Storage as a Transmission Asset

Stakeholder Comment 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 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

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:

SDG&E comment:

As indicated by its earlier comments in this initiative (SDG&E comments dated April 24, 2018 and June 8, 2018), SDG&E supports the proposal. SDG&E agrees that the CAISO must control the operation of SATA during reliability periods.

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:

SDG&E comment:

SDG&E does not support the CAISO proposal to "reduce a SATA resource's capital cost recovery" ("TRR crediting mechanism") in an effort to "protect ratepayers from early degradation of SATA resources." SDG&E believes it is inappropriate for the CAISO to impose its own $/MWh determination of storage degradation costs. The determination of storage degradation, and the costs that the SATA owner will incur to maintain the facility for the life of the SATA contract, should be left to prospective SATA owners to estimate for competitive purposes and to manage on an ongoing basis. SATA owners are in the best position to understand the degradation process of their resources, and the costs of managing this degradation, such that the SATA owners can satisfy their contractual obligations during reliability periods for the full term of the contract. The CAISO's proposed "TRR credit" is an unwarranted intrusion by the CAISO in market activities. In this sense the CAISO's proposed "TRR credit" compromises the CAISO's independence.

SDG&E understands the importance of ensuring that SATA owners do not run their devices into the ground in an effort to maximize the difference between market revenues and market costs during market periods. However, this concern should be dealt with up-front in the SATA contract. Performance guarantees, non-performance penalties and the possibility of complete removal from transmission rate base, should provide the necessary incentives for adequate performance during reliability periods across the entire contract term. FERC would likely take a very dim view of any SATA owner that failed to maintain its facilities in a condition required to provide transmission reliability services for the term of the contract.

Finally, SDG&E notes that there is nothing particularly new about facility degradation and its management thereof. For example, thermal resources may be heavily cycled as a result of market activity and nevertheless maintain their availability for Resource Adequacy purposes. The owners of such resources understand the wear and tear that comes with such cycling, reflect these costs in their market offers, and manage the associated maintenance so as to avoid Resource Adequacy unavailability penalties. SDG&E believes SATA owners will be equally qualified to manage their reliability obligations.

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:

SDG&E comment:

SDG&E prefers the D+2 Option as this option will likely maximize the opportunities for market participation; i.e., the D+2 Option allows participation in the next day-ahead market assuming the SATA does not clear in the D+2 RUC run, while the D+1 option does not allow participation in the day-ahead market under any condition.

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:

SDG&E comment:

SDG&E continues to support alternative cost recovery mechanism #3 (without the "TRR crediting mechanism") as this mechanism is consistent with FERC cost recovery principles for transmission assets, provides SATA owners with an incentive for active market participation during market periods, and will help to keep consumer costs low.

In terms of the market profit threshold above which profits would be shared between transmission customers and SATA owners, SDG&E continues to believe the proposal offered by GridBright has merit. As SDG&E understands the basic proposal, the net market revenues (market revenues – market costs) are shared above the level of CAISO-adopted forecast net market revenues. In the event the CAISO elects not to adopt a forecast of net market revenues -- i.e., the CAISO-adopted forecast of net market revenues is zero -- the sharing would apply to all net market revenues.

After further consideration, SDG&E is also open to the possibility of a symmetrical sharing of net market revenues and net market losses. A symmetrical sharing mechanism may be seen as balancing risk and reward.

As explained in SDG&E's June 8, 2018 comments, alternative cost recovery mechanism #2 should be removed. Alternative cost recovery mechanism #2 creates incentives for overly-risky bidding in the CAISO's competitive process for transmission needs above 200 kV. Alternative cost recovery mechanism #3 allows for competition, but on more controlled and stable basis.

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:

SDG&E comment:

Alternative cost recovery mechanism #2 should be removed as an option., Removing cost recovery mechanism #2 renders CAISO's concern with "a project sponsor…submitting bids…for 99.99% of total cost to be recovered through cost-of-service and the ability to keep 100 percent of all market revenues"[1] *moot.*

Under alternative cost recovery mechanism #3, it is not apparent that a limited number of qualified project sponsors would result in a non-competitive outcome. If there are a limited number of offers and the CAISO determines that none of the offers are preferable to the transmission solution, then the transmission solution moves forward. Even if only one offer is superior to the transmission solution, transmission customers will benefit so it is not obvious that there is an issue that needs to be addressed.

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:

SDG&E comment:

AS noted in SDG&E's June 8, 2018 comments, SDG&E believes the revised straw proposal is consistent with the FERC Policy Statement.

SDG&E does urge the CAISO to consider publicly posting, as soon as determined, specific transmission reliability periods. All market participants can then act on this information. This eliminates the ability of a SATA owner controlling other resources to take advantage of information known only to the SATA owner.

Other

Please provide any comments not addressed above, including any comments on process or scope of the Storage as a Transmission Asset initiative, here.

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[1] *"Storage as a Transmission Asset*: Enabling storage assets providing cost-of-service-based transmission service to access market revenues*, Revised Straw Proposal," dated August 15, 2018, Page 24.*

Comments:

SDG&E comment:

As noted in SDG&E's earlier comments, SATA raises questions of applicability to other technologies. In SDG&E's view there is nothing unique about a storage device cost-effectively deferring or avoiding the need for a conventional transmission asset. Other types of generating resources likely could provide the same service. The CAISO should consider whether it would be appropriate to approach the FERC with a technology-agnostic approach.

The CAISO's August 15, 2018 Revised Straw Proposal *seeks "stakeholder comments about how to balance the burden of the planning study needed for the TPP with the difficulty of projecting cost out three to four project cycles."*[2] *SDG&E questions whether the CAISO's proposal to require a SATA owner to commit to a forty year contractual commitment is practical. Such an approach requires the CAISO to make very long term assumptions about technology replacement and costs; i.e., for years 10, 20 and 30. This makes it difficult to determine with reasonable certainty whether, over a forty year period, the SATA will be cost-effective compared to the conventional transmission solution.*

SDG&E believes it is more sensible to establish a ten-year contract commitment and value the SATA based on a ten-year deferral of the transmission solution. This approach avoids the need for highly uncertain technology assumptions. Instead the CAISO need only adopt assumptions as to how much the cost of the conventional transmission solution will increase over the ten year period.

SDG&E recognizes that this approach will require the CAISO to perform successive TPP analyses at some point prior to the end of each ten-year contract period. SDG&E believes concerns that a successive TPP analysis would find the deferred transmission solution to be more cost-effective than a SATA solution, and that there would then be insufficient time to permit and build the transmission solution, are over-stated. If a SATA solution was found to be cost-effective (relative to the transmission solution) for the first ten-year contract period, a SATA solution would likely be even more cost-effective for the next ten-year contract period. SDG&E believes the costs of most storage technologies will decline more quickly over time than the costs of conventional transmission.

By performing successive TPP analyses prior to the end of each ten-year contract period and undertaking the corresponding competitive process to select the most cost-effective SATA option, developers will have the opportunity to submit competing offers to (i) refurbish/rebuild the then-existing SATA, or (ii) build entirely new SATAs with similar or completely different technologies. Additionally, this approach will allow the CAISO to determine whether the need for the transmission solution still exists at the end of each ten-year contract period. SDG&E recommends the CAISO reconsider its rejection of the ten-year transmission deferral approach for valuing SATA offers.

[2] *Page 14.*