

# Storage as a Transmission Asset

## Stakeholder Comments Template

Submitted by	Company	Date Submitted
Kathleen Hughes 408-615-6632 khughes@SantaClaraCA.gov	Bay Area Municipal Transmission Group (BAMx) <sup>1</sup>	April 20, 2018

Please use this template to provide your comments on the Storage as a Transmission Asset stakeholder initiative Issue Paper that was published on March 30, 2018.



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

**Comments are due April 20, 2018 by 5:00pm**

The Issue Paper posted on March 30, 2018, as well as the presentation discussed during the April 6, 2018 stakeholder web conference, may be found on the [Storage as a Transmission Asset](#) webpage.

Please provide your comments on the Issue Paper topics listed below and any additional comments you wish to provide using this template.

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

**Scope of policy examination**

The ISO's initial identified scope for this stakeholder process is to enable storage to provide cost-based transmission services and participate in the market and receive market revenues. Specifically, the ISO will focus on (1) transmission-connected storage only and (2) storage resources identified as needed to provide reliability-based transmission services. Please provide comments on the proposed scope. If there are specific items not already identified by the ISO that you believe should be considered, please provide specific rationale for why the ISO should consider it as part of this initiative.

**Comments:**

It is a worthy exercise to examine ways of decreasing the Transmission Access Charge (TAC), and therefore the cost to consumers in the CAISO balancing authority area. The concept provided by the Issue Paper would anticipate achieving a lower TAC by allowing transmission connected storage projects to reduce its TRR by supplemental income from market services.

The central issue in this policy examination is whether a transmission-connected storage resource, approved for reliability services only, can also provide market-based services and therefore receive market revenues. Although the “devil is in the details,” there are no details at present that could elicit detailed comments at this time. Therefore, these comments are general in nature and reflect on the overall impact such a change would cause to the current dichotomy between regulated transmission assets that receive total cost recovery through the TAC and market generation resources that must compete for cost recovery.

As explained below, BAMx believes that the CPUC Integrated Resource Planning (IRP) process is the appropriate forum to determine economic tradeoffs between retaining existing generation and reducing that need via new transmission or new local resources. Any changes to the structure of resources should be decided in concert with other resources and state policy goals, through the state's IRP process. This IRP process is well-equipped to compare alternatives, such as the local generation, demand response and energy storage, to transmission resources needed to address local reliability.

On October 7, 2015, Senate Bill 15 350: Clean Energy and Pollution Reduction Act (de León, Chapter 547, Statutes of 2015) (SB 350) was signed into law, establishing new clean energy, clean air, and greenhouse gas reduction goals for 2030 and beyond.<sup>2</sup> The IRP process, mandated by SB 350, takes a 10-year-ahead look at system needs (reliability needs of the overall electric system), local needs (reliability needs specific to areas with transmission limitations), and flexibility needs (such as the resources needed to integrate renewables). That process is ongoing and depends on information from CAISO's TPP to inform the decision making. The CAISO has already been working on a Reference System Plan with the CPUC to, among other goals, develop appropriate cost modeling guidelines. The CAISO and CPUC have a clear

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<sup>2</sup> SB 350 established California's 2030 greenhouse gas reduction target of 40 percent below 1990 levels. To achieve this goal, SB 350 sets ambitious 2030 targets for statewide energy efficiency savings in electricity. This bill requires the CEC to establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity uses of retail customers by January 1, 2030, and requires the CPUC to establish efficiency targets for electrical and gas corporations consistent with this goal. Part of the broad directive of SB 350 was to establish IRPs. Each area requires collaboration with sister state agencies including the California Energy Commission the Air Resources Board, and the California Independent System Operator.

expectation that the IRP and TPP processes will work iteratively to provide the best available information for integrated resource planning.

This process outlined above counsels that storage vs. alternatives decision should be made at the State level through the IRP process to ensure that potentially expensive storage solutions are not wholly deemed transmission assets based on a standalone CAISO determination and are given preference over other resources that might better serve the reliability needs of the transmission grid.

BAMx agrees with the CAISO’s assessment that “electric storage has more effectively fit within the framework of market resources providing local capacity rather than as transmission assets providing transmission services.”<sup>3</sup> The capacity expansion models such as RESOLVE<sup>4</sup> utilized in the CPUC IRP proceeding are more suitable for performing any economic comparison of alternatives for meeting LCR than the CAISO TPP by itself. In particular, RESOLVE includes a constraint that requires that sufficient new generation capacity must be added to meet the local needs in specific LCR areas. It also takes into consideration all State policy goals such as, energy efficiency and storage mandates as constraints while optimizing resource procurement costs. We should be mindful of the decisions that seek to address policy mandates already embraced by California and its ratepayers.

To characterize local capacity needs in local areas to meet reliability criteria, RESOLVE relies on the CAISO’s TPP. In other words, a flow of information from the CAISO’s TPP to the CPUC IRP on the local capacity needs exists today. Similarly, the determination of the least-cost, best-fit alternatives to meet LCR needs, that the CAISO TPP identifies, should rely on the CPUC IRP process as it is better equipped in evaluating competing resource alternatives to transmission solutions such as natural gas generation, renewables, energy storage, and demand response. The process alignment between the CPUC’s IRP and the CAISO’s TPP is key to optimizing infrastructure planning. In summary, the CPUC IRP process is the appropriate forum to determine economic tradeoffs between retaining existing generation and reducing that need via new transmission or new local resources.

### **Cost recovery mechanism**

The ISO has offered two alternative cost recovery mechanisms for discussion as part of the issue paper:

1. Asset in PTO’s TAC rate base, and
2. Contractual provision of “cost-based” transmission service without becoming a PTO

Please provide comments on these two options and any other options the ISO has not identified. Additionally, please provide comments on the “wholly in rate base” and “partially in rate base” alternatives discussed within each of the above options.

#### **Comments:**

BAMx has no comments at this time.

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<sup>3</sup> Issue Paper, page 7.

<sup>4</sup> RESOLVE is an optimal investment and operational model designed to inform long-term planning questions around renewables integration in systems with high penetration levels of renewable energy.

**Allocation to high or low voltage TAC**

The ISO has expressed its plans to maintain the current practice of allocating costs to high or low voltage TAC based on the point of interconnection. Please provide comments on this proposal.

**Comments:**

[BAMx takes no position on this issue 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:**

[Comments on process and scope are included above.](#)