Transmission Access Charge Options

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

Submitted by	Company	Date Submitted
Lanette Kozlowski *(415) 973-2081*	*Pacific Gas and Electric Company*	*March 31, 2016*

Summary of PG&E's Position

PG&E appreciates the opportunity to comment on the CAISO's Transmission Access Charge (TAC) straw proposal and understands that continuation of the current TAC methodology may be an impediment to new PTOs joining and expanding the CAISO grid. Finding solutions to the issues presented by the straw proposal that are workable for all stakeholders is imperative to a successful expansion of the CAISO. PG&E is committed to working productively with the CAISO, PacifiCorp (PAC) and other stakeholders in this important initiative to ensure that changes to the existing TAC rate methodology result in a just and reasonable TAC structure for the current Participating Transmission Owners (PTOs) and new PTOs that might join the CAISO. PG&E also recognizes that this is one of many initiatives necessary to a successful expansion of the CAISO grid.

While PG&E finds some aspects of the straw proposal appealing, it does not support the proposal with respect to the different allocation methods for the costs of Existing Facilities and New Facilities. PG&E's concern is based in part on the risk of significant additional costs being allocated to PG&E customers if the remaining PAC Gateway elements are built. PG&E is also concerned that the straw proposal will not help close the large gap that currently exists between the sub-regional rates for PAC and the CAISO ($4/MWh v. $11/MWh today).

As described in more detail below, PG&E proposes an alternative TAC methodology that adopts the straw proposal's treatment of Existing Facilities but, limits which facilities are eligible to be shared across sub-regions. Under PG&E's alternative only facilities whose costs may be shared across the entire expanded ISO Region would be those that (1) connect two or more sub-regions or upgrade an existing interconnection, regardless of voltage level; or (2) create a new or upgrade an existing intertie with a BAA adjacent to the expanded ISO, regardless of voltage level.

I. Synopsis of CAISO's Straw Proposal

In the CAISO's February 10, 2016, TAC straw proposal, the CAISO proposes to treat Existing Facilities differently from New Facilities. Under the straw proposal, Existing Facilities would have a license plate rate, i.e., the existing transmission revenue requirements (TRRs) for each sub-region would be kept separate. For New Facilities, the CAISO would consider a project for regional cost allocation only if it qualified under the CAISO's expanded Transmission Planning Process (TPP) and met one of the following criteria: (a) is rated > 300 kV, or (b) connects two or more sub-regions or upgrades an existing interconnection, regardless of voltage level; or (c) creates a new or upgrades an existing intertie with a BAA adjacent to the expanded ISO, regardless of voltage level.[1] Once a New Facility met at least one of the criteria, then a benefits test would determine cost allocation.

II. PG&E's Analysis of CAISO's Straw Proposal

PG&E has significant concerns regarding the CAISO's proposal and the dichotomy between the treatment of New and Existing Facilities. Under the straw proposal, new entrants joining an expanded ISO could build large, expensive new transmission projects after joining, the costs of which could be shared across the entire expanded ISO. By comparison, because the current CAISO grid is already extensively developed, there will be much less future investment in the CAISO grid to be shared with the new entrants. This poses the risk that PG&E customers will face additional costs without benefiting from a corresponding alleviation of costs associated with CAISO Existing Facilities.

This risk is exemplified by PAC joining the CAISO. PAC has plans to develop extensive new >300 kV transmission: Gateway Segments D, E, F, and H. PAC has been developing these projects for years, including obtaining conditional approval from the Northern Tier Transmission Group, but under the CAISO's proposal, they could be considered New Facilities. To be considered New Facilities, these projects would have to be approved under the CAISO's expanded TPP, and the expanded ISO would need a cogent, fair way to determine allocation of benefits and costs from these projects. The CAISO has agreed to develop the expanded TPP through a future separate stakeholder process. In the meantime, there is uncertainty regarding how the benefits from these projects would be ascertained and costs allocated. The current CAISO grid could be allocated a significant portion of the costs for this new transmission in PAC's territory, while PAC would likely pay for little New (and no Existing) Facilities in the existing CAISO grid.

