

Stakeholder Comments Template

Submitted by	Company	Date Submitted
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Please use this template to provide your written comments on the stakeholder initiative:

“Review Transmission Access Charge Structure”

Submit comments to InitiativeComments@CAISO.com

Comments are due July 26, 2017 by 5:00pm

The Issue Paper posted on June 30, 2017 and the presentations discussed during the July 12, 2017 stakeholder meeting can be found on <http://www.caiso.com/informed/Pages/StakeholderProcesses/ReviewTransmissionAccessChargeStructure.aspx>.

Please use this template to provide your written comments on the issue paper topics listed below and any additional comments that you wish to provide.

1. Suggested modifications or additions to proposed scope of initiative.

The issue paper proposed two main topics for the scope of this initiative. If you want to suggest modifications or additions to the proposed scope, please explain how your proposed changes would fit with and be supportive of the two main topics.

Comments:

SDG&E believes changes in the CAISO’s existing approach for allocating fixed transmission costs are needed. The current approach -- which is based on Gross (real power) Loads within the CAISO and exports out of the CAISO -- accounts for some level of transmission system use, but is neither a complete measure of use, nor a completely efficient way to allocate costs.

SDG&E supports a comprehensive review of the mechanism used to allocate fixed transmission costs among entities using CAISO transmission. This review could go so far as to change the entities to which costs are allocated (for example, splitting the transmission revenue requirement 50%/50% between both Load Serving Entities (LSEs) and generators)¹, and could include consideration of eliminating the wheeling-out charge (because it interferes with market efficiency).²

Additionally, *all* existing allocation mechanisms should be on the table for review. This would include the mechanism by which Metered Sub-Systems (MSS) are billed for fixed transmission costs.

2. Structure of transmission cost recovery in other ISOs/RTOs.

Please comment on any lessons learned or observations from the other ISO/RTO approaches that you think will be useful to the present initiative.

Comments:

The CAISO's paper notes that in ISO New England, transmission costs are intended to be allocated to load with the explicit provision that a customer's load "shall not be credited or reduced for any behind-the-meter generation." (page 13) SDG&E appreciates the sentiment of this provision: it reinforces the reality that all connected customers derive benefits from the transmission system and therefore should not be permitted to evade cost responsibility for transmission through on-site generation. As an Independent Energy Producers Association representative noted at the July 12, 2017 stakeholder meeting, the simple fact that customers remain connected to the grid is proof that they derive a benefit; otherwise they would simply disconnect.

As practical matter, however, determining the amount of each customer's behind-the-meter generation at a level of accuracy suitable for billing, is fraught with challenges. Most customers with behind-the-meter generation do not separately meter their generation with revenue quality metering, and there are no current retail tariffs that require such metering. Additionally, collecting such data and modifying billing systems to account for this data, is a costly and non-trivial undertaking. The legitimacy of these challenges was reinforced at the July 12, 2017 stakeholder meeting where a CAISO representative noted that ISO New England was not actually implementing the above-referenced provision.

¹ The concept of splitting the transmission revenue requirement between loads and generators was suggested by SDG&E during the process leading to the CAISO's initial formation. It is based on the reality that *both* generators and loads use the transmission system and both derive benefits from this use.

² SDG&E has opposed the wheeling-out charge since it was originally proposed during the process leading to the CAISO's initial formation. SDG&E continues to believe that the wheeling-out charge is inconsistent with FERC's Transmission Pricing Policy Statement which holds that "transmission pricing should promote economic efficiency." (page 8 of CAISO's June 30, 2017 issue paper)

While SDG&E is willing to explore the feasibility of calculating TAC based on actual end-use consumption rather than on end-use consumption net of on-site generation, SDG&E is not optimistic that such an exploration will prove fruit-full.

3. Today's volumetric TAC rate structure.

Do you think it is appropriate to retain today's volumetric TAC rate structure (\$ per MWh of internal load or exports) going forward? If so, please explain why. If not, please indicate what type of change you think is preferable and why that change would be appropriate.

Comments:

SDG&E believes some portion of fixed transmission costs should continue to be recovered on the basis of real power flows cumulated across defined time periods. Real power flow cumulated across defined time periods is a valid metric for measuring entities' "use" of the transmission system. However, other metrics need to be considered. For example, an entities' maximum instantaneous metered consumption during a defined period of time, could be a useful metric. Maximum instantaneous metered consumption has the advantage that it allows entities to reduce their transmission cost exposure by installing on-site generation such as rooftop solar PV, but also captures the customer's reliance on the transmission system during periods when the sun is not shining.

Also, the point of measurement is an important consideration in determining how well the metric corresponds to use of the transmission system. In general, SDG&E believes that the further the measurement is from the point at which an end-users take possession of electricity, the less valid the metric. If the measurement is moved from the end-use meter towards the transmission/distribution system interface, individual end-users' use of the transmission system becomes obscured by the effects of intervening distribution-connected generation.

4. Impact of distributed generation (DG) output on costs associated with the existing transmission system.

Do you think DG energy production reduces costs associated with the existing transmission system? Please explain the nature of any such cost reduction and suggest how the impact could be measured. Do the MWh and MVAR output of DG provide good measures of transmission costs avoided or reduced by DG output? Please explain your logic.

Comments:

Distribution-level generation may provide certain operational and planning benefits to the transmission system. These benefits may include "reactive power support/Volt-VAR management," along with the avoidance or deferral of a "specific needed upgrade." (page 22)

Compensation for operational benefits should come through established market mechanisms. If there is no established market, then compensation is not warranted. For example, the CAISO has determined that the benefits of a transmission-level reactive power market are not large enough to justify the cost of implementing and operating such a market. On the other hand, the CAISO is currently exploring the possibility of implementing a market for the provision of primary frequency response.

