

Stakeholder Comments Template

Transmission Access Charge Options Issue Paper

Submitted by	Company	Date Submitted
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PG&E appreciates the opportunity to comment on the Transmission Access Charge (TAC) Options Issue Paper. The TAC is the primary mechanism by which the CAISO allocates the cost of maintaining and expanding the CAISO grid. FERC has made clear that it is critical that these costs be allocated appropriately to the beneficiaries of the grid. The CAISO and its stakeholders should carefully consider the implications of changes to the TAC methodology in light of the proposed expansion of the CAISO controlled grid to ensure that the resulting TAC allocation is just and reasonable. As explained below, PG&E has an initial reaction to the alternatives proposed in the October 23, 2015 Issue Paper, but believes the CAISO needs to collect more data, do further analysis, and provide additional details of their studies to enable the CAISO and its stakeholders, such as PG&E, to reach a well, thought-out conclusion on the appropriate structure for an expanded CAISO grid.

PG&E has four primary comments regarding the Issue Paper:

1. The CAISO Issue Paper does not provide sufficient information to assess why a High Voltage Split would be needed or explain how it would lead to a just and reasonable cost allocation;
2. PG&E suggests a phase-in period that would create a blended High Voltage rate to mitigate any perceived rate shock to new entrants;
3. PG&E suggests the CAISO address how planned and future projects would be approved and treated under the proposed TAC rates; and
4. PG&E requests that the CAISO provide additional details of their studies so that stakeholders have an opportunity to understand the underlying assumptions used in the studies and to anticipate, to the extent possible, rate impacts that may arise from planned projects or other new entrants not currently included in the CAISO studies.

PG&E addresses each of these four items in more detail below:

1. The CAISO Issue Paper did not provide sufficient information to assess why a High Voltage Split would be needed other than to mitigate a perceived rate increase to a new entrant with a currently lower cost of transmission. Other measures, such as a phase-in of grid-wide rates, may be used as mitigation. Furthermore, cost recovery of lower (high) voltage facilities and associated upgrades that support or increase the capability of the

higher voltage system may be unjust and unreasonable if allocated only at a sub-regional level. Such a cost allocation scheme may interfere with decisions to make upgrades to lower voltage facilities that improve the reliability or capability of higher voltage facilities.

2. PG&E also suggests a phase-in period that would create a blended High Voltage rate. It would be appropriate to have a phase-in period, similar to the type used in the original transition to a grid-wide TAC when the first new “Participating Transmission Owner (PTO)” joined the CAISO. The phase-in would help manage the perceived rate shock that may occur if another new PTO, such as PacifiCorp, joins the CAISO.
3. PG&E also suggests the CAISO address how planned and future projects would be approved and treated under the proposed TAC rates. PG&E is unclear as to whether projects that have received planning approval from an entity other than the CAISO will still be required to obtain approval by the CAISO transmission planning process prior to inclusion in the TAC. PG&E also asks that the CAISO clarify whether any planning process requirements would also apply to projects that are placed in-service within the next few years.
4. Finally, PG&E believes it would be useful to collect more data from potential new PTOs, to test the robustness of any proposed new TAC rate structure as it might apply to future entrants.

Additionally, PG&E requests that the CAISO revise the Issue Paper with further information so that stakeholders can provide more informed feedback, prior to the CAISO moving forward with a Draft Straw Proposal. In particular, PG&E requests that the CAISO provide a projection of TAC rates (as shown in the Appendix to the Issue Paper), that includes:

