

# 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 stakeholder initiative Straw Proposal that was published on May 18, 2018.



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

**Comments are due June 7, 2018 by 5:00pm**

webpage.

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

### **Scope of policy examination**

The ISO has modified its initial identified scope for this stakeholder process. The scope of this initiative will focus on: If storage is selected for cost-of-service-based transmission service, how could that resource also provide market services to reduce costs to end-use consumers? Please provide comments on this proposed scope (including those issues identified as out-of-scope). If

<sup>1</sup> BAMx consists of City of Palo Alto Utilities and City of Santa Clara, Silicon Valley Power.

there is a specific item not already identified by the ISO that you believe should be considered, please provide the specific rationale for why the ISO should consider it as part of this initiative.

**Comments:**

BAMx endorses the revised scope for this stakeholder process in its focus on providing a framework for a Storage as a Transmission Asset (SATA) resource that can provide market services to reduce costs to transmission ratepayers. BAMx opposes any further expansion of the scope that was identified in the Issue Paper. In particular, BAMx does not support expanding this initiative to include resources that may provide economic or policy benefits. We observe that an evaluation of economic-driven transmission assets is already accommodated as part of TPP Phase 2 analysis. Furthermore, BAMx believes that storage connected to the distribution system should not be considered as a candidate SATA resource under this initiative.

**Background and the ISO’s Transmission Planning Process (“TPP”)**

The ISO has provided a discussion on how certain stakeholder comments could be addressed within the current Transmission Planning Process (TPP) framework – on a case-by-case basis. Please provide any additional questions or clarifications regarding how the ISO’s TPP might incorporate the market participation by SATA resources.

**Comments:**

In its comments on the Issue Paper, dated April 20, 2018, BAMx had articulated the rationale for the CPUC IRP process to be the more appropriate forum - to determine economic tradeoffs between retaining existing generation and reducing that need via new transmission or new local/preferred resources – than in the CAISO TPP. Based upon the CAISO’s response to the questions posed during the May 24<sup>th</sup> Stakeholder meeting, it appears that the CAISO concurs with BAMx that the CAISO’s first choice is to have open competitive (procurement) processes to select preferred resources.

BAMx recognizes the specific conditions under which the two storage projects were approved by the CAISO as SATA under the 2017-18 TPP and appreciates the CAISO’s support for utilizing open competitive procurement process directed by the IRP for identifying the need for storage among other preferred resources. BAMx believes that its necessary to use a model, such as RESOLVE developed by the CPUC, to compare storage with the myriad of competing resources that can solve a problem like the one created by the desire to reduce the need for gas-fired generation in local areas. We all need to recognize there are specific mandates for some of the preferred resources that have been adopted by legislation and the CPUC, including one for storage. So, developing a least cost procurement plan that recognizes these mandates is best achieved through a process like that envisioned by the CPUC’s IRP proceeding’s RESOLVE model. We note that significant efforts are currently underway in optimizing storage in the CPUC IRP proceeding, which further enhances its capability for evaluating a storage resource relative to the other competing preferred and conventional resources.<sup>2</sup> It is important to recognize that certain technologies, such as battery energy storage, have a much shorter life than typical

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<sup>2</sup> **Source:** Modeling Energy Storage in Integrated Resource Planning in 2019-2020, CPUC Modeling Advisory Group Webinar, May 30, 2018

transmission assets, and degrade with cycle use. Therefore, any analysis comparing transmission assets to storage should take into account the expected life span of each resource.

Like the predecessor RPS Calculator model, it is extremely important that the relatively simplistic assumptions made about the capability of the existing transmission system, and the cost and impacts of additions to that system, depend upon important input from power system models utilized by the CAISO - and therefore it's extremely important that the CAISO provide appropriate assumptions about the transmission system for the studies performed as part of the IRP process. However, evaluating the tradeoffs between alternative methods of achieving the State's goals should be done as part of the IRP process.

### **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) agreement and Transmission Control Agreement (TCA).

Additionally, the ISO has indicated its preference to control SATAs when they operate as transmission assets. Please provide comments on this proposal.

#### **Comments:**

BAMx supports the CAISO's plan to develop a new agreement for SATA resources that would combine Transmission Control Agreement (TCA) provisions – if the owner is not already a Participating Transmission Owner (PTO) – and provisions that cover how the CAISO would compensate a storage resource and when it can participate in the market, including the impact market revenues have on the total costs to be recovered under the agreement.<sup>3</sup> Any contractual arrangement needs to address whether the proposed operator of the SATA resource has any ability to unduly influence the market prices and outcomes. This is the same reason why existing FERC policy notes that the CAISO control over the operation of a SATA resource could jeopardize its independence as the market operator.

### **Market Participation**

The ISO provided additional details regarding how and when SATA resources would be permitted to provide market services and access market revenues. Please provide comments on this proposal.

#### **Comments:**

BAMx advises that if a storage asset can qualify to participate in the market and have access to market revenues, further studies be conducted to assess the increased frequency of storage cycling for the purposes of market participation, and subsequently, the impacts of the increased cycling of the storage asset on the equipment lifetime and total costs associated with the technology. Specifically, these increased costs include fixed overhead costs as well as the associated variable costs related to the operating, repair, and maintenance of the storage asset. Depending on the technology of the storage asset, and chemistry of the battery storage asset, increased frequency of cycling and depth of discharge of the storage asset can degrade the

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<sup>3</sup> Straw Proposal, pp. 3-4.

quality and longevity of the storage system lifetime. This could lead to increased frequency of replacement of the storage asset, therefore, impacting the total costs of the investment.

### **Cost Recovery Mechanism**

The ISO has proposed two 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

Please provide comments on these two options and any other options the ISO has not identified. Please include how the ISO might incentivize or compel SATAs to participate in the markets competitively and efficiently where they would receive full cost-based recovery.

#### **Comments:**

BAMx has no comments at this time.

### **Allocation to High- or Low-Voltage TAC**

The ISO proposes to maintain the current practice of allocating costs to high- or low- voltage TAC, based on the point of interconnection, and consistent with other transmission asset classifications to regional (high voltage) or local (low voltage) TAC. Please provide comments on this proposal.

#### **Comments:**

BAMx has no comments at this time.

### **Consistent with FERC Policy Statement**

The ISO believes the 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:**

BAMx has no comments at this time.

### **Use Cases**

Stakeholders raised numerous scenarios involving a storage device being used as a transmission asset, and with having additional storage or other generation capacity at the same site. The ISO provided feedback on how some, but not all, of these concerns expressed at the stakeholder session could be addressed. The ISO seeks stakeholder feedback on issues or concerns that would need to be addressed, as well as possible mechanisms to address such concerns.

#### **Comments:**

BAMx has no comments at this time.

### **EIM classification**

The ISO believes this initiative falls outside the scope of the Energy Imbalance Market (EIM) Governing Body’s advisory role. The ISO seeks stakeholder feedback on this proposed decisional classification for the initiative.

#### **Comments:**

BAMx has no comments at this time.

### **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:**

BAMx has no comments at this time.