

Stakeholder Comments Template

Transmission Access Charge Options

February 10, 2016 Straw Proposal & March 9 Benefits Assessment Methodology Workshop

Submitted by	Company	Date Submitted
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The ISO provides this template for submission of stakeholder comments on the February 10, 2016 Straw Proposal and the March 9, 2016 stakeholder working group meeting. Section 1 of the template is for comments on the overall concepts and structure of the straw proposal. Section 2 is for comments on the benefits assessment methodologies. As stated at the March 9 meeting, the ISO would like stakeholders to offer their suggestions for how to improve upon the ISO's straw proposal, and emphasizes that ideas put forward by stakeholders at this time may be considered in the spirit of brainstorming rather than as formal statements of a position on this initiative.

The straw proposal, presentations and other information related to this initiative may be found at: <http://www.caiso.com/informed/Pages/StakeholderProcesses/TransmissionAccessChargeOptions.aspx>

Upon completion of this template please submit it to initiativecomments@caiso.com. Submissions are requested by close of business on **March 23, 2016**.

Section 1: Straw Proposal

1. The proposed cost allocation approach relies on the designation of "sub-regions," such that the current CAISO BAA would be one sub-region and each new PTO with a load service territory that joins the expanded BAA would be another sub-region. Please comment on the proposal to designate sub-regions in this manner.

It would be appropriate and efficient for new PTOs joining the expanded BAA to be combined in aggregated sub-regions in a manner similar to that currently employed among California PTOs, and this option should be explicitly available, but not required.

2. The proposal defines “existing facilities” as transmission facilities that either are already in service or have been approved through separate planning processes and are under development at the time a new PTO joins the ISO, whereas “new facilities” are facilities that are approved under a new integrated transmission planning process for the expanded BAA that would commence when the first new PTO joins. Please comment on these definitions.

No response at this time.

3. Using the above definitions, the straw proposal would allocate the transmission revenue requirements (TRR) of each sub-region’s existing facilities entirely to that sub-region. Please comment on this proposal.

The existing CAISO BAA includes many PTOs and transmission facilities that serve the entire BAA region. It would be consistent to apply the “regional” cost allocation discussed in Q5 and Q8 to all transmission facilities meeting these criteria.

4. If you believe that some portion of the TRR of existing facilities should be allocated in a shared manner across sub-regions, please offer your suggestions for how this should be done. For example, explain what methods or principles you would use to determine how much of the existing facility TRRs, or which specific facilities’ costs, should be shared across sub-regions, and how you would determine each sub-region’s cost share.

No response at this time.

5. The straw proposal would limit “regional” cost allocation – i.e., to multiple sub-regions of the expanded BAA – to “new regional facilities,” defined as facilities that are planned and approved under a new integrated transmission planning process for the entire expanded BAA and meet at least one of three threshold criteria: (a) rating > 300 kV, or (b) increases interchange capacity between sub-regions, or (c) increases intertie capacity between the expanded BAA and an adjacent BAA. Please comment on these criteria for considering regional allocation of the cost of a new facility. Please suggest alternative criteria or approaches that would be preferable to this approach.

See response to Q3.

6. For a new regional facility that meets the above criteria, the straw proposal would then determine each sub-region's benefits from the facility and allocate cost shares to align with each sub-region's relative benefits. Without getting into specific methodologies for determining benefits (see Section 2 below), please comment on the proposal to base the cost allocation on calculated benefit shares for each new regional facility, in contrast to, for example, using a postage stamp or simple load-ratio share approach as used by some of the other ISOs.

Calculated benefit shares is appropriate for the allocation of cost shares, but it must be recognized that the actual realized allocation of benefits may change over time, and this should be reflected in cost re-allocation. Such re-allocation may be based on actual usage as reflected in metered postage stamp or load-ratio changes. At the same time participants should be protected from transfer of stranded costs that may occur if some participants do not utilize the resources as expected at the time of project approval.

7. The straw proposal says that when a subsequent new PTO joins the expanded BAA, it may be allocated shares of the costs of any new regional facilities that were previously approved in the integrated TPP that was established when the first new PTO joined. Please comment on this provision of the proposal.

No response at this time.

8. The straw proposal says that sub-regional benefit shares – and hence cost shares – for the new regional facilities would be re-calculated annually to reflect changes in benefits that could result from changes to the transmission network topology or the membership of the expanded BAA. Please comment on this provision of the proposal.

See response to Q3.

9. Please offer any other comments or suggestions on the design and the specific provisions of the straw proposal (other than the benefits assessment methodologies).

