

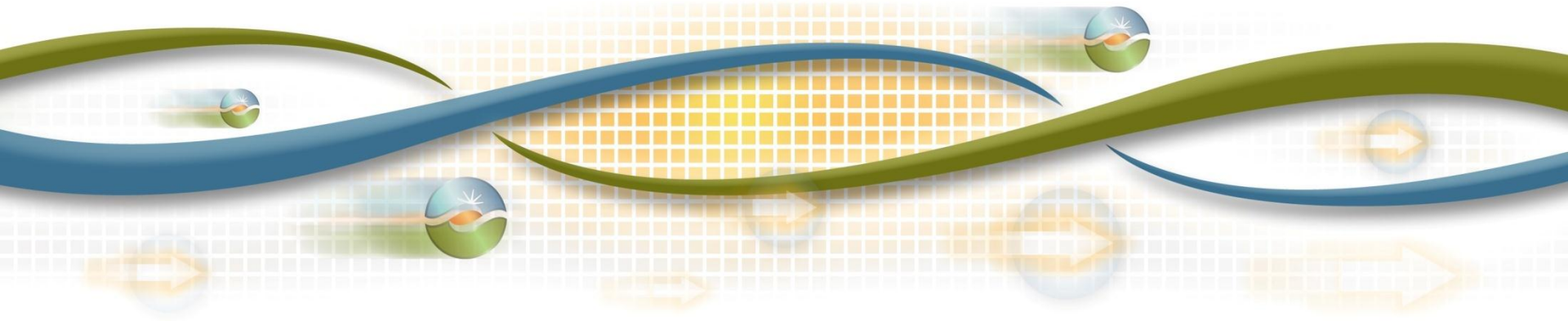


California ISO
Shaping a Renewed Future

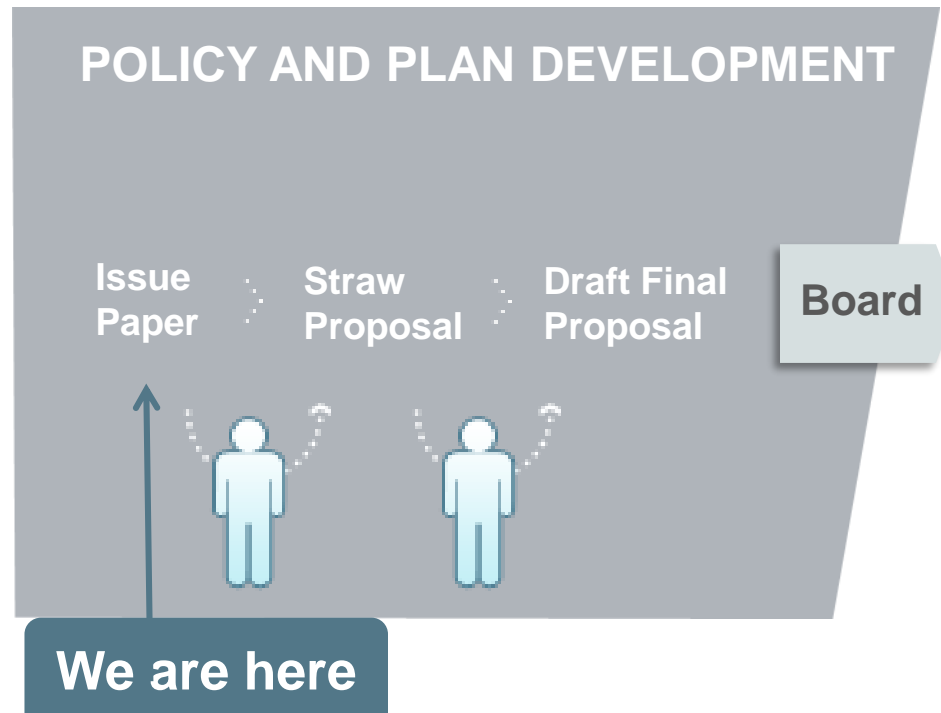
Transmission Access Charge Options

Stakeholder Conference Call
October 30, 2015


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ISO Stakeholder Process



Initiative Schedule



Date	Event
10/23/15	Issue paper posted
10/30/15	Stakeholder call
11/13/15	Stakeholder comments due
Various dates to be determined	ISO proposals, stakeholder meetings, and written comments
6/28/16	Submit any proposed tariff changes to TAC structure to ISO Board

Transmission owning utilities must recover their costs of owning, maintaining and operating transmission assets.

