January 9, 2017

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

RE: Clean Coalition Written Comments on the Draft Final 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 note that CAISO moved up the start date for the Review Transmission Access Charges (TAC) Structure Stakeholder Initiative to January 2017 from May 2017 in order to start identifying issues to be included in that initiative. We support this decision, and on December 20, 2016 the Clean Coalition provided CAISO staff a list of factual disagreements from the predecessor initiative (Review TAC Wholesale Billing Determinant) to aid the CAISO in its analyses. These issues include fundamental facts, such as the central TAC rate formula and what entities pay the TAC, and the extent that different factors (peak load conditions, reliability, policy-driven projects) are driving the perceived need for transmission investment. These issues require resolution in order for the new stakeholder initiative to proceed efficiently, and we ask that CAISO begin addressing these areas as soon as possible. We attach an updated list of identified areas of factual disagreement here as part of the public record for this initiative.

The Clean Coalition also reemphasizes that CAISO’s top priority should be the resolution of the existing, massive TAC market distortion that harms local renewables, noting that the Clean Coalition’s proposed solution provides a straightforward approach for transmission cost allocation associated with a regionalized independent system operator (ISO), in support of facilitating CAISO in a fair and effective manner while minimizing risk for the State of California and other sub-regions. As noted in previous comments, the TAC market distortion hinders the development of local renewables by applying TAC to energy that does not use the transmission system—a flagrant breach of the usage pays principle associated with TAC. The Clean Coalition’s proposed solution ensures that market signals for all generation are transparent and accurate while saving California ratepayers an estimated $40 billion in avoided transmission costs over the next 20 years, following a one-time investment of about $20 million.

Sincerely,

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TAC Wholesale Billing Determinant - Areas of Factual Disagreement

The California Independent System Operator (CAISO) received comments from 32 individuals and organizations on July 1, 2016 in response to its Transmission Access Charges (TAC) Wholesale Billing Determinant Issue Paper. While representing a wide range of interests and perspectives, the comments illustrated a number of factual disagreements at issue. The Clean Coalition lists and describes these factual disagreements below in its effort to clarify the debate and to move a timely solution to the massive existing TAC market distortion forward.

The TAC Rate Formula & Who Pays It

The primary issue that requires clarification is how the TAC rate is determined and who pays it, including confirming whether metered subsystems (MSS) pay TAC or a wheeling access charge (WAC) and how this is related to revenue requirements. The CAISO Issue Paper notes that the TAC rate is a volumetric charge assessed as a usage fee on each megawatt-hour of energy.\(^1\) CAISO determines the TAC rate by the total Transmission Revenue Requirement (TRR) divided by the total billing determinant—the total Customer Energy Downflow (CED; also known as the end-use metered load or EUML).\(^2\) The CED is the amount of energy that a customer consumes from the electric grid. The TAC rate is then applied to each megawatt-hour of metered customer energy usage. This number does not include any energy produced from behind-the-meter (BTM) devices that is directly consumed on site without passing through the customer meter. If the BTM device exports energy back onto the distribution grid, then a TAC attaches to the exported energy when that energy crosses through a neighboring customer meter as CED.

The Issue Paper notes that the TAC rate is then applied to all internal loads, including exports. The California Large Energy Consumers Association (CLECA) claims that this characterization of the TAC rate denominator is incorrect because exports and metered subsystems are not subject to TAC, but rather incur a separate Wheeling Access Charge.\(^3\) In other words, CLECA claims that CAISO exports and the load of the metered subsystems are entirely exempted from TAC rate calculations. This detail matters because it illustrates apparent confusion about which entities within CAISO service territory are actually subject to the TAC or otherwise contribute to the PTO Transmission Revenue Requirement (TRR).

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\(^1\) Issue Paper at 3.
\(^2\) Id. at 4. Note that for the purposes of clarity, the Clean Coalition uses the term Customer Energy Downflow or CED to refer to EUML in these comments, as it is a more intuitive description of the billing determinant and also a term analogous to Transmission Energy Downflow (TED).
\(^3\) CLECA Comments on the Jun3 2, 2016 Issue Paper (June 30, 2016) at 2.
If WAC payments are functionally identical to TAC rates, per CAISO tariff section 26.1.4.1, CLECA’s claim is irrelevant.

The Clean Coalition agrees with the Issue Paper’s description of the TAC rate, and has argued that a change in TAC billing determinant would bring consistent TAC treatment to all utility service territories. Our research indicates that metered subsystems pay TAC based on their reported Transmission Energy Downflow (TED), that is the amount of energy that is down-converted across transmission substations from CAISO facilities into metered subsystem (MSS) territory. The TED billing determinant accurately reflects transmission usage and allows DG to avoid TAC, which subsequently means that DG is providing substantial value that is not being provided in PTO utility service territories. Importantly, the avoided TAC value is provided to DG in non-PTO utility service territories, which allows accurate market signals—an outcome that should be the aim throughout CAISO territory resulting in a single, consistent, and fair TAC structure. To move forward with any meaningful review of the Clean Coalition’s proposal, all parties need to agree on the current process for calculating and assessing TAC, including how the rate is calculated and who pays it.

