

Storage as a Transmission Asset

Stakeholder Comment Template

Submitted by	Company	Date Submitted
Scott Flake, Northern California Director and NWA Pumped Storage committee chair saflake@outlook.com (916) 719-7520	Northwest Hydroelectric Association (NWA)	September 4, 2018

Please use this template to provide your comments on the Storage as a Transmission Asset revised straw proposal that was posted on August 15, 2018.



Submit comments to InitiativeComments@CAISO.com

Comments are due September 4, 2018 by 5:00pm

The revised straw proposal, posted on August 15, 2018, as well as the presentation discussed during the August 21, 2018 stakeholder web conference, may be found on the [Storage as a Transmission Asset](#) webpage.

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

The Northwest Hydroelectric Association (NWA) appreciates the opportunity to provide comments to the California ISO (CAISO) on the latest straw proposal for the Storage as a Transmission Asset proceeding. NWA is dedicated to the promotion of the region's waterpower as a clean, efficient energy resource while protecting the fisheries and environmental quality which characterize our Northwest region, including Northern California and Western Canada. With over 130 members, NWA's membership represents all segments of the hydropower industry – public and private utilities;

independent developers and energy producers; manufacturers and distributors; local, state and regional governments, including water and irrigation districts; consultants; and contractors.

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) and Transmission Control Area (TCA) agreements. Additionally, the ISO has indicated its preference to control SATAs when they operate as transmission assets. Please provide comments on this proposal.

Comments:

NWHA believes that any new SATA contract should, first and foremost, fulfill the intent of the Transmission Planning Process (TPP) to ensure reliability of the transmission system. During the meeting held on August 21, 2018 some discussion was held around the idea of tailoring the term of these agreements to fit with different technologies. The concern was that some technologies may not last long enough to fulfill the longer terms often needed to satisfy the requirements of a traditional transmission asset. NWHA does not support this approach and suggests the term of the agreement should be based on the transmission needs rather than the “type of asset” involved in meeting those needs. Furthermore, NWHA recommends that all costs associated with meeting the needs of the transmission service be taken into account and included in the TPP economic evaluation process and ultimately included in the new SATA contract. Issuing a SATA contract that is shorter in duration than envisioned for transmission services simply due to technology limitations, for example, should not be part of the contracting process due to the additional costs that ratepayers will incur for additional bidding, evaluation and interconnection costs.

With regard to asset control/operation, NWHA also suggests that CASIO should direct the operation of the SATA asset when it is functioning as a transmission asset. NWHA does not have a preferred methodology for how this is implemented, through direct control of the asset or direction to the operator of the asset by CAISO.

Transmission Revenue Requirement Capital Credit

The ISO has proposed a TRR capital credit to reduce a SATA resource’s capital cost recovery. The objective of this credit is (1) to protect ratepayers from early degradation of SATA resources operational capabilities due to dispatches from ISO market participation and potential for reduced useful lifespan for a SATA resource’s ability to meet the identified transmission need(s), and, (2) to ensure the SATA resource owner considers all marginal costs when bidding into the market. Please provide comments on the ISO’s proposal and any potential alternative the ISO could consider to achieve the same objectives.

Comments:

NWHA believes that, due to necessary upfront simplification of the impacts due to cycling operation on various technologies, the proposed TRR credit will not be an accurate measure of the marginal costs it attempts to represent. All assets can suffer from variable output resulting from cycling operations. NWHA believes that simplifying these estimated costs into a TRR upfront would not truly recognize the actual cost of cycling and also provide an opportunity for potential manipulation by project proponents. NWHA suggests that the total cost of the proposed SATA project should be recognized during the evaluation of the proposed asset and all costs both fixed and variable of the asset should be reflected in the SATA agreement as discussed above. These total costs of the SATA project should be using these costs as their marginal bid when bidding into the market. Market monitoring processes should be able to detect when this does not occur.

When developing the total cost of the SATA asset, all costs to provide the transmission service should be included, including any maintenance or replacement cost required to provide full transmission service throughout the life of the agreement and need for the asset. If the SATA project includes the full cost recovery in its bid, including the rate of return, then there should not be any cross subsidization of the asset in the market. Ratepayers will be protected by the provisions of the SATA contract for any degradation of the asset through ongoing required performance standards, maintenance and replacement as needed to ensure performance of the SATA in accordance with the agreement.

Market Participation

The ISO provided two additional options it is currently considering to notify SATA resources when they would be permitted to provide market services and access market revenues: Day-ahead market option and D+2 Option. Please provide comments on these options, including any preference or alternative options.

