



HOUSE COMMITTEE ON ENERGY, UTILITIES & TELECOMMUNICATIONS

Opponent Testimony for HB 2228 – Net Metering

Feb. 7, 2023

Presented by:
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Chairman Delperdang, Vice Chair Turner, Ranking Member Ohaebosim, and members of the House Committee on Energy, Utilities & Telecommunications, thank you for the opportunity to submit comments in opposition to HB 2228. I am Mark Scheibe, the Chief Executive Officer of Heartland Rural Electric Cooperative, headquartered in Girard, KS. I am also a licensed professional engineer in the state.

Heartland serves 11,500 electric meters in the rural parts of eastern Kansas across 3,800 miles of power lines, which means we provide power to around three electric meters per mile of line.

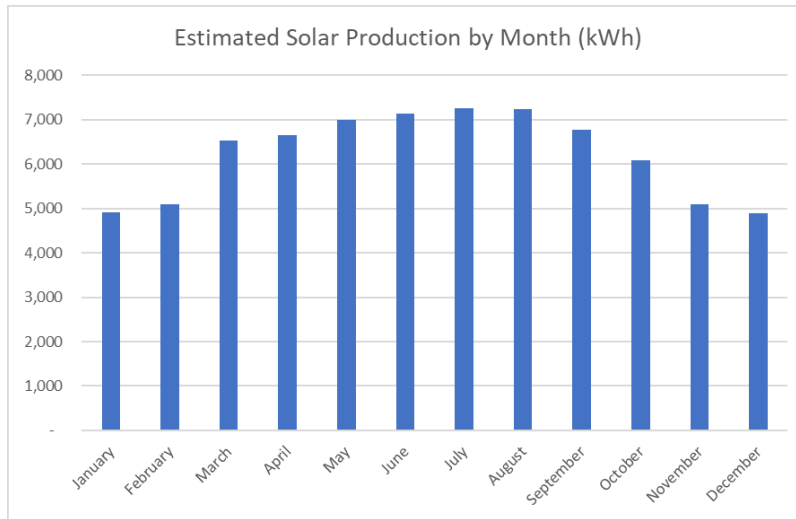
Heartland focuses on providing for the electric needs of our members in a safe and reliable manner and at a reasonable cost. Our governance structure and non-profit status allow us to stay dedicated to our mission of powering rural lifestyles. Each member of our Board of Directors is a locally elected member who represents other members in their district. Because we are owned by the members who purchase the power we provide, we can focus on responsibly meeting members' needs rather than maximizing profits.

We know from market research that our membership is diverse. Some of our members are highly interested in distributed generation technologies such as solar, while many are not. Heartland is not opposed to distributed generation for our consumer-members. What is good for our consumer-members is good for their electric cooperative. Alongside other electric cooperatives in the state, we have developed policies that balance the interests of the entire membership. However, the proposed changes to the net metering laws would be harmful to many of our members in four interconnected ways: (1) increased potential for predatory installers to sell oversized systems; (2) increased subsidization from those with solar to those without solar; (3) increased infrastructure costs to accommodate unnecessarily large solar installations; and (4) infringement on the ability of the cooperative membership to self-govern.

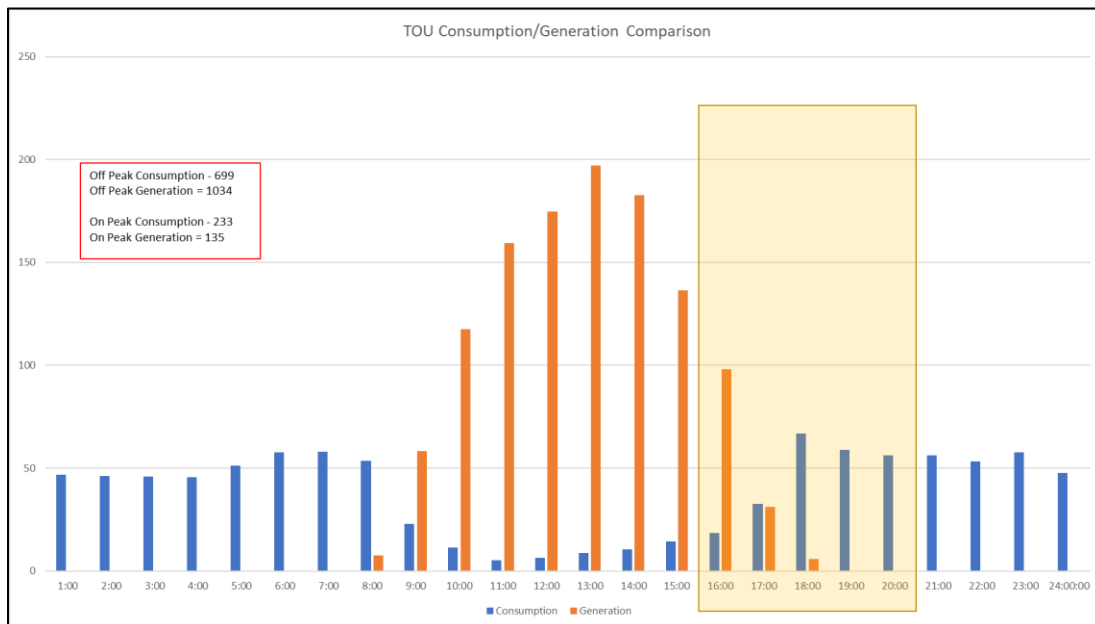
First, let's address system sizing. Heartland routinely helps our members appropriately size their installations to ensure they are maximizing the affordability and rate of return on their investment.