**Request to CAISO staff:**

1. Confirm that the assessment of TAC and WAC is associated with volumetric measurement of energy (MWh) and how this is measured (i.e., PTO EUML, MSS load at transmission interface, wheeling exports, etc.)?
2. Confirm whether EUML is derived from gross or net energy metered customer load.
3. What portion of TRR is recovered through TAC, WAC, and any other significant sources?
4. Confirm who and what is subject to TAC versus WAC?

**NOTE ON TAC RATES:** It is also worthwhile to clarify that there are two separate TACs: a high-voltage TAC associated with the costs of CAISO-owned transmission facilities operating at or above 200 kV, and a low-voltage TAC associated with the costs of CAISO-owned transmission facilities operating below 200kV. The high-voltage TAC rate is determined by the annual authorized TRR associated with high voltage transmission facilities divided by the total CAISO CED (assuming that non-PTO utility TED is treated as CAISO CED). This “postage stamp” rate that is consistent for all utility service territories under CAISO’s authority. The low-voltage TAC (LV TAC) rate varies between utility service territories. The LV TAC is determined by dividing the annual authorized low voltage transmission revenue requirement for a utility service territory by the total CED within that service territory (again, assuming that non-PTO utility TED is treated as CAISO CED). Because this rate varies by service territory, it is referred to as a “license plate” rate.

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\text{HV TAC Rate} = \frac{\text{Annual Authorized HV TRR} (\$)}{\text{Total CAISO CED} (\text{MWh})}
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\text{LV TAC Rate} = \frac{\text{Annual Authorized LV TRR dedicated to a UST} (\$)}{\text{Total CED for the UST} (\text{MWh})}
\]
The TAC Billing Process—Generally and with respect to CCAs or DAs

Using the TED as the TAC billing determinant throughout CAISO territory would ensure that TAC assessments and payments are consistently based on volumetric usage for transmission cost causation recovery. Each load-serving entity (LSE)—including investor owned utilities (IOUs), municipal utilities, CCAs, and ESPs—should pay TAC according to the exact proportion of their usage delivered through the transmission system. In order for TAC assessment to be fair, parties need to first understand how TAC is currently billed.

All parties seem to agree that LSE scheduling coordinators provide CAISO with their CED (or MSS TED) data for TAC settlement purposes. CAISO then uses this data to set the high and low voltage TAC rates. These rates are then assessed on each megawatt-hour of energy used by customers within each utility service territory.

The Issue Paper describes that each LSE that operates within an IOU service territory has the option of either performing the retail billing themselves or using the retail billing services of the IOU utility distribution company (UDC). In either case, the LSE’s scheduling coordinator provides the CED data to the ISO for settlement purposes. The Issue Paper then describes that if the LSE performs its own retail billing, then CAISO assesses TAC to the LSE in proportion to its total CED. The LSE then recovers the TAC costs from its retail customers. Alternatively, the LSE utilizes the IOU UDC billing service, CAISO assesses TAC to the UDC, and the UDC in turn collects the retail transmission charge from the LSE’s customers. Comments from other parties, including the Clean Coalition and PG&E, comport with these two options.

Some parties took issue with this description of the TAC billing process, claiming that UDCs do not bill LSEs—rather, they bill end-use customers, so there would never be any possible reimbursement by either CAISO or the UDCs to LSEs in their service territory (for example CCAs and ESPs) since the LSEs are not paying any of the TAC charges. Parties disagreeing with the Issue Paper say that CAISO addresses differences between the TAC TRR and any PTO IOU’s TRR, which manifests as a charge or credit—depending on whether the PTO IOU’s TRR is more or less than the funds gathered from its customers. The TAC Balancing Account Adjustment is used to balance the overall charges and credits for each IOU. If this description is correct, a change in the TAC billing determinant would cause no reduction in a CCA or ESP’s total TAC payments, and this would need to be addressed in order to ensure that TAC payments correspond more precisely to transmission use, fulfilling the User Pays principle.

4 Id. at 6.
5 Issue Paper at 5.
7 See, e.g., PG&E Comments at 2 (“The load serving PTO recovers TAC charges from either the CCA/DA or the end-use customer depending on billing arrangements between the CCA/DA and the load serving PTO”).
8 CLECA Comments at 4.
Clarification of the entire CAISO billing process is important both in this proceeding and generally, as all ratepayers and entities would benefit from a more transparent TAC system. Within the context of this stakeholder initiative, it is critical that any proposal to change the existing TAC system ensures a full accounting and payment of all TAC liabilities in accordance with use.

Request to CAISO staff:

5. Confirm which classes of entities have financial responsibility for TAC and whether they are charged/billed by CAISO. Does each LSE, each customer, or each utility distribution company (UDC) providing distribution services to multiple LSE customers have this responsibility?

