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**Comments of the Energy-Climate Committee of the San Francisco Bay Chapter, Sierra Club
CAISO Review of the Transmission Access Charge Wholesale Billing Determinant
June 2 Issue Paper**

Summary: Shifting the TAC determinant to transmission energy downflow (TED) merits support for many reasons. First, the proposal would align TAC payments with usage, ensuring that the utilities benefitting from the transmission system are paying proportionally. The proposal would also create a more level playing field for DG projects in procurement decisions by providing value for local projects. Additional DG investment would save ratepayers billions of dollars over the next 20 years through delayed or avoided transmission investments. Furthermore, the proposal would aid in the creation of Distribution Resources Plans and bring all utilities under CAISO jurisdiction consistent TAC treatment.

CAISO should assess transmission costs in proportion to measured usage of the transmission system and in line with the Usage Pays principle. Changing the TAC billing determinant to TED would ensure that the TAC system more closely aligns TAC liability with usage of the transmission system, resulting in a fairer cost-allocation system. A customer's distributed generation enters the distribution system directly and **does not rely on the transmission system.**

The Usage Pays principle is established in Federal Energy Regulatory Commission (FERC) Order 1000 as well as in the original TAC design. CAISO applied this principle to its existing TAC system, but circumstances have changed: When CAISO began operating in 1997, almost all energy was delivered from centralized generation through the transmission system. With increased deployment of DG, however, the customer energy downflow (CED) no longer reflects the quantity of energy actually using the CAISO transmission system, and therefore no longer reflects the Usage Pays principle.

Fixing the TAC billing determinant by changing it from CED to TED would also allow CAISO to fairly allocate the costs of any super-high voltage (SHV) transmission facilities under an expanded balancing authority area. The Clean Coalition's proposal could easily be extended to allocate costs for any new SHV transmission facilities based on the TED of energy from the SHV system to the HV system, ensuring that parties benefitting from the SHV facilities are carrying the costs.

Addition of TAC costs to distributed generation sources, as is done now, skews utilities' procurement decisions. Utilities are required to procure resources that have the lowest cost and best fit their system needs. Additional cost, estimated by the Clean Coalition at 3 cents/KWh, puts distributed generation at a competitive disadvantage and can mean good sources are bypassed.

The most significant impact of incentivizing the development of DG is the potential to defer or avoid transmission upgrades. The potential cost savings for consumers are enormous. For example, increased utilization of DER, most notably rooftop solar, has already resulted in PG&E canceling \$190 million worth of low-voltage transmission upgrades in the 2015–2016 transmission planning process.¹

The opportunity for a load-serving entity (LSE) to reduce transmission charges will improve the competitiveness of DG solutions when LSEs seek energy supplies, which will in turn result in higher levels of local generation than would otherwise occur. To the degree that increases in demand are met through local resources and programs, the need for new transmission facilities will be reduced or deferred, and the savings will be distributed in direct proportion to each LSE's reliance on local or transmission-sourced energy.

The current TAC system fails to recognize the cost-saving potential of local DG. Increased DG deployment results in savings by preserving existing transmission capacity, reducing demand for additional transmission investment, and lowering line losses. Without recognizing this cost-saving potential of DG, the lack of a transmission cost signal in procurement will result in excess investment in transmission resources over time, resulting in substantial and unnecessary costs to consumers.

Locational benefits of distributed resources: Public Utilities Code Section 769 mandates that electrical corporations file Distribution Resource Plans (DRP) to identify optimal locations for the deployment of distributed resources. Changing the TAC wholesale billing determinant would directly influence the DRP Locational Net Benefits Assessment (LBNA) methodology currently being implemented to identify the types, quantities, and locations of DER that offer the lowest net cost options to ratepayers in meeting customer needs. With additional cost-effective options, utilities will have more opportunity to develop and implement distributed generation as part of their DRPs.

The Clean Coalition proposal would levy the TAC consistently across all utility service territories under CAISO's jurisdiction. Municipal and other utilities which do not own transmission infrastructure (non-PTO utilities) are assessed the TAC on the basis of the energy downflow from the transmission grid. Utilities that do own transmission are charged on the basis of

¹ California ISO, *2015-2016 Transmission Plan* (Mar. 28, 2016), available at <https://www.caiso.com/Documents/Board-Approved2015-2016TransmissionPlan.pdf>.

downflow to end-users' meters, including energy that was generated on the distribution grid. This increases the assessment to the utility and thus the bills of their ratepayers. Implementing the Clean Coalition's TAC fix would result in a single, consistent TAC practice under CAISO's jurisdiction by bringing all utilities under the TAC treatment currently reserved for non-PTO utilities.

