flips a switch after you have established an interconnection agreement and paid the requisite fee. The advent of “smart meters” has resulted in the consumer losing a feature that had the ability to reduce one’s power cost.

I used to raise beef cattle. For tax purposes I wanted to know the electrical usage for providing water to them and to operate the electric fence. When CMP was promoting its “smart” meters, I thought great, I can monitor the farm’s usage for a few days when not at home with all other circuits turned off except for the well pump and the barn power panel feed. Then I would have a good estimate of my cattle business power consumption operating expense for taxes. But of course, not with CMP. It took CMP two plus years to set up the “smart” meter webpage. And then the website was worthless eye candy that had no meaningful use for the consumer. Later CMP promoted the downloading of data for use in the Green Button app. However, per CMP instructions one was to look at the Google play store for Green Button apps. But there were none available. The consumer had to download your home’s energy usage data into a csv file then manipulate the data and import it into a spreadsheet. Then sort the data or

write computer code to analyze data to group hourly usage into off peak and on peak periods then determine if using the time of use rate tariff made sense over the standard residential rate A tariff.

Following is CMPs current posted TOU rate and residential Rate A taken from CMPs website.

Effective **January 1, 2026**, the TOU on- and off-peak hours and rates are as follows:

Hours

- **On-Peak Hours:** 5:00 p.m. to 9:00 p.m. (Monday through Friday, excluding holidays)
- **Off-Peak Hours:** All other hours

Rates

	Rate TOU	Rate A
Service Charge	$26.71	$30.21*
Rate per kWh On Peak	$0.503144	All hours rate: $0.136474
Rate per kWh Off Peak	$0.067452	N/A

** Includes the first 50kWh of usage.*

At a 50 cent per hour extortion peak rate for just the delivery of power it is damn important that the consumer properly analyze their diurnal power usage. The consumer looks at this ridiculous peak rate and with no analysis tools available walks away as they probably should. No wonder no one uses it.

The Green Button initiative was started in 2011 with the objective of standardizing electrical usage data format so apps would be created for the consumer to use in theory to lower their

electrical costs. Hence the federal taxpayer funding nearly 50% of CMPs smart meter installation program. At some point, CMP dropped even the pretense of using the Green Button Alliance download apps. Meanwhile, the Green Button Alliance has moved on leaving CMP far behind. Green Button Alliance program can be found at https://www.greenbuttondata.org/residential.html. Click on its filter and search Maine, and not a utility comes up. Filter for Minnesota where my mother's side of the family came from, and Xcel Energy pops up. The largest electric utility in the state. It uses the Green Button Alliance with data download to connect my data to third parties that have analysis tools.

My daughter lives in New York state. Four electric utilities in NYS use the Green Button Alliance.

The Green Button Alliance now shows there are 13 electricity apps available for use.

For the record, as of January 1, 2026 following are the electricity costs (energy and delivery) for the average Maine household that uses 550 kWhr per month of electricity that is a CMP customer with the standard offer compared to that of a Minnesota household.

CMP to Xcel Energy – Minnesota Electric Fee Comparison

	CMP	Xcel Energy	Xcel Energy	Xcel Energy
		June thru Sept	Oct thru May	Oct thru May
				Electric Heat
Meter Service Fee	$30.21	$6.00	$6.00	$6.00
Meter fee includes X kWhr/month delivery	50	0	0	0
Transmission & Distribution	$98.45	Included with Energy Charge		
Electrical Energy	$69.97	$71.87	$62.50	$35.95
Total	**$198.63**	**$77.87**	**$68.50**	**$41.95**
At at Monthly Usage of	**550**	**kWhr**		

By the way, Xcel Energy installed smart meters in its Minesota service circa 2021. So its customers can use the Green Button Alliance program with its money saving apps.

To this very day, CMP makes it difficult to determine if TOU makes sense for the consumer. The consumer must download the data as previously described and analyze it for the consumer household's hourly time of use and then manually enter peak and off peak usage for all 12 months into CMPs 12-cost calculator.