PG&E supports an equitable TAC methodology. Consequently, it should be designed under the lens that costs must be commensurate with benefits and that the benefits of the expanded CAISO are distributed fairly among the expanded ISO participants. To emphasize this point, PG&E would draw attention to the E3 study commissioned by PAC that assessed the benefits of

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[1] PG&E's understanding is, as used in the straw proposal, an "existing interconnection" between two sub-regions is an intertie between two sub-regions that links the two sub-regional electric power systems. For example, Path 66 and Path 25 (as defined by WECC) would be existing interconnections between PG&E and PAC if PAC were to join the CAISO. Similarly, as used in the straw proposal, an "intertie" between two BAAs links the two BAAs electric power systems.

regional expansion where the results revealed that PAC's customers, on a load-basis, would receive nearly 2 1/2 times the amount of present value benefits between 2020 and 2039 as CAISO customers in the "low scenario" case.

III. California's Investment in Existing Facilities

For more than 15 years, California has engaged in building out its transmission system to meet Renewable Portfolio Standard (RPS) goals. The CAISO is proposing to adopt a license plate methodology for Existing Facilities after a new PTO joins the CAISO where the cost recovery of Existing Facilities remains with the customers of the PTOs in a particular sub-region even though there would be no restriction on the use of that sub-region's transmission facilities by PTOs not sharing in costs of those facilities. The straw proposal provides reciprocal rights to PTOs to use the Existing Facilities of another sub-region while paying only the costs associated with their own sub-regional Existing Facilities. In some circumstances this might be considered just and reasonable but in this instance, because of the cost differential between CAISO and PAC sub-regional rates is so great ($11/MWh v. $4/MWh), it is not just and reasonable. The straw proposal has no provision that would assure that this rate differential will ever be reduced.

According to the E3 study, between 73% - 90% of the benefits that PAC is expected to receive is due to more efficient over-generation management and renewable procurement savings, i.e., PAC will benefit by accessing California generation (renewable and conventional) and using the existing California transmission system. This illustrates that the CAISO's existing system is fundamental to the recognition of the majority of benefits to PAC and should be considered a benefit in accessing renewable generation and delivering that energy outside of California. The cost of the CAISO's existing system is currently recovered both through TAC and wheeling access charges paid by non-CAISO parties using the CAISO grid.

While it may be true that investment decisions in the current CAISO grid were made considering only the current PTO customers, there has always been an expectation that users of the CAISO-controlled grid would pay an appropriate amount for the use of the grid. Wheeling charges are a clear recognition of the value of the transmission system for non-CAISO parties when energy is exported from the CAISO's grid. To not require new PTOs to share in the costs of Existing Facilities where there is a large rate difference creates inequities.

IV. PG&E's Concerns with the Straw Proposal

The CAISO's Straw proposal, as formulated, does away with wheeling revenue for Existing Facilities and does not contemplate a method to replace this revenue. If a new PTO was paying wheeling charges prior to joining the CAISO, then after joining, those wheeling charges would go away while the new PTO continues to have the same access to the CAISO's energy markets that they had prior to joining.

PG&E expects that on an annual basis $2-$9 million in wheeling revenue will no longer be collected by the CAISO at PG&E's intertie with PAC once PAC joins the expanded ISO. Today, wheeling revenues act to reduce the TAC rate paid by CAISO PTOs. But for PAC joining the CAISO, those revenues could grow considerably given the potential over-generation of renewables that is forecasted to benefit PAC. On a larger scale, the total wheeling revenues collected by the CAISO is approximately $120 million annually. Depending on how the straw proposal is implemented these wheeling revenues could be progressively lost as new PTOs join the CAISO increasing the cost of transmission to CAISO PTOs.

Finally, PG&E is concerned that the straw proposal may create an uneven playing field for access to California-connected generation. Load-serving entities outside of California, such as customers of PAC, will be able to purchase generation within California while only paying their sub-regional rate. Conversely, California customers would purchase the same generation while paying a much higher sub-regional rate and in effect subsidizing the transmission of generation to customers outside of the California sub-region.

In light of the above, PG&E does not support the different treatment proposed for Existing and New Facilities as described in the straw proposal. Consequently, as discussed below in response to the CAISO's questions, PG&E proposes an alternate approach that results in a fairer allocation of costs and benefits of Existing and New Facilities and will provide PAC customers with protection from an initial rate increase upon joining the CAISO. Please see PG&E's response to Questions 9 and 18.

V. PG&E's responses to specific CAISO questions

A. Straw Proposal

1. <u>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.</u>

   On its face, classifying the CAISO BAA as a sub-region, and then any subsequent PTO that joins the CAISO as a sub-region, appears equitable. However, the approach described above does not appear to be just and reasonable if the new PTO is integrated with and primarily dependent on transmission facilities that are part of an existing CAISO sub-region. Under these circumstances, creating a sub-region for the new PTO may create an inequity to either the new PTO or to the existing sub-region PTOs.