1. The rate calculation components, inclusive of the total transmission revenue requirement and Gross Load by sub-region for all three of the proposed voltage level splits for the years analyzed by the CAISO;
2. A scenario that includes the TAC rate impact of Gateway Segments D, E, and F and other planned PacifiCorp transmission projects;
3. What assumptions were made about the treatment of firm transmission currently subscribed under PacifiCorp’s OATT;
4. Further information about the assumptions used to calculate the forecasted transmission revenue requirement. While the Issue Paper references the 2014-2015 Transmission Plan, PG&E requests that CAISO provide any other assumptions used in the Issue Paper to calculate the transmission revenue requirement for stakeholder review. For example, the CAISO should provide a list of potential transmission expansion projects in the CAISO and PacifiCorp regions with their approximate projected costs; and
5. More specificity on how a two-part High Voltage transmission rate would apply to various transactions on the expanded grid. For example, please explain the rates that would apply and the PTO that would receive the revenues from the following transactions:
 - A. A wheeling transaction that enters the CAISO grid in Southern California and exits the CAISO grid at a 230 kV take-out point on PacifiCorp’s system;
 - B. A wheeling transaction that enters the CAISO grid in Wyoming and exits the CAISO grid at a PG&E 500 kV take-out point in California;

- C. A wheeling transaction that enters the CAISO grid in Utah and exits the CAISO grid at a 230 kV take-out point in California;
- D. A wheeling transaction that enters the CAISO grid in Idaho and exits the CAISO at a 115 kV take-out point in California; and
- E. Any other wheeling transaction that the CAISO believes will help illustrate how the propose three-part TAC rate structure would operate.

Responses to specific CAISO questions:

1. One theme emphasized in the issue paper and in FERC orders is the importance of aligning transmission cost allocation with the distribution of benefits. Please offer your suggestions for how best to achieve good cost-benefit alignment and explain the reasoning for your suggestions.

The current TAC methodology, which was litigated at and approved by FERC, has been in use for nearly fifteen years. Careful consideration must be made if the methodology is to be changed to accommodate the expansion of the CAISO controlled grid. PG&E requires additional information to form a position on what best achieves an appropriate cost benefit alignment for purposes of a new TAC structure for an expanded CAISO controlled grid. As discussed further below, PG&E believes the CAISO needs to collect more data, do further analysis, and provide more details in their studies in order for PG&E to form a position. Generally, PG&E believes it should be a goal to adopt a methodology that is robust enough to equitably accommodate the addition of other new PTOs without the need for other major revisions.

2. Please comment on the factors the ISO has identified in section 5 of the issue paper as considerations for possible changes to the high-voltage TAC structure. Which factors do you consider most important and why? Identify any other factors you think should be considered and explain why.

The factors that the ISO has identified in section 5 of the issue paper as considerations for possible changes to the High Voltage TAC structure, and PG&E's responses to those factors, are as follows:

- A. Is it a new or existing facility (type)? This was a consideration in the original CAISO TAC methodology. In that instance, the costs of new facilities High Voltage were spread grid-wide once the facilities were placed into operation and the costs of existing facilities were phased-in over a transition period. A similar method could be used to manage the perceived rate shock that may occur if a new PTO such as PacifiCorp were to join the CAISO.
- B. What are the facility's electrical characteristics (voltage)? The "bright line" voltage test has been used in the current CAISO TAC methodology since its adoption in 2001. This methodology was accepted as a just and reasonable cost allocation of the benefits of the CAISO grid. Before changing the methodology, it should be shown that continuing the same cost allocation would not be just and reasonable.
- C. What is the geographic scope of the project; e.g., system, regional, local (scope)? A single project could provide benefits at a system, regional and/or local level. If this were to be an element, a TAC cost allocation criterion would need to be adopted that would deal with projects that provide benefits over multiple geographic boundaries. PG&E believes that the geographic scope of new projects could be considered in the CAISO

transmission planning approval processes. PG&E requests that clarification be provided on how the transmission planning processes would approve new projects before it can provide an opinion on whether the geographic scope of a project should be considered in the TAC.