The Clean Coalition makes no comment on the transmission revenue requirement (“TRR”) element of the straw proposal, but rather limits its comments to how usage is measured for the purpose of assessing transmission access charges (“TAC”). The Clean Coalition seeks to ensure that any change to the TAC structure reflects the principle that costs are allocated and

charges assessed in accord with cost causation and the principles established under FERC Order 1000.

The Straw Proposal properly references FERC Order 1000 and its core cost allocation principles as a critical focus of designing the TAC structure. FERC Order 1000 requires all regional transmission operators to use a principles-based approach to allocating costs related to use of the transmission system—ensuring that costs are roughly commensurate with estimated benefits and that costs are not allocated involuntarily to those who do not benefit. Under these principles it is reasonable and appropriate for shared transmission costs to be assessed in proportion to measured usage of the transmission system (“usage pays”), considering total energy delivery and contribution to coincident peak loads. Essentially, FERC Order 1000 supports a usage pays approach.

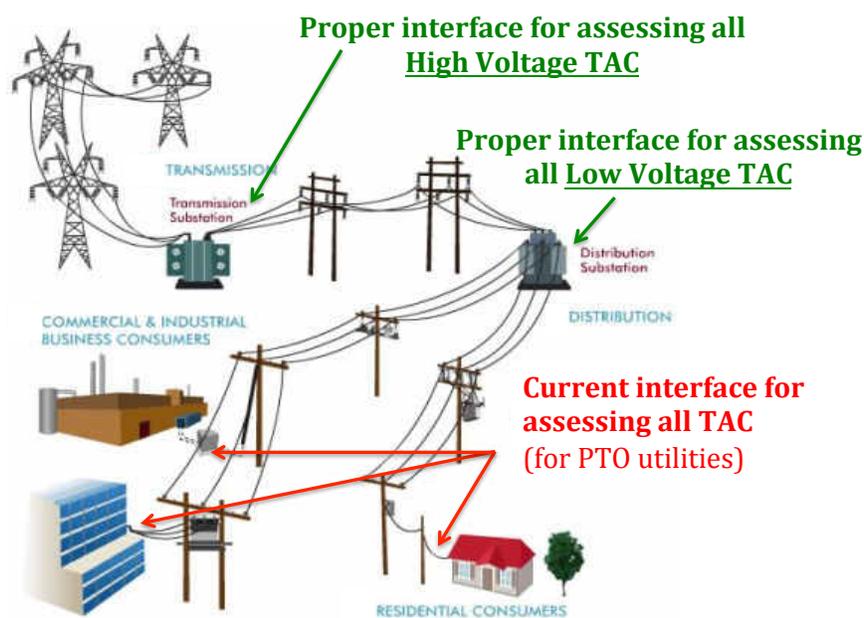
Participating ISO entities may retain responsibility for long-term infrastructure investment associated with their projected needs to avoid transferring stranded costs. However, the shares of cost responsibility may be appropriately transferred to participating entities who have increasing capacity requirements in accord with evolving needs across multiple participants.

The current TAC system assesses charges on each kilowatt-hour of Gross Load, which imposes TAC on energy without regard to use of the transmission grid. However, metering usage by Gross Load no longer serves as a valid measure of transmission usage. Historically, all electricity was generated by centralized sources and delivered to customers via the transmission system. When this was the case, the Gross Load accurately reflected use of the transmission system because all energy was sourced from the transmission grid. However, generation profiles have become more diverse as local renewables proliferate, and Gross Load now includes a mix of transmission-sourced and local energy.

A small portion of all three major investor-owned utilities’ load is now served by distributed energy resources, including rooftop solar and wholesale renewables. Energy from these sources is almost always used by customers on the same substation, but this energy still accrues TAC when it crosses the customer meter. The Gross Load approach results in energy from distributed resources accruing TAC despite not actually using the transmission system. By charging TAC on energy that never leaves the distribution system, the current TAC assessment practice fails to account consistently for each utility’s proportional use of the transmission

system. In failing to assess charges in alignment with cost causation, this functionally assigns costs on entities disproportionate to the benefit they derive from the transmission system, violating the principles of FERC Order 1000.

