

Utility Dive

So close, so far: Can Maine put its near-agreement on solar net metering back together again?

Supporters of a compromise incentive failed to override Gov. LePage's veto, plunging the state back into a net metering debate

By [Herman K. Trabish](#) | August 19, 2016

If your state solar policy is a tinderbox, just a spark can ignite a blaze.

On Feb. 11, Central Maine Power informed its regulators it had reached the level of net metered distributed generation at which state law requires them to review net metering.

CMP's filing reported its 2,085 [Customer Net Energy Billing Agreements](#) (<http://www.cmpco.com/MediaLibrary/3/6/Content%20Management/Suppliers%20And%20Partners/PDFs%20and%20Doc/Chapter%2031>) produced 20,102,698 kWh of customer-sited solar and/or wind generation. That exceeded 1% of CMP's peak load, automatically triggering a re-evaluation of the state's Net Energy Billing (NEB) policy by the Public Utility Commission (PUC).

NEB is more commonly referred to across the U.S. as [net energy metering](#) (<http://www.seia.org/research-resources/net-energy-metering-guiding-principles>) (NEM) or, simply, net metering. It is a policy that remunerates owners of distributed generation (DG) with a credit, usually equal to the utility's retail rate, for the electricity their systems export to the grid.

In response to the CMP filing, the PUC's June Notice of Inquiry (NOI) officially convened what is becoming an increasingly contentious proceeding on the future of NEB in Maine.

A [broad coalition of Maine stakeholders and lawmakers](#) (<http://www.utilitydive.com/news/how-maines-power-players-are-reacting-to-its-pathbreaking-new-solar-propos/415939/>) foresaw the current debate and tried to head off in 2015 with a compromise renewable energy legislative proposal. But [Gov. Paul LePage](#) (<http://www.utilitydive.com/news/maine-lawmakers-fail-to-override-lepage-veto-of-solar-incentive-bill/418409/>) (R) opposed it, and after a heated political struggle, the legislation fell two votes short of overriding his veto.

The coalition backing the proposal was made up of the state's solar installers, environmental groups, the consumer advocate, the major utilities, a bipartisan group of lawmakers, and a wide array of the state's non-profit organizations.

Many of those stakeholders now say the failure of the compromise solar proposal has stalled the state sector, and that its revival rests on the approval of a long-term incentive plan that can return certainty to the industry.

"Solar installers are small contractors, guys with one, two, or three trucks, and predictability is of great importance and it is an undue burden to face these high level debates time after time," said Insource Renewables owner Vaughan Woodruff, who chairs the [Maine Committee on Renewable Energy](#) (<http://www.nrcm.org/wp-content/uploads/2016/02/MABEPlettertoRepGideon.pdf>) (CORE).

"Last year's proposal would have taken the debate off the table and allowed solar customers and solar installers to not have the industry's existence threatened every six months," Woodruff added.

[Central Maine Power](#) (<https://www.cmpco.com/>) (CMP), the state's dominant electricity provider, agrees.

"Everyone sees a problem and it won't get easier to fix as more systems are net metered," said Communications Director John H. Carroll. "We are arguing about this small archaic policy but what is Maine doing to move solar development? It is small ball when it comes to addressing renewable energy policy."

Maine's solar saga

In its 32-3 approval of [a resolution](#) (<http://legislature.maine.gov/LawMakerWeb/summary.asp?LD=1263&SessionID=11>) calling for new policy in 2015, the Maine Senate described NEB as "a simple mechanism that has supported the development of distributed generation in Maine," but a mechanism that "may not provide a suitable long-term foundation."

It is in the public interest to move to a policy "that fairly and transparently allocates" costs, benefits, and participation and "creates a sustainable platform for future growth," the Senate declared.

NEB is "not a suitable long term foundation to further the state policy of promoting distributed renewable generation," the Maine [Office of the Public Advocate](#) (<http://www.maine.gov/meopa/index.shtml>) (OPA) recently reported to the PUC.

"Instead of repetitive and unproductive fights over net metering, we can discuss how best to optimize these resources and integrate them into our markets," OPA head Tim Schneider, who led the fight for the 2015 policy, told the PUC last year. The alternative, Schneider said at the time, was an "intense debate over the wrong thing."

That debate is what may be shaping up now at the commission.

[Emera Maine](#) (<http://www.emeramaine.com/residential/rates/bhe-net-energy-billing/>), the state's other major electricity provider, is holding out for something better.

We "support the general ideas in last year's compromise bill that there is a more fair and sustainable way of compensating customers" than retail rate net metering, said Government Relations Manager Julie Hashem. "We agree with stakeholders that there is opportunity and a better way."

