

November 17, 2016

Market and Infrastructure Development
California Independent System Operator Corporation
P.O. Box 639014
Folsom, CA 95763-9014

RE: Clean Coalition Written Comments on the 2017 Policy Initiatives Roadmap

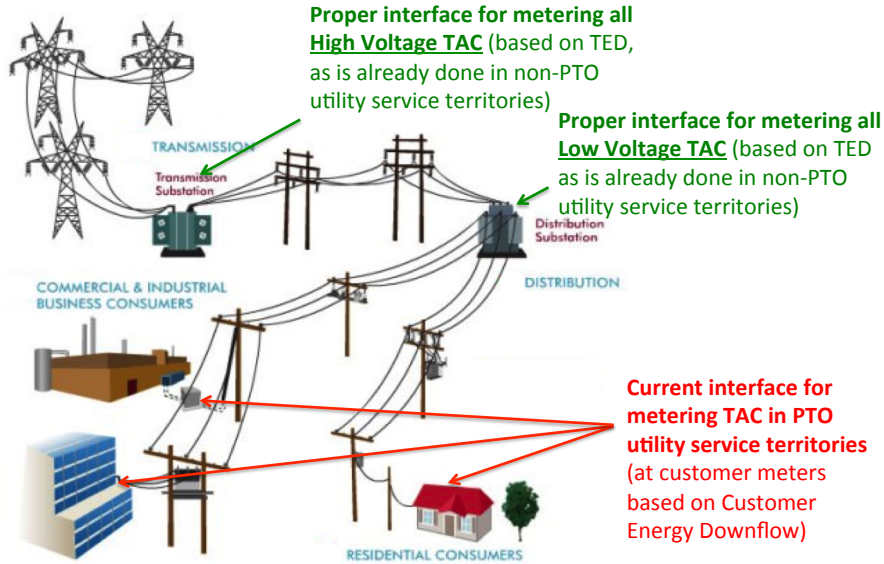
Dear CAISO Market & Infrastructure Development,

The Clean Coalition appreciates the opportunity to comment on the California Independent System Operator (CAISO) 2017 Policy Initiatives Roadmap. In these comments, we propose that stakeholder initiative #5.6 (Review Transmission Access Charges Structure) should be CAISO's top priority as the Clean Coalition's Transmission Access Charges (TAC) proposal resolves an existing massive market distortion on local renewables and provides a solution for transmission cost allocation for a regional independent system operator (ISO) after CAISO expansion. In addition, we propose a phased approach to organize the stakeholder initiative and urge the CAISO to begin the discussion as soon as possible.

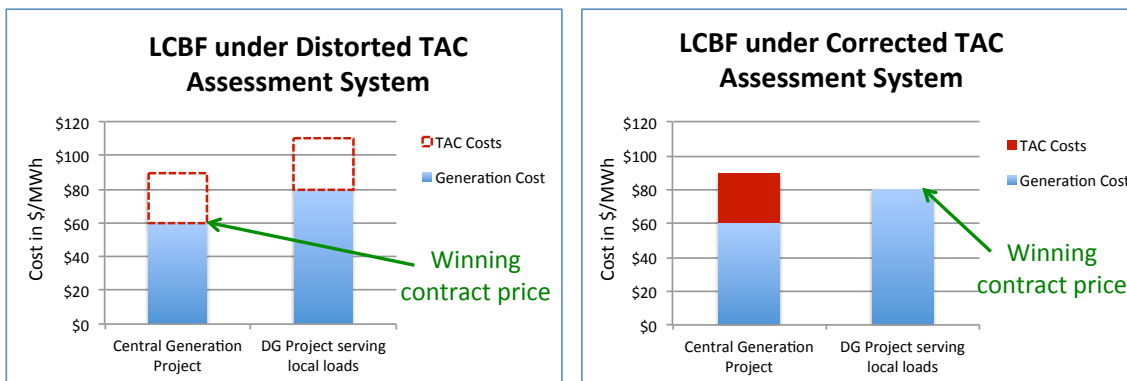
The TAC Market Distortion and the Clean Coalition's Proposed Solution

CAISO currently assesses TAC on all California electric energy consumption in Participating Transmission Owner (PTO) service territories based on the Customer Energy Downflow, or the amount of energy that crosses from the distribution system to the customer via a meter. As a result, TAC currently applies to locally generated energy (including exported net energy metering energy) that does not travel along the transmission system to reach customers. In reality, locally generated energy reduces transmission costs by freeing capacity on the transmission system.

