

Storage as a Transmission Asset

Stakeholder Comment

Submitted by	Company	Date Submitted
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CESA appreciates the opportunity to submit comments on the Storage as Transmission Asset (SATA) Initiative’s Revised Straw Proposal of the California Independent System Operator (CAISO) as well as on the presentation discussed during the August 21, 2018 stakeholder web conference.

The straw proposal includes many parts, many of which seem reasonable. Going forward, CESA requests the CAISO use the term ‘energy storage’ rather than ‘battery’ where applicable so as not to pre-judge any outcomes or constrain discussions inappropriately.

CESA provides detailed comments below but offers some general perspectives here. CESA appreciates the creativity and innovating thinking of the Revised Straw Proposal. CESA recommends the CAISO plan for an additional revised straw proposal as the current schedule is too constrained for working through some parts of the proposal.

One noteworthy piece of the proposal is the Transmission Revenue Requirement (TRR) adder, and CESA believes the goals underlying this concept could be addressed in different ways. The CAISO highlights two main drivers for the TRR adder: (1) that it avoids improper ‘over-usage’ while in the market of a resource that needs to endure through the length of its transmission contract; and (2) that this TRR bid component and VOM adder also address concerns about overly low bids or self-schedules in the energy market which are presumably traceable to the fact that the resource has an out-of-market revenue stream (*i.e.*, Transmission Access Charge). CESA believes these concerns are fair to address, but recommends they be addressed differently.

Regarding the first point, multiple reasons suggest the TRR adder is not needed. First, a contract will be in place to guarantee services. The degradation concerns may not always be applicable. Some energy storage solutions have little to no degradation. Other solutions to degradation also exist. Some energy storage systems also have warranty terms whereby degradation risks will be borne by the warranty holder. Finally, it may be impossible to accurately determine and ‘price’ the TRR to a degree where this approach is not worthwhile and could create unintended consequences, e.g. extreme underutilization. The TRR concept hinges on expectations of usage, yet the CAISO may not know what the expected usage in the markets will be, nor if the resource is or is not already designed for such usage. The CAISO would

thus be wrong and potentially discriminatory to layer additional participation barriers on one resource but not others. It may be difficult to do this fairly or in ways that don't disadvantage one transmission resource over another. All transmission resources utilize outages to conduct maintenance, ensuring operations across time, yet CESA does not know of any protocols for valuing or comparing transmission solutions based on expected maintenance frequency or duration. The TRR concept, by contrast, introduces a new and unique approach, which may be duplicative of periodic outage-based maintenance approaches. The level of scrutiny and angst over resource durability is also not reflected, as CESA understands it, in any other CAISO cost-of-service type operations. Consider that when the CAISO designates a resource for Capacity Procurement Mechanism (CPM), it uses formulas to reasonably support operations of the resource, but it does not 'know' if such operations are a fit for the actual bidding. If such CPM payments provide for *more robust* operations than the resource actually conducts in dispatch, does that mean ratepayers overpaid? Is a claw-back in order? CESA does not believe so, generally. Instead, this example highlights that the CAISO should never seek to overly specify the dispatch of resources in its planning-related efforts such as the TPP, and that planning processes should be broadly and contractually directed to ensure outcomes *writ large*. The TRR adder as a tool for managing a resource's lifecycle of operations is thus inappropriate and places undue burdens on this market participant and transmission resource.

Regarding the second point, CESA questions if the concerns about unreasonably low bidding in the CAISO market are truly an issue and thus if the 'capital-cost-based marginal bid adder' is needed. In theory, CESA understands the idea that a resource receiving full cost recovery through the TAC may have a (normal) aspiration to seek additional profits in markets when eligible, and that such a resource might accept a lower marginal (but not zero) benefit for such actions. In practice, however, there are several reasons why this concern is likely inapplicable. Due to the proposed SATA accounting provisions, incremental revenues received from markets will lead to reduced cost-of-service revenue requirement amounts, eliminating the payment benefits. The resource thus does not singularly benefit from market participation. More specifically, under SATA accounting Options 2 or 3, the resource benefits because it already has a less than 100% cost-of-service guaranteed recovery, so the cross-subsidization concern is less applicable. Under Option 1, the resource owner does not benefit at all, hence the concern the owner has no incentive to bid at all. Energy storage bids often involve energy spreads or capacity payments to offset the usage, energy costs, and efficiency losses of the resource. The resource thus has ample motive to participate with an eye towards recovering its marginal costs and risks. Owners with resources participating in the market are well situated to manage some of their costs through prudent usage and decision-making. These factors collectively guide the owner from participating in the market at artificially low prices. As the CAISO indicates, SATA resources will likely be market resources in highly competitive periods, and resource owners will not waste 'cycles' thoughtlessly.¹ These factors all also guarantee that market price effects will be limited. The fact that a newer and potentially cheaper resource is showing up in the market should not uniquely concern the CAISO in this context.