- D. What is the purpose of the project; e.g., reliability, economic, policy (purpose)? PG&E believes the purpose of the transmission project is an important factor to consider for new transmission projects and should be addressed with regards to potential changes to the transmission planning processes. There is additional complexity when considering the numerous jurisdictions with varying goals that may also change over time and create the need for policy driven projects.
 - E. Which zones or sub-regions benefit from the project (benefit criteria)? PG&E believes that zonal or sub-regional benefits of new projects should be considered in the CAISO transmission planning processes. PG&E requests that clarification be provided on how the CAISO transmission planning process would approve new projects before it can provide an opinion on whether a benefit criterion should be applied to a project with regards to TAC allocation.
 - F. When was the facility approved (transition)? See above discussion in PG&E's primary comment 2. Additional guidelines need to be developed for projects that are in the early planning stages as to when it would be appropriate to require CAISO approval under a transmission planning process applicable to the expanded grid in order to be included in the TAC applicable to the expanded region.
 - G. Under what planning process was the facility approved (procedure)? See Factor F above as it pertains to new facilities.
 - H. What happens upon the new PTO's withdrawal (exit)? It may be appropriate to reassess the TAC methodology at the time a PTO announces its intention to withdraw from the CAISO.
3. The examples in section 7 illustrate the idea of using a simple voltage-level criterion for deciding which facilities would be paid for by which sub-regions of the combined BAA. Please comment on the merits of the voltage-based approach and explain the reasoning for your comments.

The merit of the current model is its simplicity. PG&E is aware of multiple instances where lower voltage facilities support – indeed are vital to – its 500kV system. Under the current TAC methodology, the cost and benefit of these lower voltage level facilities (i.e. those rated at 230 kV) is shared by all users of the 500 kV system. The proposed High Voltage split for TAC may inappropriately result in sub-regions shouldering the TAC burden for network lines that support the entire region. Additionally, the High Voltage split model may also discourage the development of a lower transmission voltage project that primarily benefits the higher voltage system.

4. Please comment on the merits of using the type of transmission facility – reliability, economic, or public policy – as a criterion for cost allocation, and explain the reasoning for your comments.

PG&E believes that the purpose of the transmission project is an important factor to consider for new transmission projects and should be addressed with regards to potential changes to the

CAISO transmission planning process. PG&E believes that the reliability, economic, or public policy merits of a transmission facility need to be considered in the CAISO transmission planning process, and a potential revision of how these attributes are defined may be needed in the CAISO transmission planning stakeholder process before consideration is given to their role in the TAC rate methodology.

5. Please comment on the merits of using the in-service date as a criterion for cost allocation; e.g., whether and how cost allocation should differ for transmission facilities that are in service at the time a new PTO joins versus transmission facilities that are energized after a new PTO joins.

PG&E believes that the in-service date could be a criterion for cost allocation. This was the approach taken in the original transition to CAISO grid-wide rates. The CAISO Issue Paper did not provide sufficient information to assess why a change is needed for existing facilities at this time. For new facilities, the CAISO should clarify as to whether projects that have received planning approval from an entity other than the CAISO will still be required to obtain approval through the CAISO transmission planning process prior to inclusion in the TAC. PG&E also asks that the CAISO clarify whether any other requirements would also apply to projects that are placed in-service within the next few years.

6. Please comment on using the planning process as a criterion for cost allocation; i.e., whether and how cost allocation should differ for transmission facilities that are approved under a comprehensive planning process that includes the existing ISO PTOs as well as a new PTO, versus transmission facilities that were approved under separate planning processes.

The planning process should be used as a criterion for cost allocation. See the response above to Question 5. Of particular interest is whether facilities that have received planning approval from an entity other than the CAISO will still be required to obtain approval by the CAISO transmission planning processes prior to inclusion in the TAC. The CAISO should also clarify whether any such requirements would also apply to projects that are placed in-service within the next few years without approval of the CAISO transmission planning processes. A related issue is as a new PTO is integrated into the CAISO balancing authority, at what point would that new PTO become subject to the CAISO's transmission planning process. For instance, existing projects that are already under development should not be re-analyzed, but failure to undergo the CAISO's transmission planning processes may have an impact cost allocation. It may be appropriate for projects that are planned, but that have not obtained all necessary approvals, should go through the transmission planning processes, particularly if the Project is above a certain economic threshold.

7. The examples in section 7 illustrate the idea of using two "sub-regional" TAC rates that apply, respectively, to the existing ISO BAA and to a new PTO's service territory. Please comment on the merits of this approach and explain the reasoning for your comments.

