Stakeholder Comments Template

Transmission Access Charge Options

December 6, 2016 Draft Regional Framework Proposal

The ISO provides this template for submission of stakeholder comments on the December 6, 2016 draft regional framework proposal and the discussion at the December 13 stakeholder meeting. The proposal, presentations 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. Submissions are requested by close of business on January 11, 2017.

NOTE: Items highlighted in yellow below refer to elements of the present proposal that have not changed from the prior proposal, the second revised straw proposal posted on September 28. If your organization’s position on one of these elements has not changed from the comments you submitted on the September 28 proposal, you may simply refer to your prior comments in response to that item and the CAISO will take your prior comments as reflecting your current position.

Draft Regional Framework Proposal

1. The proposal defines “new facilities” as facilities that are planned and approved under an integrated TPP that will plan new transmission infrastructure for the entire expanded BAA and will commence upon integration of the first new PTO. Please comment on the CAISO’s proposal for the definition of “new facilities.”

ORA agrees that facilities that are planned and approved through an integrated Transmission Planning Process (TPP) for the expanded ISO should be defined as new facilities.
ORA also agrees with requiring Participating Transmission Owners (PTO) that join the expanded ISO to be responsible for the cost of new regional facilities approved through the integrated TPP to the extent that they benefit. Cost responsibility should be based on the benefits the new PTOs receive from each such facility, consistent with FERC Order No.1000’s requirement that costs must be allocated “roughly commensurate” with benefits.

In order to deter PTOs from waiting to join the expanded ISO until after the completion of new transmission facilities in the expanded ISO, cost allocation for facilities that are planned and approved under an integrated TPP for the expanded BAA should be based on the benefits received from use of the facilities, regardless of when the PTO joins the expanded ISO.

2. The proposal previously defined “existing facilities” as transmission facilities that are in service or have been approved in separate planning processes for the current CAISO BAA and the new PTO’s area at the time the new PTO is fully integrated into the expanded BAA. Simply stated, all transmission facilities that are included in the controlled grid for the expanded BAA and are not “new” facilities will be considered “existing” facilities. Please comment on the CAISO’s proposal for the definition of “existing facilities.”

ORA agrees with the proposed simplified definition of existing facilities.

3. The CAISO provided further details on the determination of whether a candidate PTO should be deemed “integrated” within an existing sub-region rather than designated a new sub-region. The CAISO proposed that the expanded ISO would work with the candidate PTO and other stakeholders to apply criteria specified in the tariff (listed in the December 6 proposal) for making this determination. The CAISO would then present its recommendation to the Board of Governors as part of the new PTO application process, and upon Board approval would file for FERC approval of the proposal to treat the new PTO as either a new sub-region or part of an existing sub-region. Please comment on this element of the proposal.

The CAISO proposes to use the following criteria to evaluate whether a candidate PTO should be deemed “integrated” within an existing sub-region rather than designated a new sub-region:

1) The proportion of the new PTO’s annual and peak load served over the facilities of the existing sub-region;
2) The number of Interties between the new PTO and the existing sub-region and the distance between them;
3) Whether the transmission system within the new PTO runs in parallel to major parts of the existing sub-region;
4) The frequency and magnitude of unscheduled power flows at applicable interties;
5) The number of hours where the actual direction of power flows was reversed from scheduled directions.

ORA agrees that these criteria are reasonable and relevant for determining whether a candidate PTO should be deemed “integrated” within an existing sub-region rather than designated a new sub-region.

4. **Consistent with the second revised straw proposal, the CAISO proposes to recover the costs of existing facilities through sub-regional “license plate” TAC rates.** The CAISO has proposed that each sub-region’s existing facilities would comprise “legacy” facilities for which subsequent new sub-regions have no cost responsibility. Please comment on this aspect of the proposal.

