

# Storage as a Transmission Asset

## Stakeholder Comment Template

Submitted by	Company	Date Submitted
Michael Kramek <a href="mailto:Michael.kramek@betm.com">Michael.kramek@betm.com</a>	Boston Energy Trading and Marketing	09/05/2018

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.



California ISO

Submit comments to [InitiativeComments@CAISO.com](mailto: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:**

Boston Energy has no comments on this agreement at this time.

**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:**

Boston Energy can't support the ISO's proposed TRR credit methodology because it does not ensure that SATA resources aren't inappropriately suppressing market pricing. As currently drafted the proposal appears adequate to protect ratepayers from over paying for a transmission asset (which Boston Energy agrees with in concept), but fails to adequately quantify the true marginal cost of the SATA in market bids. Short of the ISO proposing a methodology to determine a true cost based reference or threshold price for energy and ancillary service bids, the TRR credit proposal as drafted does not provide meaningful assurances that market prices won't be inappropriately impacted.

The proposal represents a SATA resource marginal cost as a function of fixed capital costs, but this approach is flawed and is not representative of its actual marginal costs. Specifically, the proposal fails to account for the energy costs of charging, round trip efficiency, and the variable O&M associated with charging and discharging due to potential degradation, parasitic load, periodic maintenance, etc. Fixed capital cost by number of cycles is not a marginal cost. Fixed capital costs generally do not impact a resource's short-run decision to produce energy and/or respond to a 4-second AGC signal for regulation.

TRR credit proposal approach to handling project degradation based on market participation needs to be further fleshed out. Based on Boston Energy's experience managing an energy storage resource in the CAISO market, degradation is more complicated than simply counting number of discharge cycles. The assumption that energy storage resources will just daily charge and discharge for energy does not represent the only way energy storage resource participate in the market. For example, the ISO's proposal is silent on ancillary service market participation and how degradation will be calculate if a SATA resource participates in the NGR-REM model.

Lastly, If the CAISO fails to develop a reference/threshold price as mentioned above for SATA resource market participation, the logical protection to ensure market prices aren't inappropriately suppressed is to require SATA resources to offer market products at the relaxation penalty price levels specified in the tariff. This approach meets FERC's policy objective by ensuring SATA resources won't be dispatched until all market based bids are exhausted and the CAISO's optimization is forced to clear the market based on administrative pricing.

**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 ISO proposal indicates that a SATA owner must have an active scheduling coordinator. Boston Energy has the following questions regarding this requirement:

1. Can the scheduling coordinator (“SC”) for a SATA resource be a competitive market participant? If a SATA SC is a competitive market participant, how does this comply with FERC’s long standing rule of separating transmission and generation market participants?
2. If the SATA resource is used as transmission to mitigate a system constraint, what impacts would this have on CRR, generation/storage, and virtual market participants? It seems apparent that knowledge of the status of an SATA asset, for example, advance knowledge of whether the SATA will be needed for transmission for a period of time, would provide valuable competitive market information to an SC that would not be widely known to others. In order to prevent this from occurring, what provisions does the ISO have in mind to ensure that this information will not be used by the SC to trade around or otherwise utilize to impact its CRR/Virtual/Energy market position?
3. For example, as a possible resolution to the issues raised here, will the ISO daily post on OASIS the DA and RT status of the SATA resource, to ensure transparency to all market participants?

#### **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:**

Boston Energy has no comments on this agreement at this time.

#### **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:**

Boston Energy has no comments on this agreement at this time.

#### **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:**

CAISO proposal falls short of addressing FERC's policy statement. CAISO continues to make blanket and unsupported statements regarding the proposal's effectiveness in ensuring SATA resources will not inappropriately suppress market pricing. Examples of unsupported claims include:

(Page 18) “The hours in which the resource will be most needed for transmission service will be the same hours in which the resource would most likely have the ability to significantly impact energy market prices, therefore the ISO believes there should not be significant energy market power concerns”

“The hours a SATA resource would be able to access market revenues would be the intervals that are already competitive and, with the proposed reduction to the SATA resource’s TRR, the addition of SATA resources would have little to no impact on market prices, let alone inappropriate suppressing them”

CAISO provides no concrete evidence as to why it is “most likely” the SATA resource will be needed for transmission service the same hours in which it can have significant ability to impact energy market pricing. Is it the belief of CAISO that the intervals when the transmission need is active are exactly (and exclusively) the same intervals when SATA resources can impact market pricing? What about all the other hours when the transmission need is not active? What protections are in place for those “less likely hours”? While these hours may be fewer in number, it is not evident from the analysis presented to date that these hours, while smaller in number, might not have a substantive (and inappropriate) impact on suppressing energy & ancillary market prices. Perhaps the CAISO could address this issue by creating some type of ‘participation impact test’ which would exclude SATA market participation in any hours when the unit could be marginal and set price for energy or ancillaries.

As stated in our comments in the TRR capital credit section we feel the ISO proposal does not address concerns regarding inappropriate price suppression, because the methodology described to date does not contain a definitive prescription for how all marginal costs are to be included in the SATA market offer, and as such we understand that given the implicit subsidy in the TRR, the SATA will have an economic incentive to offer below true marginal cost and thus inappropriately suppress prices. Given that the SATA resource is guaranteed full cost recovery regardless of market participation it seems absent the ISO coming up with true marginal costs of energy and ancillary service (i.e. reference/price thresholds), the solution may be requiring SATA resources to offer at the respective market product relaxation penalty price in order to protect market prices.

**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:**

Boston Energy has no comments on this agreement at this time.