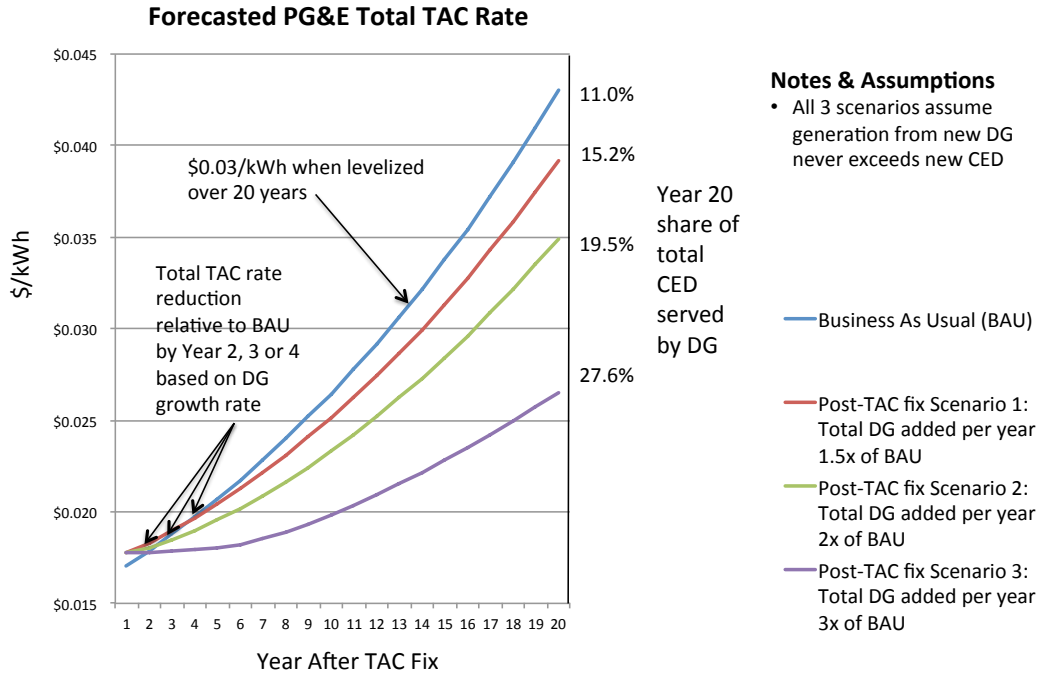
To create a fair, transparent, and consistent TAC assessment practice, the Clean Coalition recommends that CAISO measure participating transmission owner (PTO) utility service territory transmission usage at the Transmission Energy Downflow, where energy down-converts from transmission to distribution voltages. Importantly, CAISO already allows non-PTO utility service territories to pay TAC based on this assessment system by opting to be treated as Metered Sub-Systems. The graphic below compares how TAC is metered in PTO utility service territories (at the Customer Energy Downflow) to how TAC is metered in non-PTO utility service territories (at the TED). Under the Clean Coalition's proposal, low voltage (LV) TAC would be assessed at the TED for the transmission-distribution grid interface. High voltage (HV) TAC would be assessed at the TED for the high voltage to low voltage transmission system interface.



The current method for assessing TAC causes local generation to subsidize costs associated with the transmission grid, distorting Least Cost Best Fit (LCBF) conclusions when comparing local generation to centralized generation. The charts below compare distorted LCBF conclusions (left chart) against corrected conclusions (right chart). This market distortion harms ratepayers by discouraging the development of cost-effective local renewable energy resources, depriving communities of the benefits of local energy development, and artificially inflating demand for transmission capacity.