ORA continues to recommend that the costs of existing transmission facilities be allocated to all sub-regions within the expanded ISO based upon the benefits the sub-region receives from the existing facilities.¹

CAISO ratepayers have made substantial investments in California’s existing transmission facilities. These facilities have the potential to benefit other sub-regions. Given that the CAISO expects to analyze new transmission facilities for potential benefits to other sub-regions, ORA recommends that a similar analysis be conducted for existing facilities based on load share. In addition, the expanded ISO should conduct a benefit analysis every time a new PTO joins the expanded ISO or every three years, at a minimum.²

Moving forward without sharing the costs of existing facilities would lead to significant inequities between sub-regions. To illustrate these potential inequities, Six Cities provided the following example in their March 29, 2016 comments on the February 10, 2016 TAC Straw Proposal and March 9 Benefit Methodology Workshop: “[For] 45 MW of a wind resource in Wyoming, PacifiCorp will pay less than half of the transmission charges associated with that transaction as would a current CAISO [PTO] procuring the same resource. Similarly, if PacifiCorp procured 45 MW of a solar resource located in Riverside County, PacifiCorp would pay less than half the transmission charges as the City of Riverside, California, would pay. Such a result is plainly unfair.”³

In other regional transmission organizations (RTO), new PTOs share in the costs of existing facilities depending on the context of the formation. For example, ISO New England shared the cost of existing facilities through a phased in approach over 13 years,

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¹ ORA Comments on Transmission Access Charge Options August 11, 2016 Stakeholder Working Group Meeting, August 31, 2016, Response to Question 8, pp. 4-6.
because significant existing transmission infrastructure was already in place in the ISO New England region at the time of this RTO’s formation and new PTOs joining the ISO New England would benefit from the existing facilities.\(^4\)

The RTO practices presented in the February 10, 2016 CAISO TAC Straw Proposal did not clearly explain the formation context of the RTOs used as examples of cost allocation. For example, Southwest Power Pool (SPP) does not share the cost of legacy projects, because SPP did not have significant projects at the time of the SPP formation. Prior to the formation of SPP, the SPP region had avoided large projects because of their costs, and did not have significant resources to merge.\(^5\)

Pennsylvania-New Jersey-Maryland (PJM) also requires new PTOs to share in the “going forward” costs of existing facilities. That is, new PTOs that are integrated into PJM are responsible for a portion of the remaining costs of existing regional transmission projects. Per Schedule 12 of the PJM tariff, 50% of regional project costs are shared, and this regional cost allocation is assessed annually based on peak load to all PJM zones.\(^6\)

Reviewing how other RTOs allocate the costs of existing transmission facilities provides helpful guidance as to how these costs can be allocated equitably among PTOs in an expanded ISO. For these reasons, ORA continues to recommend that the expanded ISO allocate the cost of existing facilities based on the benefits the facilities provide.

5. The CAISO proposes to use the Transmission Economic Assessment Methodology (TEAM) to determine economic benefits to the expanded ISO region as a whole and to each sub-region. Please comment on the use of the TEAM methodology to determine sub-regional shares of economic benefits.

ORA continues to recommend that the TEAM be expanded to include a broad range of potential benefits, such as increases in employment opportunities and tax revenue that may accrue to the regions that the transmission line traverses. The current TEAM only considers the benefits to end users of the energy from the project, and does not consider benefits such as employment and tax base increases that may accrue to regions where the project originates or passes through, such as employment and tax base increases.

ORA continues to support consideration of employment and tax base increases as benefits of transmission projects that should be quantified and assessed into the total economic benefits a sub-region receives from a transmission project regardless of the project type. In response to stakeholder comments recommending the inclusion of these


\(^5\) ORA Staff phone interview with Sam Loudenslager of SPP, December 15, 2016: Direct Testimony of Bruce Rew on Behalf of SPP, Exhibit No. SPP-1 Transmission Expansion in ER05-652-000, February 28, 2005; p. 4.

\(^6\) PJM Open Access Transmission Tariff, Schedule 12. (b)(i)(A) and (c)(4).
economic benefits, the CAISO stated “the benefits become indistinguishable at some point, from policy drivers established for policy-driven transmission”\(^7\). ORA disagrees. Even if the policy of one state is the initial driver of a transmission project, significant economic benefits may accrue to other sub-regions where the transmission project is built or whose generators benefit from the transmission project.

