Sierra Club Comments on the

Review TAC Structure Straw Proposal

Submitted by	Organization	Date Submitted
Katherine Ramsey 415-977-5627 katherine.ramsey@sierraclub.org	Sierra Club	Feb. 15, 2018

Sierra Club is a non-profit, member-based, "public benefit" California corporation with over 770,000 members nationwide and more than 170,000 members living in California. Sierra Club's mission is to promote the responsible use of the earth's ecosystems and resources and to protect and restore the quality of the natural and human environment. In California, Sierra Club supports efforts to develop cost-effective incentives and policies that promote energy efficiency and clean energy development, including distributed energy resources. We work to secure energy policy reforms necessary to help the state meet its clean energy, air quality and climate protection goals, create jobs for California families, and reduce our dependence on dirty forms of energy.

Sierra Club has no comments on Questions 1-6 at this time.

Point of Measurement Proposal

7. Does your organization support the concepts and supporting justification for the ISO's current proposal to maintain the current point of measurement for TAC billing at end use customer meters as described in Section 7.2.3.2 of the Straw Proposal? Please explain your position.

Sierra Club does not support the concept and supporting justification for the ISO's proposal to maintain the current TAC point of measurement. The customer meter reflects a less accurate measure of transmission usage than the transmission-distribution interface, and therefore the customer meter should be abandoned as the point of measurement in favor of the transmission energy down flow (TED) at the transmission-distribution interface.

The primary flaw in the Straw Proposal's point of measurement section is that it fails to provide any justification for using the end of the distribution system to reflect use and benefits of the transmission system. The transmission-distribution interface marks the end of the transmission system, whereas the customer meter marks the end of the distribution system. Transmission charges should therefore be assessed at the end of the transmission system. Any alternative to the transmission-distribution interface as the point of measurement undermines this logic and increases the likelihood of causing market distortions.

One such market distortion is that the customer meter point of measurement requires some customers to pay for something that they are not using. In this case, that means utility distribution companies (UDCs) with significant distribution energy resources (DER). Energy that is generated and consumed on the same distribution system incurs a TAC, even when it never travels via the

transmission system. This means that UDCs that generate energy locally through significant distributed energy resources (DERs) incur transmission delivery charges on energy that is not actually delivered via the transmission system. This obscures the primary locational benefits of DER and unfairly burdens UDCs that have deployed significant quantities of DER.

Similarly, the customer meter point of measurement allows UDCs that use the transmission system comparatively more intensively underpay for their share of transmission investment. A primary benefit of DER is that any energy and ancillary services they provide can be located near to where the energy and services are needed—without creating new demand for additional transmission infrastructure. By meeting distribution needs locally, UDCs with significant DER investments can save all ratepayers money by avoiding or postponing the need for new transmission infrastructure. However, the UDCs and their customers see no reduction in transmission costs for the benefits that they provide. If the point of measurement were moved to the T-D interface, then this cost shift would be corrected by an immediate market signal for energy that is generated and consume locally.

Additionally, it is important to point out that the customer meter point of measurement poses a significant hurdle for the deployment of community solar and other wholesale DER projects. As long as TAC is assessed on energy that flows across the customer meter, energy exports from community solar projects or wholesale DER will be subject to charges for the transmission system, regardless of whether that energy flows across the transmission grid. For these projects, relatively small but growing TAC charges can pose a significant problem in the financial feasibility of these projects, despite the benefits they can provide to local communities.

It is improper to cite the relatively small size of TAC as a reason not to correct the point of measurement. The ISO is correct that TAC currently makes up a relatively small portion (between 9 and 16%) of rate revenues for California investor-owned utilities, but the TAC has been growing at a fast pace while generation costs—particularly for renewables—plummet. The TAC is not likely to remain a small portion of California's electricity costs. For example, the installed costs of PV have fallen dramatically over the past two decades.

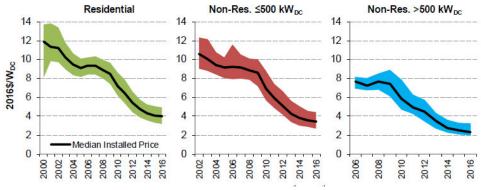


Figure 1: U.S. Residential and Nonresidential PV System Prices¹

2

¹ Barbose, Galen, Naïm Darghouth, Dev Millstein, Kristina LaCommare, Nicholas DiSanti, and Rebecca Widiss. September 2017. *Tracking the Sun 10: The Installed Price of Residential and Non-Residential Photovoltaic Systems in the United States*. Lawrence Berkeley National Laboratory. Figure 5.

By contrast, California's high voltage transmission prices have consistently escalated, at times faster than the ISO has expected. California's energy costs are increasingly shifting towards infrastructure rather than generation, and it is therefore critical that the TAC point of measurement reflect actual use and benefit more closely than it currently does. For this reason, the ISO and stakeholders should further evaluate the transmission-distribution interface as the TAC point of measurement.

While the ISO does not bear responsibility for project procurement decisions, it is squarely within ISO responsibility to correct market distortions that result from an inaccurate point of measurement for TAC. The current point of measurement transmission costs to energy that does not use the transmission grid and perpetuates a market distortion against DER, and Sierra Club urges the ISO to address it by further evaluating the transmission-distribution interface in its Revised Straw Proposal.

8. The ISO has indicated that the recovery of the embedded costs is of paramount concern when considering the potential needs and impacts related to modification of the TAC point of measurement. The ISO seeks additional feedback on the potential for different treatment for point of measurement for the existing system's embedded costs versus future transmission costs. Does your organization believe it is appropriate to consider possible modification to the point of measurement only for all future HV-TRR costs, or additionally, only for future ISO approved TPP transmission investment costs? Please provide supporting justification for any recommendations on this issue of point of measurement that may need to be further considered to be utilized for embedded versus future transmission system costs. Please be as specific as possible in your response related to the specific types of future costs that your response may refer to.

For all the reasons listed above, the point of measurement for all transmission costs should be at the transmission-distribution ("T-D") interface. Short of that complete solution, the partial solution of using the T-D interface for only future HV-TRR costs would be an incremental improvement over the status quo.

3

² See Bay Area Municipal Transmission Group (BAMx) Comments on the CAISO Transmission Access Forecasting Model (Sept. 27, 2017), at 2, available at http://www.caiso.com/Documents/BAMxComments 2016-2017TransmissionAccessChargeForecastModel.pdf (citing that the ISO's high-voltage transmission revenue requirement had increased 9% more than projections made 6 months prior).