Comments:

NWHA recommends the Day Ahead Market plus 2 (DAM+2) option. This option provides the best opportunity for the SATA asset to fully participate as a transmission asset as required by CAISO and also provides market opportunities to allow reduced costs to ratepayers. DAM+2 provides SATA owners and operators the best opportunity to participate in markets when the project is most likely not needed by CASIO as a transmission asset protecting all parties. In the straw proposal CAISO states that there is greater uncertainty with this option than the DAM option. During the meeting on August 21 no data was provided to show just how much uncertainty is anticipated with the DAM+2 option over the DAM option. NWHA requests that CAISO run simulations to better quantify what the level of uncertainty might be for the two options provided.

Cost Recovery Mechanism

The ISO has proposed three 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
3. Full cost-of-service based cost recovery with partial market revenue sharing between owner and ratepayer

Please provide comments on these three options and any other options the ISO has not identified. Please provide specific comments on (a) if the ISO should maintain option 2, above, and (b) why, if any, specific market profit threshold must be reached before the SATA resource would be permitted to retain some portion of profits and how such threshold should be determined.

Comments:

NWHA supports Option 3 with full cost of service recovery and market revenue sharing between the owner and ratepayer. NWHA believes that this option provides the best opportunity to both, providing a valuable transmission asset at reasonable cost of service and reducing costs to ratepayers by maximizing the revenue of the project through market options when the asset is not needed as a transmission asset. Revenues generated from market operations should first be shared with ratepayers, consistent with the economic evaluation that was used to support the SATA asset in the TPP process. Market revenues in excess of what was assumed in the TPP evaluation process should benefit the project owners. This approach provides the economic benefit that was promised to the ratepayers and also incentivizes the project owners to enter into the market for the potential of additional market revenues. Market contribution to ratepayers can be calculated on a monthly or annual basis so that owners may see benefit from market operations after ratepayers have been compensated as an incentive to participate in market operations.

NWHA notes that Option 1 may be appropriate for some project developers with limited desire to enter into market operations. It can also serve as a backstop for CAISO review of projects that propose market operations during their review process. NWHA does not believe that Option 1 will provide an incentive to participate in market operations and could result in a costlier asset without market revenues. This option should, however, be retained as an option for SATA projects.

The partial revenue recovery aspect of Option 2 would not likely be adequate for financing an asset, nor would it provide revenue certainty for utilities or LSE's for cost of service rate recovery. Additionally, because of the partial cost recovery aspect of Option 2, it could provide an incentive to engage in more risky market operations than Option 3 to make up for the reduced cost recovery. NWHA does not see the utility in continuing to keep Option 2 in the process going forward.

Options in the event of insufficient qualified project sponsors

The ISO has proposed potential options for addressing SATA projects when there is insufficient qualified project sponsors. Please provide comments on these options, including preferences and/or additional alternatives that should be considered.

Comments:

When there is not sufficient participation in a project, NWHA believes that Option 3 can continue to be an appropriate option so long as the ratepayers are provided market revenues equal to that which was

proposed on the TPP evaluation process. In the case of limited participation, it may also be appropriate to consider a full cost of service recovery option as an alternative in the case that the proposed market operation is not credible or deemed too risky.

Consistent with FERC Policy Statement

The ISO believes the revised 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:

NWHA agrees with CAISO that the draft SATA straw proposal is consistent with previous FERC Policy Statements.

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:

NWHA believes that more discussion on how CAISO might procure and operate a SATA project is needed. On several occasions, comments have been made to the effect that CAISO staff believe that SATA projects are most useful in a local setting rather than on a larger grid scale or network setting. NWHA does not support this conclusion. Additionally, many comments have been made regarding the need for generation during discharge operation, indicating that the charging operation may not be useful or provide benefit to the transmission system. For example, in every month of 2018, renewable resources have been issued exceptional curtailment orders due to stress on the transmission grid, as reported in CAISO's monthly renewables' performance reports¹. These exceptional dispatch orders for renewable generation occur for both local and network levels of grid operations and appear to be growing in magnitude and duration each year. SATA assets can provide valuable grid reliability services as a transmission asset in relieving these stresses without resulting in curtailment or export. NWHA believes that additional study in this area needs to be performed prior to developing a final SATA policy. It may prove premature to develop a policy when the full scope of the benefit is not or may not be known. Different energy storage projects of various technologies operate on the grid today and have very different operating characters and are also utilized in very different ways. These differing operational characteristics will likely have a material impact on the nature of a final SATA policy and should be studied as part of this process.

¹ <http://www.caiso.com/market/Pages/ReportsBulletins/RenewablesReporting.aspx>