¹ Revised Straw Proposal, p. 17. Some energy storage resources do not have degradation concerns, so the concept of 'wasting cycles' can be immaterial in some case.

Finally, to the extent the CAISO is concerned that the actual transmission operation of the resource will affect market prices, CESA views this potential concern as improper. Transmission operations shall be independent. Any transmission operation, addition, or outage affects grid power flows and thus prices. These transmission effects are neither accounted for nor settled at the transmission resource level. They are collectively reflected in very normal congestion-based pricing, or as ‘unaccounted for energy’ (UFE). A SATA’s transmission operations should be no different. In some cases, some accounting could be made for energy *stored as transmission* that is later used for market purposes. In such an instance, which may be very rare, it may be prudent to explore accounting conventions by which the costs of the charging energy are borne by the market resource (if used). This way, ratepayers who paid for the transmission service in the form of charging energy to the SATA through UFE, are ‘held whole’.

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:

CESA continues to support the CAISO’s development of a new and separate agreement for SATA resources that incorporates the most relevant elements of other CAISO contracts and allows for flexibility to change the *pro forma* template as learns how best to procure and operate SATA resources.

Shorter-term versus Longer-term SATA Agreements

CESA would also like to respond to the CAISO’s request for stakeholder feedback on how to balance the burden of the planning study with the difficulty of projecting cost out three to four project cycles.² The CAISO found the shorter-term agreement (*e.g.*, 10-year agreement instead of 40-year agreement) proposed by Center for Renewables Integration (CRI) to be “unworkable” because the CAISO would have to choose another SATA resource for the same transmission overload. CESA is unclear on why the CAISO would have to study and procure solutions for the same transmission overload in the next study year, even as it has procured a 10-year SATA resource, and thus requests clarification if CESA is misunderstanding the Transmission Planning Process (TPP). As CESA understands it, the CAISO will have addressed the identified transmission overload for a 10-year period and will need to reassess renewal a couple years before Year 10 to determine whether renewal of the contract and/or replacement of the SATA storage module is needed. This means that four studies might be needed, rather than just one. If this incremental workload is countered by material savings, it could be prudent.

In addition to this clarification, CESA recommends that the CAISO reconsider completely ruling out shorter-term agreements as unworkable. There are challenges and significant levels of uncertainty in forecasting out replacement costs for battery storage technologies in Year 10, Year 20, and Year 30, with

² *Ibid*, p. 14.

the level of speculation increasing as anyone looks farther into the future. To make a 40-year agreement work for battery storage technologies that, say, have degradation factors, the CAISO would have to vet these replacement cost assumptions and/or bind SATA resource operators to competitively ‘bid’ in replacement costs as part of the total 40-year capital cost requirement of the SATA resource. While factoring in Year 0 bid in replacement costs into the 40-year capital cost requirement is one approach, an alternative approach may be to reassess transmission reliability needs every 10-20 years and determine whether renewal is needed and at what price. CESA understands that prudent replacement amounts should be assumed. Ratepayers may benefit from more accurate and up-to-date replacement costs as a result.

While CESA understands the CAISO’s desire for long-term solutions, CESA seeks further clarification on the CAISO’s reservation of reassessing transmission reliability needs more frequently, as the CAISO already appears to be doing this by reassessing whether already-approved transmission projects are still needed (even cancelling some transmission projects in recent TPP cycles) on a year-by-year basis. Just as the CAISO aims to ‘right-size’ the procurement of SATA resources in Year 0, there may be benefits to reassessing transmission reliability needs in Year 10 or Year 15 to right-size SATA solutions over a longer time period, especially as distributed energy resource (DER) and load forecasts have been identified as a challenge in grid planning efforts at the June 29, 2018 working group meeting.