I was a member of the Maine Pulp and Paper Association when that was a going concern. I recall CMP CEO Sara Burns coming to an annual meeting circa 2008 pitching the necessity of CMP spending $1.5 billion ($2.26 billion in 2026 dollars) to upgrade its transmission system. With the assertion that the 440 miles transmission line and substations were needed for reliability and to allow future clean energy integration. Sara Burns stated, "If we don't do this, the lights will go out in southern Maine". And by association, power reliability problems for the mills

MPRP construction was from 2010 through 2015. After its completion, in late October 2017, southern Maine had a wind storm resulting in the largest power outage in Maine history, up to that time, with 400,000 services lost power, exceeding the great 1998 ice storm (220,000 services). We lost power for 3 days and unlike the ice storm, there was damn little actual damage. Please read the Forbes article written shortly after the event, Why Mainers Should Be Outraged Over the Worst Power Outage In State's History (November 6, 2017). It is absolutely disgusting. CMP spent $2,500 ($3,480 in today's dollars) for every single customer. The MPRP increased CMP's profitability by more than $175 million annually, increasing the CMP's EBITA by about 120%. The following quote is from the article.

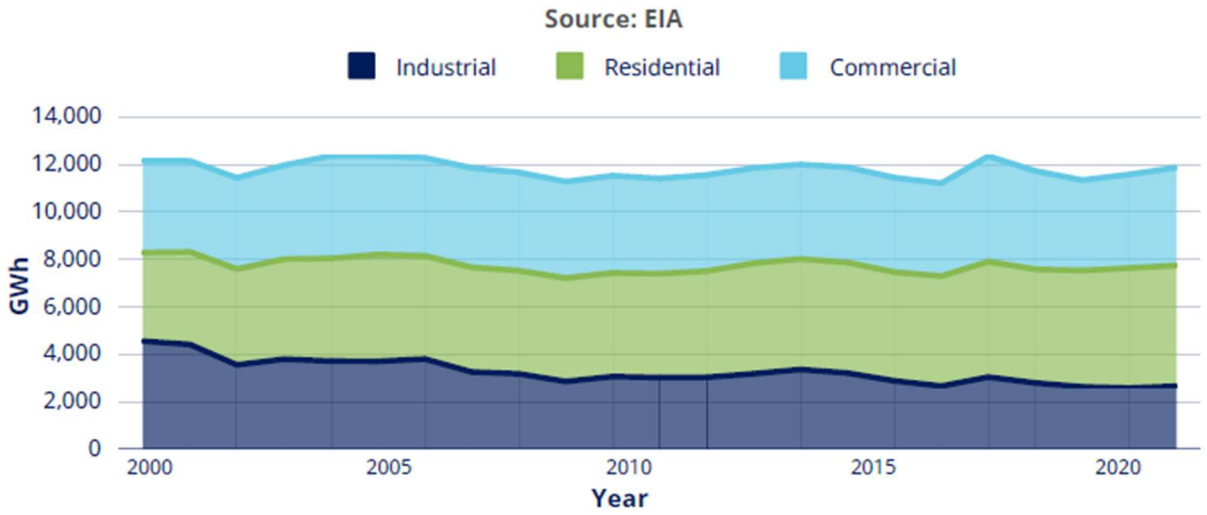
> "The MPRP should never have been built," said Rich Silkman, the president of Competitive Energy Services. "There were viable alternative solutions that could have been used in lieu of the MPRP and they would have cost a fraction of the what the MPRP has cost."

CMP promoted the MPRP by saying CMP rate payers will only pay for 10% of it with the rest of ISO-New England area paying the rest due to a socialist transmission line agreement with other ISO-New England utilties. However, the agreement is a two-way street. Since 2015 Mainer's have been paying for much more expensive transmission lines that have and are being constructed in Connecticut and elsewhere in southern New England. Per the referenced 2017 Forbes article, the Brattle Group found it would have been more cost effective for Maine rate payers had paid the full MPRP cost than to have joined the ISO-New England socialism transmission line agreement.

