Storage as a Transmission Asset Stakeholder Comment Template

| Submitted by | Company | Date Submitted |
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| Jan Strack | SDG&E | November 6, 2018 |

Please use this template to provide your comments on the Storage as a Transmission Asset second revised straw proposal that was posted on October 16, 2018.



Submit comments to lnitiativeComments@CAISO.com

Comments are due November 6, 2018 by 5:00pm

The second revised straw proposal, posted on October 16, 2018, as well as the presentation discussed during the October 23, 2018 stakeholder meeting, may be found on the <u>Storage as a Transmission Asset</u> webpage.

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

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

Additionally, the ISO envisions two potential scenarios for option 1: Direct assigned SATA projects and 2) when the project sponsor bids into TPP phase 3 competitive solicitation process, selecting this option. The ISO has proposed the rules governing SATA bidding and cost recovery eligibility would differ slightly

between these two scenarios. Please provide comments on these three options, including the two scenarios under option 1 and any other options the ISO has not identified.

Comments:

SDG&E continues to support Options 1 and 3 for the reasons cited in our previous two sets of comments.

In the case of "direct assignment" (projects operated at under 200 kV or built within existing utility rights-of-way), the CAISO worries that a utility could select Option 2 (retaining 100% of market profits for shareholders) without being subject to any competitive process that would discipline the amount of capital recovery discount that the utility might specify. For this reason, the CAISO proposes to require all direct assignment SATA to utilize Option 1. SDG&E anticipates that under Option 1, a direct assignment SATA's market participation would be subject to standard FERC prudency review.

As an initial matter, SDG&E reiterates its opposition to Option 2 and continues to believe this option should be eliminated. As described in SDG&E's earlier comments, Option 2 creates the risky incentive to submit low cost offers in the competitive solicitation process with unrealistic expectations of market profits. If market profits fail to materialize, the SATA could fail, a bad outcome for a resource critical to transmission reliability. If Option 2 is eliminated, then the CAISO's concern regarding direct assignment SATA, is moot.

Additionally, SDG&E does not understand why a direct assignment SATA should be ineligible for Option 3. Option 3 is intended to give SATA owners a financial incentive to be active in the market during non-reliability periods. This incentive should apply regardless of whether the SATA is a direct assignment or the product of a competitive solicitation process; i.e., the owner of the project – utility or non-utility – is not relevant to the importance of active market participation. Such participation is a benefit to consumers. SDG&E anticipates that under Option 3, a direct assignment SATA's market participation would be more likely to satisfy any FERC prudency review since, compared to Option 1, consumer benefits should be greater.

Recognizing that Option 1 provides less incentive for active market participation, the CAISO is considering imposing a Must Offer Obligation (MOO) on direct assignment SATA for market participation periods. The MOO would "set[] the discharge price at the energy price cap or at the 95 percent level at a given location." Further, the CAISO is considering whether "a MOO for charging is needed" during market participation periods. According to the CAISO, the discharge MOO "ensures the resource is not suppressing market prices and ensures the ISO remains independent." (page 21)

SDG&E does not believe there is a need for a MOO. SDG&E anticipates that under Option 1, utilities' market participation will be subject to standard FERC prudency review. The need to demonstrate prudent market participation should be sufficient to ensure utilities do not sit on their hands during market participation periods. Moreover, the MOO is used by the CAISO when resource performance is critical for grid reliability, such as providing Resource Adequacy (RA) capacity. SATA is not eligible to provide RA capacity. Instead, the CAISO should follow its established policy -- "reliability through markets" -- and allow the SATA owner to submit bids/offers during market periods which the SATA owner believes will satisfy prudency review standards and produce market profits for the benefit of consumers.

Finally, In the event the CAISO does decide a MOO is necessary during market periods for direct assignment SATA participating under Option 1, SDG&E believes more thought is needed in setting any required discharge price. If the discharge price is set at or near the "the energy price cap," it would appear that the SATA would almost always discharge any available energy since the applicable Locational Marginal Prices (LMPs) is almost always below "the energy price cap." This would be neither profitable nor efficient. There will be many market periods, for example when LMPs are relatively flat, when idling is the economically efficient decision.

