

Storage as a Transmission Asset

Stakeholder Comment Template

| Submitted by | Company | Date Submitted |
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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.

The San Diego County Water Authority (Water Authority) and City of San Diego (City) appreciate the opportunity to provide comments and thank CAISO for its continued stakeholder engagement on Storage as a Transmission Asset (SATA).

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:

The Water Authority and City agree with CAISO on a new, separate, and customized agreement with SATA resource owners. This agreement should include accounting standards to prevent double recovery and conformance with FERC policy on market participation while allowing for full rate-based cost recovery. However, a SATA resource should be allowed to provide market services at all times unless subject to recall by CAISO or Participating Transmission Owner operations. This recall procedure would be similar to local and regional Remedial Action Schemes. This approach would enable the SATA resource to maximize its market revenues thereby minimizing costs to the ratepayer.

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 Water Authority and City think that a SATA owner should bear the risk and responsibility for the degradation of its asset's performance. The Transmission Access Charge revenue should be annually adjusted based on usable capacity of the asset and any excess degradation due to market participation should be the responsibility of the asset owner. This is contemplated in the Revised Straw Proposal, with CAISO's selection of Option #3 as the preferred cost recovery mechanism. Such an adjustment in revenue recovery arrangement would also be consistent with FERC's "used and useful" regulation principles.

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:

The Water Authority and the City agree that a SATA resource should be allowed to participate in any market it is qualified for, including bilateral long-term capacity markets, with the realization that the resource can be recalled to provide reliability transmission service at CAISO's sole discretion at any time.

In determining how and when a SATA resource can be recalled for reliability transmission service, the Water Authority and City believe two major criteria should be considered:

- 1) The need for reliability transmission service recall should be based on NERC/WECC/CAISO reliability criteria as is typically considered by transmission planning and operations engineering studies and not market operation criteria and studies. For example, congestion into a zone, regardless of its severity, should not be the reason that a SATA resource in that zone would be recalled to provide transmission service. In fact, that is a perfect example of market distortion via SATA resources. However, if N-1 and N-2 contingency studies for an operating hour the next day, two days later or a week later, show that the resource is needed to prevent inconsequential loss of load, then the resource must be recalled to provide transmission service for the day where the condition occurs.
- 2) The recall of a SATA resource should not enable some resource owners to take advantage of the information on the SATA resource recall. This is an additional reason why market operation criteria and studies should not be the basis to recall a SATA resource to provide reliability transmission service.

The sooner the reliability transmission service recall signal is relayed to a SATA resource the better, for both maintaining transmission system reliability and for the resource for managing its market services. In that regard, the Water Authority and the City support Option 2: the D+2 option as D+2 will be better than D+1. D+3 will be even better. This allows SATA resources to bid in both the Day-Ahead and Real Time Market if SATA resources do not clear two days prior to operating day in the D+2 process. Option 2 allows for more market services to be accessed instead of completely limiting certain market services with Option 1-the Day-Ahead Market Option.

With that said, during the August 21st CAISO meeting, no data was provided to show just how much uncertainty is anticipated with the Day-ahead market+2 option over the Day-ahead market option. The Water Authority and the City request that CAISO run models to quantify the levels of uncertainty for these two options. This is important because renewables are not easily forecasted two days ahead of time, so some true up of the day-ahead market will be needed.

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:

Option 1

In the original Issue Paper and subsequent proposals, CAISO offered only two options—full or partial cost recovery. The Water Authority and the City strongly recommended Option 1 of those two options. This was because the Water Authority and City are actively involved in potentially developing a large pumped energy storage project and are mindful as public agencies of the need for a reliable mechanism for full cost recovery in order for investments in a large pumped energy storage project to proceed. Absent that mechanism, project risks will be higher, which in turn will make such projects less attractive and more expensive for ratepayers and market participants. The Water Authority and City’s previous comments also emphasized the value of allowing appropriate participation in the market, and the Water Authority and City thank CAISO for reflecting those ideas with the new Option 3.

Option 2

It remains unclear to the Water Authority and the City whether Option 2 is viable. Large projects that are partially included as SATA resources and partially non-SATA resources, and perhaps such projects may qualify under Option 2. Elsewhere in the Revised Straw Proposal CAISO may be indicating that such bifurcation in a project would not be allowed. If a project were required to be treated fully as a SATA resource and yet not allowed full cost recovery, then the Water Authority and City do not think that Option 2 is a viable option and should be removed from further consideration.

Option 3

The Water Authority and City strongly support Option 3: Full cost-of-service based cost recovery with partial market revenue sharing between the owner and ratepayers. Option 3 provides both a valuable transmission asset at a reasonable cost of service and reduced cost to ratepayers by maximizing the revenue of a SATA resource when that resource is used for purposes other than as a transmission asset. The Water Authority and City are also supportive of planning approaches through which CAISO would include estimated plausible market revenues in the project evaluation and selection; these revenues would also be credited towards project revenue requirements and thus accrue as a tangible benefit to ratepayers. Those estimates would be adjusted over time in light of real market conditions and any excess should benefit the project owners.

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:

The Water Authority and City believe that Option 1, as referred to in Section 5.4.4 of the August 15th Straw Proposal, for responding to situations where there are insufficient qualified project sponsors will create arbitrary limits and are not consistent with how the opportunities for investment in bulk storage are emerging. Many projects will have, by virtue of their geography and the complexity of organization,

just one project sponsor—and therefore Option 1 would harm ratepayers by removing options from consideration for cost-recovery by CAISO. This situation will arise not just for local projects but also transmission-connected projects that rely on local geographical features, such as pumped storage. Options 2 and 3 could be more viable, but insufficient information has been provided to evaluate them. The Water Authority and City believe that if the right cost-recovery and market revenue sharing mechanisms are in place (see above), along with the right provisions to ensure that market services are not bid below marginal cost, that additional constraints due to the number of qualified project sponsors will not be needed.

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 Water Authority and City agree that the Revised Straw Proposal is consistent with the FERC Policy Statement because it provides conformance on market participation while receiving rate-based cost recovery. The Water Authority and City believe that a mechanism for full cost recovery, with partial market crediting, as outlined in Option 3 would not conflict with the “double recovery” standard.

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:

The Water Authority and City feel that CAISO should clarify how SATA resources will be right-sized and how the partial capacity of SATA resources might be allowed into the market while some of a SATA resource is retained for reliability purposes.

Additionally, it is important to note that SATA resources are most beneficial on a large grid scale or network setting and not a local setting, to help with the large amounts of renewables integration to balance the grid.

The Water Authority and City thank CAISO for its consideration of their comments and look forward to continued engagement in the SATA stakeholder initiative.