For example, the Midcontinent ISO (MISO) considers economic development benefits in its cost allocation for Multi Value Projects.\(^8\) MISO is also exploring the use of an IMPLAN\(^9\) model to quantify the direct, indirect, and induced effects on jobs and income such transmission projects provide, in addition to benefits to end users and suppliers.\(^10\)

To estimate the economic impact of transmission projects, the National Renewable Energy Laboratory (NREL) has also developed jobs and economic development impact (JEDI) models, which estimate the economic impacts of constructing and operating power generation and transmission lines at the local and state levels.\(^11\)

Insight can be gained by reviewing approaches adopted in other RTOs. ORA recommends that before finalizing the Draft Regional Framework, the CAISO consider these examples and broaden the benefits assessment for transmission projects to include benefits such as increased jobs and tax revenues.

6. **The CAISO assumes that a new integrated TPP for the expanded ISO will retain today’s TPP structure. Please comment on the structure of the current three phase TPP process.**

ORA participates in the CAISO TPP planning process and agrees with the current three phased approach to this process. At this time, ORA has no further comments on this process.

7. **The CAISO proposes to allocate the entire cost to a sub-region if a reliability project within that sub-region only addresses a reliability need of that sub-region or if a policy-driven project within that sub-region is approved only to support the policy mandates for that sub-region. Please comment on this element of the proposal.**

ORA supports the proposed cost allocation approach for reliability projects. The cost of

\(^7\) California ISO-TAC Options Initiative-2nd RSP Addendum—Response to Stakeholder Comments, October 6, 2016, pp. 6-7.

\(^8\) MTEP14 MVP Triennial Review, September 2014, p. 50.

\(^9\) [http://implan.com/company/](http://implan.com/company/). IMPLAN is a consulting company that develops models that quantify the direct and indirect benefits of a transmission project.

\(^10\) ORA staff phone interview with Adam Solomon and Davey Lopez of MISO on December 7, 2016; MISO MTEP14 MVP Triennial Review, September 2014, p. 49.

transmission projects that are approved as reliability projects should not be eligible for cost allocation across different sub-regions, because maintaining reliability within a sub-region would be required even in the absence of joining an expanded ISO.

ORA recommends a different cost analysis approach for policy projects irrespective of the particular state whose policy mandate initiated the project, the cost allocation should include an assessment of benefits for the following reasons:

1) Policy projects may enhance reliability and economic goals in more than one sub-region and defer the need for reliability and economic projects.
2) Allocating the entire avoided cost of a policy project to the sub-region whose policy was a driver of the project would allow other sub-regions that later adopt the same policies to benefit from the policy project without paying for its cost.
3) Load Serving Entities (LSE) within sub-regions may already be compliant with a public policy project goal. As California Municipal Utilities Association (CMUA) observed:

“Allocation of policy driven projects to all of a sub-region can result in violation of the beneficiary pays principle. Several Load Serving Entities are already compliant with a 50% RPS, or otherwise have extraordinarily low carbon footprint with their power portfolio. Yet, a sub-regional policy may drive cost allocation to these LSE’s within the sub-region irrespective of the fact that they are already compliant with the policies driving the project forward.”

Other RTOs including MISO, ISO New England, and SPP share some portion of the cost of policy projects based on load served. MISO, ISO New England, and SPP developed their regional cost allocation rules, recognizing that high voltage lines provide regional benefits. SPP’s multiple analyses validated the regional benefits of their transmission facilities. ORA recommends that the CAISO conduct similar studies of high-voltage line usage to develop the cost allocation rules for public policy projects.

14 ISO New England OATT Schedule 12 (6) Public Policy Upgrade Costs.
16 ORA staff phone interview with Adam Solomon and Davey Lopez of MISO on December 7, 2016; MISO Cost Allocation Issues White Paper, November 11, 2015, p. 6; Docket No. ER06-18, November 1, 2006 compliance filing, MISO FERC Filing on Multi-Value Projects ER10-1791-001 pp. 7-11, p. 59, p. 105.
8. The CAISO proposes to allocate the cost of an economic project, for which the economic benefits must exceed its cost, to sub-regions in proportion to each sub-region’s economic benefits. Please comment on this element of the proposal.