In addition, while shorter-term 10+ year agreements should be re-considered, CESA also supports the CAISO’s consideration of longer-term 40-year agreements for SATA resources as well, especially as other energy storage technologies, such as flow batteries, sodium-sulfur batteries, pumped hydro storage, compressed air energy storage (CAES), liquid air energy storage (LAES), among others, may provide the 40-year lifespan that the CAISO is seeking without replacement requirements. CESA understands that there are challenges to an ‘apples-to-apples’ comparison of, for example, a 10-year agreement with three renewal options versus a single 40-year agreement, so we hope to work with the CAISO in the recurring TPP Initiative to develop a net present value (NPV) methodology to support these comparisons.

Merits and Feasibility of a *Pro Forma* SATA Agreement

CESA supports the CAISO’s response that standardization of terms and conditions through a *pro forma* SATA contract provides greater transparency and consistency in terms of the reliability obligations.³ The proposed notification options provide the type of flexibility for SATA resources to access market services while delivering on the contracted reliability services, which the CAISO found to generally be difficult to clearly predict defined market participation 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

³ *Ibid*, p. 14.

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:

CESA understands the CAISO's intent of the TRR capital credit and believes that the two aforementioned reasons are important objectives for SATA resources. However, CESA has several concerns with the TRR capital credit mechanism and instead recommends that the CAISO rely on the SATA agreement provisions to enforce the contracted time period in which the SATA resource must deliver on transmission reliability services. The SATA agreement could help ensure that SATA resources deliver on the full ten to forty-year term of the transmission reliability need, and that SATA resource owners bear the cost of any 'unplanned' replacement costs that could potentially result from participating in the market more than expected. If stipulated in the SATA agreement, this resource replenishment along with the related reduction of the revenue requirement in the TAC may generate greater benefits to the ratepayer (under Options 1 and 3). CESA believes that this mechanism is simpler and supports a more cost-effective SATA resource.

Understandably, this will require timely replacement actions for SATA resources. Traditional transmission infrastructure solutions have planned transmission outage procedures to allow for regular maintenance and repairs,⁴ which could be applied to SATA resources as well.⁵ With defined and enough notification periods, CESA finds it reasonable to allow for SATA resources to meet contracted SATA terms and provisions through similar types of outage procedures governed through the CAISO's Outage Management System (OMS). Some stakeholders in previous comments expressed concerns about the increased frequency of the replacement of the SATA resource due to market participation, but this may not be a major concern because proper outage planning can accommodate this goal. Finally, concerns over a failure to deliver on transmission obligations are unlikely because replacement of SATA resources comes at a cost, and because contracts are binding and will require compliance.

Clarifications on TRR Credit Mechanism and Capital Cost Credit Multiplier

While preferring a contract-based enforcement to ensure SATA resources maintain their ability to service the transmission reliability need over the full contracted term, CESA also seeks clarification on how this multiplier is calculated. CESA assumes that the capital cost credit multiplier (CCCM) is intended to reflect the \$/MWh opportunity cost of providing a market service that reduces the total available

⁴ New requests for planned transmission Maintenance Outages or requests to change Approved Maintenance Outages must be submitted to the CAISO Outage Coordination Office (OCO) at least seven (7) days in advance of the start date for the Outage, in order for the Outage to be designated as a Planned Outage. The timeline for submitting the required advanced notice is calculated excluding the day the request is submitted and the day the Outage is scheduled to commence. See: http://www.caiso.com/Documents/3210_OMS.pdf

⁵ CESA more broadly seeks to ensure that SATA resources are treated equivalently with traditional transmission resources, which may not meet their useful in all cases.

cycles and MWh over the lifetime of the asset to service a transmission reliability need. However, CESA does not understand how this mechanism would ensure that the ratepayers are assured of having a SATA resource deliver the transmission reliability service over the contracted period, even as the CAISO proposes the TRR credit mechanism to ensure that SATA resource operators understand the potential negative capital cost implications of providing market service.⁶