SDG&E believes the CAISO already has experience with energy storage devices subject to MOOs, for example storage that provides RA capacity. Any MOO applied during market periods to direct assignment SATA participating under Option 1, should be no more restrictive than what is applied to storage providing RA capacity.

Options in the event of insufficient qualified project sponsors

The ISO proposal would require all SATA projects sponsors to also submit a full cost-of-service bid as described in option 1, above. This bid would to be used in instances when there is fewer than three qualified project sponsors.

Please state your organization's position as described in the Second Revised Straw Proposal (support, support with caveats or oppose). If you support with caveat or oppose, please further explain your position and include examples.

Comments:

While SDG&E agrees that multiple SATA offers should provide the best outcome for consumers (because competitive forces tend to drive offered costs down), a single SATA offer could still provide consumer benefit compared to the alternative of building a conventional transmission solution. The availability of a conventional transmission solution provides consumer protection. In the event of a single SATA offer -- undisciplined by competitive forces -- the CAISO can make the rational decision as to whether the single SATA offer or the conventional transmission solution provides the greatest overall benefit for consumers. In effect, the conventional transmission solution provides a cost cap on what consumers will pay for transmission reliability. Accordingly, SDG&E is not convinced that it is possible to have an "insufficient" number of qualified project sponsors.

Contractual Arrangement

The ISO proposes to establish defined three contract durations: 10, 20, and 40 years. Additionally, the ISO has eliminated its previously proposed TRR capital credit in favor of contractual requirements for maintenance of the resources.

Please provide comments on these two modifications to the ISO's proposal, stating your organization's position as described in the Second Revised Straw Proposal (support, support with caveats or oppose). If you support with caveat or oppose, please further explain your position and include examples.

Comments:

SDG&E supports the CAISO's decision to offer contracts with 10, 20 and 40 year durations. This reduces issues around project degradation and on-going project maintenance requirements. It should also make the competitive SATA selection process easier to administer since all entities submitting offers will be subject to standard contract lengths.

As indicated in SDG&E's September 5, 2018 comments, the "TRR capital credit" mechanism is an unwarranted intrusion by the CAISO in market activities. This intrusion could compromise CAISO's independence from the market. SDG&E supports the CAISO's decision to eliminate the TRR capital credit mechanism and replace it with performance guarantees and penalties, including possible full removal from CAISO TAC cost recovery. These contractual provisions should be adequate incentive for SATA owners to keep their property available for all contract-term reliability event periods.

With respect to performance guarantees, SDG&E suggests the CAISO consider whether it would be appropriate to back-load contract payments such that the SATA owner would receive a larger share of contract payments in the

later years of the contract and smaller share in the early years. The payments would be structured such that the present value over the term of the contract would be equal to the SATA owner's offered cost in the competitive process. By back-loading the payment stream, the SATA owner has a strong incentive to maintain its facility through the entire term of the agreement.

SDG&E does have concerns with the CAISO's proposal to include in the contract "amendment rights" related to "life cycle replacements," "capital additions," "unplanned capital items," and "repairs." This appears to create the opportunity for entities to low-ball their offers in the competitive process with the expectation that, subsequent to being selected and after some period of operation, they will be able to secure additional project funding. Such results could invalidate the original selection in the competitive process; i.e., had the CAISO known the entity would be seeking additional funding after some period of operation, the CAISO might have selected a different offer.

SDG&E believes the CAISO needs to address this concern prior to developing contract language.

Market Participation

The ISO has proposed that a SATA resource will be provided notification regarding its ability to participate in the market prior to real-time market runs, but after the day-ahead market closes. The ISO will conduct a Load based SATA notification test to determine a SATA resource's eligibility to participate in the real-time market.