   For example, Silicon Valley Power (SVP) currently has the majority of its energy needs met from wheeling across the CAISO grid, for which it pays a wheeling charge. If SVP joins the CAISO as a new PTO, the transmission facilities that they would turn over consist principally of transmission level substations and may not substantially benefit the existing sub-regions' grid. Under the straw proposal, after becoming a new sub-region, SVP would be relieved of paying wheeling, i.e., the costs of the existing transmission system from which they are benefiting and would only pay for New Facilities found to provide SVP will benefits.

2. <u>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</u>

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.

For purposes of PG&E's alternative proposal described in answer to Question 9, PG&E concurs with the CAISO's definition of "Existing Facilities." To help distinguish Existing Facilities from New Facilities, PG&E believes that New Facilities should be defined as those facilities that as of the date a new PTO joins:

- Are not yet in operation, or
- Are not currently under construction, or
- Have not obtained any regulatory and permitting approvals.

In addition, New Facilities must:

- Have been approved through a new integrated transmission planning process for the expanded ISO, and
- Have met the necessary criteria and benefits test for the purpose of the regional cost allocation.

Please see PG&E's complete proposal in its response to Questions 9 and 18.

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.

   A license plate rate methodology for Existing Facilities results in no cost sharing of facilities even if there is a benefit to a sub-region for facilities in the other sub-region. PG&E believes that such an approach is only appropriate if New Facilities are treated in a similar manner except for facilities that (1) connect two or more sub-regions or upgrade an existing interconnection, regardless of voltage level; or (2) create a new or upgrade an existing intertie with a BAA adjacent to the expanded ISO, regardless of voltage level. If there is no cost sharing between sub-regions for Existing Facilities, cost sharing for New Facilities should be limited and should only apply to projects that clearly increase transfer capabilities between sub-regions or between BAAs. These facilities should be allocated to each sub-region proportionate to the benefits that region gets from the facilities. Please see PG&E's complete proposal in its response to Questions 9 and 18.

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.

Please see PG&E's answer to Question 3 and its complete alternative proposal described in its response to Questions 9 and 18.

5. <u>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.</u>

   Please see PG&E's answer to Question 3 and its complete alternative proposal described in its response to Questions 9 and 18.

6. <u>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.</u>

   Costs should be allocated only according to the benefits a sub-region derives from the project. A postage stamp or simple load-ratio share approach could, in many instances, allocate cost disproportionately to the larger sub-region.

7. <u>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.</u>

   At this time, PG&E does not take a position on the treatment of a subsequent new PTO joining.

8. <u>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.</u>

   PG&E believes that an annual recalculation to reflect the change in benefits may cause excessive and unanticipated rate changes and thus create uncertainty. PG&E is generally opposed to an annual re-calculation. As is, the CAISO is committing to recalculating benefits of "new" facilities as additional PTOs join as part of an existing sub-region or by creating a new sub-region. This may sufficiently serve to properly reallocate benefits. Moreover, a PTO could request a re-calculation through a Section 206 filing at FERC if the PTO believes that the benefits and costs become unjustly out of balance.

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).

PG&E is supportive of facets of the CAISO's straw proposal but PG&E believes that the following proposal should be pursued. The proposal being put forward integrates some of the characteristics of the straw proposal, but creates an acceptable balance of benefits and burdens and maintains the same allocation principles between existing (legacy) facilities and new (regional) facilities. Definitions and an outline of PG&E's proposal are as follows.

Legacy Facilities: Facilities that were approved in a transmission planning process, or are in the process of construction, or are operational when a new PTO joins and creates the Regional ISO (RISO).

Regional Facilities: New Regional Facilities should be defined as those facilities that:

- Are not yet in operation, or
- Are not currently under construction, or
- Have not obtained any regulatory and permitting approvals.

In addition, Regional Facilities must:

- Have been approved through a new integrated transmission planning process for the RISO, and met one of the following two criteria:

  (a) connect two or more sub-regions or upgrade an existing interconnection, regardless of voltage level; or

  (b) create a new or upgrade an existing intertie with a BAA adjacent to the RISO, regardless of voltage level.

- Undergo an appropriate cost allocation to multiple sub-regions based on a benefits test. See also PG&E's response under Question 18.

New PTO: A Participating Transmission Owner that joins the RISO either by integrating with an existing sub-region or as a new sub-region.