For example, let's say the CAISO selects a 40 MWh energy storage unit with 10,000 equivalent cycle life, which translates to delivering 400,000 MWh over a 10-year timespan.⁷ The CAISO indicated that it seeks to 'right size' solutions to the transmission reliability need and thus the 400,000 MWh is what the CAISO has identified as being needed from the SATA resource over a 10-year time period. So, as CESA understands the proposal, the CCCM would reduce the TRR by some \$/MWh amount because the MWh delivered to the market will no longer be MWh delivered to service the transmission reliability need – *i.e.*, ratepayers should not be paying for more than what they should expect from the ratebased SATA resource. As a result, the SATA resource operator would need to factor in these "marginal costs" into their bids so that they only participate in the market when the market clears at or above their reduced ratebased cost recovery.

However, in this example, since the CAISO procured the SATA resource to deliver 400,000 MWh over a 10-year period (*i.e.*, right-sized solution), the proposed mechanism will not assure the CAISO or ratepayers that the SATA resource would meet the identified transmission reliability need. Any MWh committed to the market, even after accounting for the CCCM reduction in the TRR, would leave MWh 'missing' to service the transmission reliability need. Thus, this mechanism would serve to reduce TRR cost recovery for SATA resources while also reducing the crediting back to ratepayers of any energy market profits (as reflected in higher marginal costs and possibly less market participation) under Options 1 and 3, without ensuring the transmission reliability service is met. As CESA understands this proposal, a tradeoff is created. CESA assumes that any tradeoffs that reduce the availability of expected MWh for the transmission reliability service will require the SATA resource owner to replace their SATA resource to meet the contracted terms – in which case the SATA agreement is the underlying enforcement mechanism.

Under Option 2, it is unclear on whether and how the CCCM would be applied, as laid out in the Revised Straw Proposal. An example formula is not included in the Revised Straw Proposal as done for Options 1 and 3 cost recovery mechanisms, so it would be helpful to have the CAISO clarify its perspective on the TRR crediting mechanism and CCCM if it applies to Option 2. CESA assumes that these mechanisms do not apply to Option 2 because there is no crediting back to ratepayers any market profits. Thus, under Option 2, the CAISO would be relying on the SATA agreement to enforce the time period in which the SATA resource would be in service of the transmission reliability need.

⁶ *Ibid*, p. 17.

⁷ CESA chooses 10 years for this example but understands that the CAISO prefers 40-year agreements with potential replacement provisions. For the purposes of this example, CESA only looks at the first lifecycle of the battery and assumes that the SATA resource owner will need to replace this resource in Year 10 per the 40-year agreement. CESA also understands that this is a very simplified example, as "equivalent cycle life" may depend on how a full cycle is defined and whether the depth of discharge is factored in (*e.g.*, 100% charge to 0% charge versus more optimal depth of discharge ranges between 80% and 20%)

Finally, CESA believes it may be challenging to determine the appropriate CCCM. The CAISO proposes to forecast the expected number of cycles of a battery storage device, but forecasting this number may be more difficult to estimate and calculate than the CAISO presumes, given that the expected number of cycles may depend on other factors such as depth of discharge.

Degradation is Ineffective in Addressing Market Price Suppression Concerns

The CAISO proposed this mechanism for an additional reason – *i.e.*, to protect against market price suppression from ratebased SATA resources. However, CESA does not believe degradation addresses any market price suppression concerns because not all SATA resource types have major or any degradation factors. Flow batteries, compressed air energy storage, liquid air energy storage, flywheels, and pumped hydro storage are some of the energy storage technologies that fall into this category, and thus there may be no CCCM for these technologies. Even if the CCCM is intended to prevent market price suppression, this mechanism would be flawed in addressing these same concerns with other SATA resource types. More broadly, for technologies with significant degradation factors, CESA believes that these “costs” can already be reflected as variable operations and maintenance (O&M) costs in market bids.