6. Confirm to whom are TAC charges paid (e.g., to CAISO for on behalf of PTOs, to LSEs or distribution operators by customers) and the exact process by which this occurs?

Regulatory Roles in setting TAC rates

Parties disagree on whether the Federal Energy Regulatory Commission (FERC) and/or the California Public Utilities Commission (CPUC) have an active role in setting wholesale and retail transmission rates. This issue matters in determining the proper venue for resolving the CAISO’s TAC wholesale billing determinant proposal—whether CAISO or another regulatory body.

FERC

All parties seem to agree that FERC, as an independent federal agency with authority to regulate the interstate transmission of electricity, has an oversight role regarding CAISO’s transmission activities. The CAISO operates under the terms and conditions of its FERC-approved tariff and is subject to FERC rules and regulation. However, parties disagree on whether and how the CPUC and FERC affect transmission rates.

According to the Issue Paper, CAISO defines its tariff in accordance with direction from FERC guidelines and then submits it to FERC for oversight and approval. FERC also approves the billing determinant that CAISO uses to assess the wholesale TAC. The Issue Paper states that the CPUC sets the retail transmission charge as a component of the rate structure of each investor-owned utility. CLECA disagrees with this description, claiming that the CPUC has established a policy of simply deferring to FERC’s set rates for each customer class—including having separate volumetric and demand charges for medium and large customers.

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9 Issue Paper at 5.
10 Id.
11 Id.
12 CLECA Comments at 2.
The Clean Coalition understands FERC to have oversight authority over CAISO, and approves the CAISO tariff as long as it conforms to FERC regulations regarding how CAISO establishes and modifies the TAC rate. Because FERC’s role is limited to oversight and approval rather than active revision of proposed tariff changes, the correct venue to resolve the TAC market distortion on local renewables is through managing a tariff amendment before CAISO. The amended tariff would then be reviewed by FERC in order to ensure that the tariff conforms to FERC’s required cost allocation principles, detailed in FERC Order 1000, before gaining FERC approval.

**CPUC**

Another area of disagreement in the comments is the role of the CPUC in setting retail TAC rates. The Issue Paper notes that the CPUC sets the retail TAC rates as a component of the rate structure of each investor-owned utility, noting that this poses a tension with the CAISO’s responsibility to set wholesale TAC rates as creates the possibility of difference between the charges assessed to the LSE and collected from customers.13 Other parties noted that the CPUC manages transmission charges only as a pass through charge—they propose no changes to the rates after FERC signs off on transmission rates. As noted by CLECA, the CPUC recognizes that it allows a “pass through” of transmission rates that are filed and become effective at the FERC.14 This is similar to the cost of energy that is passed through to customers at the wholesale rate. The Clean Coalition agrees with this description of the CPUC’s role.

While many parties agree that the total TAC associated with each LSE is passed through directly to that LSE’s customers in aggregate, clarification is needed on whether the LSEs (or UDCs) are directly responsible for these costs or are merely providing a billing service for CAISO to collect TAC directly from individual customers. Clarification is also needed regarding the role of the CPUC in the allocation of these “pass through” costs within and between rate classes as a component of each customers T&D billing assessment, including volumetric use, demand charge, and time of delivery.

**Request to CAISO staff:**

7. Confirm who has jurisdiction over this distribution of TAC assessments as reflected in individual customer bills: LSE, CPUC, and/or FERC? For example, does CAISO establish—and then FERC approve—the TRR and TAC rate received by each LSE? Then the LSE establishes assessment by customer class through volumetric and demand charges, with CPUC approval?

8. If CAISO approves a change to the TAC wholesale billing determinant, does the CPUC need to be instructed to take special action to keep retail and wholesale TAC billing aligned?

13 Issue Paper at 5.

14 CLECA at 3, citing CPUC Resolution E-3930 at 11.
9. Confirm that CAISO tariff development—including TAC rate setting and assessment methodology—is properly conducted at CAISO, with resulting tariff changes adopted by the Board of Governors, subject to FERC approval?

Peak Loads, Reliability, Economic, and Policy-Driven Investment: How much is each driving the need for planned transmission investment?

Parties are generally in agreement that the Clean Coalition proposal will result in long-term savings only if it actually reduces the need for transmission investments and associated transmission revenue requirements over time. Parties also agree that future transmission investments will be driven by both peak load reliability factors and policy factors requiring access to new energy projects to meet RPS, as well as efficient market access to lower cost resources.

However, parties disagree on the proportion that each factor has on the projected transmission revenue requirement. To the extent that CAISO has considered these projections, how much is each factor expected to contribute to future transmission revenue requirements? Please discuss how SB 350 and expected future adjustments to customer rate design time of use and demand charge billing factors have been reflected in these projections.

Request to CAISO staff:

10. Explain how rate design, economic, peak load and policy-driven transmission investment factors are expected to each contribute to transmission revenue requirements.

Conclusion

The Clean Coalition is available to assist in resolving these factual disagreements in order to build a common starting point for all involved parties, and we hope to work with CAISO to continue moving this issue forward.