Stakeholder Comments Template

Review TAC Structure
Stakeholder Working Groups

This template has been created for submission of stakeholder comments on the Review Transmission Access Charge (TAC) Structure Working Group Meetings that were held on August 29 and September 25, 2017. The working group presentations and other information related to this initiative may be found on the initiative webpage at: http://www.caiso.com/informed/Pages/StakeholderProcesses/ReviewTransmissionAccessChargeStructure.aspx

Submitted by	Organization	Date Submitted
Bert Hansen *626-302-3649*	*Southern California Edison*	*October 14, 2017*

Upon completion of this template, please submit it to initiativecomments@caiso.com. Submissions are requested by close of business on **October 13, 2017.**

Please provide your organization's comments on the following issues and questions.

<u>NOTE: See last page for definitions of some key acronyms and terms.</u>

1. One concept for allocating the costs of the existing transmission infrastructure is to charge each user of the grid in accordance with their usage of or benefits received from the grid. What do you believe is the most appropriate way to measure each end-use customer's or load-serving entity's (LSE) benefits or usage of the grid? What specific benefits should be considered? Please explain you answer.

   Response: The answer the question of what is the proper method of measuring transmission grid usage first requires a specific identification of the benefits received by transmission customers, and may also require an assessment of the cost causation of various customers. As SCE stated in its July 27 comments, benefits that should be considered at a high level would have to include, at a minimum, the reliability provided by the transmission grid to all transmission customers, any CAISO services that would have to be provided to maintain reliability, and remaining flows over the transmission grid under all conditions.

   SCE believes it is premature to define transmission usage (in terms of possible actual charges for transmission such as per kW or kWh charges, customer or connection charges, etc.) without first determining broad set of benefits that different groups of transmission customers receive from the transmission grid, and also any cost causation considerations of different groups of customers. Only when these factors have been identified can the issue of the proper definition of usage be determined.

2. The example the ISO presented at the August 29 working group meeting (slides 21-22 of the ISO presentation) illustrated how using transmission energy downflow (TED) as the high-voltage TAC billing determinant (instead of end-use metered load) affects all ratepayers of each utility distribution company (UDC) irrespective of which LSE serves that load. If the ISO were to adopt TED as the billing determinant for the high-voltage TAC, what further procedures would be needed to ensure that the benefits of reduced TAC payments go to the correct LSEs that make the decisions to procure DG? Please explain your answer.

   Response: The CAISO currently bills PTOs with associated UDC load for the HV TAC on a net basis (total HV TAC responsibility based on the load of the UDC, less the total HV revenue requirement contribution of the PTO). This net billing aspect is an important feature of the TAC billing that reduces revenue transfers between the PTOs and the ISO, and financial risk to PTOs. Investor Owned Utility ("IOU") PTOs in turn recover or return any net TAC bill to their retail transmission customers through a FERC balancing account mechanism (the Transmission Access Charge Balancing Account Adjustment, or "TACBAA"), which is assessed to all retail customers of IOU PTOs on an equal cents per kWh of end use load basis.

   Under the current TAC ratemaking construct, to the extent that an IOU PTO receives a lower TAC bill/credit for any reason, that benefit is shared among all of that IOU PTO's retail customers, since any reduced TAC bill to an IOU PTO would be shared among all of the PTO's retail transmission customers on an equal cents-per-kWh basis through the operation of the TACBAA mechanism.

   Although there is no comparable FERC balancing account like the TACBAA for non-IOU PTOs with load (such as a municipal utility), the same logic would apply to the load of the muni, assuming that the muni passed through any lower TAC bill/credit to its customers.

   If it is desired that a specific customer with DG receive a lower TAC bill to reflect a lower TED as a direct result of that customers DG production, then there would have to be some additional ratemaking mechanism created that would reduce either the base retail rate bill of the customer or the TACBAA bill of the customer. This would be a significant change to the current construct of recovering transmission cost in the CAISO. Currently, the cost of all approved High Voltage transmission projects are charged equally to PTO regardless of the identification of cost causation or benefits to specific customer groups. It would be inappropriate to implement a benefit to one type of customers (e.g. those with DG) without examining the structure of how costs are appropriately assigned based upon the identification cost causation or benefits received by different customer groups. SCE does not at this time have a proposal that would accomplish this.