Additionally, there was no power demand increase that warranted such an expansive project. CMP scammed Mainers.

The following figure is from the Maine Energy Plan (pg. 12, Maine Governor's Energy Office, January 2025).

Figure 12. Electricity Consumed in Maine in Retail Sales by Sector



The MRPP was promoted in 2008 with MPUC approving the project on June 10, 2010. Figure 12 shows retail power sales have not significantly changed from 2000 to 2021. For more recent data and to confirm from a second source, the US Energy Information Administration Maine Electricity profiles were consulted and tabulated below for some key periods. Maine's electricity use has decreased this century particularly the direct use electricity which reflects the decline of Maine's paper industry with closure of many mills that produced their own power. There was no justification for the massive MPRP. There was no need for a major transmission expansion or overhaul. Only now a decade after the completion of the MPRP with the addition of 1,200 MW added to the grid in Lewiston from the New England Con-Connect,

were upgrades needed. And that was limited to cable ampacity upgrades of two 115 kV lines (16 miles and 9 miles in length) from Lewiston to North Pownal, Surowiec. No upgrades were needed further south because Maine rate payers have been paying for those upgrades for a decade that were done in the MPRP. The following table shows retail sales of electricity in Maine have decreased by 7.4% and total electric consumption by 24% since the turn of the century. Don't believe a word of what CMP says.

US EIA Maine Electricity Consumption

Year	Utility Retail Sales	Non-Utility Sales and Direct Use	Total
	TWh	TWh	TWh
1996	11.7	not listed	?
1999	11.9	3.6	15.5
2000	12.2	4.5	16.7
2001	11.8	3.9	15.7
2005	12.4	2.6	15
2006	12.3	4.3	16.6
2007	11.9	4.0	15.9
2008	11.7	3.6	15.3
2009	11.3	3.1	14.4
2010	11.5	3.4	14.9
2015	11.9	2.4	14.3
2020	11.3	1.9	13.2
2021	11.6	1.8	13.4
2022	11.9	1.7	13.6
2023	11.3	1.4	12.7
2024	11.3	1.4	12.7

The Quite Unraveling of the Power Grid Monopoly & Why CMP Keeps Filing Expensive Project Upgrades with PUC.

Oil Price.com which covers the entire spectrum of the energy industry had an interesting article on January 5, 2026, The Quiet Unraveling of the Power Grid Monopoly. The article succinctly sums up the situation.

> "An electric distribution utility, to operate as a prosperous for-profit business that can attract capital requires two things: continuous growth in assets (rate base) and a consistent and predictable growth in earnings. A "good" utility should be a declining cost business (via technology) while spreading its expenses over an increasing number of customers. Thanks to the proliferation of distributed, renewable technologies this growth dynamic is beginning to run in reverse due to competition from renewables, which is eroding the natural monopoly. Government ownership of utilities (even in the guise of share ownership in ostensibly commercial ventures) is the norm in much of the world. Whether the US remains wedded to private ownership in the future remains to be seen".

Maine since the beginning of the century has experienced a decline in electricity consumption. The electricity business in Maine is shrinking not growing. Maine does not have an increase in electricity customers. AI is not locating in Maine because our electricity prices are already too high. AI is locating elsewhere where the power is cheaper.

CMP recently proposed a $1.5 billion solution to its poor power reliability. Put up heavy duty poles and strong wire to absorb the hits of falling trees and tree limbs. CMP trims 4,000 miles

per year of distribution lines with trimming repeating every 6-years. Instead of requesting proposals from heavy equipment manufacturers to make a blended grapple saw – excavator with knuckle boom to mechanize the current extremely labor-intensive tree trimming process, which is largely ineffective because there are large limbs and leaning trees above the wires that CMP does not cut, CMP proposed the $1.5 billion project that does not address the underlying problem of tree limbs over the lines. But it addressed CMPs problem with its declining rate base.

