

# Stakeholder Comments Template

## Transmission Access Charge Options Issue Paper

Submitted by	Company	Date Submitted
<i>(submitter name and phone number)</i>	<i>(company name)</i>	<i>(date)</i>
Tom Darin / Tom Vinson phone: 720-244-3153 / 202-383-2535	American Wind Energy Association	November 20, 2015 <i>(per CAISO's 11/11/15 time extension)</i>
Nancy Rader / Dariush Shirmohammadi phone: 510-845-5077 / 310-858-1174	California Wind Energy Association	
Sarah Cottrell Propst phone: 505-660-4229	Interwest Energy Alliance	

This template has been created for submission of stakeholder comments on the issue paper for the Transmission Access Charge Options initiative that was posted on October 23, 2015. The issue paper 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](mailto:initiativecomments@caiso.com). Submissions are requested by close of business on **November 13, 2015**.

### Introduction

As a preliminary statement, AWEA, CalWEA, and Interwest Energy Alliance (“Joint Parties”) stress the importance of high-voltage transmission to the nation’s continued economic prosperity and, increasingly important, of accessing the most cost-effective and reliable renewable energy resources as we expand our efforts to modernize and decarbonize the U.S. electric grid. We also stress that success in building high-voltage interstate transmission can only be achieved with the combined leadership of FERC and state public utility commissions. This combined leadership has resulted in recent interstate successes within all ISOs and RTOs. Following many decades of neglect, much of the transmission that has been built recently is simply backfilling long-standing reliability needs that had been deferred for too long.

It is also important to place in context the costs of transmission and impacts on ratepayers. Nationally, transmission represents approximately 10% of a consumer's bill, with generation representing 50% and distribution and customer service the other 40%. And while of course all factors that affect electricity rates are important, this context is also important because transmission is pivotal to ensuring that the portfolio of resources that represents 50% of electricity rates includes very low-cost renewables that are not subject to fuel price volatility. These resources will be important in meeting California's 50% RPS requirement and in facilitating western states' achievement of federal Clean Power Plan goals.

New infrastructure will be essential if we are to cost-effectively deploy any of the low-emission generation options at the needed scale. While distributed generation, "smart grid," and other innovative solutions provide benefits and should be part of the solution, they are often much less cost-effective than utility-scale renewables, which require high-voltage transmission from resource areas to load centers.

Accordingly, we appreciate the CAISO's very thoughtful and thorough issue paper on Transmission Access Charge (TAC) options for an expanded regional market. Effective cost allocation has already proven to be a critical feature in the successful transmission policies resulting in new high-voltage transmission projects in CAISO, ERCOT, and other RTOs. FERC cost allocation principles emphasize that the beneficiaries of upgrades should pay for the cost and recognize that large-scale transmission projects inherently provide benefits to all ratepayers within a region through improved reliability, greater access to low-cost generation, improved market efficiency, and protection against fuel price uncertainty.

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.

We agree with CAISO and FERC that aligning the allocation of transmission costs with the distribution of benefits is of fundamental importance to the development of a TAC for a significantly expanded CAISO service territory that integrates the territories of additional transmission owners, potentially starting with PacifiCorp. In pursuing this alignment, however, the CAISO and its stakeholders should consider that FERC and the courts have found that a wide range of regional cost allocation methods comport with the principles set forth in FERC Order No. 1000, including the CAISO's current TAC<sup>1</sup> as well as the various cost allocation methods in the PJM, MISO, SPP and ISO-NE balancing areas that the issue paper summarizes on page 7.

Therefore, in considering whether or how the CAISO's current TAC should be modified, the CAISO and its stakeholders must consider *why* new TAC options are being evaluated. The CAISO is exploring the combining of balancing areas to make it significantly easier to reliably

---

<sup>1</sup> As noted in the Issue Paper, see Cal. Indep. System Operator, 143 FERC ¶ 61,057, PP 297-305 (2013) (finding that the ISO's current regional access charge largely complies with the Commission's costs allocation principles).

operate the electric grid. The importance of improved operations is particularly important given the increased reliance on variable renewable energy resources that will be needed to meet both state and federal clean energy goals, specifically, California's 50% RPS, RPSs in seven other western states, and the federal Clean Power Plan targets that will apply to all western states. The benefits of balancing area consolidation are clearly shown in the recent PacifiCorp-CAISO study on integrating the balancing areas of these entities. To quote this study, "Over its first full 20 years, ... we estimate that PacifiCorp and ISO integration would yield \$1.6 to \$2.3 billion (2015\$) in total present value incremental savings for PacifiCorp, and \$1.8 to \$6.8 billion for ISO customers."<sup>2</sup> These benefits accrue from more efficient generation unit commitment and dispatch, lower peak capacity needs, more efficient overgeneration management and renewable energy procurement savings. Another benefit that will accrue to PacifiCorp (and other entities joining CAISO) is that it will take advantage of CAISO's functions without bearing the significant cost that has gone into building the institution.

