Storage as a Transmission Asset

Stakeholder Comment Template

Submitted by	Company	Date Submitted
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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 <u>Storage as a Transmission Asset</u> 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.

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:

SCE views the "contractual arrangement" to be analogous to the TCA with additional provisions. SCE supports the development of a new hybrid contractual arrangement between the CAISO and SATA, with the adoption of relevant provisions from the TCA, PGA, PLA, and RMR. Among other main areas contemplated in the SATA agreement, and given the SATA project's primary function is to perform as a transmission asset, SCE agrees with the need to develop specific language regarding the maintenance (including reliability, CAISO, industry, and "good utility practice" standards), performance, and operations requirements of a SATA to ensure equal treatment with conventional transmission wires solutions. While recognizing storage resources have different performance and maintenance requirements from conventional transmission lines and facilities, and accommodating for such differences, the TCA provisions with respect to operational control, maintenance, outages, and return to service, at a minimum, for transmission facilities should be applicable to SATA resources.

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:

SCE agrees with the concept that there should be a TRR crediting mechanism to protect transmission ratepayers from early degradation of a SATA resource due to market participation dispatches, and to ensure that the SATA owner considers all marginal costs in submitting a market bid. However, SCE does not support the mechanism proposed by the CAISO in the Revised Straw Proposal and believes the proposal is more complex than necessary to address the underlying issue, and that a literal crediting of the transmission "capital cost" is not necessary to achieve the objectives. Rather, SCE believes that a "Wear and Tear" \$/MWh of discharge energy for market dispatches should be incorporated into the determination of a revenue credit to be applied to the SATA devices transmission revenue requirement. For example, suppose that a SATA device incurred "Wear and Tear" costs per dispatch cycle of \$100, and the device operation during the allowable market participation hours yielded revenues in excess of costs of \$1,000 for a cycle. SCE would propose to include the \$100 Wear and Tear cost in determining the sharing of revenues, so that the SATA device owner would keep 50% of \$900 (\$1,000 - \$100), or $\$450^{1}$. The remaining amount of \$550 would be included as a revenue credit to the SATA device's transmission revenue requirement. In order to preserve proper bid incentives, this revenue credit would have to be based on actual costs and revenues as well as the wear and tear per MWh cost, and so would have to be a formulaistic component of the revenue requirement determination. Under the Revised Straw Proposal Option #3 "Full cost-of-service based cost recovery with partial market revenue sharing between owner and ratepayer", this wear and tear cost per MWh would be incorporated in the determination of the revenue credit, so that the revenue credit reflected a sharing of net revenue reflecting both the charging costs of the device and this wear and tear cost.

¹ SCE would expect transmission customers to receive the \$100 revenue credit per dispatch cycle irrespective of the gains/losses incurred by the SATA owner.

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:

SCE agrees that long-term assurances of market participation cannot be guaranteed. Although market participation notices may be helpful to the SATA owner, and should be provided on an indicative basis where practical², the CAISO cannot be bound by the market and should be able to call back the resource from the market for transmission purposes at any time. SCE supports providing a SATA project a potential window(s) of opportunity to participate in the market which is nearer its anticipated market performance date and provides improved clarity for the resource to actually participate in the energy markets. The proposed day-ahead market option and the two-day-ahead option, although still imprecise forecast move further in the direction of providing resources real-time opportunities for market participation. These two new options are much more realistic than the prior consideration of providing a forecast of such potential market opportunities years in advance. To potentially provide for greater opportunity for market participation, SCE prefers "D+2" option over the Day-Ahead-Market (DAM) option, as there would be a potential for participation in both the DAM and Real-Time markets, rather than only the Real-Time Market under the DAM option, recognizing the reliance on less accurate load forecast data. Finally, such market notifications should be made by the CAISO in a public manner (e.g. posted on OASIS). The CAISO will maintain its independence while SATA resources will fulfill their transmission services obligation prior to their participation in the energy markets, and public disclosure will help alleviate potential "standards of conduct" issues that might otherwise exist between a SATA transmission owner and its marketing organization.

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.

² For example, if the CAISO only expect the SATA will be needed as transmission during the summer months, it should communicate this expectation – on a nonbinding basis – to the SATA owner. This will allow the SATA owner to better plan for expected operations.