[Natural Resources Council of Maine \(http://www.nrcm.org/projects-hot-issues/clean-air-clean-energy/clean-renewable-energy-wind-solar-hydro-biomass/\)](http://www.nrcm.org/projects-hot-issues/clean-air-clean-energy/clean-renewable-energy-wind-solar-hydro-biomass/) Climate and Clean Energy Project Director Dylan Voorhees pointed out that the 2015 comprehensive solar policy would have opened up new market segments in Maine like community solar and large-scale commercial-industrial and municipal solar.

"Net metering can do that, too, but we can do better than just net metering," Voorhees said. "We have had just net metering in Maine and we are in last place in solar. We can go farther and faster."

Net metering supporters

[Sunrun \(https://www.sunrun.com/blog/net-metering-2-0-brings-a-bright-future-to-california-solar\)](https://www.sunrun.com/blog/net-metering-2-0-brings-a-bright-future-to-california-solar) Director of Policy Chris Rauscher remains adamantly in favor of NEB. He stands firmly on a 2009 commission ruling that may be a determinative precedent in the current proceeding.

Rauscher is allied with Woodruff's Maine CORE group for this proceeding, though Sunrun, a national solar installer, does not presently do business in the state.

Rauscher is also a spokesperson for [The Alliance for Solar Choice \(http://allianceforsolarchoice.com/learn-more/\)](http://allianceforsolarchoice.com/learn-more/) (TASC), a trade association representing other national solar installers who also are not doing business in the state. The TASC companies largely operate where strong net energy metering (NEM) policies are vital to their business models.

Maine's local environmental groups and solar installers took a different strategy than TASC during last year's legislative struggle. While installers in the state supported the compromise, TASC [dispatched lobbyists to the state to defeat the effort. \(http://www.pressherald.com/2016/05/15/big-solar-worked-to-kill-maine-solar-energy-bill/\)](http://www.pressherald.com/2016/05/15/big-solar-worked-to-kill-maine-solar-energy-bill/)

Now, however, the solar installers and other advocates are united by the single common purpose of keeping the commission from detrimentally altering NEB.

There is no reason for the PUC to further disrupt Maine's DER businesses by changing the NEB policy simply because CMP reported it has reached the 1% threshold, Rauscher told Utility Dive. "Solar policy is a question for the legislature."

Furthermore, on the strength of a just-released update of Maine's landmark [2014 value of solar study \(http://www.nrcm.org/wp-content/uploads/2015/03/MPUCValueofSolarReport.pdf\)](http://www.nrcm.org/wp-content/uploads/2015/03/MPUCValueofSolarReport.pdf), "net metering is a good rule of thumb for how rooftop solar should be compensated and if the legislature wants to have a more granular discussion, let's have it," Rauscher said.

TASC, CORE, and other proceeding participants are dubious of CMP's report that it has reached the NEB threshold. Though Carroll showed Utility Dive publicly available documentation that suggests CMP's reporting is transparent, the participants want further verification.

"We don't think CMP has hit the 1% of peak load cap on net metered systems because we think their math is just guess-timing and we want to see the claim backed up with data," he added.

In addition, the commission established the governing precedent on NEB in 2009, Rauscher argued.

When Maine Public Service, now a subsidiary of Emera, reported it had reached the 1% threshold, [the PUC noted \(http://www.maine.gov/mpuc/legislative/documents/NEB%20report1.pdf\)](http://www.maine.gov/mpuc/legislative/documents/NEB%20report1.pdf) the shift of costs was only 0.24% of the utility's revenue and increased the threshold to 2% of peak load, Rauscher said.

The participants also want the benefits of net metered DG acknowledged. A 2014 PUC-commissioned [value of solar study for Maine \(http://www.utilitydive.com/news/is-solar-worth-033-per-kwh-inside-maines-valuation-debate/376364/\)](http://www.utilitydive.com/news/is-solar-worth-033-per-kwh-inside-maines-valuation-debate/376364/) by Clean Power Research found that, including environmental and societal benefits, customer-sited electricity exported to the grid was worth \$0.33/kWh.

A just-released [update from Crossborder Energy \(http://www.nrcm.org/wp-content/uploads/2016/08/ValueofSolarstudyUpdate.pdf\)](http://www.nrcm.org/wp-content/uploads/2016/08/ValueofSolarstudyUpdate.pdf) found that, with current electricity market and natural gas prices, the value is now \$0.272/kWh and "and even without societal benefits it is well about retail," Rauscher said.

DER have more than just energy value, Rauscher added. Used as a non-transmission alternative by utilities, they can save ratepayers millions of dollars in system infrastructure upgrades. They can also provide capacity value by shaving utilities' peak demand.

