Storage as a Transmission Asset

Stakeholder Comment Template

Submitted by	**Company**	**Date Submitted**
Jan Strack	SDG&E	July 16, 2019

Please use this template to provide your comments on the Storage as a Transmission Asset stakeholder working group meeting that was held on June 29, 2018.

Submit comments to InitiativeComments@CAISO.com

Comments are due July 16, 2018 by 5:00pm

The working group meeting, hosted on June 29, 2018, as well as the presentation materials discussed during the 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.

Informational discussion

Based on stakeholder comments to the straw proposal, the ISO provided additional information regarding how SATA resources will be considered in the ISO's Transmission Planning Process (TPP). The ISO's working group presentation built on the materials covered through the straw proposal and focused on:

1. Assessments of need and technical requirements
2. Economic evaluation of project alternatives
3. Transmission Asset versus Market Local Resource considerations
4. ISO Operational control of storage assets

Are there additional questions regarding the materials that the ISO provided during the working group process or questions specifically relating to how the ISO will consider SATA resources in the TPP that the ISO has not yet discussed?

Comments:

SDG&E Comment:

SDG&E has no additional questions at this time but asks that the CAISO consider the advantages and disadvantages of publishing, in advance, the bid/offer prices that a SATA owner would be required to use when directed by the CAISO to charge/discharge during reliability periods. (See SDG&E's comments on the "Cost Recovery Mechanism" below.)

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, among others. At the working group meeting, the ISO provided additional details about this proposed new agreement. Please provide comments on this proposal.

Comments:

SDG&E Comment:

SDG&E supports the development of a new agreement but notes that there should be explicit provisions governing the procedures to be used to ensure reliable interconnection of the SATA. As SDG&E indicated in its earlier comments, if the SATA will be limited to transmission reliability services only, then the new agreement should cover the procedures necessary for reliable interconnection to the existing grid.

However, if the SATA will be participating in the market for any time period and for any amount of output, then it should be required to go through the standard generator interconnection process to identify any upgrades necessary for reliable interconnection and subsequently enter into a Generation Interconnection Agreement with the CAISO and the host utility. This ensures the SATA is being treated comparably with other interconnecting generators intending to participate in CAISO markets.

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

At the working group meeting, CRI and SDG&E provided additional ideas for cost recovery. Through the discussion, a third option was proposed: Full cost-of-service with partial cost recovery. This option would mitigate risks associated with option 2 and provide incentives that do not exist under option 1. Please provide comments on the proposal and/or comments provided by CRI and SDG&E along with this third option. In comments, please provide a description of how they compare and contrast to the ISO's first two options, specifically as it pertains the direction provided in the FERC policy statement.

Comments:

SDG&E Comment:

It is SDG&E's understanding that the "third option" proposed through the discussion at the June 29, 2018 stakeholder meeting (and supported by SDG&E and SCE) was "full cost-of-service with partial energy market crediting." The only market revenues that would not be credited against transmission revenue requirements would be market revenues which exceed some threshold level. One suggestion was that *this threshold be set by the CAISO. For example, in its Transmission Planning Process (TPP) the CAISO could project annual revenues earned, and costs incurred, by a SATA during market periods. The projected net revenues would then be the revenues earned minus the costs incurred. If, during market periods, the SATA's actual net revenues exceeded the CAISO's projection of net revenues, the SATA owner would retain 50% of the difference; the remaining net revenues would be credited against transmission revenue requirements.*

As an example, assume the transmission revenue requirement for a SATA was $1000. Assume the CAISO projects the SATA will earn $100 in revenues during market periods and pay $80 in costs during market periods. Projected net revenues would then be $20. If, during market periods, the SATA's actual net revenues are $30, then the SATA owner would retain $5 [50% x ($30 - $20)] and credit $25 against the transmission revenue requirement of $1000. The resulting net transmission revenue requirement to be recovered from customers would be $975 ($1000 - $25).

If, during market periods, the SATA's actual net revenues are less than what the CAISO projected, for example $15, then all $15 would be credited against the transmission revenue requirement of $1000. The resulting net transmission revenue requirement to be recovered from customers would be $985 ($1000 - $15).

This "third option" provides an incentive for the SATA owner to operate as efficiently as possible during market periods. This addresses the primary concern with the CAISO's proposed first option ("Full cost-of-service based cost recovery with energy market crediting"); namely, that if all revenues earned, and all costs incurred, by a SATA during market periods are credited against, and charged to, the transmission revenue requirement, the SATA owner may be inclined to limit its market activity to the minimum necessary to avoid a possible FERC prudency investigation.