Sub-Region: A new sub-region is formed when a new PTO joins the RISO. To form a new Sub-Region, the new PTO must not be integrated with or primarily dependent on transmission facilities that are part of an existing RISO sub-region. Such an integrated or primarily dependent PTO would, in this instance join the sub-region with which it is integrated or primarily dependent.

If a new PTO joins the RISO and is integrated into an existing sub-region, after its Legacy Facilities have been turned over to RISO control, then they will become part of that sub-region's TRR and the current TAC methodology will apply. A new benefits analysis of Regional Facilities for purposes of regional cost allocation should be performed across all sub-regions. The new PTO will share in any allocation of a regional TRR to the sub-region it joined.

If a new PTO joins the RISO and a new sub-region is formed, its Legacy Facilities become part of that sub-regional TRR for TAC purposes and are not shared with any other sub-region. A new benefits analysis of Regional Facilities for purposes of regional cost allocation is performed across all sub-regions and the new sub-region will be allocated a share of the cost of any then-existing Regional Facilities and any new Regional Facilities based on a benefits test.

B. Benefits Assessment Methodologies

10. <u>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.</u>

PG&E agrees with CAISO's approach to apply different assessment methods to three main categories of transmission projects: reliability, economic, and public policy. While the straw proposal provides an approach for cost allocation, PG&E believes that the CAISO should consider other alternatives that better align the cost allocation with the benefits to each sub-region and with CAISO's proposed methodology for Existing Facilities. Please see PG&E's proposal in response to Questions 9 and 18 for more details.

11. <u>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.</u>

PG&E agrees that 100 percent of the cost of each new regional facility be should be allocated based on a benefits test calculation. As noted in PG&E's response to Question 1, PG&E has provided an alternative to CAISO's proposed approach for cost allocation of new facilities. Please refer to PG&E's proposal in response to Questions 9 and 18 for more details.

12. <u>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.</u>

PG&E recommends use of PG&E proposed methodology for cost allocation. PG&E's proposed methodology does not require a Distribution Factor Cost Allocation (DFAX) test. PG&E also offers the following comments regarding the improvements that could be made to DFAX methodology, if this methodology is used in future.

> CAISO's proposed "DFAX" methodology is derived from PJM's "Solution-Based Method", which attempts to quantify the expected flows on the proposed transmission line. More specifically, DFAX attempts to quantify the expected relative use of the proposed line by each of the sub-regions, based on the expected

portion of hours (over a year) that power will be flowing towards one sub-region vs. another sub-region. In this manner, DFAX allocates costs based on the expected use of the line, which may or may not correlate with the need for meeting the applicable reliability standards. Therefore, PG&E proposes the following modifications to the DFAX methodology itself that would make it more robust:

- A production cost component that is based on volume of energy (i.e., MWh) rather than volume of hours; and
- A power flow analysis that is based on multiple system conditions, rather than one snapshot in time.

13. 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.

    Conceptually, the TEAM methodology offers a good approach for an economic benefit assessment. As CAISO pointed out during the March 9 meeting, there is a need to review the approach. The CAISO is planning to initiate a stakeholder process to review the TEAM methodology and to make any necessary changes based upon stakeholder feedback. PG&E supports this approach and will work with the CAISO to make the TEAM methodology robust for use in the benefits test.

14. 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.

    Please see PG&E's response to Question 13.

15. 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.

    PG&E does not agree with the ISO's statement. The potential benefits to California customers from out-of-state RPS resources and associated transmission projects are unclear given the changing legislative and regulatory landscape in California. For example, while SB 350 allows for the counting of out-of-state renewable resources for RPS compliance, the SB 350 Studies are currently evaluating multiple scenarios that include expansion of the CAISO footprint and restrictions on the counting of out-of-state resources. Any modified TAC proposal should be robust enough to accommodate changes to the ISO tariff as a result of the SB 350 Studies. Furthermore, the definition of policy projects should be based on regulatory and legislative policies (e.g., RPS policies and the Clean Power Plan), that is enacted by governing agencies.

16. <u>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.</u>

    PG&E has proposed a robust approach for cost allocation which aligns with CAISO's proposed methodology of sharing cost of Existing Facilities. In PG&E's proposed approach, TEAM methodology will be used to allocate cost based upon economic benefits to the different sub-regions.

17. <u>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.</u>

    PG&E has no comments on the BAMx proposal at this time.