Legacy markets for centralized generation operate through antiquated market structures that don't suit the opportunities that DER offer, Rauscher said.

"Net metering is a policy that exists [in 40-plus states \(http://ncsolarcen-prod.s3.amazonaws.com/wp-content/uploads/2016/07/Net_Metering1.pdf\)](http://ncsolarcen-prod.s3.amazonaws.com/wp-content/uploads/2016/07/Net_Metering1.pdf) to provide a market structure for DER and it is a good rule of thumb," Rauscher said. "If a state is at [5% DER penetration \(https://emp.lbl.gov/sites/all/files/FEUR_2%20distribution%20systems%2020151023_1.pdf\)](https://emp.lbl.gov/sites/all/files/FEUR_2%20distribution%20systems%2020151023_1.pdf), studies show the impact is de minimis and there is a net benefit. As the penetration gets higher, it is important to take a closer look."

In Maine, where the penetration is 1% or less, there is a net benefit to the system and it has little impact on utility revenues. "Altering the NEB policy will needlessly introduce solar market instability, impede solar growth, and impinge on job creation," Rauscher said.

The governor's controversial proposal

The [Governor's Energy Office \(http://www.maine.gov/energy/\)](http://www.maine.gov/energy/) (GEO) "actively opposed" the 2015 solar legislation as "very risky for ratepayers," Director Patrick Woodcock told Utility Dive. Rather than endorse a retail rate credit in the proposed market-based plan, the GEO wanted a \$0.10/kWh credit that was rejected by the bill's sponsors.

CMP's 2005 NEB capacity more than tripled by 2008 and "increased to approximately ten times the 2009 value" in 2015, the GEO filing for the proceeding reports. On just the first six months of 2016, CMP's grew over 17% again.

Given this rate of NEB growth, [the commission \(http://www.maine.gov/mpuc/\)](http://www.maine.gov/mpuc/) needs to act promptly to protect against the shifting of costs to non-NEB customers from growing and to protect customers investing in DER without realizing "substantial policy changes" are coming, the GEO filing argues.

NEB should "be discontinued as soon as possible and be replaced with an interim approach that moves toward a market based system, but in a measured way that allows customers and the industry, time to adapt," the GEO said.

The GEO filing outlines an interim approach that would, according to Woodcock, leverage the state's uniquely high penetration of smart meters.

Though market-based, like [the legislative proposal \(https://legislature.maine.gov/bills/display_ps.asp?paper=HP1120&snum=127&PID=1456\)](https://legislature.maine.gov/bills/display_ps.asp?paper=HP1120&snum=127&PID=1456), it is not based on long-term contracts that Woodcock sees as putting ratepayers at risk.

Such contracts were part of last year's proposal and without them, Schneider said, the full DG value – which could be the retail electricity price or more – is difficult to obtain through the multiple markets in which potential returns are possible.

That is not a concern for Woodcock because his plan calls for only a [wholesale market \(https://www.eia.gov/electricity/state/maine/\)](https://www.eia.gov/electricity/state/maine/) credit rate.

"Solar is its [own] worst enemy in terms of value," Woodcock said. As penetration rises and peak demand shifts toward low daylight hours, "the value from [additional marginal units of solar \(http://www.utilitydive.com/news/the-epic-fail-on-solars-doorstep-and-how-the-grid-can-help/324411/\)](http://www.utilitydive.com/news/the-epic-fail-on-solars-doorstep-and-how-the-grid-can-help/324411/) decreases in a restructured market."

The GEO proposal "shifts the risk to the person choosing to install solar," Woodcock said. That customer can always derive some value for the exported electricity but "it is a question of what the price will be for the kWh."

Woodcock's plan has two phases. In the first, compensation would be through a proxy value comparable to the standard offer used now for customers who do not choose their own retail power provider. During this phase, the utility would handle compensation matters.

After "a couple of years," the necessary billing system technology will be in place to automatically process data from the [smart meters \(http://www.cmpco.com/smartmeter/smartmeter_smartgrid.html\)](http://www.cmpco.com/smartmeter/smartmeter_smartgrid.html), Woodcock said. At that point, the utility will no longer be involved and DG owners will begin receiving real time market prices for their exported electricity.

The objective is to move as quickly as possible to "a foundation for long term growth," he added. "Other states have moved the cap on net metered systems from 1% to 2% to 3%. We are trying to leapfrog over that policy debate."

Woodcock believes this change will not be disruptive to [Maine's solar industry \(http://www.seia.org/state-solar-policy/maine/\)](http://www.seia.org/state-solar-policy/maine/), but "there are differences of opinion," he acknowledged.