ORA notes that other RTOs such as MISO, PJM, ISO New-England and SPP share some portion of the cost of economic projects regardless of whether there are demonstrated benefits to ratepayers in all parts of that RTO. This is based on the assumption that high voltage economic projects benefit the entire region. PJM and MISO allocate any remaining costs to identified beneficiaries based on project benefit studies. However, ORA continues to support allocating the cost of economic projects in proportion to the benefits a sub-region would receive, but recommends that the expanded ISO recalculate the benefits and cost allocation for new economic transmission facilities at least every three years, so that the benefits and cost allocation are reasonable over the life of the project. ORA also recommends consideration of a broader range of economic benefits as explained in response to Question 5.

9. For a reliability project that is enhanced or replaced by a more costly project that also provides economic benefits that exceed the incremental cost above the cost of the original reliability project, the avoided cost of the original project will be allocated to the sub-region with the original reliability need, and the incremental cost will be allocated to sub-regions in proportion to each sub-region’s economic benefits. Please comment on this proposal.

ORA supports the allocation of the avoided cost of the reliability project to the sub-region with the reliability need, and the allocation of the incremental costs in proportion to benefits. However, there should be consideration of a broader range of economic benefits as explained in response to Question 5.

10. For a policy-driven project that is enhanced or replaced by a more costly project that also provides economic benefits that exceed the incremental cost above the cost of the original policy-driven project, the avoided cost of the original project will be allocated to the sub-region with the original policy need, and the incremental cost will be allocated to sub-regions in proportion to each sub-region’s economic benefits. Please comment on this proposal.

ORA appreciates that the CAISO is considering additional cost allocation approaches for policy-driven projects. ORA continues to recommend allocating the costs of policy projects based on the benefits provided, irrespective of the policy-driver. Unlike reliability projects, which are required to avoid violating North American Reliability

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Electric Corporation (NERC) criteria, policy projects are designed to support policies of a particular state, but may provide benefits to other sub-regions.

The cost allocation policy documents of MISO, PJM, ISO New England, and SPP recognize that policy projects can have economic and reliability components, so they evaluate policy projects for the full range of potential benefits. For example, the SPP considers wind projects for regional cost allocation because they support SPP base reliability needs in addition to state renewable goals:

“For (SPP) [transmission] Base Plan Upgrades that are associated with wind generation resources, costs are allocated one-third regionally and two-thirds zonally (using the MW-mile analysis) when the Base Plan Upgrade is located in the same Zone as the Transmission Customer’s Point of Delivery. However, when the Base Plan Upgrade that is associated with a wind generation resource is located in a different Zone than the Transmission Customer’s Point of Delivery, two-thirds of the costs of the upgrade are allocated regionally, with the remaining one-third allocated to the Transmission Customer (with the wind resource).”

Given the recognized overlapping benefits of public policy projects, the cost allocation rules of MISO, PJM and SPP evaluate the benefit of meeting public policy goals along with economic and reliability goals.

MISO, ISO New England and SPP allocate the cost of policy projects consistent with FERC Order No.1000 and distribute the costs based on load share/usage. In contrast, FERC rejected the ISO NE’s proposal to allocate the majority of a policy project’s cost to the entity whose policy drove the need for the project.

MISO, ISO New England, and SPP developed their regional cost allocation rules, recognizing that high voltage lines provide regional benefits. SPP’s multiple analyses
ORA validated the regional benefits of their transmission facilities. ORA recommends the CAISO conduct similar studies to develop the cost allocation rules for public policy projects.

11. In the December 6 proposal the CAISO introduced an approach for allocating costs more granularly than just to sub-regions for certain policy-driven projects and for the policy-driven costs of projects that provide economic benefits in addition to meeting policy needs. The proposal is based on the following principles: If a project that meets policy needs is built within a different sub-region from the state or local regulatory authorities driving the policy need, the policy-related project cost will be allocated only to the load of those regulatory authorities driving the policy need. Alternatively, if a project that meets policy needs is built within the same sub-region as the state or local regulatory authorities driving the policy need, that project is deemed to provide benefits to the entire sub-region and therefore the policy-related costs will be allocated to the sub-region as a whole rather than on a more granular basis. Please comment on these principles.

ORA appreciates that the CAISO is considering a policy related project cost option that would allocate cost only to load, but does not agree that the load assessed should only be the load from the regulatory authorities driving the policy need.

