



April 30, 2018

To: House Energy Committee Members

RE: Testimony in support of HB 5692 and HB 5693

Dear Committee Members,

Thank you for the opportunity to comment in support of House Bills 5692 and 5693, which would keep Michigan's successful net-metering program in place. The Michigan Environmental Council (MEC) is a coalition of over 65 environmental, conservation, and faith-based groups located across the state of Michigan. We have significant expertise and a long history of involvement in discussion around energy policy in Michigan, including playing an active role in the 2016 rewrite of Michigan's energy laws. We also intervene on behalf of residential ratepayers in Michigan Public Service Commission proceedings.

Right now Michigan residents pay the highest rates for electricity of any Midwest state. Our residential rates are also above the national average. Over the last ten years Michigan residential customers have seen their electric rates rise by more than 44%. Significantly while Michigan utility bills were going up, the average median income of Michigan residents has gone down.

Retail net-metering is a billing system whereby customers are charged the retail rate for energy purchased from a utility and are credited on their bill at that same retail rate for any excess energy they supply back to the grid. In Michigan system size is capped at the average of a customer's last 12 months of energy use (up to 20 kW) and the program participation size is capped at 1% of a regulated utility's peak demand. The Upper Peninsula Power Company (UPPCO) has hit that participation cap already.

Given the high cost of energy and the declining installation costs of solar, more and more residents, farmers, and businesses are looking to small-scale solar as a means of decreasing their energy costs. As of December 2016, Michigan had over 2,500 customers participating in net metering. While that number represents only 0.024% of Michigan's total retail electricity sales we did see a 28% increase in program size over 2015. Net metering is working in Michigan, in part, because it is easy for solar installers to explain to customers. Additionally individual customers can readily calculate the impact of DG on their energy costs versus the upfront capital investment in order to determine if an investment in those resources is wise. In short, until this recent commission decision, there was long term certainty in the rate customers would get credited for on energy they export back to the grid, so they could gauge the length of the payback period for DG installations.

In 2016, the legislature rejected utility efforts to charge DG customers a significant grid usage fee and instead reached a compromise meant to ensure both that 1) the DG customers have an accurate rate that reflects the costs and benefits they bring to the grid and 2) that the DG market wasn't squashed, but rather had a solid framework to continue to grow. The legislature under Sec. 6a (14) of Act 341 of 2016 directed the commission to both study and approve a tariff for DG customers with the requirement that the tariff be

“equitable” in the recovery of the “cost of service.” The legislature further directed the commission and utilities to incorporate the new tariff into any rate cases filed after June 1, 2018. Any customer enrolled in net-metering before the approval of the new tariff in post-June 1 rate cases would be grandfathered into net-metering for 10 years.

Recently, the commission staff completed a stakeholder process and a report outlining recommendations to the commission for the DG tariff. MEC participated in that stakeholder process and provided detailed comments to staff and the commission. We, like other interested parties, were frustrated by the lack of detailed data about customers with DG and about the minimal analysis done to determine the cost to serve these customers and the value of solar to the grid. The staff report recommended moving to an inflow/outflow billing mechanism whereby “inflow, or the customer energy purchases from the utility, would be priced at the full retail rate, while power outflows to the grid from the customer’s generation would be valued, at least initially, at the utility’s avoided cost.”

Based on recommendations from the staff report and comments from stakeholders, the commission issued an order in the DG tariff case. That order requires the utilities to include an inflow/outflow billing mechanism or an alternative billing mechanism of their choosing in their rate cases filed after June 1, 2018. Furthermore, the Commission determined that inflow should be the retail rate. But while they gave a nod of agreement to the staff recommendation of using avoided cost for outflow, ultimately the commission did not make that a requirement. Instead, they left outflow to be determined in the utility rate cases.

We have a number of concerns with this order, which are outlined below. Given the level of confusion and uncertainty the implementation of this order will have on Michigan’s nascent solar industry and the lack of evidence presented by the staff or the commission that the report and order meet the legislature’s requirement that the tariff reflect an equitable cost of service, we strongly support HB 5692 and HB 5693 and believe that the best path forward is to retain Michigan’s net metering program.

### **Creating Confusion and Uncertainty in the Market**

The recent commission order only creates confusion and uncertainty in the market. The commission order allows utilities to file alternative billing mechanisms for inflow/outflow in their rate cases. The order also leaves open-ended the outflow rate; presumably pushing decisions on that to the post-June 1 rate cases. We could likely see a large variety of variation in rate case filings and potentially widely different programs offered in different utility territories. That is one of the reasons why we don’t feel that rate cases are the appropriate venue for making these determinations.

All of this would make it even more difficult for solar developers/installers to explain costs and benefits to customers and for customers to be able to pencil out how the investment will impact their utility bill. Furthermore, it is unclear what the timeline is for revising outflow or inflow rates once they are set in post-June 1 rate cases. The commission and staff both indicated an interest in updating the rates when more data becomes available and a fuller range of benefits is quantified. If they are revisited and revised often, that would make it even more difficult for residents and businesses to determine what the costs and benefits would be over the life of a DG system.