In one instance, a member had signed paperwork with an installer to have solar installed on their property to cover the electrical needs of their home and small business. They used electric heat during the winter months to heat buildings and their summer energy usage was

at a minimum. Solar production is less during the winter months (as noted in the graph below) than the summer, which meant that they would only be consuming about 65% of the kilowatt-hours (kWh) their installer-recommended system would produce in a year. Heartland helped this member right-size their installation, which saved them \$100,000 compared to the initial proposal. This member would have not seen a return on their investment had they gone with the installer’s recommended sizing.



Another problem created by oversized solar generation systems, which would be significantly worse under this proposed legislation, is the fact that members without solar typically subsidize members with solar. This occurs because of a mismatch between when solar production is at its highest and when members are using the most electricity. Heartland has experienced many instances where installers size solar installations based on the kWhs consumed all hours of the day, and not those that are able to be consumed during the daylight hours.



The graph above illustrates the issue very well. This is the monthly kWh consumption of electricity per hour from Heartland (blue bars) versus the production of solar by one of our consumer-members (orange bars). In a perfect world, distributed generation systems would generate the most power during the peak window of 3 to 8 p.m. when electricity is in highest demand and is therefore most expensive. That electricity would then be used instantaneously with nothing being pushed back onto the grid. But as you can see, the production of solar energy peaks at noon, which does not match well with when this member is using their electricity. This means that the majority of kWh produced are being pushed back onto the grid, and the member is receiving credit on their bill for the full retail price, when in reality, Heartland would have been able to purchase those kWh from other sources at a much lower cost during nearly all of that time.

The disconnect between when kWhs are produced and when they are used under Heartland's Net Metering Rate Schedule means that on average those members who install a 7 kilowatt (kW) solar installation receive a \$762 per year subsidy from the other non-solar members. The timing of production versus consumption changes the return on investment sold to the member from their installer. This is especially problematic as our members with solar are likely to be more financially secure than our members without solar.

Additionally, the proposed legislation would create unnecessary expenses related to infrastructure and equipment in the rural parts of the state. The distribution electric grid was originally designed for a one-way flow of electricity. As more generation is added that is not being used by the end-consumer, this creates a reverse flow of energy, which impacts the protection systems to help provide safe operation. The cost to replace legacy equipment in order to support reverse flow of energy is expensive, so the question then becomes, who should have to pay? Should it be the members with solar at their home or business, or should it be all Heartland members?

Lastly, HB 2228 would reduce the cooperative's ability to make rate decisions that are best for its membership. In 2022, Heartland's locally elected Board of Directors voted to implement new modern rate designs that provide members with options to help them control their electric costs. Time of Use, Super Off-Peak Electric Vehicle rates, and demand rates are all options for our members. These rates better align what members pay with how Heartland purchases wholesale power. The ability to self-regulate, a core feature of any cooperative, would be harmed by this bill. The bill would limit the membership's ability to make policy and rate decisions that fairly balance the interests of all members, since it would mandate how net metering would need to be implemented. Those with solar would benefit at the cost of those without.

Through our experience with two utility-scale solar projects we installed in the communities we serve, Heartland Rural Electric Cooperative understands that a properly designed and installed solar system can help save money. All the electricity that is being produced locally is being consumed locally, and no excess energy is being sent back to the bulk electric grid, which helps reduce costs for all consumer-members.

Heartland also helped spearhead utility scale solar projects for 12 other electric cooperatives across the state to help lower the costs of power for each of those cooperative's members, in partnership with Today's Power, Inc., a wholly owned subsidiary

of Arkansas Electric Cooperatives, Inc. The utility-scale solar projects were designed to help reduce peak electrical demands when wholesale energy is the most expensive.

As with all of the other electric cooperatives in the state, Heartland Rural Electric Cooperative is positioned well to do the right thing for the right reasons. The proposed Net Metering changes would limit our ability to help protect our members from predatory installers who do not have their best interests in mind, would increase subsidization from members with solar to those without solar, and would create costly and unnecessary infrastructure challenges in our state's rural areas.

Thank you again for the opportunity to share our concerns with HB 2228. We respectfully request the committee to refrain from advancing the bill. If the committee does act on HB 2228, we request cooperatives be excluded from the bill.

If you have any questions regarding our testimony, please feel free to contact me.

Mark Scheibe

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