As stated above, ORA objects to allocating the cost of policy projects to the driver of the policy, because this cost allocation approach does not allocate cost based on the usage of the line or consider the full extent of possible benefits, as explained in ORA’s response to Question 7. As previously stated, some LSEs within a sub-region may already comply with a sub-region’s public policy goals. ORA recommends that the CAISO evaluate proposed policy projects to determine usage at the local and regional level, and the range of reliability and economic benefits, to develop a reasonable default cost allocation rule for policy projects.

12. Continuing with the scenario of item 10 and applying the principles above, for a policy-driven project, if the new project is built outside the sub-region where the regulatory authorities driving the policy need are located, the ISO will allocate the policy-related avoided cost to the load served under the state or local regulatory authority or authorities whose policy mandates drove the need for the original project. Please comment on this proposal.


This proposal is consistent with the cost allocation proposals presented in Questions 9 and 10 in that it would allocate the avoided cost of policy projects to the policy driver without consideration of benefits to other sub-regions. ORA, therefore, does support this proposal because it does not consider the range of benefits from policy projects, as explained in the response to Question 7 to allocate costs based on benefits received consistent with FERC Order No. 1000.

13. Similarly, if the policy driver of the project was a federal policy, then for sub-regions other than the sub-region in which the project is built the ISO will allocate the associated avoided cost to the load served in each state in proportion to the state’s need for the project to comply with the federal policy mandate. Please comment on this proposal.

ORA does not support a cost allocation proposal for policy projects that includes allocation of the avoided cost of the project to the sub-region whose policy required the project for the reasons provided in the response to Question 7. ORA recommends basing the cost allocation for policy projects under the expanded ISO on usage and benefits received. Projects that meet federal policy requirements may also provide enhanced reliability and economic benefits and other transmission line capacity related benefits, and for these reasons the full range of benefits should be evaluated for cost allocation purposes.

14. For a policy-driven project that supports policy mandates of more than one sub-region, or that is built in one sub-region to meet the policy mandates of another sub-region, the ISO will calculate the economic benefits of the project and allocate costs to each sub-region in proportion to the sub-region’s benefits, but only up to the point where each sub-region’s cost share equals the sub-region’s benefits. Any additional cost of the project will be allocated to the load served under the state or local regulatory authorities within each sub-region, other than the sub-region in which the project is built, whose policy mandates drove the need for the project. Please comment on this proposal.

This proposed approach for allocating costs for policy project would be based on the economic benefits of the project and any additional cost will be distributed to load served under the state or local regulatory authorities within each sub-region, other than the sub-region in which the project is built, whose policy mandates drove the need for the project.

As explained in response to Question 7, allocating all additional costs to the sub-region(s) that drove the need for the project would fail to recognize that some LSEs in the sub-region(s) may already comply with the policy that drove the need for the project. ORA therefore recommends allocating any remaining costs to all load served.

15. Continuing with the scenario of a policy-driven project that supports policy mandates of more than one sub-region, if the policy driver of the project was a federal policy, then for sub-regions other than the sub-region in which the project is built the ISO will allocate the project costs to the load served in each state in proportion to the state’s need for the project.
project to comply with the federal policy mandate. In such cases, if the project also supports policy mandates within the same sub-region in which the project is built, the ISO will allocate that sub-region’s share of the policy-driven costs to the entire sub-region as part of the sub-regional TAC. Please comment on this proposal.

ORA supports the CAISO’s consideration of different cost allocation options for policy projects. This proposal considers allocating policy project cost to the load served in each state in proportion to the state’s need for the project to comply with federal policy mandates. ORA agrees allocating costs to load served, but disagrees with determining load served “in proportion to the state’s need for the project to comply with the federal policy mandate.” Such a limitation overlooks the potential for policy projects to enhance reliability and provide economic benefits. Please see responses to Questions 7 and 10.

Thus, ORA recommends allocating the costs of policy projects based on a benefit and usage analysis, and conducting an analysis at least every three years to confirm that the cost allocation is reasonable and justified.