3. The ISO could (a) continue to use the end-use metered load (EUML) or customer energy downflow (CED) as the basis for assessing high-voltage TAC, or (b) propose a change to assess HV TAC based on downflow at the transmission-distribution interface (T-D TED), or (c) assess HV TAC based on downflow at the interface between the high-voltage and low-voltage transmission systems (HV-LV TED). Does your organization prefer one of these approaches at this time? Please explain the reasons for your preference.

    Response: At this point in time, without a thorough assessment of the nature of benefits received by transmission customers, transmission cost causation, and the relationship between these factors and possible billing determinants, SCE prefers the continued assessment of the TAC to EUML. SCE is opposed to revising the TAC billing structure until a thorough study is performed that would show convincing evidence that another TAC billing structure would be superior to the current TAC billing structure.

4. Does your organization believe that any of the options in the previous question present any potential problems or issues that have not been identified or explained during the stakeholder process thus far? If so, please explain. Also, please indicate what other analyses could be done to help understand the impacts of changing the point of measurement?

    Response: Any change in the basic TAC billing structure would need to be thoroughly vetted on an end-to-end basis to ensure that all required information to implement any change exists or could be obtained, and that retail transmission customer billing could in fact be implemented.

5. Does your organization believe that the ISO should change *only* the point of measurement utilized for assessing TAC apart from considering other changes to the TAC structure? Alternatively, should the ISO change the point of measurement in conjunction with other changes to the TAC structure? Please explain your position.

    Response: SCE is strongly opposed to changing only the measurement point of the current TAC recovery construct as it would result in unreasonable cost shift away from customers that still receive benefits by being connected to the transmission system. However, SCE is open to any TAC billing structure that can be demonstrated to be superior to the current TAC structure in terms of matching TAC bills to benefits received and costs caused by transmission customers. However, as stated above, any revised TAC billing structure would have to be demonstratively superior to the current TAC billing structure.

6. Does your organization believe that changing the point of measurement for assessing TAC to use TED instead of metered customer demand will result in increased procurement of DG by LSEs? Please explain your position.

Response: SCE believes that this question that cannot be determinatively answered at this time.

7. Does your organization believe that increased procurement of DG by LSEs will reduce the need for future investment in transmission infrastructure? Please explain your position.

   Response: SCE believes that this question that cannot be determinatively answered at this time.

8. The Clean Coalition provided a spreadsheet and documentation (available at the ISO's TAC initiative web page link on page 1) showing their approach for estimating the savings from avoided future transmission investment that could result from increased DG procurement in response to the ISO adopting TED as the point of measurement for assessing TAC. Does your organization believe that Clean Coalition's analysis provides a reasonable projection of transmission cost savings as a result of DG growth? Please explain your position.

   Response: Any model purporting to demonstrate a specific cost savings from avoided future transmission investment as a function of increased DG procurement must be speculative, in the sense that the estimated cost savings would have to rest upon assumed parameters linking reduced transmission investment to increased DG. As SCE indicated in the above two questions, SCE does not believe that these parameters are known at this time. They would require significant study to estimate with any accuracy (and in fact it may not be possible to determine the parameters). Accordingly, SCE is not prepared to take a position on whether the Clean Coalition model provides a reasonable projection of possible cost savings.

   Based upon a cursory look at the spreadsheet, SCE has noted some calculations appear to use the wrong approach. For example, in calculating a levelized transmission rate, Clean Coalition simply took the 20 year average instead of using the net present value and payment functions to appropriately discount the time value of money over time. This error results in a overstated value of a transmission rate, which in turn overstates the projection of transmission costs in current dollars.

   Clean Coalition bases their calculation on historical growth rates of transmission costs. Historical data will include costs of both new projects and the replacement of embedded transmission assets. As replacement costs are higher than embedded costs, the cost of transmission will likely increase over time even with limited new transmission projects. Thus to appropriately calculate the savings, an avoided cost analysis needs to be used to measure the transmission projects that are actually avoided by DG.