In terms of transmission planning benefits, SDG&E agrees with the CAISO that where a distributed energy resource can avoid or defer a “specific needed upgrade,” compensation is warranted. However, as recent events have demonstrated – for example the CAISO’s cancellation of 13 previously-approved PG&E transmission projects and the identification of only two new transmission upgrades – the transmission avoidance or deferral benefits of distributed energy resources are likely small or non-existent, at least within the near-term planning horizon.

SDG&E also agrees with the CAISO that in the longer-term, it is difficult to establish whether distributed energy resources should be compensated for avoiding or deferring transmission upgrades. To the extent transmission planning decisions are based on reasonably accurate projections of growth in distributed energy resources, compensation may not be justified; i.e., there are no planned transmission costs that will be avoided or deferred if the distributed energy resources are added as forecast.

Stated differently, absent compensation for avoided/deferred transmission, would the growth in distributed energy resources be materially lower than forecast? The CAISO characterizes the issues as follows: “...as DERs [Distributed Energy Resources] proliferate on the system, it is less clear what the counterfactual would have been, *i.e.*, the specific transmission upgrades or reinforcements that may or may not have been needed absent the addition of the DERs.” (pages 22-23)

5. Potential shifting of costs for existing transmission infrastructure.

If the TAC rules are revised so that TAC charges are reduced or eliminated for load offset by DG output, and there is no reduction in the regional transmission revenue requirements that must be recovered for the existing transmission infrastructure, there will be an increase in the overall regional TAC rate that presumably will be paid by other load. How should this initiative take into account this or other potential cost shifts in considering changes to TAC structure?

Comments:

“Fairness” should control transmission cost allocation. If the cost shift is not “fair,” it would be unlikely that FERC would find the resulting rates to be “just and reasonable.” It is important to recognize that the majority of transmission costs at issue, are the unrecovered costs of *existing*

transmission assets. New behind-the-load meter distributed generation will not change the unrecovered costs of *existing* transmission assets; new behind-the-load meter distributed generation can only have an impact on future transmission upgrades.

The operative question is whether the magnitude of cost savings from avoided or deferred transmission that is a result of new behind-the-load meter distributed generation, will offset the shift of unrecovered costs of existing transmission to other loads. As suggested in SDG&E's response to question 4, there are reasons to believe the cost savings from avoided or deferred transmission will be negligible for some time. This makes it hard to justify a major cost shift.

Of course, there could be other reasons for shifting costs among CAISO entities; e.g., the imposition of a transmission cost allocation mechanism based on instantaneous demand. SDG&E believes FERC is more likely to find that a cost shift resulting from allocating transmission costs in accordance with instantaneous demand, to be "fair" and to produce rates that are "just and reasonable."

6. Potential for DG and other DER to avoid future transmission costs.

The issue paper and the July 12 presentation identified a number of considerations that the transmission planning process examines in determining the need for transmission upgrades or additions. Recognizing that we are still at an early stage in this initiative, please provide your initial thoughts on the value of DG and other DER in reducing future transmission needs.

Comments:

See SDG&E's response to question 4.

7. Benefits of DERs to the transmission system.

The issue paper and the July 12 discussion identified potential benefits DERs could provide to the transmission system. What are your initial thoughts about which DER benefits are most valuable and how to quantify their value?

Comments:

SDG&E takes issue with several statements in the CAISO's paper that suggest a generator can deliver energy to load "without using" the transmission system.³ As noted above, the only way to avoid "using" the transmission system is to disconnect from the grid. Very few entities have made this choice.

³ PJM tariff: "...a generation unit that delivers energy to load without using the Transmission System or any distribution facilities..." (page 16)

"...this definition is limited to generation that uses neither the transmission system nor the distribution system..." (page 17)

The CAISO paper describes a number of benefits that the transmission system provides to connected entities, both generators and loads. These include access to (i) “lower cost resources or resources necessary to achieve policy goals,” (ii) “adequate voltage control,” (iii) backstop services provided by “flexible generation resources,” (iv) “‘headroom’ for inertia-like response,” (page 19) (v) “balancing and frequency control services” (page 20), and (vi) “inrush current for motor starting at commercial and industrial sites.” (page 21) To this list SDG&E would add restoration services: When a distribution circuit is forced out-of-service, the stable frequency, voltage support and energy delivery capability provided by the transmission system allows distribution service to be restored.

The fact that distribution-connected generators may be physically *able* to supply some of the services listed above -- balancing and frequency control services for example -- does not change the fact they are nevertheless still “using” the transmission system. SDG&E suggests that the CAISO revise its paper to clarify that the only circumstance where a generator or load is not “using” the transmission system in some capacity is where the generator or load voluntarily disconnects from the grid with no intention of returning to service.

8. Other Comments

Please provide any additional comments not covered in the topics listed above.

Comments:

The CAISO’s paper suggests that the transmission grid will be used to “effectively provide storage” for the portion of behind-the-load meter generation that is in excess of on-site load. While the transmission and distribution grids accommodate the flow of electricity where there is “excess production,” it is not correct to assume that this electricity is somehow “stored.” In fact, most of this “excess production” simply serves other loads contemporaneously.

A limited amount of such load-service may include the charging of storage devices, but in an integrated electric system there is no way to know whose electrons are being “stored” and whose are not. Accordingly, it is misleading to suggest that there is “grid storage service provided by NEM [Net Energy Metering].”⁴ (page 21) SDG&E suggests that the CAISO paper be revised to remove this misleading inference.

⁴ The “storage” attribute discussed in the CAISO’s paper is neither a technical nor physical attribute of the electric grid; it is solely the result of accounting protocols associated with established tariffs and rates. Physical and technical attributes of electric equipment should not be confused with regulatory policies intended to meet environmental goals.