Please state your organization's position as described in the Second Revised Straw Proposal (support, support with caveats or oppose), including any alternative proposals. If you support with caveat or oppose, please further explain your position and include examples (please note that any alternative proposals should be specific and detailed).

Comments:

Given that transmission reliability trumps market participation for SATA, SDG&E understands the CAISO's proposal to notify SATA owners of transmission reliability periods after the day-ahead market closes. SDG&E notes, however, that this approach may significantly limit potential market profits. The vast majority of economic transactions take place in the day-ahead markets. The real-time markets are limited to resolving imbalances, which are usually a small fraction of the volumes traded day-ahead. For example, ancillary services arranged by the CAISO in the day-ahead market will often be sufficient to cover small real-time imbalances. In this case, if released by the CAISO for real-time market participation, SATA will not have an opportunity to provide any ancillary service capacity.

SDG&E believes there may be circumstances where the CAISO will determine that, for extended time periods during a year, transmission reliability will not require that the SATA be reserved for transmission reliability services. For example, there may be months of the year where the level of loads in the CAISO are simply too low to create any N-1-1 reliability risks given known resource availabilities and contractual commitments. While the CAISO may not be able to determine these periods prior to when offers are due in a competitive selection process, SDG&E sees no reason to preclude their determination during the term of a SATA contract. Entities can submit offers in the competitive process using their own assumptions as to whether, and how often, such extended market periods may exist.

¹ SDG&E notes that even during declared market periods, the CAISO will have the ability to recall the SATA for transmission reliability purposes. The CAISO's proposed contractual provisions specify under the "Market participation obligation/restriction" provision type (Section 9.1, Appendix) that "the CAISO will also retain right to pull SATA resource out of market participation if needed for reliability."

Finally, SDG&E questions the CAISO logic that in declaring a 24 hour transmission reliability day, the "SATA resource(s) would need to be fully charged starting at 12AM of the delivery day." Unless the transmission reliability need actually begins at 12AM, SDG&E does not understand the need for the SATA to be fully charged at 12AM. As suggested by Figure 5, the critical time periods may only include the highest load hours of the day. This allows time in the early morning hours to charge the SATA in order to be prepared for the highest load hours of the day. SDG&E believes that by declaring a full 24 hour period as a transmission reliability period, the CAISO will have usually provided ample time within which it can ensure that the SATA is sufficiently charged to meet the identified need.

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 state your organization's position as described in the Second Revised Straw Proposal (support, support with caveats or oppose). If you support with caveat or oppose, please further explain your position and include examples. If you oppose, please clarify why and how the ISO might address this issue.

Comments:

As indicated in its previous comments, SDG&E finds the CAISO's SATA proposal to be generally consistent with the FERC Policy Statement. As noted above, eliminating the "TRR capital credit" mechanism helps to maintain CAISO independence from its markets.

Draft final proposal meeting or phone call

The stakeholder meeting for the second revised straw lasted approximately 2.5 hours. As a result, the ISO requests stakeholder feedback regarding whether an in-person meeting is necessary for draft final proposal or if a stakeholder phone call will allow the ISO to adequately address the remaining issues in the draft final proposal.

Please state your organization's position as described in the Second Revised Straw Proposal (support, support with caveats or oppose). If you support with caveat or oppose, please further explain your position and include examples.

Comments:

SDG&E believes the CAISO's latest proposal raises several concerns that require further thought and discussion. SDG&E suggests that the CAISO review all stakeholders' comments prior to deciding whether the issues raised can be satisfactorily addressed through a stakeholder phone call or whether another in-person meeting is warranted.

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:

Definitionally, SDG&E finds the CAISO's description of "Net positive market revenues from CAISO" to be somewhat unclear. The definition refers to "revenues received by the resource owner for any market based services provide to the ISO." Importantly, owners of SATA will make payments to the CAISO for market based services. For example, during a market period, a SATA owner may make purchases from the CAISO market in order to charge the storage device. The associated payments to the CAISO need to be accounted for in calculating "Net positive market revenues from CAISO."