Given the substantial benefits that the study shows will be gained from expansion of the CAISO footprint, the TAC design must ensure that transmission investments that have been demonstrated to be needed for reliability, economic or policy reasons are built so that the expected benefits of combining balancing authorities are realized (or even enhanced). This is best accomplished with a relatively simple cost allocation methodology. The goal is not transmission expansion per se; transmission is an enabler for efficiently operating the power system. In the process of determining the need for new transmission, the cost-effectiveness of the selected project will have been fully vetted among all stakeholders representing state and regional interests. A cost allocation method that is relatively simple will minimize disputes at the cost allocation stage, which will facilitate the goal of expanding an efficient transmission system and delivering the benefits of such transmission expansion. These benefits include not only the benefits identified as part of the need justification but the additional benefits that will accrue once the expansion is implemented. In contrast, more complicated cost allocation methods will provide opportunities for arguments, delays and derailments, which will make it difficult to realize the benefits of transmission expansion. Therefore, a chief goal of cost-benefit alignment should be to keep the cost allocation method simple so that identified benefits can be realized.

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 most important factor to be considered in allocating the cost of a transmission asset is the benefit that it offers to those who pay for it. While complex analysis techniques can be used in an attempt to precisely capture the benefits, these methods necessarily rely on gross assumptions about future system conditions and data forecasts many years into the future. Hence, any precision that may apparently be gained by the use of complex algorithms is more than offset by the uncertainty introduced through the use of data and assumptions that are likely to be grossly approximate or even erroneous. Moreover, the process for developing those assumptions (or

---

<sup>2</sup> See "Regional Coordination in the West: Benefits of PacifiCorp and California ISO Integration," October 2015, at p. 4. Available at: <https://www.caiso.com/Documents/StudyBenefits-PacifiCorp-ISOIntegration.pdf>.

subsequently defending them) is likely to be contentious, time-consuming, and expensive. At the same time, it is well known that, once a transmission asset – particularly a backbone upgrade – is added to the grid, its benefits will accrue, to differing degrees, to all customers of the grid, so even a complex analysis is likely to fall short of fully capturing the benefits of a particular transmission addition.

For these reasons, the most critical factor in identifying the benefits of a transmission facility will be the facility's voltage – the higher the voltage, the more likely the facility is part of the regional backbone transmission system benefiting the entire grid. Lower voltage lines are more likely to be part of a sub-regional network transmission or a utility network transmission system.

Hence, a simple cost allocation method that reasonably captures the benefits of a new transmission facility should be based on the facility's voltage level. As for existing transmission facilities, the same rationale is applicable. However, in the context of service territory consolidation, care should be taken to avoid creating significant rate discontinuity for those who are already paying for the existing transmission facilities.

As we noted above, geographic scope for high voltage backbone transmission facilities is not a critical factor, since electrons do not respect geographic or political boundaries. Backbone (extra high-voltage) transmission facilities, even if wholly within a single state, can nevertheless provide system benefits to the entire region. For example, as discussed above, it would be extremely difficult, if not impossible, to distinguish between the benefits of a transmission segment that enables policy goals in one state to be achieved while delivering significant economic savings to customers in another state and improving grid reliability in all states. Indeed, the substantial economic benefits that will accrue to consumers in California and all of the states within PacifiCorp's service territory increasingly demonstrate that classifying certain types of transmission upgrades – e.g., “economic,” “policy driven,” or “reliability” – is an antiquated concept. More and more, accessing low-cost wind and other renewables are as much about economics and reliability as they are about “policy.” Attempts to parse out the purpose of the project would, however, create opportunities for the project to be bogged down in arguments over models, assumptions and the like – an unnecessary boon to consultants that will delay benefits to ratepayers.

