



Public Service Commission <psc@utah.gov>

Net Metering costs

message

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Please see this article about Minnesota

<http://spectrum.ieee.org/energywise/green-tech/solar/minnesota-finds-net-metering-undervalues-rooftop-solar>

Minnesota Finds Net Metering Undervalues Rooftop Solar

By Peter Fairley

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Utilities should be paying more for their customers' surplus solar power generation according to a solar pricing scheme approved by Minnesota's Public Utility Commission last month

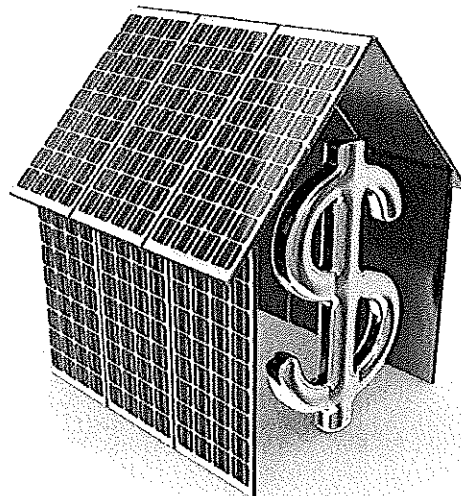


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(<http://thinkprogress.org/climate/2014/03/14/3401351/minnesota-value-of-solar/#>) and expected to be finalized in early April. Minnesota's move marks the first state-level application of the 'value of solar' approach, which sets a price by accounting for rooftop solar power's net benefits, pioneered by the municipal utility in Austin, TX.

Minnesota is one of 43 U.S. states that requires utilities to pay retail rates for surplus solar power that their customers put on the grid. Utilities across the U.S. are fighting such *net metering* rules, arguing that they fail to compensate the utility for services that their grid provides to the distributed generator. So last year pro-solar activists and politicians in Minnesota called the utilities' bluff, passing legislation tasking the state's Department of Commerce with calculating the true value of rooftop solar power.

Now the verdict is in, and the state's 'value of solar' formula -- affirmed by the PUC -- finds that distributed solar generation is actually worth *more* than its retail power price according to John Farrell, an economist and senior researcher at the Institute for Local Self-Reliance (<http://www.ilsr.org/>), a Minneapolis-based economic think tank, and the principal architect of last year's solar legislation.

What put solar's benefits over the top was the state's decision to adopt the U.S. EPA's value for avoided carbon emissions -- the social cost of carbon (<http://www.epa.gov/climatechange/EPAactivities/economics/scc.html>) in EPA's lingo. At \$37 per metric ton of carbon this is worth almost 3 cents for every kilowatt-hour of natural-gas fired generation displaced by rooftop solar power in Minnesota, according to a preliminary analysis of the PUC's formula by Xcel Energy, the state's largest utility.

Still bigger benefits come from more obvious savings, such as displaced fuel for power plants (about 5.5 cts/kwh) and avoided construction of new power stations (about 3.4 cents/kwh). In sum, solar values in at 14.5 cts/kwh, which is 3-3.5 cents more per kilowatt than Xcel's retail rates.

As for the grid costs utilities are complaining about, such as managing the variability of solar power flows, the PUC found they were essentially zero and would remain so until solar generation exceeds about 15 percent of the state's power supply. That could take a while. Solar currently provides less than 0.1 percent of Minnesota's power, and would rise to just 1.5 percent by 2020 under state mandates.

Despite the appearance that utilities lost and solar generators won, Farrell says the new value of solar rate plan is actually a boon to both. The rate works like the feed-in tariffs popularized by Germany, whereby generators would get a 25-year contract at a set rate. Farrell says guaranteed pricing will benefit consumers by easing the financing of new solar installations. "It's a contract from the utility. That's a pretty good security to bring to the bank to finance solar," he says.

Solar value pricing could be good for utilities too because the cost of net metering is rising as they push up their retail power rates. Farrell says that Xcel's rates rose 4.5 percent per year over the last decade, and they have proposed steeper rate increases for the years ahead. Unless natural gas prices spike, he says, valuing solar will soon be a better deal for utilities. "In 5-6 years value of solar should be lower than the retail rate," says Farrell.

For now the value of solar rate is an option available to Minnesota utilities. No word yet as to whether any plan to abandon the net metering rules they so dislike.

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