9. If you do not agree with Clean Coalition's projections of transmission cost savings, what approach would you suggest for estimating savings from reduced need for future investment in transmission that could result from increased DG development?

Response: SCE does not have a suggested modeling approach at this time to address this innately complex question.

10. The ISO must decide what types of analyses to perform to evaluate alternative TAC approaches, and how to prioritize them. Please provide your organization's view on what analyses would be most useful, and indicate the relative importance of each analysis you recommend to assist the ISO in determining which analyses should take precedence.

    Response: SCE believes that the most productive analyses to perform at this time would be: 1) An assessment of benefits retail end use transmission customers receive from the transmission grid; and 2) An assessment of the relationship between potential billing determinants (connection charge, peak kW charge, and kWh) and the benefits received by, or costs caused by, customers.

11. How can the ISO evaluate the downstream financial impacts of potential changes to the TAC structure? What data would best inform the ISO and stakeholders of the potential impacts to various entities? Does your organization believe the ISO should focus on this question now, or wait until potential TAC structure options are better defined (e.g., after the ISO issues a straw proposal)? Please explain your position.

    Response: SCE believes the ISO should consider this question at a later stage in this stakeholder process.

12. How are transmission needs and costs driven by the delivery of energy versus the provision of capacity necessary to meet peak load conditions? Please explain your position.

    Response: This is a complex question that cannot be answered in general. ISO transmission is built for three major reasons: 1) reliability; 2) economics; and 3) public policy. Projects built strictly for reliability may be mostly associated with ensuring reliability during peak conditions or N-1 outage conditions. Projects built for economics or for public policy are generally driven by energy benefits (lower costs of energy or meeting a higher public policy energy production target).

13. In considering potential changes to the TAC structure, what kinds of changes would best align with the impacts of energy delivery, peak load and other drivers of new transmission investment? Please explain your answer.

    Response: SCE believes that this question cannot be answered without first identifying the benefits to transmission customers of the transmission system, as discussed in the response to question #1.

14. What are the cost drivers of operating and maintaining the existing transmission system and what, if anything, could materially affect these cost drivers? In particular, does your organization believe that increasing the share of load served by DG can reduce any costs associated with the existing transmission system? Please explain your position.

    Response: SCE has not performed a study of potential O&M cost savings for the existing transmission system; however, SCE is of the opinion that any O&M cost savings on the existing transmission system are likely to be very minimal.

15. Please offer any other comments your organization would like to provide on the material discussed in the two Review TAC Structure Working Group meetings (August 29 and September 25), or any other aspect of this initiative.

    Response: SCE has no additional comments at this time.

Related Acronym Definitions:

- **Community Choice Aggregator (CCA):** One type of non-utility Load Serving Entity that can operate in an investor-owned utility service area.

- **Customer Energy Downflow (CED):** Metered energy delivered from the grid to an end-use customer measured at a customer meter, also referred to as end-use metered load (EUML). Customer energy consumption that is met by output of DG located behind the same customer meter is not included in CED. Also, CED does not include any production of DG behind the customer meter in excess of consumption behind the same meter during the same interval.

- **Distributed Energy Resources (DER):** Energy resources connected at distribution level, either on the utility side or the customer side of the customer meter, without regard to technology type or size. DERs include distributed generation (DG), energy storage of various types, EV charging stations, as well as demand response and energy efficiency.

- **Distributed Generation (DG):** Generating resources deployed at the distribution system level, either on the utility side or the customer side of the customer meter; DG is one type of DER.

- **Electric Service Provider (ESP):** One type of non-utility Load Serving Entity that can operate in an investor-owned utility service area.

- **End Use Metered Load (EUML):** Another term for customer energy downflow (CED).

- **High Voltage (HV):** Transmission system 200kV and above.

- **Low Voltage (LV):** Transmission system below 200kV.

- **Transmission Energy Downflow (TED):** Gross metered energy flow measured at specified transmission system interfaces, either (a) from high-voltage to low-voltage transmission **(HV-LV TED)**, or (b) from transmission to distribution **(T-D TED)**. TED measurements do not reflect energy flows in the opposite direction from LV to HV transmission or from distribution to transmission.