SDG&E does not support the second option ("Partial cost-of-service based cost recovery with no energy market crediting") and recommends that the CAISO remove this option from further consideration. SDG&E agrees with PG&E that the second option raises concerns about the long-term efficacy of SATA. The second option creates strong incentives for a prospective SATA owner to be aggressive in estimating the amount of net market revenues the prospective SATA owner will earn. Such aggressive estimates could tempt the prospective SATA owner to submit an overly-optimistic offer to the CAISO for the amount of cost-of-service based cost recovery the prospective SATA owner would accept if selected in the CAISO's competitive process. If actual net market revenues turn out to be less than estimated, the SATA owner could be in financial jeopardy and fail to maintain the SATA in a condition necessary to support its reliability function during time periods when the CAISO calls on the resource to provide transmission services.

Additionally, SDG&E is concerned that for purposes of conducting competitive solicitations, the CAISO will be constrained in its ability to definitively identify market periods. This could add a significant degree of uncertainty to the offers from prospective SATA owners that participate under the second option. While contractual provisions providing for compensation adjustments in the event of future changes to market periods could address such uncertainties, such after-the-fact adjustments call into question the results of the competitive process.

If the second option is available, SDG&E believes it will be challenging for the CAISO to effectively factor the implications of the above-discussed possibilities and uncertainties into its competitive process. If only the first option is available, then the CAISO will be able to conduct its competitive solicitation with *comfort that all prospective SATA owners will be receiving full cost-of-service based cost recovery; i.e., the risk of financial failure should be lower.*

SDG&E acknowledges that even full cost-of-service based cost recovery option is not risk-free. In an effort to win a competitive solicitation, prospective SATA owners may choose to offer cost containment provisions which could compromise the SATA owner's ability to recover all of its costs. SDG&E believes, however, that if all prospective owners are competing under a full cost-of-service based cost recovery construct, offered cost containment provisions are less likely to pose significant default risks and the CAISO will find it easier to identify the offers that provide the best value for consumers and that do not pose an unacceptable reliability risk.

With respect to the FERC policy statement, SDG&E believes both options are consistent. FERC was clear that "providing services at both cost- and market-based rates is permissible." Further, by using the CAISO's Transmission Planning Process (TPP) to determine whether SATA is more economic than a conventional wires solution, the CAISO will honor FERC's principle that the storage asset is "cost competitive with transmission. Because reliability periods and market periods will be specifically differentiated by the CAISO, FERC's principle of avoiding "double recovery for providing the same service" is honored.

FERC indicated a principle that SATA "cannot suppress market bids." During defined market periods, SDG&E does not believe there is an issue with inappropriate price suppression. If the third option discussed above is implemented, a SATA owner will have an incentive to operate its storage device as efficiently as possible; i.e., it would lose market opportunities by offering excessively high discharge prices or bidding excessively low charge prices. It would lose profit opportunities by offering to discharge at excessively low prices or bidding to charge at excessively high charge prices.

During defined reliability periods, it is less clear whether the operation of SATA would be consistent with the principle that SATA "cannot suppress market bids." SDG&E notes that the CAISO already takes actions which effectively suppress market prices. For example, exceptional dispatch prior to the operation of the real-time market adds generation which necessarily depresses real-time market prices. The FERC has determined that such actions are just and reasonable. Concerns with unacceptable market impacts during reliability periods might be mitigated by (1) submitting bids to charge at the CAISO's offer ceiling and offers to discharge at the CAISO's bid floor, and (2) publishing the amounts of timing of such bids and offers sufficiently in advance of the market run so as to allow other market participants to reflect such information in their own bids and offers.

Finally, as SDG&E's previous comments pointed out, the CAISO already takes actions which have impacts on the market yet do not "jeopardize ISO/RTO independence," another FERC principle for SATA. For example, the CAISO's substitution of its own forecast of CAISO Balancing Authority Area loads for that of the CAISO load serving entities, has direct and sometimes consequential impacts on market clearing prices. FERC has determined that such actions do not "jeopardize ISO/RTO independence." SDG&E believes that directions by the CAISO to SATA owners to charge and/or discharge during reliability periods, will have less dramatic impacts on market results and would therefore not "jeopardize ISO/RTO independence." SDG&E believes further safeguards would occur if, as suggested above, the CAISO submits bids/offers at the CAISO's ceiling/floor prices and publishes this information in advance of market runs.

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:

SDG&E Comment:

There are three matters that SDG&E believes deserve additional attention.

- *The roll of the CPUC in reviewing the effectiveness of a SATA owner's actions during market periods.*
- *Whether the principles under which SATA is being considered, apply equally to other technologies that could replace or defer conventional transmission assets.*
- *Whether existing FERC accounting procedures will need to be modified or augmented to capture, and appropriately credit to transmission revenue requirements, the costs/revenues incurred/earned by SATA during the following two periods:*
    - *During periods when the CAISO calls on the SATA to perform transmission reliability services*
    - *During periods when the SATA is allowed to participate in the market*