The key long-term impact of the Clean Coalition proposal is that both the transmission revenue required (TRR) and the TAC rate would decline significantly over time relative to business as usual. Changing the TAC assessment point eliminates the TAC market distortion that currently undervalues DG resources in PTO utility service territories and results in increased deployment of local renewables. In addition, higher penetrations of DG would slow the need for additional investments in transmission infrastructure and result in substantial avoided transmission costs for all ratepayers over time—significantly slowing the alarming growth in TAC rates, and potentially even lowering it. Clean Coalition analyses show that a 10% annual growth rate of DG would save California ratepayers approximately \$35 billion in avoided transmission costs over 20 years—including ratepayer costs for capital investment in infrastructure and PTO return on equity.

On peak load: We urge CAISO to adjust the TAC wholesale billing determinant now rather than working to incorporate a peak load measure into the TAC system. The peak load measure is a separate, broad issue far beyond the comparatively narrow problem of TAC impact on DG. The immediate TAC reform is straightforward and should be resolved immediately, regardless of whether CAISO opts to undertake a more long-term effort to consider incorporating a separate peak load demand charge.

The two matters are complimentary but distinct, should not be conflated, and may be appropriately addressed separately.

Peak loads reflect Time of Delivery rates in procurement contracts and Time of Use rates in consumption. Each factor's contribution and their interaction should be considered in broader policy development, integrated resource planning, and market design. This overarching coordination is being addressed in other stakeholder processes and CPUC proceedings that would benefit from the proposed TED correction to the billing determinant.

That said, we note that additional local renewables do reduce load on the transmission system, including peak loads. As such, the change in billing determinant will broadly contribute to a positive impact on peak transmission loads.

On shifting of costs between utilities by going to a TED-based allocation: Any immediate change in cost responsibility would be proportional to the difference in current DG penetration between PTO utilities. Current DG penetration for the PTO utilities is less than 2%, meaning that the difference in DG penetration would be far less than the proportional change seen in the [CAISO's Issue Paper's](#) Example 1 (comparing TAC impact on hypothetical utilities using varying % of DG). Any actual cost shift would likely be a fraction of a percent between utilities, and would be an appropriate incentive for making transmission capacity available. The TAC proposal

incentivizes LSEs to use transmission only when cost-effective to do so or to fulfill customer demand for local renewable energy, therefore the cost impact appropriately depends on the amount of DG being used by each LSE.

On the matter of incentives: The central objective behind this proposal is: 1) to properly allocate transmission costs in accord with FERC principles,² and 2) to establish appropriate market pricing signals to reflect actual costs of delivering energy in procurement decisions, in order to determine the most cost effective balance between transmission and non-transmission resources. The current Customer Energy Downflow (CED) basis for TAC fails these tests and creates a market price distortion in favor of non-local resources that actively discourages development of DG and artificially drives demand for additional transmission and associated increases in transmission costs.

Under the current approach, TAC rates have increased dramatically since 2000, with HV rates statewide increasing from less than \$2/MWh to more than \$10/MWh. CAISO has projected a 7% annual growth in HV TAC rates, and regional LV transmission TRR are comparable. If current trends continue the cost of transmission will approach and ultimately exceed the cost of energy, underscoring the importance of addressing the factors driving the increases in TAC rates. The market distortion created by EUML is not the only factor, but it is an important one and necessary to address the growth in TAC rates.

On prioritizing objectives: Multiple policy objectives would be accomplished by changing the TAC wholesale billing determinant to the TED. The most important policy objective is to provide appropriate market pricing signals that align the TAC system with the Usage Pays principle and ensure that TAC volumetric assessed liability directly reflects actual volumetric use of the transmission system. This is an important component in successful overall application of cost effectiveness methodologies.

The objectives should also include the following:

- Save billions for electricity customers by deferring transmission upgrades.
- Aid in developing cost-effective Distribution Resource Plans.
- Increase fairness by aligning the TAC system with the Usage Pays principle.
- Bring consistent TAC treatment to all utility service territories under CAISO's jurisdiction.
- Level the playing field for local DG in utility procurement processes.
- Consistent treatment of EE and DG for LSEs.

² Order No. 1000, *Transmission Planning and Cost Allocation*, 136 FERC ¶ 61,051, at p. 585 (2011).