

Storage as a Transmission Asset

Stakeholder Comment Template

Submitted by	Company	Date Submitted
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<p>For context below NRDC and CEERT are the Public Interest Organizations (PIOs)</p>		

Please use this template to provide your comments on the Storage as a Transmission Asset revised straw proposal that was posted on August 15, 2018.



Submit comments to InitiativeComments@CAISO.com

Comments are due September 4, 2018 by 5:00pm

The revised straw proposal, posted on August 15, 2018, as well as the presentation discussed during the August 21, 2018 stakeholder web conference, may be found on the [Storage as a Transmission Asset](#) webpage.

Please provide your comments on the revised straw proposal topics listed below, as well as any additional comments you wish to provide using this template.

Contractual Arrangement

The ISO proposes to develop a new agreement with SATA resource owners that captures elements from Participating Generator Agreement (PGA), Participating Load Agreement (PLA), Reliability-Must-Run (RMR) and Transmission Control Area (TCA) agreements. Additionally, the ISO has indicated its preference to control SATAs when they operate as transmission assets. Please provide comments on this proposal.

Comments:

In whichever way CAISO finalizes an agreement, then the new agreements must be clear on roles and responsibilities including upgrades. The Public Interest Organizations (PIO) which include NRDC and CEERT, support CAISO to control SATAs when they operate as transmission assets, as it's consistent with CAISO's role to control traditional transmission assets.

Transmission Revenue Requirement Capital Credit

The ISO has proposed a TRR capital credit to reduce a SATA resource's capital cost recovery. The objective of this credit is (1) to protect ratepayers from early degradation of SATA resources operational capabilities due to dispatches from ISO market participation and potential for reduced useful lifespan for a SATA resource's ability to meet the identified transmission need(s), and, (2) to ensure the SATA resource owner considers all marginal costs when bidding into the market. Please provide comments on the ISO's proposal and any potential alternative the ISO could consider to achieve the same objectives.

Comments:

The PIOs agree with the CAISO on ensuring no double payments for providing the same service are requested, and market services are clearly delineated.

We agree a TRR capital credit will create an incentive to bid into the market with full consideration of the capital cost implications of providing a service and eliminates cross subsidization of market services from transmission service cost recovery.

CAISO will need to make sure the incentives are clear to ensure appropriate adjustments are made.

Market Participation

The ISO provided two additional options it is currently considering to notify SATA resources when they would be permitted to provide market services and access market revenues: Day-ahead market option and D+2 Option. Please provide comments on these options, including any preference or alternative options.

Comments:

PIOs agree that SATA resources should bid like any other non-RA resource when participating as a market resource, and since SATA is a non-generating resource, it will not pay transmission costs. Non-generating resources are considered negative generation and thus excluded from TAC allocation.

We understand Option 2 could have less accuracy, however if the resource is not determined to be needed D+2, then SATA resources can bid in both day-ahead and real time market, which seems to maximize all options and provide a more level playing field. The CAISO should consider how often a need could be identified in the day ahead market, *but not* in D+2. A balance may to have a more conservative standard in D+2 to call the resource.

Cost Recovery Mechanism

The ISO has proposed three alternative cost recovery mechanisms in the straw proposal:

1. Full cost-of-service based cost recovery with energy market crediting
2. Partial cost-of-service based cost recovery with no energy market crediting
3. Full cost-of-service based cost recovery with partial market revenue sharing between owner and ratepayer

Please provide comments on these three options and any other options the ISO has not identified. Please provide specific comments on (a) if the ISO should maintain option 2, above, and (b) why, if any, specific market profit threshold must be reached before the SATA resource would be permitted to retain some portion of profits and how such threshold should be determined.

Comments:

Would the definition change of “operational control of SATA facilities” alter any of the cost recovery mechanisms above? And how would this be revisited?

On slide 12 in the August 21, 2018 presentation, it states “in SATA proposal, the practical meaning of operational control is a hands-on out-of-market state-of-charge (SOC) control – a new definition may be appropriate. Orchestrated in a way that the market system reflects any change in the SOC.”

Options in the event of insufficient qualified project sponsors

The ISO has proposed potential options for addressing SATA projects when there is insufficient qualified project sponsors. Please provide comments on these options, including preferences and/or additional alternatives that should be considered.

Comments:

PIOs would like to see continued flexibility here, and how SATA could address a reliability and/or public policy requirement need. PIOs recommend a consistent structure within reason for all SATAs. This should be expanded in the next Transmission Planning Process (TPP).

Consistent with FERC Policy Statement

The ISO believes the revised straw proposal is consistent with the FERC Policy Statement. Specifically, that the straw proposal does not inappropriately suppress market prices, impact ISO independence, nor result in double recovery of costs. Please provide comments on the whether you agree or disagree with the ISO. If you disagree, please clarify why and how the ISO might address this issue.

Comments:

The CAISO has worked to ensure its notification processes will monitor forecast errors, available resources, and maintain its independence by clearly ensuring the SATA resources will be responsible for the bidding and market participation once online.

Other

Please provide any comments not addressed above, including any comments on process or scope of the Storage as a Transmission Asset initiative, here.

Comments:

As noted by other stakeholder we also encourage the CAISO to continue discussion and reporting on the flexibility and limitations of the process and how the integration with TPP are implemented and updated.

Even though no public policy need was identified thus far (two in the 2018 TPP), we envision storage will continue to become a cost-effective option and will need to be revisited to appropriately incorporate upgrade needs.

The PIOs see SATA as part of the solution to increase the need for flexible and fast ramping capacity that can be dispatched by the ISO to integrate the increased amounts of variable energy efficiently and reliably.

We would also like to see more dialogue in the next report on the dynamic path assessment approach, which uses actual market conditions and produce a more accurate and less conservative assessment of transmission competitiveness.

PIOs would also like a conversation on how would SATA may interact with congestion revenue rights. It seems SATA can be part of a voluntary market for financial contracts.

Here are two papers that might be of interest to the CAISO regarding about "Financial Storage Rights" as defined by Prof Joshua Taylor in his paper [here](#). And more recent and publicly accessible paper Alvarez and Bitar at Cornell on the topic [here](#).

Question for future consideration:

- Will storage stranded transmission assets be allowed to become regulatory assets, or will these assets be disallowed for recovery in whole or in part?
- In what circumstances might storage strand transmission assets?