Ultimately the market should treat utility customers who produce solar power or any distributed generation "as suppliers to the grid," Woodcock said. They may, depending on wholesale energy market prices, be able to earn more in credits than they do with NEB, he added.

Rauscher objects to the GEO plan. "If you are used to energy being sold on the wholesale market, you will try to put what is a fundamentally retail product like rooftop solar into a [wholesale market \(https://www.eia.gov/electricity/monthly/epm_table_grapher.cfm?t=epmt_1_01_a\)](https://www.eia.gov/electricity/monthly/epm_table_grapher.cfm?t=epmt_1_01_a) structure and that may not be the best structure."

The idea that customers could get more than they do with NEB is "preposterous," Woodruff added. It defies what is happening in the electricity market. It will surely reduce the benefits for solar customers."

It is "the wholesale net metering the governor has wanted all along so that customers would get roughly half the value they get now," he said. "The promise of a possible higher price is just spin."

The GEO proposal lacks adequate details, Voorhees said, but "if it is what it seems to be, it would slash payback periods, slash investment, and be catastrophic for [Maine solar \(http://solarforme.org/\)](http://solarforme.org/)."

"There is a serious conversation in Maine about how to move forward on solar in a cost-effective sustainable way but proposals like the governor's don't have a place in it," he said. "I am disappointed his office thinks we can cut our solar initiatives to the bone and still have a thriving solar industry. That is math that does not add up."

The proposal is still "a concept," [Woodcock \(https://www.youtube.com/watch?v=nTl_xenodnl\)](https://www.youtube.com/watch?v=nTl_xenodnl) responded. "There are specific implementation issues that need to be further addressed. These could be overcome as we move the concept into an operable rule."

The most controversial point in the proposal is [grandfathering \(http://www.utilitydive.com/news/nevada-task-force-recommends-net-metering-grandfathering-provision/419927/\)](http://www.utilitydive.com/news/nevada-task-force-recommends-net-metering-grandfathering-provision/419927/). The GEO proposes that all DG put in place after September 1, 2016, be subject to whatever new plan comes from the commission proceeding.

It also proposes that DG owners be "grandfathered," or allowed to continue under their current NEB contracts, for only three years. They would then be shifted to the new plan.

That would, in effect, "create a solar moratorium in the state of Maine on September 1," Woodruff said. "Customers would be waiting for a new policy that could take months to put into effect. The uncertainty on compensation and grandfathering would be a disincentive to invest in solar until the proceeding concluded."

These questions are part of putting in place "a model that people can understand and will enable long term growth for DG," Woodcock said. "This is not looking at the next quarter or the next year but allowing DG to be a big part of our electrical mix over the long term."

Where the utilities stand

CMP's net metered capacity puts it at the center of the debate. Emera "is close to the 1% of peak demand notice threshold and we expect to reach it shortly," Hasem said. But she offered no substantive support or criticism of either the solar advocates' or the GEO's arguments.

Whether at the PUC or the legislature, Emera is "open to the possibility that stakeholders will find ways to improve upon last year's proposal and look forward to continued collaboration," she said.

Emera liked the collaboration on [the previous legislation \(http://www.maine.gov/MEOPA/about/reports/2016-2-24%20Solar%20Legislation%20Overview.pdf\)](http://www.maine.gov/MEOPA/about/reports/2016-2-24%20Solar%20Legislation%20Overview.pdf) and sees "momentum behind stakeholders working collaboratively" again, she added.

CMP's data on its NEB contracts is well documented and it used the commission's required NEB reporting methodology to estimate its \$1,269,545.69 "revenue loss (<http://www.cmpco.com/SuppliersAndPartners/MainesElectricityMarket/BusinessInMaine/netenergymetering.html>)" for 2015, Carroll said.

But despite the moniker, NEB does not actually reduce revenues for CMP.

"It is a cross-subsidy. We have a revenue decoupling mechanism. It is revenue not collected by CMP but it is not revenue we miss because it is built into future rate years and recovered from other ratepayers," Carroll said.

The utility's objections to NEB are not because it is protecting its own revenue but because it is forced to collect the revenues from non-net metered customers, creating the cross-subsidy, he added.

And it is not the utility calling it a [cross-subsidy \(http://www.utilitydive.com/news/why-the-net-metering-fight-is-a-red-herring-for-utilities/307061/\)](http://www.utilitydive.com/news/why-the-net-metering-fight-is-a-red-herring-for-utilities/307061/), he pointed out. "On the record, the Governor, the legislature, the commission, the OPA, and the OPA's consultant have all stated that net metering as a policy is a cross-subsidy that allows certain customers to avoid costs and shifts the responsibility for those revenues to other customers."