Maine PUC on November 18th rejected CMPs $1.5 billion boondoggle, that would increase the average monthly bill by $35 for many years until the heavy duty poles and cable is depreciated. After that rejection it took CMP less than a month to propose spending $547 million on the first phase of a greater Portland grid upgrade cmp-plans-major-grid-overhaul-in-greater-portland. CMP has 650,000 services. This is going to result in sending a $841 bill plus interest to every CMP service. That includes services in Jackman, Dexter and Orland. And, that is for the first phase of the overhaul.

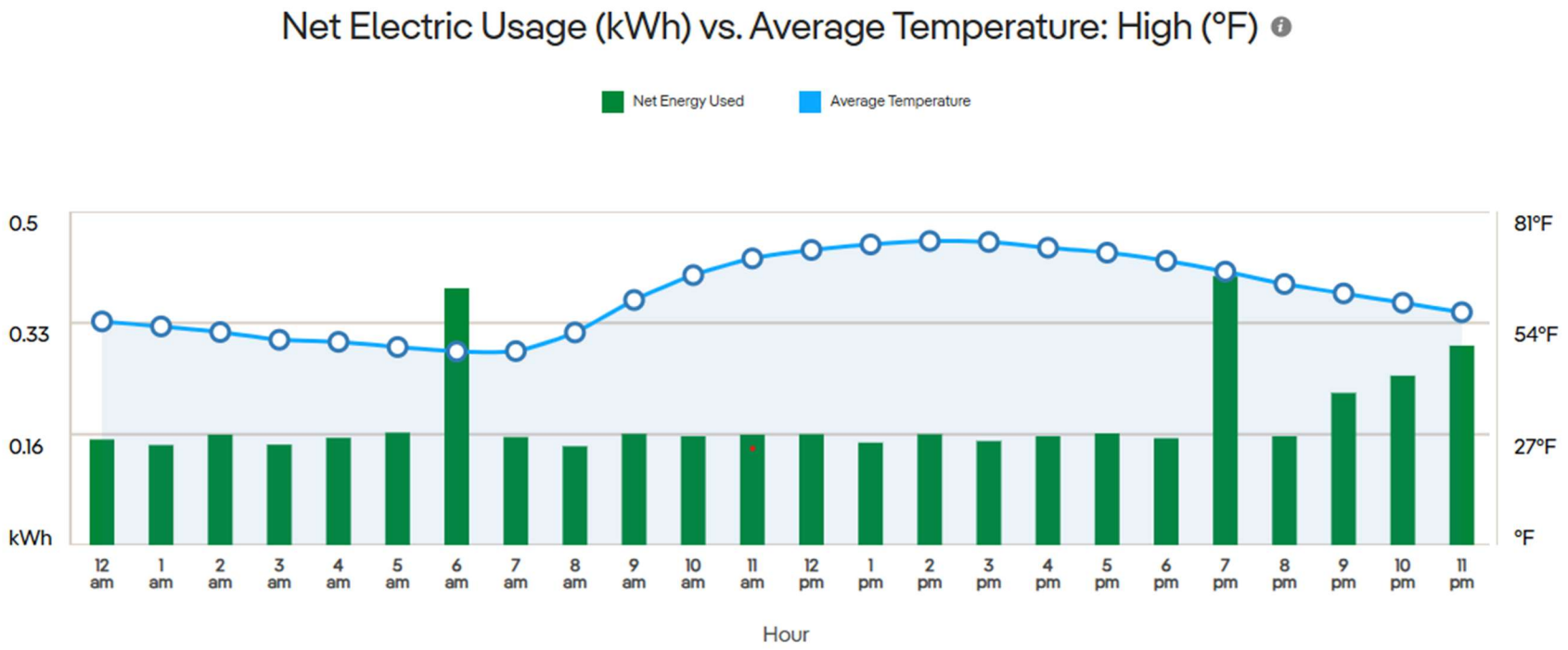
LD 1730 as written requires zero-export controls to prevent putting power to the grid. Zero-export control is not to be confused with anti-islanding which protects grid workers during a power outage by preventing the back feeding of power. Zero-export is to protect the power company from the advancements of renewable power and thus the financial condition of the power company - not for lineman safety. A vote for LD 1730 with zero-export is a vote for a higher electricity bill.