- Utilities file annual “transmission revenue requirements” (TRR) with FERC for approval of costs to be recovered
- The utility or the transmission system operator uses a FERC-approved mechanism to recover the TRR from users of the transmission system
- The ISO’s mechanism is the Transmission Access Charge (TAC)
 - The TRR amounts are approved at beginning of each year
 - A \$/MWh rate is calculated to fully recover TRR from internal load and exports
 - Balancing accounts enable periodic adjustment as needed to ensure revenues equal approved recovery amounts

Existing TAC structure for the current ISO region was approved by FERC as part of Order 1000 compliance.

Existing TAC structure consists of:

- Postage stamp “regional” rate to recover TRR for all facilities rated > 200 kV under ISO operational control
 - \$/MWh charge to all internal load and exports
- PTO-specific “local” rates to recover TRR for all facilities rated < 200 kV under ISO operational control
 - \$/MWh charge to internal load in each PTO’s territory
- Current ISO TAC has no cost allocation differentiation based on project type (e.g., reliability, economic, or policy projects), in-service date or other non-voltage level factors

This initiative will consider whether revisions to TAC structure would be appropriate when adding a new PTO with a load service territory to the ISO BAA.

- ISO is not assuming *ex ante* that revisions to existing TAC structure are or are not needed
- Initiative focuses on “regional” or high-voltage TRR only
 - Assume, initially, that < 200 kV costs continue to be recovered through PTO-specific rates
- Focus on adding a PTO with load service obligation
 - Entities who build transmission but have no load service territory become PTOs under existing TAC structure
- Assume, initially, that TAC will continue to be charged as a per-MWh rate to internal load and exports

FERC Order 890 (2007) set broad principles for regional transmission cost allocation.

- Allows regional flexibility
- Weighs several factors, including
 - Alignment of costs among participants
 - Adequate incentives to construct new transmission
 - General support from participants across the region
- Recognizes that cost allocation is not an exact science

Order 1000 established six principles that apply to regional cost allocation of newly approved projects.

1. Costs must be allocated in a way that is roughly commensurate with benefits
2. Costs may not be allocated involuntarily to those who do not benefit
3. A benefit to cost threshold may not exceed 1.25
4. Costs may not be allocated involuntarily to a region outside of the facility's location
5. The process for determining benefits and beneficiaries must be transparent
6. A planning region may choose to use different allocation methods for different types of projects

Other ISOs and RTOs employ regional flexibility in allocating costs of new transmission projects.

PJM	MISO	SPP	ISO-NE
<p><u>Reliability Projects:</u></p> <p>50% allocated on postage-stamp basis to pricing zones based on load ratio share.</p> <p>50% allocated to beneficiaries, identified using DFAX.</p> <p><u>Economic Projects:</u></p> <p>50% allocated on postage-stamp basis to pricing zones based on load ratio share.</p> <p>50% allocated to beneficiaries, identified by analyzing LSEs' expected LMP payment reductions.</p>	<p><u>Reliability Projects:</u></p> <ul style="list-style-type: none"> ◦ ≥ 345 kV: 20% allocated system-wide and 80% allocated to affected pricing zones based on Line Outage Distribution Factors. ◦ Multi-Value Projects: Regional, high-voltage transmission (≥ 100 kV) facilities designed to “address energy policy laws and/or provide widespread benefits across footprint.” Allocated via postage stamp. <p><u>Economic Projects:</u></p> <ul style="list-style-type: none"> ◦ Market Efficiency Project: ≥ 345 kV, cost \$5 million or more, and meet certain benefit criteria. ◦ 20% of the costs are allocated on a system-wide basis and 80% of the costs are allocated to one of the 9 “local resource zones,” generally the states. ◦ Market efficiency projects must reduce congestion and the benefits must be 1.25 times greater than the costs. 	<p>"Highway": Facilities ≥ 300 kV are allocated via postage stamp rate.</p> <p>"Byway": Facilities 100 kV to 300 kV:</p> <ul style="list-style-type: none"> ◦ 1/3 allocated via postage stamp rate ◦ 2/3 allocated via license plate rate ◦ Ratios switch when serving designated wind resources across zones. 	<p>Facilities ≥ 115 kV are allocated via postage stamp rate based on monthly zonal coincident peak loads.</p> <p>“Market Efficiency Transmission Upgrades” not needed for reliability but with greater system benefits than costs are allocated the same as reliability upgrades. Also must be ≥ 115 kV.</p>

The ISO proposes to include the following factors for consideration in this initiative.

1. Whether the transmission facilities are new or existing
2. Electrical characteristics (e.g., voltage)
3. Geographic scope (regional, sub-regional, local)
4. Purpose of the facility (reliability, economic, policy)
5. Zones or sub-regions that receive benefits
6. When the facility was approved
7. Under which planning process the facility was approved

Potential for PacifiCorp to join the ISO as a PTO provides a real-world example for examining options for regional TAC structure.

