

Storage as a Transmission Asset

Stakeholder Comment Template

Submitted by	Company	Date Submitted
Brenda Prokop bprokop@itctransco.com 216-577-1464	ITC Grid Development, LLC	6/7/2018

Please use this template to provide your comments on the Storage as a Transmission Asset stakeholder initiative Straw Proposal that was published on May 18, 2018.



Submit comments to InitiativeComments@CAISO.com

Comments are due June 7, 2018 by 5:00pm

The straw proposal, posted on May 18, 2018, as well as the presentation discussed during the May 24, 2018 stakeholder web conference, may be found on the [Storage as a Transmission Asset](#) webpage.

Please provide your comments on the Straw Proposal topics listed below, as well as any additional comments you wish to provide using this template.

Scope of policy examination

The ISO has modified its initial identified scope for this stakeholder process. The scope of this initiative will focus on: If storage is selected for cost-of-service-based transmission service, how could that resource also provide market services to reduce costs to end-use consumers? Please provide comments on this proposed scope (including those issues identified as out-of-scope). If there is a specific item not already identified by the ISO that you believe should be considered, please provide the specific rationale for why the ISO should consider it as part of this initiative.

Comments:

The CAISO appears, appropriately, to have separated from this initiative the question of whether the SATA resource is selected for reliability or some other purpose (economic, public policy) in the Transmission Planning Process (TPP).

However, the CAISO continues to maintain that changes to the TPP, including the evaluation of potential solutions and the competitive solicitation framework, are outside the scope of this initiative. ITC Grid Development, LLC (“ITC”) notes that storage resources can provide additional services, such as black start and Primary Frequency Response, which should be taken into consideration in the TPP and in developing cost recovery options as part of this initiative. In addition, the concepts that the CAISO has presented in the 5/18/2018 Straw Proposal contain a number of assumptions about how a SATA owner’s market revenues would be considered in the competitive framework of the TPP. It seems inappropriate that rules for considering a SATA’s market revenues or selected cost recovery option in evaluating its competitive transmission proposal will be established in this initiative, without at least considering corresponding changes to the TPP.

Background and the ISO’s Transmission Planning Process (“TPP”)

The ISO has provided a discussion on how certain stakeholder comments could be addressed within the current Transmission Planning Process (TPP) framework – on a case-by-case basis. Please provide any additional questions or clarifications regarding how the ISO’s TPP might incorporate the market participation by SATA resources.

Comments:

Please see the previous comment regarding changes to the TPP that ITC believes are necessary to pursue in tandem with those under consideration in the SATA stakeholder initiative.

Contractual Arrangement

The ISO proposes to develop a new agreement with SATA resource owners that captures elements from Participating Generator Agreement (PGA), Participating Load Agreement (PLA), Reliability-Must-Run (RMR) agreement and Transmission Control Agreement (TCA). Additionally, the ISO has indicated its preference to control SATAs when they operate as transmission assets. Please provide comments on this proposal.

Comments:

The proposal for CAISO to have control of SATA resources when operating as transmission assets, but to relinquish control to the asset owner or other qualified entity for market participation, is consistent with FERC policy generally, and the FERC policy statement on energy storage participation in wholesale energy markets specifically. However, as the CAISO is likely aware, a transparent and detailed process will need to be established for the transfer of operational control between the CAISO and the asset's market operator as the asset switches between transmission usage and market participation. Sufficient time and advance notice will also be necessary for the return of the asset to set point, and for the appropriate transfer of control to occur.

Market Participation

The ISO provided additional details regarding how and when SATA resources would be permitted to provide market services and access market revenues. Please provide comments on this proposal.

Comments:

The CAISO indicates that in its experience, the best fit for storage is as a market resource providing local capacity, but that if a greater degree of control over the device is needed to solve a specific issue, selection of SATA as a transmission solution would be another tool in the CAISO's toolbox. In the latter case, CAISO clarifies that the selected SATA resource would be considered a transmission asset that is incidentally being made available to the market.

ITC points out that if SATA resources are primarily transmission assets that are only "incidentally" being made available to the market, then it is not a foregone conclusion that the CAISO can or should require their participation in the market, or that the market revenues of a SATA choosing to participate in the market should be considered in the competitive solicitation framework of the TPP.

A major concern with market participation by a storage asset that is being relied upon to meet a transmission need is the potential impact of that participation on the asset's useful life. The regular charging / discharging of a chemical storage asset associated with market participation has the potential to significantly shorten the asset's life, resulting in costs to repair or replace the asset in order to have it available to meet the transmission need for which it was selected. This usage pattern is in sharp contrast to that of a storage asset that is held in reserve for reliability emergencies or system events. While the CAISO's 3/30 Issue Paper noted the need to consider storage asset lifecycle in developing market participation rules, this does not appear as a consideration in the Straw Proposal, and it is not clear whether or how the CAISO plans to take this into account.

