

15 Solar Prosperity and Net Metering Talking Points, March 2019

Locally owned solar energy represents a dramatic opportunity for energy prosperity and energy entrepreneurship throughout Iowa. The MidAmerican solar monopoly legislation closes the door on that opportunity in order to protect the profits of Warren Buffet and MidAmerican's largely out-of-state investors.

- ✓ Locally owned “distributed” solar creates good local contractor jobs – over 800 in Iowa and growing¹, and 85% of those are based on customer – not utility - projects. The MidAmerican solar monopoly bill would kill hundreds of good Iowa jobs.
- ✓ Iowans have a right to generate solar energy and to keep their energy wealth local. Energy costs are a giant sucking sound of wealth draining out of Iowa communities year after year. Studies suggest Iowans could provide about 20% of their power from rooftop solar alone²³, which would represent over a billion dollars staying in customer pocketbooks and balance sheets every year.
- ✓ MidAmerican's solar monopoly bill would authorize a “sunshine tax” on solar owners of over \$300/year in unfair fees and charges, making solar ownership economically less viable, killing jobs, and steadily closing the door on solar energy prosperity.
- ✓ Utilities are granted a monopoly to serve us and manage the grid, but they are NOT granted a monopoly on generation and wealth creation: that “first monopoly” and right to generate on fair grid terms must always remain with the Iowa customers and communities. Do not grant MidAmerican Energy a monopoly on the sun.
- ✓ Customer-owned solar represents less than 1/10th of one percent of MidAmerican's sales. Many utilities and entire states are doing just fine at levels 10-100 times higher. Those higher levels would be great for wealth retention in Iowa communities, and represent positive competition for MidAmerican. The MidAmerican solar monopoly bills represent job-killing, prosperity-killing, competition-killing protectionism, plain and simple.

Studies around the country show that most solar owners actually contribute more value to the utility and grid than they utilize. The claim that solar owners are “subsidized” by or “shift costs to” non-solar customers is false. The only shift enacted by this bill would be a generational profit and wealth shift from Iowa homes, farms, businesses, communities and counties to MidAmerican and Alliant investors.

- ✓ All energy customers have been paying for the distribution grid for generations already, and all customers – including solar – continue to pay for it through monthly fixed charges.
- ✓ Solar producers add value to the utility and grid in many ways, including avoided transmission and distribution capacity costs, avoided energy generation, and avoided capacity cost. Capacity

¹ <https://www.thesolarfoundation.org/solar-jobs-by-state-2018/>

² https://www.iaenvironment.org/webres/File/Program%20Publications/2015_solar_handout.pdf

³ <https://www.nrel.gov/docs/fy16osti/65298.pdf>

represents the “time value of energy”. MidAmerican Energy values⁴ summer energy from 1-6pm at about 20 cents/kwh, yet only credits solar producers about 10 cents/kwh. This would suggest that for much of their annual production, solar owners are directly subsidizing other customers, rather than the other way around.

- ✓ Many states have commissioned detailed “Value of Solar” studies^{5,6,7}, almost all of which show the total (stacked) values provided by solar producers are worth about the same or more than the utility’s retail rate, making net metering overall a very fair balance of trade for the utility, and disproving MidAmerican’s claims of “subsidization” or “cost-shifting”.
- ✓ The National Association of Regulatory Utility Commissioners’ own authoritative “Distributed Energy Resources Compensation Manual” suggests that
 - utility regulatory bodies are the appropriate place for this deliberation,
 - regulators should observe caution when considering changes to net metering at low penetration levels, and warns that “reforms that are rushed and not well thought out could set policies and implement rate design mechanisms that have unintended consequences such as potentially discouraging customers from investing in DER or making inefficient investments in DER.”⁸
 - Regulators consider the guidance from the DOE’s Lawrence Berkeley National Lab stating that distributed generation penetration rates up to about 5%, “can be accommodated within the existing distribution system without material changes to infrastructure or operations.”⁹ A subsequent LBNL study confirmed that “the effects of distributed solar on retail electricity prices will likely remain negligible for the foreseeable future”, even with full retail net metering policies.¹⁰
 - MidAmerican’s distributed penetration rate is less than 0.1%. In other words, it would take roughly 50 times the current level of customer-owned solar on MidAmerican’s system before cost or rate impacts *might* be felt.
- ✓ The grid has always been a system of shared infrastructure. For example, rural customers require up to 10 times the distribution infrastructure as urban customers and pay the same rates, yet MidAmerican isn’t claiming a cost-shift, or trying to “fix” that “problem”.

