

Storage as a Transmission Asset

Stakeholder Comment Template

Submitted by	Company	Date Submitted
Omar Martino Director, Transmission Strategy T: 1.303.568.1273 Oar.Martino@EDF-RE.com	EDF-Renewables (EDF-R)	June 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.



California ISO

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:

EDF agrees that the scope of this initiative should include storage assets approved as transmission substitutes in the TPP for any reason – reliability, economic, and/or policy-driven. However, the process should not exclude from SATA status storage resources that:

- Share facilities with other, market-driven resources and/or generation assets;
- Are parts of larger resources
- Were procured or contracted for reasons beyond meeting a TPP-identified CAISO need

These views are further explained below.

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:

TPP consideration of storage resources should not be constrained by configuration or location. For example, these resource types should be eligible for SATA treatment, as long as they provide the transmission functionality the CAISO needs:

- **Storage resources added to facilities other than PTO substations.** While there may be no explicit prohibition against locating SATAs elsewhere, the CAISO should make this condition clear.
- **Storage combinations with other resources**, e.g., solar + storage combinations. This is an increasingly common configuration, and an efficient use of project-development resources.
- **Partial resources**, as long as the required capability is made available to the CAISO when needed (e.g., takes priority over market uses for the remaining capacity when the CAISO uses the SATA as a transmission asset). Costs could be allocated (e.g., proportionately) between the portion dedicated to the CAISO and the portion available for market use. This option may be particularly cost-effective if the CAISO need is relatively small.
- **Resources with shared facilities** – e.g., generation tie lines, substations, etc. – as long as the required capability is made available to the CAISO when needed (e.g., takes priority over market uses by other resources sharing those facilities when the CAISO uses the SATA as a transmission asset). After all, many transmission resources also share assets with other transmission resources (e.g., towers). Costs could be allocated (e.g., proportionately) between the SATA and other projects using the shared facilities. This may be an easier model for the CAISO to manage than partial resources, and separate Resource IDs could be required if that would facilitate CAISO administration.
- **Resources procured or contracted for reasons beyond meeting a TPP-identified CAISO need**, including those procured through other state/FERC initiatives (including customer-connected resources and “CPUC-mandated procurement process(es)”), as long as they can substitute for transmission and/or mitigate the need for transmission additions.

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:

EDF-R supports the CAISO’s contract proposal. Contracting for and financing SATAs will be greatly simplified by the need to execute only one agreement, e.g., by avoiding questions about how the SATA’s obligations or rights under multiple agreements interact with each other.

EDF-R generally supports CAISO “control” over SATAs when they operate as transmission assets but believes that this term should be better defined. Would the CAISO directly, physically control the SATA, or simply issue instructions to the SATA that the SATA is obligated to follow?

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:

EDF-R agrees generally with the approach where the CAISO attempts to forecast the months, days, and hours when the SATA is most likely to be needed as transmission (precluding market participation) and allows market participation the rest of the time.

However, forecasts can be wrong (especially months and years in advance), and the compensation impacts of forecasting inaccuracies were unclear in the CAISO’s proposal. The CAISO said that: (1) Resources need not be compensated when the CAISO “recalls” it from market participation, and contracts would not be reopened if market revenues are below expectations; but also (2) contracts could be reopened when CAISO’s needs for the SATA as transmission increase (reducing market-compensation opportunities).

Generally speaking, SATAs should not be disadvantaged by CAISO forecast inaccuracies. Resulting reductions in market opportunities should be compensated through increases in TAC coverage.

Applying a simple example, if a SATA contracts to be available to the CAISO as transmission for 6 months of the year, and the CAISO recalls the asset from market participation for a total of one month (reducing market-participation opportunities), the SATA’s cost coverage should be increased, through either:

- (1) **A cost-based approach**, i.e., to the level that it would have received if the market-participation obligation were originally defined as 7 months; or
- (2) **An opportunity-cost-based approach**, i.e., by an estimate of the amount of market revenues foregone for that month.

If the CAISO’s increased need is expected to be permanent, the change could be incorporated through a contract revision.

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:

Possible alternatives: The CAISO should consider other options, including those discussed below.

- **“In-between” options:** It makes sense that the greater the “guaranteed” cost-of-service coverage through the TAC, the greater the share of market revenues that ratepayers should be entitled to through crediting. However, the “either-or” CAISO proposal does not allow for those nuances. For example, near-full TAC cost coverage (e.g., 99%) would require no market-revenue crediting, while 100% TAC cost coverage would require full crediting of all market revenues. Allowing partial TAC coverage and partial market-revenue crediting could rationalize the TAC coverage/revenue crediting combination.
- **Avoided-cost payments:** Generally, ratepayers would be indifferent between transmission and alternatives if they get the same service from the latter without paying more than for the former. CAISO could simply establish a “traditional” transmission solution cost benchmark and then offer to pay that amount to supplier of alternatives meeting CAISO requirements.

In some cases, this payment might meet or exceed the cost of the alternatives, and suppliers of those alternatives would effectively get complete cost coverage (or perhaps better) through the TAC. In other cases, the payment might not cover the whole cost of the alternative, and those suppliers must try and recover the remaining cost through the market.

Potential suppliers would compete based on the ability of their solutions to meet the CAISO’s need. Since the payment would be the same regardless of which solution is selected, the CAISO need not use cost as a selection criterion.

Under this model, ratepayers would never pay more than the transmission alternative solution is worth, and the cost of the solution would be the responsibility of the supplier and not a concern of the CAISO.

Market participation by SATAs with full TAC recovery: EDF-R sees no reason why CAISO should compel SATAs with 100% TAC cost recovery to participate in the market, especially if the CAISO is not willing to cover net market losses as well as market profits. Transmission solutions that SATAs replace would certainly not have any market participation element.

Moreover, forcing such participation would seem to be beyond FERC’s directives as well as the CAISO’s stated scope to explore how SATAs could also “provide market services,” not how they must do so.

If the CAISO wants to incent SATA participation in CAISO markets, it should adopt the believes that SATAs should participate in the Allowing such resources to keep a portion of those revenues, as CalWEA suggested, would be one way to incent such participation. This profit sharing should not be construed as double cost recovery, because the resource would be providing an additional service, which would only clear the market when it is economic.

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:

EDF-R has no comment on this issue at this time.

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:

EDF-R believes that the general framework outlined by the CAISO would meet these requirements, as would the alternatives and refinements supported by EDF-R in these comments.

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:

Stakeholders had questions about these matters at the meeting, but that does not mean that these “scenarios” indicated “concerns” about such configurations. As noted above, for example, EDF-R believes that the CAISO should allow co-location and/or sharing of facilities between SATAs and other resources, like different transmission resources share assets. Potential conflicts that could jeopardize SATA availability to the CAISO can be addressed through contractual safeguards that give SATAs priority access to shared facilities when the CAISO needs the asset as transmission.

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:

[EDF-R has no comments on this issue 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:

[\[Insert comments here\]](#)