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.

As discussed above, the Joint Parties believe that the substantial merit of a simple voltage-level criterion is that it avoids complexity that can delay or derail a transmission upgrade that has already been demonstrated to be needed as part of a rigorous planning process and at the same time will provide regional benefits. Moreover, this approach has been vetted and approved by FERC for the CAISO's current cost-allocation method and, hence, offers the continuation of a regional cost allocation scheme that has already facilitated the most successful regional transmission expansion in the country.

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.

To repeat our statement above, it would be extremely difficult, if not impossible, to distinguish between the benefits of a transmission segment that enables policy goals to be achieved while delivering significant economic savings and improving grid reliability. Attempts to parse out the purpose of the project would, however, create opportunities for the project to be bogged down in arguments over models, assumptions and the like. It also may unnecessarily “politicize” and therefore delay transmission expansion if there are interstate or inter-region disagreements over “policy”, when in fact transmission enhances reliability, promotes economic interests and satisfies policy goals all at the same time.

Moreover, the initial reasons justifying an upgrade, including the ratepayer groups that benefit, can change over time, in some cases even between the time that the upgrade is first planned and when it goes into service. For example, upgrades may initially be needed to enable utilities to meet their public policy requirements, which serve particular load centers to which costs are allocated. But the upgrade may then prove to bring efficiency and reliability benefits to a larger group of ratepayers. Similarly, rapidly-changing market drivers, including plummeting generation costs, can transfer benefits to entirely new groups of ratepayers.<sup>3</sup> Thus, the type of transmission facility is too blunt a methodology for allocating costs.

Therefore, transmission type should not be used as a criterion for cost allocation. In other words, for example, regardless of the need that initially justifies the construction of a specific transmission facility, extra high voltage transmission facilities (345 kV and above) provide regional benefits and their costs should be allocated regionally.

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.

As indicated above, the Joint Parties support the use of voltage levels, and not in-service dates, as the methodology for cost allocation. One advantage of treating existing and new transmission under the same methodology is that artificial lines not relating to the methodology need not be drawn. For example, regardless of in-service date, an existing extra high voltage transmission line in PacifiCorp’s current service territory, when operated within CAISO’s very efficient markets, will offer benefits to California utilities that are already part of the CAISO footprint,

---

<sup>3</sup> As a real-world example, consider the One Nevada (ON Line) transmission line in Nevada, which was approved by the Nevada PUC in 2010 to bring low-cost renewables from the North (hydro and geothermal) to allow NV Energy (which owns 25% of the project) to meet its RPS requirements and serve load centers in Southern Nevada. Since it was approved in 2010 and came online in January 2014, the solar resources in Southern Nevada along with inexpensive natural gas have resulted in greater power flows from South to North, which brings more benefits to the northern ratepayers than originally anticipated.

and vice versa. Hence, for consistency purposes, it would make sense that the cost of existing extra high voltage lines be regionally allocated.

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 need for transmission, and the most cost-effective solutions to those needs, would be established in the same type of comprehensive and stakeholder-driven transmission planning process that the CAISO now conducts. This process allows for the essential and effective participation of stakeholders from all ISO states. However, based on the principles of an effective cost-allocation approach discussed above, the planning process would not play a role in cost allocation.

The CPUC has coordinated its planning process with that of the CAISO, and this consistency should likewise be established with all state regulators across the expanded footprint. With agreed-upon planning assumptions and inputs, the product of transmission planning can be more readily accepted in siting processes. Once transmission upgrades have been approved, the voltage-based cost-allocation methodology should be applied. As discussed above, this approach will facilitate the development of transmission that will produce benefits across the entire footprint.

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.

The suggestion to use a three-tiered TAC rate is reasonable. In the example, the cost of all lines above 300 kV would be allocated regionally based on regional load levels; lines in the 200 to 300 kV range would be allocated based on sub-regional load levels; and all lines below 200 kV would be allocated on a utility-by-utility basis based on utility load.

Until transmission interconnections between CAISO and PacifiCorp are strengthened, it would be reasonable to assume that most 200-kV-class upgrades do not currently produce regional benefits. Secondly, if existing transmission were to be rolled into the new cost-allocation formula, a 300-kV cutoff for regional cost allocation would avoid significant rate inconsistency for PacifiCorp customers.

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

None at this time.