CMP has made its required report on NEB to the commission and it is now up to the commission to decide to act on NEB or to send the question back to the legislature, Carroll said.

"CMP doesn't think it is inappropriate for the commission to address net metering because it is a ratemaking question that requires the commission's expertise," he said. But the narrow NEB issue "is not the same as a broad forward looking energy policy."

NEB was [a convenient simple policy \(http://www.utilitydive.com/news/beyond-net-metering-how-location-can-help-put-a-value-on-ours/413442/\)](http://www.utilitydive.com/news/beyond-net-metering-how-location-can-help-put-a-value-on-ours/413442/) when DG "barely existed" but it is imprecise and "winds together" three very different questions, Carroll said.

"First, what is the cost of the grid and how do you pay for it? Second, what is the value of solar and DER? And, third, what is the right mechanism for compensating them? A good energy policy would unwind them," he said.

The current proceeding is only on the first question. "CMP would like to see a more comprehensive, forward-looking, fair, equitable, and sustainable energy policy for Maine like the one we worked on last year that included commercial-scale, [community-scale \(http://www.utilitydive.com/news/why-community-shared-solar-is-ready-to-be-the-great-equalizer/392045/\)](http://www.utilitydive.com/news/why-community-shared-solar-is-ready-to-be-the-great-equalizer/392045/) and utility-scale solar, Carroll said.

He declined to comment on whether the GEO proposal was such a policy.

The CMP July 22 filing for the proceeding endorsed the previous legislation. "If properly structured, an approach similar to the one advanced by the Solar Stakeholder Report (and subsequently L.D. 1649) would," it argues, "represent an improvement over the current net energy billing paradigm."

But, CMP stipulates, "certain key issues, including grandfathering terms and levels could be further modified to reduce and shorten ongoing cost subsidies."

The utility would "always be willing to participate in another [coalition \(http://www.utilitydive.com/news/maine-lawmakers-override-gov-lepages-veto-of-value-of-solar-bill/401574/\)](http://www.utilitydive.com/news/maine-lawmakers-override-gov-lepages-veto-of-value-of-solar-bill/401574/) like the one that came together last year," Carroll said. "We have the same concerns about

the environment and sustainable energy resources as many of the others in the coalition and we would look to find common ground in a legislative process.”

'Not the last policy decision'

Each of the three PUC commissioners was appointed by [Gov. LePage \(http://www.maine.gov/governor/lepage/\)](http://www.maine.gov/governor/lepage/). Though regulatory ethics prevent them from speaking out during the proceeding, it's unlikely any of them will outline an approach that diverges significantly from the governor's proposal.

“We think the commission should reform NEB now to a more market-based approach,” Woodcock said. “If it does not, we would work to develop a policy that grows solar in a market-based approach with the Legislature.”

Schneider and other advocates interviewed are under the impression the commissioners are skeptical of NEB and looking for a way to address the cost shift. They are, however, entirely astute and fair-minded enough to see the “real gaps in the GEO plan on how it would be implemented,” Schneider said.

All the stakeholders want to see prompt action. But that could be a new compensation plan or it could be leaving NEB in place and letting the legislature take it up in January 2017. And what a legislature elected in [November's Clinton-Drumpf face-off \(http://www.realclearpolitics.com/welcomead/?ref=http://www.realclearpolitics.com/\)](http://www.realclearpolitics.com/welcomead/?ref=http://www.realclearpolitics.com/) will do adds to the uncertainty.

A comprehensive energy policy would be better for Maine ratepayers than retail rate NEB, Schneider believes. Either way, [solar will grow \(http://www.nrel.gov/docs/fy14osti/61858.pdf\)](http://www.nrel.gov/docs/fy14osti/61858.pdf) 30% to 40% per year, but with net metering “there will eventually be a significant cost shift,” he said.

The legislation's market-based policy can drive solar growth with retail rate compensation, Schneider added. “And utilities prefer it because it eliminates the cost shift.”

CORE would like to see the legislature make the decision because energy policy is about more than just ratemaking, Woodruff said. “Lawmakers have to take into account economic development and long term energy strategies.”

If the PUC simply increases the retail rate NEB threshold to 2%, he added, “this will not be the last policy discussion about net metering in Maine.”

If that is the outcome, Voorhees observed, “we should try again at a comprehensive solar policy and the governor's proposal is not that,” he said. “Last year's legislation was a pretty serious attempt at a comprehensive framework to move ahead on solar. We have something to build on.”

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