For example, SPP’s reviews its cost allocation for high voltage regional projects, which includes economic, reliability and policy projects, at least once every three years and considers the following benefit factors:

1) Adjusted Production Cost (APC) Benefits
   • Reduction of Emissions Rates & Values
   • Savings due to lower ancillary service needs and production costs

2) Avoided or Delayed Reliability Projects

3) Capacity Cost Savings due to Reduced On-Peak Transmission Losses

4) Mitigation of Transmission Outages Costs

5) Assumed Benefits of Mandated Reliability Projects

6) Benefits of Meeting Public Policy Goals (this is limited just to renewable goals)

7) Increased Wheeling Through and Out Revenues

8) Marginal Energy Losses Benefits

9) Reduced Cost of Extreme Events

10) Reduced Loss of Load Probability
11) Capital Savings from Reduced Minimum Required Margin

This cost allocation review considers policy mandates along with other possible benefits equally. ORA requests similar treatment for the cost allocation of policy projects in the expanded ISO.

16. Competitive solicitation to select the entity to build and own a new transmission project would apply to all new transmission projects rated 200 kV or greater, of any category, with exceptions only as stated in ISO tariff section 24.5.1 Please comment on this proposal.

ORA supports competitive solicitation for new transmission projects, consistent with the requirements of FERC Order No.1000. Ratepayers should have the benefit of robust competitive solicitations to select projects for which they are allocated costs. ORA agrees with TURN that special exceptions to the competitive solicitation requirement (such as the one previously contemplated for PacifiCorp’s uncompleted Gateway segments and discussed at the March 1, 2016 stakeholder meeting) undermine the integrity of the TAC allocation policy and encourage new PTOs to seek special deals relating to their entry into the regional ISO.

In contrast, the revised competitive solicitation policy that would apply to all economic and policy-driven transmission projects approved for regional cost allocation by the body of state regulators, and new projects whose costs are paid for by the ratepayers of more than one PTO within a sub-region, promotes transparency and supports the claim that an expanded ISO will benefit customers.

17. The proposal indicated that the ISO would establish a formula for a single export rate (export access charge or “EAC”) for the expanded region, and under the proposal, non-PTO entities would pay the same sub-regional TAC rate paid by other loads in the same sub-region. Please comment on this proposal.

ORA agrees with the proposal to establish a single region-wide export access charge (EAC) because it would deter gaming.

ORA supports the EAC proposal requiring that non-PTO entities within a sub-region pay the proposed EAC, because this would maintain consistency with wheeling charges within the expanded ISO and outside of the expanded ISO.

18. The EAC would be calculated as the sum of all high-voltage transmission revenue requirements (TRRs) of all PTOs within the expanded BAA divided by the sum of the projected internal load for the entire expanded BAA. Please comment on this element of the proposal.


ORA agrees with the proposed EAC formula, because it recognizes the resources used by the sub-regions in export transactions.

19. **The CAISO proposes to allocate shares of the EAC revenues to each sub-region in proportion to their total high-voltage TRR. Please comment.**

ORA supports the proposal to allocate EAC revenues to each sub-region in proportion to their transmission revenue requirements. This approach recognizes the resources used by the sub-regions in export transactions.

20. **The CAISO proposes to break down each sub-region’s share of the EAC revenues into portions to be allocated to the sub-regional TAC and each state or local regulatory authority whose load is paying a share of the high-voltage TRR for policy-driven transmission whose costs are not included in the sub-regional TAC. These shares of the sub-region’s EAC revenue would be in the same proportion as the corresponding shares of the sub-regional high-voltage TRR. This element of the proposal would not affect the allocation of EAC revenues between sub-regions. Please comment on this proposal.**

ORA has no comments on this proposal.

21. **Please provide any additional comments on topics that were not covered in the questions above.**

**Grid Usage Study:** ORA recommends that the expanded ISO conduct a study of grid usage to determine reasonable cost allocation rules for economic and policy projects consistent with FERC Order No.1000.

**Recalculating Benefits:** As noted in ORA’s responses to Questions 4, 8 and 15, ORA continues to recommend that the expanded ISO recalculate transmission project benefits at least every three years to confirm that the project cost allocated is reasonable. PJM reassesses regional project costs based on the reported peak load annually. SPP conducts a thorough cost allocation review for its high voltage projects at least every three years.

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36 ORA staff phone interview with Pauline Foley, January 9, 2017; PJM Open Access Transmission Tariff, Schedule 12. (b)(i)(A) and (c)4.