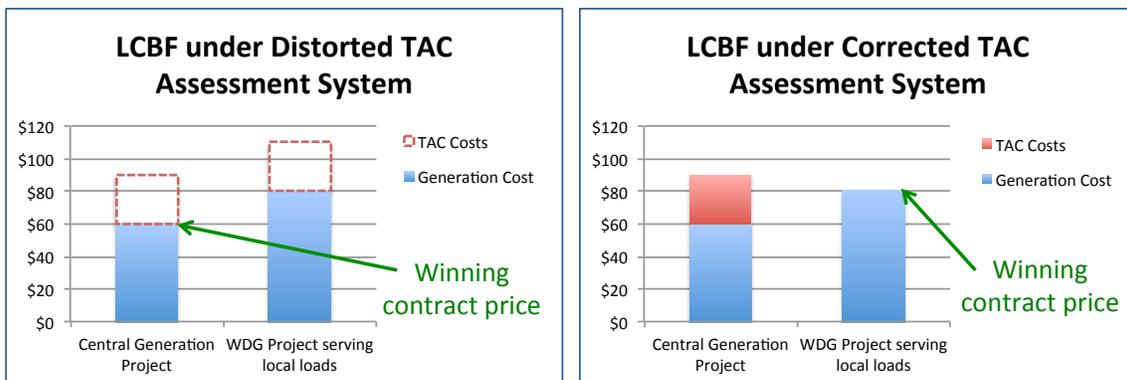
To align costs and benefits, TAC should only apply to energy that is delivered through the transmission system. Therefore, the Clean Coalition recommends that TAC be consistently calculated based on the Transmission Energy Downflow (“TED”), the kilowatt-hours that flow from the transmission system to the distribution system via the distribution substation. CAISO currently allows this approach for non-PTO utilities, and it already applies to all those opting for assessment as a Metered Sub-System (“MSS”). Under this approach, energy from distributed resources would be assessed TAC only if fed back to the transmission system for delivery to another distribution substation—then measured as part of the TED for the receiving distribution substation. This same approach may be appropriately applied to the High Voltage to Low Voltage transmission interfaces, and the proposed Super High Voltage demarcation to proportionately assess costs to each sub-region and PTO based on usage.



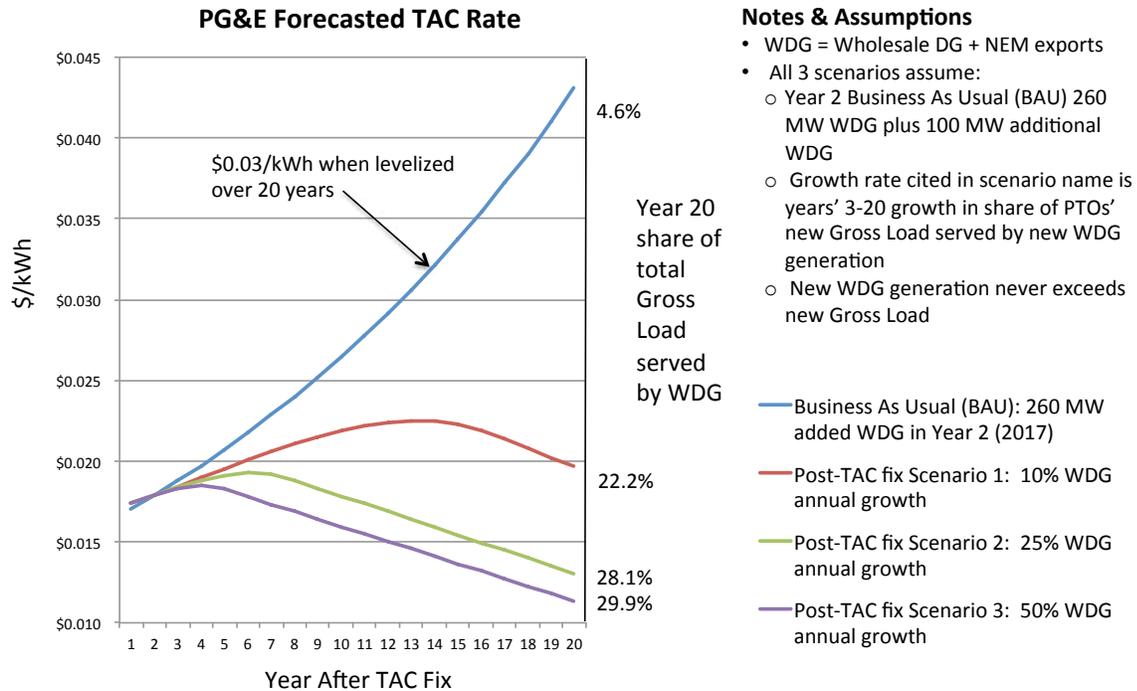
All substations are currently equipped to meter TED for other purposes, and therefore this proposed change is technically feasible and involves no additional equipment. Metering usage at the Transmission Energy Downflow would also make assessment of TAC consistent between PTO and non-PTO utilities. Non-PTOs (i.e., municipal utilities) have the option of being treated

as a MSS, meaning that they pay TAC on the TED at their interconnection points with the transmission system.