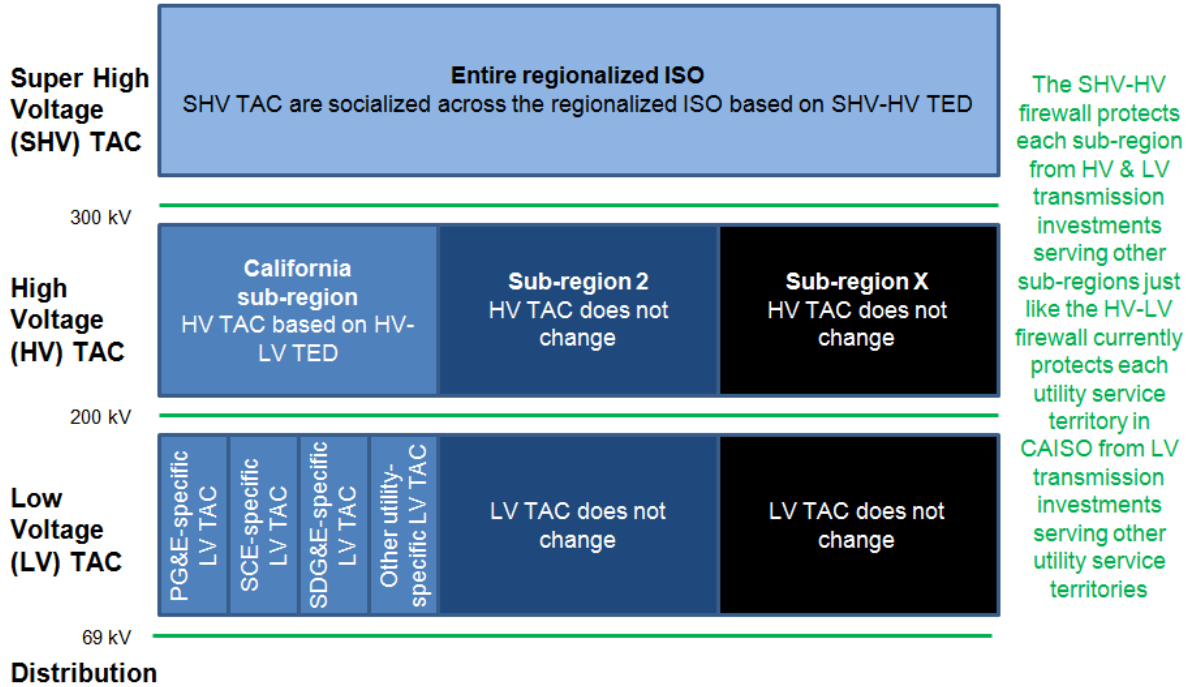
Measuring TAC at substations in all service territories will provide consistent TAC treatment across the entire CAISO region and ensure accurate market signals. The elimination of the massive TAC market distortion will result in increased deployments of local generation, which will significantly reduce TAC over time and save ratepayers enormously. The Clean Coalition estimates that a solution to the TAC distortion will increase the amount of local renewables by a factor of 5 and save California ratepayers approximately \$40 billion in avoided transmission costs over 20 years. The chart below shows drastically reduced TAC rate outcomes over 20 years by eliminating the TAC market distortion. The area between the blue and purple curves represents over \$20 billion in avoided transmission costs over 20 years.



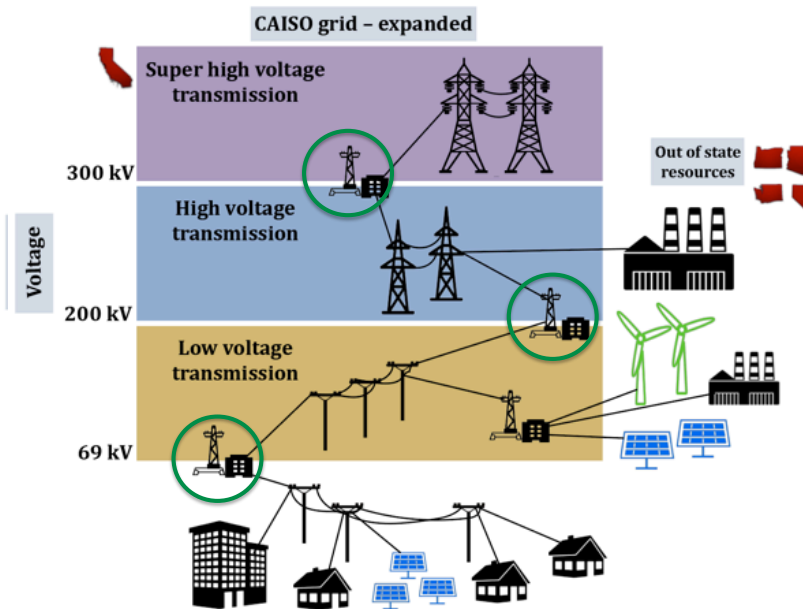
By prioritizing the review of the TAC billing determinant, we can work together to resolve the TAC market distortion that currently disadvantages local renewables and build a more fair, transparent, and cost-effective electricity system.