18. <u>Please offer any other comments or suggestions regarding methodologies for assessing the sub-regional benefits of a transmission facility.</u>

    To better align cost allocation approach for New Facilities with CAISO's proposed methodology of sharing cost of Existing Facilities, PG&E proposes the following modification to CAISO's proposal:

    > Modify the CAISO's filter for "New Facilities" to eliminate the threshold qualifying criteria that any transmission facilities > 300 kV can be shared regionally. Thus, the facilities whose costs may be shared across the entire expanded ISO Region would be those that (1) connect two or more sub-regions or upgrade an existing interconnection, regardless of voltage level; or (2) create a new or upgrade an existing intertie with a BAA adjacent to the expanded ISO, regardless of voltage level.
    >
    > The facilities that meet the above criteria will qualify for benefits test. PG&E's proposed benefits test and cost allocation methodology is shown in Figure 1:

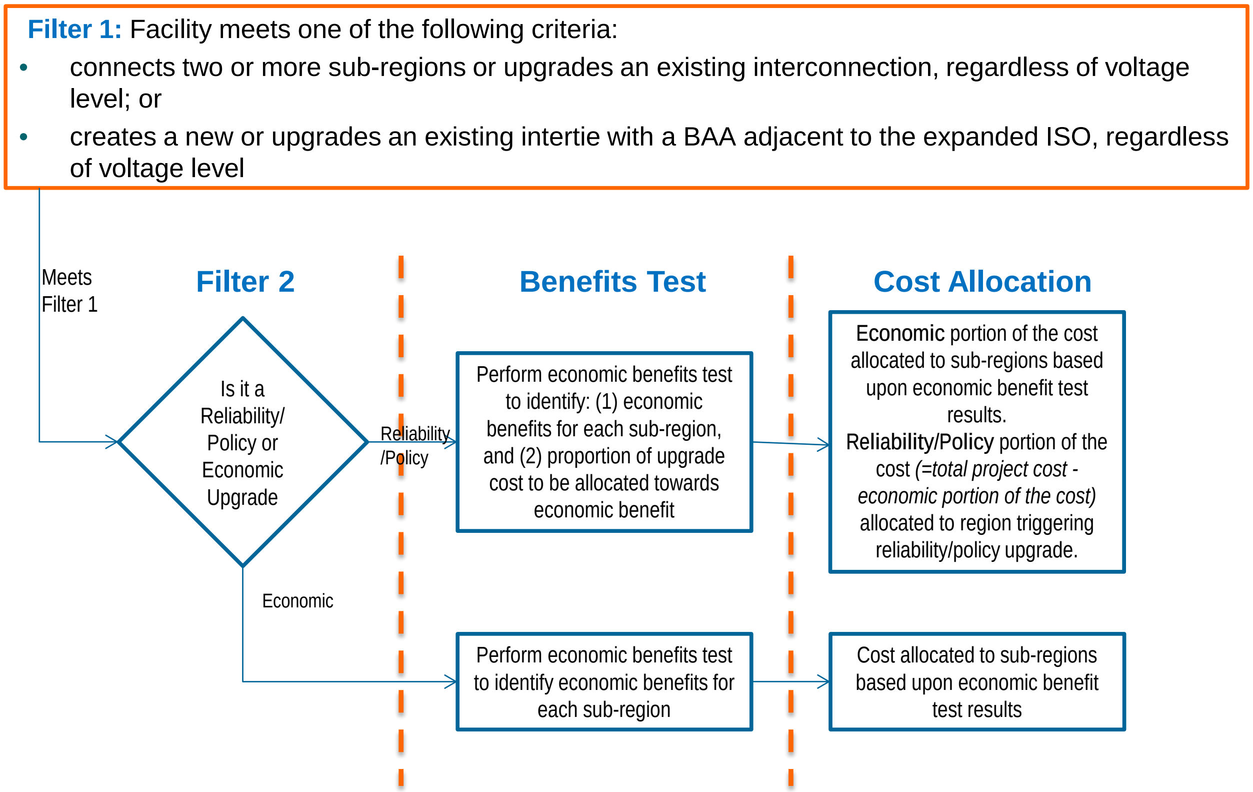

Figure 1 Benefits Test and Cost Allocation Methodology

Finally, transmission upgrades are typically identified to meet the CAISO Planning Authority footprint's reliability, policy, economic, and new customer (load and generation) interconnection needs (currently, through the TPP and Generator Interconnection and Deliverability Allocation Procedures (GIDAP) processes). Since there may be differences in planning processes in different regions, PG&E recommends that CAISO address these differences before finalizing a new TAC structure.