Overall, CESA does not find it necessary to use the proposed TRR crediting mechanism and CCCM to ensure market prices are not suppressed. Given the primacy, high-reliability requirements, and possibly unpredictable nature of transmission reliability needs, market participation may be relatively limited to the degree that market prices will not be materially affected. Furthermore, accounting for the periods in which SATA resources charge, market prices may in fact increase in certain time periods. Therefore, in CESA’s view, the CCCM would only be addressing ratepayer protection concerns from early degradation of SATA resources. As discussed above, this concern may be best addressed through enforcement of the SATA 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:

The CAISO initially indicated that it wanted to identify specific hours, months, or seasons when a SATA resource would be permitted to provide market services but found that such specific information may not be provided with certainty during Phase 2 of the TPP. Therefore, the CAISO proposed two new notification options to maintain its independence and ensure that transmission services take primacy

over market participation. The first option is the day-ahead (DA) option. The second option is a two-days prior to the operating day (D+2) option.⁸

While specifying hours, weeks, and months of the year where SATA resources could participate in the market would have facilitated more clear-cut dual use and would have supported easier forecasting of expected market revenues, CESA understands the challenge that the CAISO faces in forecasting these use patterns and thus supports the proposed notification options that facilitate flexible market participation and maintain the CAISO's independence. CESA prefers the D+2 option because it provides greater opportunity for SATA resources to provide a wider range of market services, including Ancillary Services, which requires bidding into the Day-Ahead Market. While the generation and load forecasts may be less accurate under the D+2 option, the CAISO still maintains recall provisions to ensure SATA resources deliver on unexpected transmission reliability needs – through which SATA resources could incur the market service penalties in service of the transmission reliability need.

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:

CESA continues to support the CAISO's consideration of SATA resources that choose either of the three cost recovery options. At this time, CESA believes that there is insufficient evidence to determine whether one option is more effective to service the transmission reliability need and deliver savings to ratepayers. One point of clarification that may be needed among the three options is how to 'draw the line' between different options. As was brought up during the stakeholder meeting, a resource could seek 99.99% cost-of-service under Option 2 and allow SATA resource owners to keep all market revenues, even though this option would look more like Option 1. Possibly, this issue may be addressed directly in the competitive solicitation process since the CAISO would likely not select such a SATA resource as the most cost-effective option, but some boundaries may generally be needed to support greater comparability among the options.

⁸ *Ibid*, p. 19.

Retention of Option 2

In the Revised Straw Proposal, the CAISO indicated that it is seeking stakeholder input on whether Option 2 should remain a cost recovery option given that the CAISO has determined that it cannot provide clear and certain windows for market services of SATA resources. However, CESA recommends that the CAISO maintain this cost recovery option because this option provides the greatest incentives for SATA resource owners to participate in the market and could potentially represent the most cost-effective option for ratepayers.

Even as specific hours, weeks, or months can be ‘blocked off’ as market participation periods versus transmission reliability periods, CESA requests that the CAISO consider whether the aggregate number of hours, weeks, and months throughout a year could be estimated for any identified transmission reliability need to support SATA resource operators in bidding and forecasting out market revenues to determine the optimal cost-of-service level. For example, in aggregate across a year, the CAISO may determine that transmission reliability services may be needed for 3,000 hours out of the year (8,760 hours in total), even though the specific times in which those 3,000 hours may require a SATA resource to operate may be less predictable. The proposed notification options may also support SATA resources under Option 2 to compete given that they may seek market participation until they are selected to provide a transmission reliability service. With these estimates of aggregate market participation periods expected throughout the year, SATA resource operators may be able to propose an optimal, less-than-100% cost-of-service proposal into the transmission planning process.

Clarification of Option 3

CESA supports the proposed Option 3 mechanism and recommends a 50/50 split market profits between the ratepayer and the SATA resource owner. CESA is unclear on why San Diego Gas and Electric (SDG&E) recommended that splitting of market profits occur only after a threshold of expected market profits are met, which appears to incorporate elements of Option 1 up until a certain threshold. One concern with this approach may be that the threshold may be set too high where the SATA resource owner may choose to limit market participation given that the level of market participation needed to cross that threshold may deter profit-seeking activities, causing Option 3 (under SDG&E’s version) to look more like Option 1. For simplicity and more immediate market participation incentives, CESA recommends Option 3 be adapted to the version supported by Southern California Edison (SCE), which favors splitting any market profits.