- “The primary guiding principles will be to align transmission cost allocation as closely as possible with distribution of the benefits of those facilities, and to ensure that allocation of costs are perceived as fair by stakeholders and ‘just and reasonable’ by FERC.” – from ISO Board memo on PacifiCorp integration, Sept. 10, 2015

ISO has constructed illustrative examples using TRR data for the existing ISO region and PacifiCorp.

Current ISO region TRR data includes:

- Existing high voltage transmission (>200 kV) plus all projects approved through the ISO TPP through the March 2015 plan approved by the Board
- Minimum \$250 million per year for future reliability projects
- Annual capital maintenance costs at 2% of gross plant

Does NOT try to estimate any public policy or economic projects that may be approved in the future

PacifiCorp TRR data includes:

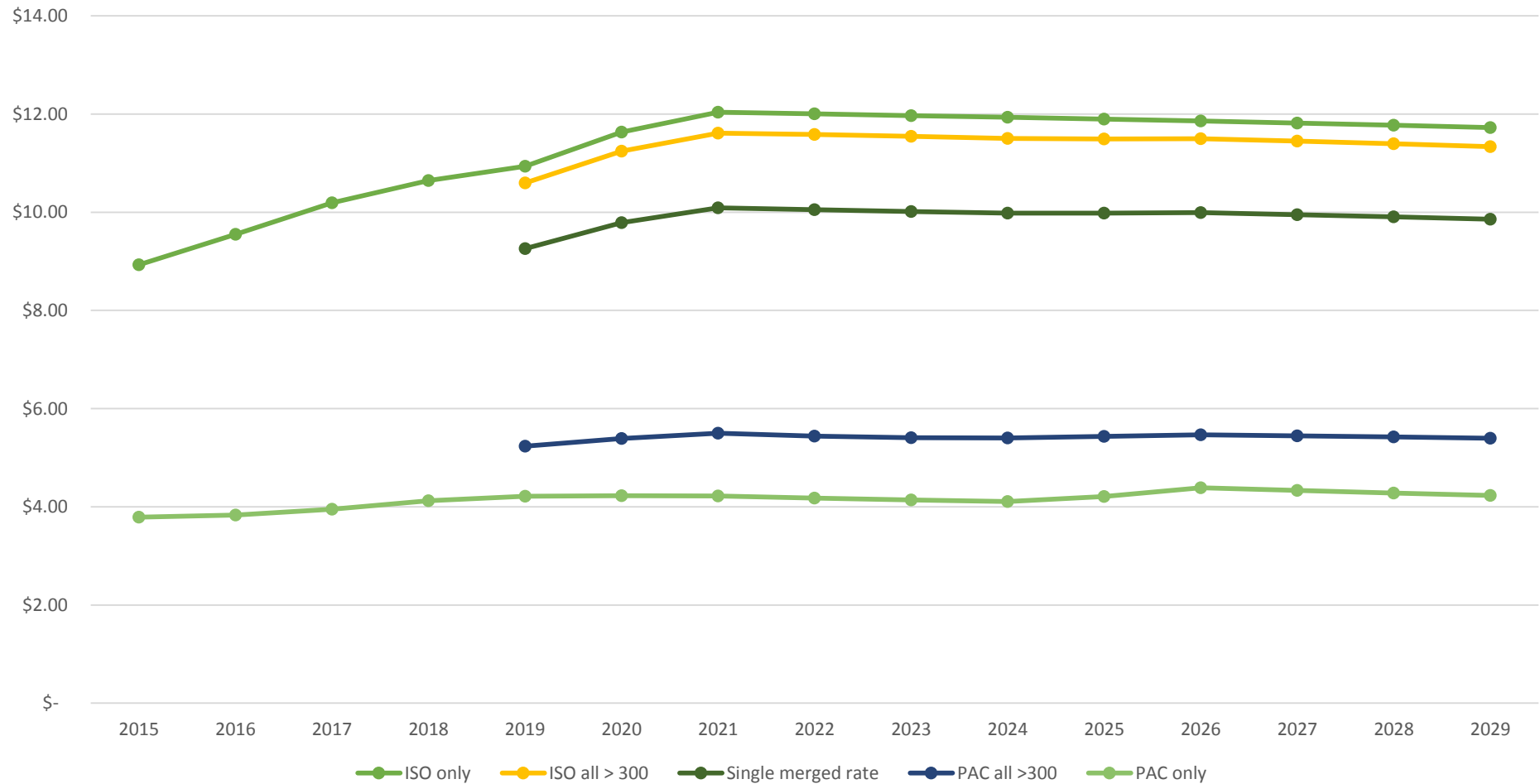
- Existing high voltage transmission (>200 kV) plus all projects currently planned by PacifiCorp EXCEPT Gateway D & F
- Capital maintenance costs as estimated by PacifiCorp

Illustrative examples, based on PacifiCorp joining ISO effective 1/1/2019.

