

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:

The CAISO appears to be developing this initiative around rules for primarily battery storage assets. While ITC Grid Development, LLC (ITC) understands that battery storage assets have already been approved in the CAISO's Transmission Planning Process (TPP), the policies developed in this initiative should be technology-neutral and accommodate other types of storage assets.

ITC agrees with commenters during the 4/6 stakeholder call that while the CAISO is limiting this initiative to energy storage assets selected in the TPP to meet reliability needs, this should not preclude further work in the future to develop market participation rules for storage assets meeting other needs (economic, policy, resource adequacy). For consideration in that future stakeholder initiative or initiatives, we note that an asset selected in the TPP to provide reliability service could also provide Primary Frequency Response, black start service, voltage support, or inertial response while not being utilized for reliability – with the revenues for these services likely coming from separate Federal Power Act Section 205 filings proposing different cost allocations and recovery mechanisms. However, in order for the assets to serve these multiple functions, they might need to be oversized (at least from a TPP perspective) in order to provide these additional services.

ITC also agrees with comments during the 4/6 stakeholder call that the CAISO may need to consider how the policies established in this initiative interact with not only the TPP, but the allocation of deliverability to resources – and potentially other processes. As discussed further below, it is unclear to us that policies and rules can be agreed upon in this initiative without at least considering corresponding changes to the TPP and other impacted processes.

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:

ITC agrees with the CAISO's acknowledgement that there may be instances in which a storage asset must necessarily be dedicated to support transmission reliability needs, without offering the

opportunity for market participation by the asset. Further, since customers will be paying for the storage asset to provide reliability service, it is critical to ensure that the asset is available to provide that service. We therefore support the CAISO's intention to assess the need for rules around notification timelines and the return to set point for provision of reliability service, as well as assessment of lifecycle limitations and maintenance.

We note that just as an option is envisioned for a storage asset owner to provide cost-based transmission reliability service without becoming a Participating Transmission Owner (PTO), an option should also be available for a storage asset owner whose asset cost of service is in the Transmission Access Charge (TAC) rate base to decline market participation. For example, an entity owning a storage asset that primarily serves a transmission function may have neither the ability nor the desire to become a market participant.

It is unclear to ITC whether, in proposing the “wholly in rate base” and “partially in rate base” alternatives, the CAISO is considering making both alternatives available, and whether the asset owner would have the choice between the two. If so, the complexity of determining the costs vs. benefits of a storage solution on a comparable basis to other potential solutions in the TPP would be greatly increased, if not rendered impossible. In addition, the CAISO should confirm that once chosen, the selection of cost recovery alternative could not be changed, as this would even further increase the complexity of the TPP evaluation and could also be unduly preferential to the asset owner. [Note: This example illustrates the interaction between policies to be developed in this initiative and changes that may be needed in the TPP, and the dependencies between them.]

If the CAISO is considering making only one of the alternatives (“wholly in rate base” or “partially in rate base”) available, we assert that an asset owner whose storage device is selected in the TPP should have the ability to recover the full cost of service of the asset in the TAC with appropriate crediting of market revenues; i.e., the “wholly in rate base” option should be the default. We note that full cost-of-service recovery in the TAC is also the only option that would work for a storage asset owner who cannot or does not wish to become a market participant, or in a case where the asset needs to be dedicated to providing reliability services, in which cases there would be no crediting of market revenues.

In presenting cost recovery alternatives, the CAISO has considered crediting of market revenues against the TAC cost-of-service rate. However, it is not apparent that the CAISO has also considered how to treat the charges associated with a storage asset's market participation, such as energy charges associated with charging of a battery storage asset, and how to appropriately segregate those costs into those incurred providing transmission reliability service versus those incurred providing market services. It will be critical to consider these charges and how to account for them such that the costs are allocated to the appropriate customers.

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:

It would be consistent with current practice to allocate costs of the storage asset to the high- or low-voltage TAC based on the point of interconnection of the storage resource, and may also be administratively efficient. However, in the case of a mismatch between the level of the storage asset's connection to the transmission system and the transmission need that is being solved, we encourage the CAISO and stakeholders to consider whether any disincentives or cost allocation issues are created.

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:

We have no additional comments at this point, but appreciate the opportunity to provide input.