

# Storage as a Transmission Asset

## Stakeholder Comments 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 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.

### **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:**

PG&E shares the CAISO's interest in exploring a pathway for storage resources providing transmission services to provide maximum benefits to CAISO transmission customers by enabling participation in the organized wholesale electric markets as a part of using the storage resource for multiple purposes.

PG&E agrees with the CAISO that in the case of transmission grid services, there is the potential that the storage resource will be operating under at least a partial cost-of-service ratemaking in connection with the provision of those services. PG&E believes that appropriate rules and incentives must be created for the storage resource operator and the transmission operator to prioritize the transmission grid service for which the storage resource is receiving cost-of-service ratemaking treatment over any participation in the organized wholesale electric markets. Additionally, we believe that CAISO should evaluate how transmission connected storage resources can effectively provide both transmission and market services, such that CAISO is getting the full value for the market based services being procured, (particularly given the higher priority for the reliability functions).

PG&E also affirms that the existing Transmission Planning Process is the appropriate place to make transmission system planning decisions for reliability and economic purposes, regardless of technology, and therefore storage assets eligible for regulated cost of service treatment should be the result of the TPP framework. PG&E also agrees that the framework for competitive solicitation and the applicability of the CAISO’s current competitive solicitation framework issues are beyond the scope of the current stakeholder initiative.

Though PG&E supports the goals and general scope of the initiative, there are some concepts and definitions that should be discussed by stakeholders during the initiative process. For example, given the differences in voltages that define regional and local transmission systems throughout the ISO controlled grid, stakeholders and the CAISO must clearly define the technical conditions, configurations and equipment that allow storage asset to be considered ‘transmission connected.’ Likewise, additional attention is needed to develop a shared understanding of ‘CAISO operational control’ when applied to storage assets serving as transmission and potentially in the market.

### **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:**

PG&E agrees with the CAISO that the “partially guaranteed cost recovery with potential for market gains or losses” model introduces numerous complexities and risks into the TPP. Non-PTOs, entities who do not carry the responsibility to serve, have markedly different risk profiles than an incumbent PTO with a regulated obligation to serve. Given the uncertainty of market revenues across the transmission

planning time horizon, PG&E is concerned that allowing project sponsors to execute on proposals with relatively high levels of market revenue assumptions could compromise the ability of an asset owner to ensure reliable, long term transmission service. Ensuring that the resource is available for reliability dispatches is important. The CAISO should provide additional details to describe how it will implement the use plan that identifies and preserves the specific hours for reliability dispatch while allowing market participation during other periods. The CAISO should also consider how rules and non-performance penalties will be used to incent behavior and how these penalties will be optimized within the market runs to ensure that market participation doesn't interfere with meeting the reliability need that it was approved for.

PG&E encourages the CAISO to expand the scope of the issue paper to clearly define the market revenue offsetting assumptions and various market conditions that will be studied throughout this initiative and allow stakeholder to comment on these assumptions and conditions. In addition the CAISO should explore the implications of a resource alternating its selection of being wholly in rate base or partially in rate base.

#### **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:**

PG&E understands the rationale behind the CAISO's existing practice of allocating costs to high or low voltage, but believes this is an issue that should be explored in more depth during the stakeholder initiative process.

#### **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 CAISO should consider the implications of allowing storage that provides cost-based transmission services and participates in the market to interconnect without a generator interconnection study. For example, the CAISO should consider whether a deliverability study is needed and whether these resources should be taken into account when determining local capacity area needs. The LCR process has an established approach for maintaining the deliverability of generation resources that have demonstrated the ability to be fully deliverable. By permitting storage to interconnect without a deliverability process it could impact the ability of the grid to maintain the established NQCs of resources. Without clarity on the interconnection process for storage resources that are participating in

the markets, it's not clear how the CAISO would permit market participation for partially in rate base storage resources and the potential impacts to other resources deliverability.