

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

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:

CPUC Energy Division (CPUC ED) has five (5) recommendations to amend the current scope of the Storage as Transmission stakeholder initiative. A summary of our recommendations follows:

- 1) Include distribution interconnected storage resources as well as those interconnected to the transmission system.
- 2) Consider interaction of distribution level services with transmission level services, all of which have thus far been defined as “reliability” services under the MUA framework jointly developed by CAISO and CPUC staff, and adopted in D.18-01-033.
- 3) Determine whether, and how, each of the transmission services listed in D.18-01-003, may be combined with other services in a multiple use application.
- 4) Include consideration of the three distinct types of multiple use application: time differentiated, capacity differentiated and simultaneous.
- 5) Consider provision of wholesale services by transmission projects that are needed for economic reasons, in addition to those needed for reliability.

CPUC ED and CAISO are currently engaged in a working group process to develop implementation details and refinements to the rules governing multiple use applications (MUA) for energy storage adopted in Commission Decision (D.) 18-01-003. The working group is focused on a multitude of topics, including the interaction of other services (resource adequacy, wholesale market) with distribution and customer level services. The Working Group has not yet tackled the interaction of transmission services with retail services.

CPUC ED recommends expanding the CAISO's identified scope for this initiative to also include what interaction, if any, may be possible for retail (distribution and customer domain) services and transmission level services using the same storage capacity. This means also amending the scope to include provision of transmission service by distribution interconnected storage resources, as well as those interconnected to the transmission system. We believe the CAISO to be a more appropriate and effective venue than the working group for sorting out the specifics of interaction of retail services with its own managed transmission grid.

Relatedly, the joint framework adopted in D.18-01-003 identified five services that could be provided to support the reliability of the transmission grid. These services are: transmission deferral, inertia, primary frequency response, voltage support, and black start. The decision noted that only transmission deferral and black start are available now as services that could be provided by storage. The decision marked inertia, primary frequency response, and voltage support with an asterisk, and noted that they “have traditionally been obtained as inherent characteristics of conventional generators, and are not

today procured as distinct services. We include them here as placeholders for services that could be defined and procured in the future by the CAISO”¹. It would be quite useful to the discussion of multiple use applications for storage in California, and the formulation of workable rules, if the CAISO expanded the scope of this initiative to consider whether, and how, each of these services interacts with others in an MUA context. We presume, for example, that the MUA construct for black start may be entirely different than that for transmission deferral. We are having similar such discussions in the MUA working group for other services.

We further recommend that the examination of multiple use applications for energy storage acting as a transmission asset focus on the three distinct types of multiple use application identified by the CAISO and CPUC in the joint framework. These types are: time differentiated, capacity differentiated and simultaneous.

Finally, we agree with a comment made by a participant in the April 6th webinar to consider provision of wholesale and transmission services by storage needed for transmission projects that are approved for economic reasons, in addition to those approved for reliability needs. CAISO states that the ultimate objective of this effort is “lowering costs and providing flexibility for the benefit of ratepayers.” CPUC Staff support this objective and believe that it would be beneficial if the scope to include economic-driven network upgrades that similarly have the objective to create opportunities to reduce ratepayer costs within the ISO, as stated in the recently approved 2017-2018 ISO Transmission Plan.

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:

Although the transmission planning process (TPP) itself is not within the scope of this work, CPUC ED would like to highlight that if the objective is to lower costs, an initial understanding of the likely cost recovery mechanism would be very helpful to stakeholders during the TPP process. Within the TPP process when multiple project alternatives that meet the identified need are compared, the comparison is often on a cost basis. Going forward, we recommend sharing information on whether a project is likely to be covered entirely by TAC as compared to only being partially in the rate base, as it would be beneficial to stakeholders before the CAISO recommends and approves specific projects.

¹ D.18-01-033 in R.15-03-011. January 17, 2018. Page 10.

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: 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:

Energy Division is curious as to why both the framework for competitive solicitation and the applicability of the ISO's current competitive solicitation framework and cost allocation of the cost-based revenue requirements for rate based assets, are outside the scope of this initiative.