PG&E requests that further information be provided, as detailed above, in order to assess whether a sub-regional TAC rate might be appropriate. See Comment 3 as it may pertain to the concerns of using two sub-regional TAC rates.

8. Please offer any other comments or suggestions on this initiative.

- i. The CAISO should address how the transmission planning and generator interconnection processes relate to this stakeholder process, namely:
 - a. What are the differences between the Transmission Planning Processes and Planning Standards and would there be a significant change in the identification of new projects once a new PTO becomes a part of CAISO and follows CAISO's transmission planning processes?
 - b. Whether PacifiCorp has – or will have – a similar concept to the CAISO's deliverability requirement for resources that result in transmission being built, and, if so, the criteria for resource deliverability under that policy.
 - c. Considering that Deliverability Network Upgrades (DNU) are based upon "On-Peak Deliverability Assessment", what are CAISO's thoughts on how cluster studies for the expanded footprint are going to be conducted? Of interest would be examples addressing the following: (1) a description of the possible "Group Study" areas in the expanded footprint; (2) peak-hour selected for the "Group Study" area (this would have an impact on the identified LDNUs (Local DNU)); and how an ADNU (Area DNU) area will be defined (will it be spread across the entire new ISO footprint).
 - d. The impact of DC lines from a generation site to the current CAISO boundary and whether they will be considered generation ties rather than network facilities.
 - e. Whether there are differences between the CAISO reliability standards and requirements and those used by PacifiCorp – or any prospective new PTO – and whether the CAISO standards will apply to any new PTO joining the CAISO. If so, will new transmission be needed to bring up the prospective PTO's existing system to meet CAISO standards? If so, how will the cost of this "remedial" transmission be allocated.
- ii. PG&E has identified several other topics that are inextricably intertwined with the TAC and should be considered in tandem in order to allow thorough understanding of the impacts of changes to the TAC. The CAISO should clarify whether these topics will be addressed as a part of this process, including:
 - a. CAISO should add Congestion Revenue Rights (CRR) to the scope of issues to be considered in this initiative. It is unclear from the schedule and scope of initiatives CAISO has identified regarding PacifiCorp's integration whether it plans to address the impact of PacifiCorp's integration on the existing CRR process. The phasing-in of PacifiCorp's transmission assets will impact long term CRR planning in the CAISO, so it is important that CAISO considers the appropriate TAC structure if it were to expand its balancing authority area by integrating PacifiCorp as a new PTO. CAISO should also consider the impact of PacifiCorp's integration on the existing CRR process and understand what improvements are necessary.

CRR revenue inadequacy has been a significant issue in the CAISO's market over the last year and a half as inconsistencies between the CRR and Day-Ahead market models have caused the money owed to CRR holders to exceed the Day-Ahead congestion rents. PacifiCorp's integration into the CAISO's market as a full PTO could increase the modeling complexities between the CRR and DAM models and lead to further modeling discrepancies and errors that cause high CRR revenue inadequacy. The CAISO's Department of Market Monitoring has recognized the problem and proposed a design solution, which PG&E supports.

PG&E recommends that CAISO address the CRR process, the issue of CRR revenue inadequacy, and the potential impact of the PacifiCorp integration within the context of this initiative. If CAISO does not intend to address the CRR process in this initiative, CAISO should indicate in which initiative (e.g. PacifiCorp Related Initiative #6: PacifiCorp Implementation Items) it will look at the CRR process to ensure adequate stakeholder consideration is allowed and the issues associated with CRR revenue inadequacy are resolved prior to PacifiCorp's integration and not further exacerbated by the expansion of its market.

- b. How will TAC be impacted for transmission that is built to meet policies of individual states considering that the CAISO footprint is changing from a single state to a multi-state model?
- c. For purposes of meeting RA requirements for each state, will generation in one state be considered deliverable as long as it meets the deliverability requirements to the load in that state's footprint? Or, will there be a new definition of deliverability to load?
- d. The impact on potential benefits from out-of-state RPS resources and transmission considering the changing legislative and regulatory landscape in California.