Comments:

SCE supports the adoption of Option 3^3 , full cost-of-service based cost recovery with sharing of market earnings (i.e. revenues net of costs) between owner and ratepayers as the preferred SATA cost recovery mechanism. Option 3 includes the element of Option 1 that provides for full cost-of-service based cost recovery, but proposes that any energy market crediting must provide incentives for the asset owner and ratepayers to benefit. The starting point for this option assumes the SATA owner will fully recover through cost-of-service based revenues its SATA costs, consistent with how PTOs currently recover their costs for conventional transmission assets. But such SATA assets provide services beyond those provided from traditional transmission and thus should be offered a mechanism to obtain additional earnings. Specifically, under Option 3 SATA resources perform traditional transmission service, but also provide a new "rate reduction service" that promises to provide additional customer benefits by lowering Transmission Access Charge (TAC) rates. Further, in SCE's construct the SATA owner would face the risk of market losses, including the requirement to pass through "cycling" wearand-tear credits to customers. These risks are unique to the SATA owner that participates in the markets and not faced by traditional transmission. Since SATA owners face these non-traditional risks, they should be compensated for assuming these risks. Option 3 provide a mechanism for such compensations. Option 3 also mitigates some of the financial uncertainties that exist in the partial cost of service (Option 2), which SCE recommends should be eliminated

CAISO should eliminate Option 2 as an unviable path forward for SATA resources. This option is materially outside of the current transmission rate paradigm because only a portion, not the entire, costs of transmission would be recovered through the TAC. It would be inappropriate to make such a transformative change to the existing transmission cost recovery simply to accommodate the potential for conditional market participation. Further, Option 2 is predicated on the ability to accurately forecast market participation opportunities in order for the SATA owner to forecast market revenues and its ability to recover the project costs. As the CAISO concedes, it is infeasible to accurately forecast the transmission requirements of the SATA resource and, thus, the market participation opportunities years in advance, for the life of the resource. Given the difficulty in predicting transmission system conditions and needs to determine when the SATA resource is not needed to provided transmission services (must serve its primary function as a transmission asset), it is infeasible to provide future windows of market opportunities with any meaningful degree of confidence months or years into the future. Beyond the difficulty of forecasting market participation opportunities, the possibility of a SATA owner choosing Option 2 as the cost recovery mechanism and selecting 99.9999% of the total cost to be recovered through cost-of-service and the ability to keep 100% of the market revenues would be a highly undesirable outcome and subject to gaming. (See related comments in the next section).

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.

³ Assuming Option 3 is available, SCE is still considering whether it would object to also having Option 1 available.

Comments:

SCE believes there is no need to revamp the CAISO's competitive transmission process in the event of insufficient qualified project sponsors. In fact, establishing an arbitrary minimum number of qualified project sponsors under certain scenarios appears to infringe on one of the issues identified by the CAISO as being beyond the scope of the current stakeholder initiative, "the framework for competitive solicitation and the applicability of the ISO's current competitive solicitation framework."⁴ Instead, the issue of "insufficient qualified project sponsors" highlights a significant deficiency (i.e. project owner largely recovering its SATA costs though TAC and keeping the vast majority of market earnings, with no real ratepayer benefits of the market participation) regarding Option 2, and why this option should be eliminated. Option 3 (full cost-of-service recovery with sharing of market earnings), on the other hand, addresses "gaming" concerns by ensuring that customers meaningfully share in the benefits of SATA market participation. For example, if market rents were shared 50-50 between customers and the SATA owner, this would mitigate concerns of the SATA owner's gaming the payment structure to capture excess rents without passing-on associated "rate reduction service" benefits to customers.

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:

SCE agrees the revised straw proposal is consistent with the FERC Policy Statement. First, by requiring SATA projects to bid at their true marginal cost, including the "wear and tear" costs of participating in the energy markets, the resource will not inappropriately suppress market prices. As for maintaining its independence, the CAISO's advance notices to SATA resources regarding when they may participate in the energy markets coupled with the requirement that the SATA owner be responsible for bidding the resource into the market, will achieve this objective. Finally, there will be no double recovery of costs since energy market revenues will only be earned when the CAISO does not expect the resource to be needed for transmission services (during which period it will earn cost-of-service revenues).

Under cost recovery Option 3, the SATA project is not double recovering its costs. Instead, the resource is providing a service that is not provided by conventional transmission, which is potentially a "rate reduction service" to customers. In this scenario, where market earnings are shared with ratepayers, there would be no double compensation to the SATA owner because costs to transmission ratepayers would decrease, not increase. In order to achieve the desirable outcome of benefits accruing to ratepayers from a SATA's market participation, the SATA owner has to assume risks of market losses, including providing a wear-and-tear credit to customers, and should be compensated for this risk-taking.

⁴ CAISO Storage as a Transmission Asset Revised Straw Proposal, p. 12.

<u>Other</u>

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

Comments:

No comment.