Power distribution systems are designed to handle peak loads for sustained periods ranging from 15 minutes to several hours. The vast majority of the time, the transmission and distribution grids are not operating close to their capacity. But the system is designed to handle the peak demands which is very expensive. That is why CMPs TOU on peak rate is $0.50 per kWhr and off peak is $0.067 per kWhr – a factor of 7.5 times difference.

The figure on the following page is my electric usage on August 28th, 2025. That date was picked because it is mid-season. While I have heat pumps, I almost never use them in air condition mode. I do use fans in the heat of summer but at a temperature in the high 70s I would not have used fans. I live alone and work at home mostly on the computer with the radio on and the refrigerator turning on and off. Besides those loads there is no other electrical demand. But a family of four with both parents working out of the home and two children at school should have a similar electrical load profile.

This is a representative day during late summer in which solar radiation should be good if not overcast. Utilizing the National Renewable Energy Laboratory free solar modeling software, a 1,200 watt PV system in Portland, Maine should produce about 160 kWhr per month or 5.6 kWhr per day near the end of August. August 28th length of day is 13 hours – 37 minutes with sunrise at 6:07 am and 7:44 pm sunset. The majority of the solar radiation will occur between 9:00 am and 4:00 pm. Over that 7-hour period, a 1,200 watt system will produce about 5 kWhr of energy or 0.7 kWhr per hour on average. My total usage over those 7-hours was 1.15 kWhr. With zero-export allowed, 3.85 kWhr (77%) of the solar energy produced electricity would be lost to heat or to ground by the zero-export controller.

My house August 28th, 2025 electric use



With zero-export allowed, the system is not economical without a battery. Once the investment of a battery has been made, why should the consumer be prevented from discharging the battery energy to the grid during the period of peak demand. CMP has set the just the delivery price at peak demand at 50 cents per kWhr. Why shouldn't the consumer take advantage of that by providing power to their neighborhood and in the process reduce CMPs bill to all its customers?

Sunrun's business model is now to install a battery with every solar installation. Sunrun owns the entire system and sells power to the homeowner at a reduced rate. Sunrun gives a discount to the homeowner for the trouble of having a battery taking up some space on their property. The homeowner gets a secondary benefit of having power if the distribution system loses power. Sunrun bids to the day ahead market. Sunrun monitors the forecast for solar radiation for the coming day and submits a bid to the day ahead market.

Sunrun has 5,000 customers in Massachusetts with a combined bid capacity of 20 MW delivering significant dispatchable power during peak power periods. Nationally, Sunrun now has 80 MW of dispatchable power. Sunrun operates in every New England state accept Maine. Why is that? Is it an unfriendly regulatory environment.

Dispatchable battery power would greatly reduce the cost of CMPs $547 million first phase greater Portland grid upgrades project.

Owner's of micro solar power systems should be able to contract with aggregators that control their small battery. The aggregator collectively bids for the small generators similarly to that of Sunrun to provide power during peak power demand periods. Unlike a solar farm in Farmington supplying to the

grid needing transmission down to Surowiec and then to Raven substation in Yarmouth and then to distribution substations, the battery dispatched power is where it is needed and should be justly compensated for that value.

Having a zero-export requirement in LD 1730 is a genuflection to the power distribution companies that will result in the continuation of their ever-increasing electrical distribution costs.

Technology progresses. No one gets a break. Neither should the power distribution companies. Maybe their future is that of Kodak.

Sincerely,

Carlton C. Wilcox