⁴ Net metering kwh credit is at standard residential tariff p217, while summer power value is shown in residential time-of-use tariff, p293: <https://www.midamericanenergy.com/content/pdf/rates/elecrates/iaelectric/ia-elec.pdf>

⁵ A compilation is available here: <https://www.seia.org/initiatives/solar-cost-benefit-studies>

⁶ A review by Brookings is available here <https://www.brookings.edu/research/rooftop-solar-net-metering-is-a-net-benefit/>, and found that “Increasingly [the national literature concludes]— whether conducted by PUCs, national labs, or academics — that the economic benefits of net metering actually outweigh the costs and impose no significant cost increase for non-solar customers. Far from a net cost, net metering is in most cases a net benefit—for the utility and for non-solar rate-payers.”

⁷ A detailed report on Minnesota’s process is available here <https://ilsr.org/wp-content/uploads/2014/04/MN-Value-of-Solar-from-ILSR.pdf>

⁸ P62, <https://pubs.naruc.org/pub/19FDF48B-AA57-5160-DBA1-BE2E9C2F7EAO>

⁹ Pp7-9, <http://eta-publications.lbl.gov/sites/default/files/lbnl-1003797.pdf>

¹⁰ P29, <http://eta-publications.lbl.gov/sites/default/files/lbnl-1003797.pdf>

If MidAmerican Energy or Alliant Energy truly believe they have a problem with solar customers producing their own power, they should take their case to the Iowa Utilities Board (IUB), not the legislature. The IUB exists to regulate rates for Iowa’s rate-regulated utilities, has studied this issue before, and is ready and willing to study it again.

- ✓ From 2014-2017, the IUB heard evidence in docket NOI-2014-0001, which was focused on distributed generation (largely solar) interconnection and net metering. MidAmerican and Alliant tried to claim that solar producers were receiving unfair subsidies through net metering, and the IUB rejected that argument.
- ✓ In the IUB’s “Order Directing Filing of Net Metering Tariffs”¹¹ (July 19, 2016), the Board ordered the two utilities to submit revised net metering tariffs valid for a period at least three years. The utilities were ordered to “provide data annually so that the Board can monitor any impacts” going forward, which the Board could then use to “generate useful information regarding the penetration of DG and what policies will best balance the interests of customers and the utilities.”
- ✓ In the final “Order Approving Compliance Tariff, Requiring Submission of Data, and Closing Docket”¹² (May 4th, 2017), the board defined 30 data points that MidAmerican was to file annually, and stated that with continuation of net metering and the closing of the current docket “these inquiries proceed into the next stage – that of collecting and then evaluating operational data to inform future deliberations on rate and other related terms for customers with distributed generation.”
- ✓ If MidAmerican believes they have now collected enough data to prove that solar customers aren’t paying their fair share of infrastructure, they should feel perfectly comfortable returning to the IUB to request another docket. The fact that they have come to the legislature for protection and relief suggest that the data do not, in fact, support their claims. The legislature should direct MidAmerican to take their case to the IUB, not attempt to pre-empt the proper regulatory process and grant favors to a multi-billion dollar company at the expense of Iowans simply trying to generate solar energy on fair grid terms.
- ✓ If the legislature does feel compelled to learn more, or “get to the bottom” of the issue, they could certainly appropriate funds to the IUB and Office of Consumer Advocate to collaborate on an Iowa “Value of Solar” or “Value of Distributed Energy Resources” study, commissioned by an independent third party, to investigate the various costs and benefits of customer-owned solar in Iowa, as did the Minnesota Public Utilities Commission in 2014¹³.

¹¹ <https://efs.iowa.gov/cs/groups/external/documents/docket/mdax/njaw/~edisp/1600470.pdf>

¹² <https://efs.iowa.gov/cs/groups/external/documents/docket/mdax/njiz/~edisp/1623632.pdf>

¹³ <https://ilsr.org/wp-content/uploads/2014/04/MN-Value-of-Solar-from-ILSR.pdf>