Cost Recovery Mechanism

The ISO has proposed two alternative cost recovery mechanisms in the straw proposal:

1. Full cost-of-service based cost recovery with energy market crediting
2. Partial cost-of-service based cost recovery with no energy market crediting

Please provide comments on these two options and any other options the ISO has not identified. Please include how the ISO might incentivize or compel SATAs to participate in the markets competitively and efficiently where they would receive full cost-based recovery.

Comments:

The CAISO indicates that it will consider in the competitive solicitation framework how a SATA resource's market revenues might offset its transmission revenue requirement, and requests comments on whether to be optimistic, pessimistic, or moderate in assuming the level of market revenues.

ITC questions how the CAISO could make reliable assumptions about the level of a SATA asset owner's market revenues, and the extent to which those revenues will offset its cost-of-service revenue requirement, in evaluating competitive transmission proposals. The SATA asset owner's actual market participation will be driven by a number of factors, including predictability of the transmission need that the SATA is being chosen to address, market forces, and the SATA asset owner's business decisions. Even the most optimally-designed incentives or contractual provisions cannot compel the SATA entity to participate in the market, or to earn the level of market revenues that the CAISO assumed in evaluating the SATA entity's competitive bid. The CAISO's evaluation will also be complicated on the transmission revenue requirement side of the equation, since certain components of the transmission rate (Return on Equity, etc.) will not be known at the time of the SATA's bid, and FERC, not the CAISO, has authority over these rate components.

ITC also wonders whether the level of potential risk that this framework imposes on a SATA asset owner is commensurate with the potential reward. At the time a SATA entity submits a competitive bid, the market revenues it assumes for its SATA are speculative at best. The asset owner does not even know at that point whether the CAISO would consider the transmission need sufficiently predictable to allow its asset to participate in the market. Then, the asset owner must choose between the two options of having an unknown level of market revenues credited against its full transmission cost-of-service, or keeping an unknown level of market revenues while only being guaranteed a portion of its transmission cost-of-service. The CAISO's proposal appears to be imposing a great deal of risk without much reward, and placing an overemphasis on extracting savings from assets that the TPP has determined are a viable solution to a transmission need, and which may offer incremental efficiencies in the form of market services. The added risk may make it difficult to secure financing for storage assets proposed primarily as transmission solutions.

As a final note, we agree with other commenters that the market revenues that a SATA earns are funded by customers, and are likely being funded by a subset of the same customers who are paying the SATA's transmission revenue requirement. Therefore, the crediting of these market revenues against the SATA's cost-of-service revenue requirement may not be "savings" to customers.

Allocation to High- or Low-Voltage TAC

The ISO proposes to maintain the current practice of allocating costs to high- or low- voltage TAC, based on the point of interconnection, and consistent with other transmission asset classifications to regional (high voltage) or local (low voltage) TAC. Please provide comments on this proposal.

Comments:

The CAISO's proposal here appears appropriate; however, should cost allocation or other issues arise due to a mismatch between the point of interconnection of the storage asset and the transmission need that is being solved, additional discussion on this topic would be warranted.

Consistent with FERC Policy Statement

The ISO believes the straw proposal is consistent with the FERC Policy Statement. Specifically, that the straw proposal does not inappropriately suppress market prices, impact ISO independence, nor result in double recovery of costs. Please provide comments on the whether you agree or disagree with the ISO. If you disagree, please clarify why and how the ISO might address this issue.

Comments:

ITC does not disagree with the CAISO's assertion that its straw proposal is consistent with the principles discussed in the FERC policy statement on the use of storage for multiple services. However, we question whether revenues earned through the energy market, which are earned from providing a separate service, are always appropriately credited against the SATA asset's transmission cost of service – or whether it may be appropriate in certain circumstances for a SATA resource to earn combined energy market and transmission revenues in excess of its total cost of service.

In addition, we point the CAISO's attention to our comments above regarding the need for more details about how operational control of a SATA will be transitioned between the CAISO and the entity who will have control of the SATA for operation as a market asset.

Use Cases

Stakeholders raised numerous scenarios involving a storage device being used as a transmission asset, and with having additional storage or other generation capacity at the same site. The ISO provided feedback on how some, but not all, of these concerns expressed at the stakeholder session could be addressed. The ISO seeks stakeholder feedback on issues or concerns that would need to be addressed, as well as possible mechanisms to address such concerns.

Comments:

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EIM classification

The ISO believes this initiative falls outside the scope of the Energy Imbalance Market (EIM) Governing Body's advisory role. The ISO seeks stakeholder feedback on this proposed decisional classification for the initiative.

Comments:

The proposed classification is appropriate, since this initiative addresses SATA resources selected in the TPP to resolve transmission needs, and the TPP is currently not applicable to the EIM entities.

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:

ITC appreciates the opportunity to provide comments, and looks forward to reviewing future iterations of the CAISO's SATA proposal.