

# 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](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:**

Cogentrix Energy Power Management (“Cogentrix”) is open to the utilization of storage as transmission assets (SATA) when it offers a more cost efficient solution compared to a traditional transmission upgrade. Cogentrix concurs that the most effective use of any resource as a transmission asset would be under the control of the ISO itself.

**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:**

While Cogentrix is not opposed to the use of a Transmission Revenue Requirement (TRR) capital credit per se, Cogentrix anticipates that the accurate and effective calculation of the TRR credit as it relates to the useful lifespan and marginal costs of storage assets will prove challenging. As such, Cogentrix has several questions relating to the ISO’s formulation of the TRR credit.

1. How does the ISO envision the TRR credit calculation taking into account the possibility of charging with negative electricity pricing?
2. How does the ISO plan to calculate the useful lifecycle for established as well as new battery chemistries and controls? Does the ISO plan to engage an Independent Engineer to perform testing?
3. The true TRR of an asset will vary dramatically based on technology. For example, lithium-ion batteries show degradation over time and use, where certain flow technologies do not. How does the ISO expect the proposed calculation of the TRR to impact the competitiveness of certain storage technologies over others?
4. Is it possible that the proposed calculation of the TRR could be applied to large-scale pumped hydro in a manner that would make that technology the most cost-competitive?
5. Does the ISO plan to set a specific contract duration in its TRR calculations? If not, does the ISO plan to offer longer term contracts to those storage assets that do not degrade over time?

**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:**

1. Does allowing the asset owner to schedule market participation two days prior to the operating day or in the day ahead risk optimal use of the SATA in real-time?
2. Is it possible that a SATA is given permission to participate in the market two days prior or in the day ahead and then needed as a transmission asset in real-time as a result of uncertainty in market projections? If so, would that SATA have any obligation to provide transmission-related services if it is not at full charge?

**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:**

1. Option 1: Cogentrix is not opposed to full cost-of-service recovery with energy market crediting so long as the SATA's market participation does not result in suppression of market pricing and/or suboptimal utilization of the SATA for transmission purposes.
2. Option 2 and 3: Cogentrix views the partial cost-of-service recovery with no energy market crediting as the most problematic of the three options. Cogentrix also views both Option 2 and 3 as less preferable to Option 1. Cogentrix would like to understand how CAISO plans to address the following challenges under both Option 2 and 3:
  - Asset owner's incentive to earn any level of profit in the market, especially if they own a non-degrading or low-degrading storage asset
  - The role that negative pricing plays in the asset owner's approach to market participation as the duck curve becomes more pronounced

- If the asset owner has access to non-public information through the day-ahead and/or D+2 transmission planning process, how that non-public information might be used to maximize profit

### **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:**

Cogentrix views the risk of only one qualified sponsor bidding into a SATA RFP as low. That said, Cogentrix does not object to any of the three options the ISO proposed to address this risk. Additionally, Cogentrix encourages the ISO to publish its definition of “Qualified Sponsor” in the next iteration of the SATA proposal for stakeholder comment. It is essential that the definition of Qualified Sponsor reflect typical market and banking standards and be broad enough to apply to numerous, credible participants.

### **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:**

Cost recovery Options 2 and 3 run the risk of being inconsistent with the FERC Policy Statement. Assets that have partial cost recovery guaranteed and the ability to participate in the market (possibly with non-public information) have the potential to suppress market prices as a result of their capital costs being partially subsidized.

### **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:**

Cogentrix recommends that the ISO undertake additional studies or pilot projects in order to ensure equitable market participation by SATA resources and that does not result in discrimination against existing generation.