Changing the way that usage is measured would have a significant impact on procurement decisions. Utilities evaluate bids through a least-cost, best-fit analysis, where a project is evaluated by the cost to produce the electricity (i.e., the generation cost), in addition to the cost of any specific system upgrades required to deliver the electricity to consumers. However, the substantial delivery charges for use of the transmission grid are not currently considered because TAC is assessed regardless of whether the energy is delivered through the transmission system. Where transmission usage and associated costs can be avoided, energy can be delivered to ratepayers at significant savings. These saving, resulting from appropriate assessment of TAC, should be included in evaluation of energy bids, and would reflect the ratepayers’ actual delivered energy cost from distributed energy resources—making them much more competitive with large transmission-dependent generation than it currently appears.



Over time, assessing TAC based on TED would result in billions of dollars in savings for all ratepayers through decreased demand for the additional transmission investment. Using public PG&E and CAISO data, the Clean Coalition has forecasted the change in TAC rate over the next 20 years. Current projections indicate that the TAC rate is expected to grow significantly in the upcoming years in order to pay for transmission upgrades related to incorporating additional renewable resources. Despite growing transmission costs, wholesale distributed generation (“WDG”) and net energy metering (“NEM”) exports are not expected to exceed 5% of annual load share within PG&E territory.



The three post-TAC fix scenarios in the graph above illustrate the projected TAC rates with alternate rates of WDG procurement growth that may result from this correction in cost allocation. If usage were metered based upon TED at the substation and local generation were deployed in higher rates, required investments in new transmission would decline, causing the TAC rate to grow less rapidly and then level off as existing assets depreciate and are eventually paid off. These projections assume deployment of WDG will not exceed new load growth. As older facilities are retired and replaced, there is even more opportunity to incorporate local renewables.

Ratepayers would reap the benefits of this change through billions of dollars in avoided TAC payments. Even in the lower 10% growth rate scenario, ratepayers would save roughly \$40 billion in avoided TAC payments and transmission investment over the next 20 years.

For these reasons, the Clean Coalition requests that CAISO carefully consider changing the usage measurement for the purposes of assessing TAC to the Transmission Energy Downflow.

Section 2: Benefits Assessment Methodologies

1. The straw proposal would apply different benefits assessment methods to the three main categories of transmission projects: reliability, economic, and public policy. Please comment on this provision of the proposal.

The Clean Coalition is generally supportive of this approach.

2. The straw proposal would use the benefits calculation to allocate 100 percent of the cost of each new regional facility, rather than allocating a share of the cost using a simpler postage stamp or load-ratio share basis as some of the other ISOs do. Please comment on this provision of the proposal.

Calculated benefit shares is an appropriate basis for the allocation of cost shares, but it must be recognized that the actual realized allocation of benefits may change over time, and this should be reflected in cost re-allocation. Such re-allocation may be based on actual usage as reflected in metered load-ratio changes. At the same time participants should be protected from transfer of stranded costs that may occur if some participants do not utilize the resources as expected at the time of project approval.

3. Please comment on the DFAX method for determining benefit shares. In particular, indicate whether you think it is appropriate for reliability projects or for other types of projects. Also indicate whether the methodology described at the March 9 meeting is good as is or should be modified, and if the latter, how you would want to modify it.

No response at this time.

4. Please comment on the use of an economic production cost approach such as TEAM for determining benefit shares. In particular, indicate whether you think it is appropriate for economic projects or for other types of projects. Also indicate whether the methodology described at the March 9 meeting is good as is or should be modified, and if the latter, how you would want to modify it.

No response at this time.

5. At the March 9 meeting some parties noted that the ISO's TEAM approach allows for the inclusion of "other" benefits that might not be revealed through a production cost study. Please comment on whether some other benefits should be incorporated into the TEAM

for purposes of this TAC Options initiative, and if so, please indicate the specific benefits that should be incorporated and how these benefits might be measured.

No response at this time.

6. Regarding public policy projects, the straw proposal stated that the ISO does not support an approach that would allocate 100 percent of a project's costs to the state whose policy was the initial driver of the need for the project. Please indicate whether you agree with this statement. If you do agree, please comment on how costs of public policy projects should be allocated; for example, comment on which benefits should be included in the assessment and how these benefits might be measured.

The Straw Proposal limits regional cost allocation to new regional facilities that meet threshold criteria. Regardless of the initial impetus for these facilities, benefits will accrue to all users as determined in the adopted benefit calculation, and cost allocation should be commensurate.

7. At the March 9 and previous meetings some parties suggested that a single methodology such as TEAM, possibly enhanced by incorporating other benefits, should be applied for assessing benefits of all types of new regional facilities. Please indicate whether you support such an approach.

No response at this time.

8. Please offer comments on the BAMx proposal for cost allocation for public policy projects, which was presented at the March 9 meeting. For reference the presentation is posted at the link on page 1 of this template.

No response at this time.

9. Please offer any other comments or suggestions regarding methodologies for assessing the sub-regional benefits of a transmission facility.

No response at this time.