The Clean Coalition’s Super-High Voltage (SHV) Proposal

The Clean Coalition’s general TAC proposal could easily and effectively be extended to an expanded ISO so that the transmission cost allocation for any new transmission facilities would be closely tied to transmission usage. In addition to the change in TAC billing determinant in the general proposal above, the SHV proposal would create a third category for new transmission facilities that operate at or above 300kV and have interties between multiple sub-regions in the expanded ISO territory. Only facilities meeting these three requirements (new, over 300kV, and having interties in multiple sub-regions) would be eligible for region-wide cost allocation. These costs would be assessed based on the TED for any substations that downconvert energy from 300kV or higher to levels below 300kV, as depicted in the graphic below.



The graphic below provides another visual representation of the three separate transmission categories (LV, HV, and SHV). The green circles below indicate the billing determinant for each transmission category.



This proposal to create a category of transmission facility to ensure separate and appropriate cost allocation is directly analogous to CAISO’s existing LV and HV thresholds. By retaining these thresholds and creating a new one for a SHV category, ratepayers can rest assured that costs will only be allocated to their sub-region when they pull energy from facilities in that particular category. This creates bright-line

transparency for the true costs of SHV, HV, and LV transmission costs, ensuring that the costs associated with the transmission grid are tied closely to actual usage.

In addition, this proposal ensures clear cost and governance responsibility for both existing and future transmission investments between sub-regions, meaning that sub-regions will retain existing and separate approaches unique to their needs and preferences. This approach ensures complete accountability for transmission investments in an expanded ISO and resolves extant discussions on how to resolve governance issues and cost allocation challenges.

Last, this proposal allows Californians to resolve a significant market distortion on distributed generation resources before managing the possibility of diluted California governance. As evident by defined policy priorities for distribution resources planning and integrated resources planning, California has committed to ensuring that distributed energy resources are a fairly considered and fully valued part of its energy mix. Resolving the TAC market distortion prior to regional expansion will ensure that these policy priorities are as effective as possible.

The new stakeholder initiative (Review TAC Structure) should be launched as soon as possible, be organized in phases, and note CAISO's stated commitments for this initiative.

The TAC market distortion is the main subject matter in stakeholder initiative #5.6 ("Review TAC Structure"), and there is no reason to delay this topic until midyear 2017. Rather, this topic has been moved between three different stakeholder initiatives already, despite the fact that over 30 stakeholders have been active and engaged in the most recent round of comments. Even if a deeper dive into the TAC structure is required to develop this debate, there is no reason to postpone the discussion. The Clean Coalition notes that CAISO has sketched Q2 2017 as the approximate starting point for the new Review TAC Structure initiative, and we look forward to working with CAISO on that timeline (if not sooner) to resolve this market distortion. The Clean Coalition also wishes to highlight that the Clean Coalition's SHV proposal resolves regionalization issues and that adoption of this proposal would alleviate the need to review proposed changes to the CAISO's HV and LV TAC structure. Any such changes to the TAC structure that do *not* address the TAC market distortion on distributed generation is a comparatively low priority to be addressed after regionalization.

In order to keep debate in the stakeholder initiative organized, the Clean Coalition recommends identifying distinct phases for the initiative to ensure a productive use of stakeholders' time and attention. We propose that the Review TAC Structure initiative be organized to first review the TAC billing determinant, and to then address any changes to the volumetric, per kilowatt-hour TAC structure. This will allow stakeholders to review and analyze separate proposals in a sequential and organized fashion.

Last, the Clean Coalition suggests that the 2017 Stakeholder Initiatives Catalog and Roadmap note CAISO's publicly stated observations and commitments on the subject matter of the Review TAC



Structure initiative, most of which were made at the October 27, 2016 CAISO Board of Governors meeting. These commitments and observations included:

1. CAISO committed to resolving factual disagreements identified in the TAC Wholesale Billing Determinant comments by Q1 2017;
2. CAISO committed to identifying any additional analyses that will be required to move the subject matter forward in the Review TAC Structure initiative by Q2 2017; and
3. CAISO agreed that distributed generation resources reduce the need for transmission investment and the current TAC tariff does not recognize this contributed value.

By including these commitments in the catalog and roadmap, all parties will have notice of the commitments and be able to hold CAISO accountable to meet them.

Thank you again for the opportunity to comment, and we look forward to working with CAISO and other stakeholders to resolve this issue.

Sincerely,

Craig Lewis
Executive Director
Clean Coalition
650-796-2353 mobile
craig@clean-coalition.org