

Storage as a Transmission Asset

Stakeholder Comments Template

Submitted by	Company	Date Submitted
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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:

TransCanyon agrees that the including these particular resources in scope is appropriate.

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:

TransCanyon recommends that the CAISO consider the likely outcomes associated with each option in terms of the potential costs and risks for customers, and offers the following comments regarding each alternative, focusing on such outcomes.

The first alternative (“rate base”) would be highly likely to result in the highest guaranteed costs to customers. Customers would be required to pay for the entire cost of the asset, inclusive of financing costs allowed in the applicable PTO rate. While this option offers theoretical upside from market operations, in practice that upside would be unlikely to materialize, due either to concerns about standards of conduct, wear and tear on the asset or ISO interference in market outcomes. Even in the absence of these barriers, the storage asset owner would have no incentive to generate market revenues purely for customers’ benefit.

The second alternative (“contract”) would present customers with a lower ceiling on costs, which the asset owner would offer in return for an opportunity to earn market revenues. This alternative would also offer a lower floor on customers’ costs in practice, as the asset owner would have an incentive to generate market revenues that would be shared. The issues noted above related to market operations could be addressed via an agreed upon operating protocol, which would enumerate constraints on market operations required to preserve the ability of the asset to serve its intended reliability function.

Finally, CAISO should consider that the “rate base” option would almost certainly forego any possibility of an owner constructing a storage facility with additional incremental capacity to be used solely for market purposes. Given the relatively low marginal costs for such expansion (for batteries, for example), the potential to offset customer risk and cost with such margins is promising.

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:

Given the likely outcomes described above, it follows that incumbent PTOs would be expected to prefer the first alternative cost recovery mechanism, which presents a risk and return profile that is consistent with other transmission assets. As such, it is reasonable to expect that, even if CAISO adopts the “contract” approach exclusively, incumbent PTOs would likely not offer or accept “contract” terms that did not perform similarly to the “rate base” option in practice.

With this in mind, to the extent that storage projects within the scope of this process are directly assigned to incumbent PTOs, CAISO should expect that, from a customer point of view, the “rate base” model will manifest in practice irrespective of which option is adopted in principle. This represents a problem considering that, as described above, the “contract” model offers a lower ceiling and lower floor on customer costs.

This problem can be addressed by implementing rules that encourage competitive solicitations for such projects in most instances. CAISO customers have seen firsthand how the competitive process allows a variety of participants with different capabilities and risk appetites to offer innovative proposals that reduce cost and risk; those forces would if anything be more powerful in the context of storage assets. TransCanyon proposes that the CAISO issue competitive solicitations for any storage project in the scope of this process with a value exceeding \$20.0m. Establishing a cost (rather than cost allocation) threshold for competition would allow customers to capture the benefits described above without conducting a

competitive process for small projects for which a solicitation might generate only limited cost/risk improvement on an absolute basis.

If CAISO prefers not to decouple the competitive process for storage assets from cost allocation, TransCanyon recommends that the cost allocation threshold for storage assets be tied to project cost, rather than interconnection voltage. Project size is a reasonable criterion for assessing the likelihood that a project will generate regional benefits, and the establishment of a cost (rather than voltage) threshold would maximize benefits to customers for the reasons described above.

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:

[No other comments at this time.]