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:

CESA agrees with the Department of Market Monitoring (DMM) that solicitations should drive toward greater competition to benefit ratepayers. Our responses to each option are below:

- **Requiring at least three qualifies project sponsors for the partial cost-of-service or full cost of service with revenue sharing to be options for consideration. Additionally, all project sponsors would be required to also submit a full cost-of-service bid as a contingency option:** CESA supports this option as it preserves optionality and prevents sub-optimal outcomes by taking advantage of Options 2 when there is limited competition. However, CESA sees limited risk in allowing for Option 3 in circumstances where there is insufficient competition.
- **Only in cases of too few qualified sponsors, requiring a set percent of total TRR be recovered before any market revenues could be retained by the project sponsor:** CESA is unclear on this option and requests clarification. CESA understands this option as similar to SDG&E’s proposed version of Option 3 that sets a certain threshold before market profits can be retained by the SATA resource operator.
- **Limiting the total allowable market revenue retention be limited to a fixed percent of the total annual TRR, or limiting the revenue split to no more than 50-50:** CESA does not support limiting the total allowable market revenue retention because it may cap benefits to ratepayers without mitigating any risks.

In general, for any of the options above, greater detail and clarity are needed. In situations where there are insufficient qualified project sponsors, SCE’s version of Option 3 may be most appropriate, as it protects ratepayers by ensuring that a portion of the market profits are credited back while providing SATA resource operators with an incentive to participate in the market and earn profits. CESA proposes that only Options 1 and 3 be made available when there is insufficient competition, and only make Option 2 available when there are at least three qualified project sponsors. The proposed options above where thresholds are set or market profits are capped may unnecessarily limit crediting and market upside that could be of significant benefit to ratepayers. Finally, CESA notes that any risks to ratepayers are limited or capped to a degree by the traditional transmission solution, which should also be competing with SATA resources to address a transmission reliability need.

On this point around competition, CESA also requests that the CAISO ensure competitive outcomes by having “local” projects (less than 200 kV) that solve “regional” problems (greater than 200 kV) be subject to competition from other regional projects. Because local projects are not subject to competitive solicitations and only allows for the applicable Participating Transmission Owners (PTOs) to propose such projects, CESA is concerned about non-competitive outcomes for bulk-system problems. Thus, if local projects are actually intended to solve regional problems, they should also be subject to competition with other regional projects.

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:

CESA believes that the Revised Straw Proposal is generally consistent with the FERC Policy Statement:

- **Does not inappropriately suppress market prices:** As noted before, market participation may be relatively limited to the degree that market prices will not be materially affected. Thus, CESA believes that the Revised Straw Proposal is consistent with the FERC Policy Statement on this matter.
- **Impact ISO independence:** With the proposed notification options, SATA resources are not subject to direct operational control by the CAISO. Thus, CESA believes that the Revised Straw Proposal is consistent with the FERC Policy Statement on this matter.
- **No double recovery of costs:** The CAISO effectively distinguishes between TRR revenue for transmission reliability needs and market revenues from market participation. Market profits under Option 1 are credited back to the ratepayer and do not present any double recovery issues. Market profits (and losses) under Option 2 are kept by the SATA resource owner, who chooses to take partial cost-of-service, so there are no double recovery issues. Market profits under Option 3 are split between a credit to the ratepayer and profits to the SATA resource owner. Even as the total profits collected by the SATA resource owner are above and beyond the full cost-of-service requirement, these profits are generated from delivering a different service, and therefore does not present any double recovery issues. Thus, CESA believes that the Revised Straw Proposal is consistent with the FERC Policy Statement on this matter.

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:

Several concerns were raised by other stakeholders on the potential for SATA resources to jump the interconnection queue. CESA agrees with the CAISO who addressed these concerns by explaining that SATA resources would be subject to a competitive solicitation and would be studied for interconnection impacts during the transmission planning process.⁹ It is extremely unlikely to plan to use the TPP as a means to jump the queue. CESA expects SATA resources will be rarer still, and so queue jumping to a concerning degree seems improbable. The TPP should thus seek and evaluate SATA's without queue-jumping concerns, as is done with all transmission planning.

Finally, CESA recommends the CAISO plan for an additional revised straw proposal as the current schedule is too constrained for working through some parts of the proposal.

⁹ Revised Straw Proposal, p. 14.