- Baseline 1: Maintain separate sub-regional rates for PacifiCorp and current ISO footprint
- Baseline 2: Immediately combine > 200 kV facilities into a single postage stamp rate for the expanded BAA
- Alternative 1: Create postage stamp rate for > 300 kV (i.e., 345 kV and 500 kV facilities), with separate sub-regional rates for facilities between 200 and 300 kV
- Alternative 2: Use a 5-year phase-in period to go from separate rates (Baseline 1) to Alternative 1 structure

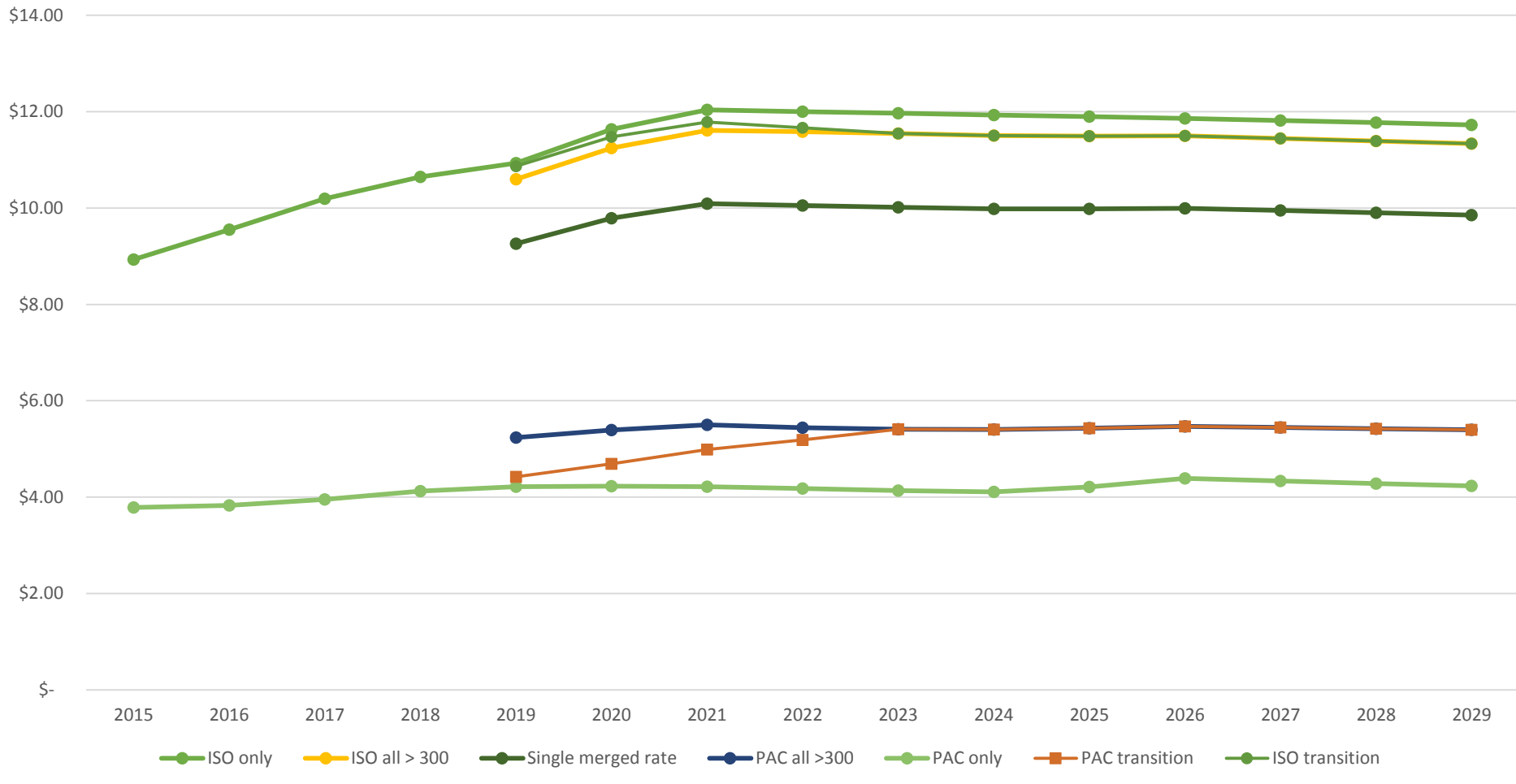
Illustration of Baselines 1 & 2 and Alternative 1

TAC Scenarios - Example 1



Previous slide, plus Alternative 2

TAC Scenarios - Example 2



Next Steps

- Stakeholders are asked to submit written comments by November 13, 2015 to Initiativecomments@caiso.com