Until a robust, data-based cost of service or value of solar analysis is conducted we would support staying on net metering. This would preserve certainty in the market and ensure we are only making those changes to the program in-line with what the legislature asked for.

### **Lack of Cost of Service Analysis**

Cost of service ratemaking is the use of rate design and cost of service analysis to allocate costs to different customer classes based on their usage patterns. In ordering the use of the retail rate for inflow the commission and staff failed to provide evidence that the retail rate reflects cost of service for DG customers. In fact, there is evidence in the staff's analysis that distributed generation customers are 16% less costly to serve than non-distributed generation residential customers due to lower contribution to peak capacity needs and that the use of retail rate for inflow to customers with DG produced a small but material **overcharge** to those customers.

Staff recommended that PURPA avoided cost be used for outflow, but again did not demonstrate that avoided cost reflected an equitable cost to serve DG customers. Finally, the commission order failed entirely to set any outflow rate (cost-of service based or otherwise). The commission did not take the staff recommendation and require utilities to file PURPA avoided cost as the outflow in their post-June 1 rate cases. Instead the order leaves it open-ended to utilities to file whatever outflow rate they want without any sort of guidelines or parameters to ensure the post-June 1 utility filings for outflow are cost of service based.

Distributed generation customers have seasonal and time of day production and usage patterns that are different from non-distributed generation customers. That is why a equitable cost of service for these customers can't be accurately determined until a robust analysis of data from these customers is conducted. It is also why in 2016 the legislature called on the commission to ensure the tariff was cost of service based. But this needed comprehensive cost of service analysis was not done and what analysis staff did conduct the relied largely on limited data provided by DTE from 2014. Despite the existence of more recent smart meter data from DG customers. If this data is not accessible within informal stakeholder processes then at a very minimum the commission should follow staff advise and open a contested case and use discovery to access needed data from the utilities.

### **No Valuation of Grid Benefits**

Distributed generation provides a number of negative costs (benefits) including avoided carbon emissions, reduced criteria air pollutant emissions, avoided compliance costs with environmental regulations and renewable portfolio standards, offsets to investments in generation; transmission; or distribution, reactive power supply, increased system reliability, and hedging fuel risk. And many of these benefits accrue to the grid as a whole. For example DG customers very likely decrease the cost of utilities to serve other customers. When a solar system generates excess power that is exported to the grid, that power flows to neighbors, and the utility is paid full-retail for that power by the neighbors. Consequently, the utility cost to serve those neighbors is reduced even while the utility still collects the full retail rate on that power.

These negative costs (benefits) are not fully captured in a system that uses the PURPA avoided cost for outflow and the retail rate for inflow. The PURPA avoided cost methodology in Michigan does not measure for a number of benefits associated with DG. In its order in the PURPA case U-18090 the Commission found that "except for line losses, there was insufficient evidence in this record to quantify other avoided costs including reduced transmission costs, reduced air emissions and environmental compliance costs, and the hedging value resulting from QF power." In the PURPA case the commission also concluded that it would look to the DG tariff case as the mechanism to investigate further the value of solar and quantifying avoided costs saying: "the Commission anticipates that VOS issues, as well as other avoided costs associated with distributed generation generally, will be examined as part of [the DG tariff] proceedings, which will be completed before the next PURPA review."

However, the full valuation of avoided costs was not rendered within the DG tariff case. In fact, DG report the staff concludes that: "A fair valuation method for DG resources injected into the grid by DG customers consists of two parts: (1) an avoided capital and energy cost; and (2) all other avoided cost or benefit elements such as avoided distribution line losses, transmission and distribution costs, avoided air emission and environmental costs, the solar-fuel price hedge, and reactive supply and voltage control...Unfortunately, neither Staff nor any DG workgroup stakeholders have had the opportunity to rigorously quantify a total valuation." Therefore staff looked to "what is available at this time" as a stand-in for a cost of service based outflow rate and landed on PURPA avoided cost (plus a little additional for avoided line loss) as their recommendation.

As we have seen in other states DG customers are very sensitive to price signals and if we undervalue solar and other small-scale generation we risk potentially shortchanging michiganders on their investment or driving them out of the market either by making the investment in DG uneconomical or moving them towards battery storage (and thus depriving the grid of the benefits they bring). Before we move forward with any changes to Michigan's net metering program we should be certain, based on sound analysis of robust data sets, that those changes reflect an accurate valuation of the costs and negative costs to serve DG customers.

The legislative mandate contained within PA 341 of 2016 does not accommodate ending Michigan's current net metering program to move to a non-cost of service based tariff even as an interim measure. In light of the concerning order from the commission and the limited analysis in the DG staff report, we encourage committee members to support HB 5692 and HB 5693 and keep Michigan's current net-metering program in place.

Sincerely,

Charlotte Jameson  
Energy Policy and Legislative Affairs Director  
Michigan Environmental Council