Storage as a Transmission Asset Stakeholder Comment Template

Submitted by	Company	Date Submitted
Brian McDonald One Post Street, Suite 2550 San Francisco, CA 94104 925.989.7908	NextEra Energy Resources, LLC ("NEER") and NextEra Energy Transmission, LLC ("NEET"); together, "NextEra Energy"	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 Storage as a Transmission Asset 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:

Generally, NextEra Energy supports cost recovery options that encourage competition for the benefit of ISO customers and incentivize SATA owners to maximize market revenues, and thus potential customer savings.

In particular, NextEra Energy cautiously supports CAISO retention of Option 2 (considered for elimination in the last proposal version). On the one hand, since Option 2 leaves the seller partly at risk for market revenues, the option offers bidding flexibility that has the potential to benefit ratepayers. SATA sellers, for example, may be willing to assume some level of market risk through an Option 2 offer and, to the extent that they are, the risk and cost to ratepayers could be less. Recent market resource competitive solicitations for energy storage can be instructive in this area. Some off-taker contracts provide only Resource Adequacy (RA) to the buyer, and/or require buyer control at specified times; otherwise, the seller can participate in the market as desired.

On the other hand, NextEra Energy concurs with the CAISO's observation that for Option 2 to have value to ratepayers, bidders must assume reasonable levels of expected market revenues to avoid distorting the competitive process, while also safeguarding project viability. Accordingly, the CAISO must ensure bids meet the threshold of reasonableness, but in so doing, this element would seem to impose on the CAISO additional complexity and administrative burden.

NextEra Energy does not have an opinion about whether incumbent transmission providers awarded a non-competitive ("direct assignment") SATA contract should have a Must-Offer Obligation, even though they would be limited to Option 1. However, NextEra Energy notes that such entities would have to recover, not only general operation and maintenance costs caused by incremental market participation, but also some kind of compensation for asset replacement to meet the contract term, given degradation of some technologies from the additional dispatch.

NextEra Energy also recommends the following:

- Better examination of the definition of "market revenues" to be shared under Options 2 and 3. The last proposal version would have used the bid-LMP difference (for sales and purchases), while this proposal would simply net full market revenues for sales and purchases over the month. This new proposal should be further analyzed, including realistic examples, and compared to the methodology under the prior proposal.
- Allowance of other optionality in SATA proposals, such as cost caps, minimum revenue guarantees, and/or revenue sharing agreements in order to maximize consumer savings. While these features may increase the complexity of the ISO TPP Phase 3 competitive analyses, the additional optionality may provide additional benefits to ratepayers. If time does not permit inclusion of these features initially, the ISO should work to refine the assessment methodology to allow them in the future.

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:

NextEra Energy fully supports this proposal, which is the same structure it suggested in comments on the last proposal version.

NextEra Energy also support the ISO's deletion of other options that might have applied if there is insufficient market interest – namely, requiring a set percent of total TRR recovery before any market revenues be could be retained by the project sponsor, limiting the total allowable market revenue retention to a fixed percent of the total annual TRR, or "limiting the revenue split to no more than 50-50." These were arbitrary restrictions that should not be necessary with the contract terms and safeguards discussed below.

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:

NextEra Energy supports the ISO's proposal to develop a new agreement with SATA resource owners that both incorporates applicable and relevant Participating Transmission Owner (PTO) requirements and clearly outlines the process for determining when SATA resources can participate in competitive markets.

NextEra Energy understands the ISO's need to consider limiting the choice of contract terms at this time, given the somewhat limited varieties of typical SATA technology today, and it supports the proposed three terms initially. However, the ISO should work to develop an analysis framework that could consider any potential useful life –e.g., where a SATA resource guarantees a higher level of market revenues and thus wishes to bid with a lower asset life.

NextEra Energy fully supports replacement of the Transmission Revenue Requirement (TRR) credit mechanism previously proposed with contractual requirements for maintenance of the resource. These contracts should also include non-performance penalties, appropriate market-participation incentives, and seller reporting requirements for operation, maintenance, repair, replacement and actions, and also expected remaining asset life.

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:

General comments

NextEra Energy supports the proposed framework generally, including daily notice where SATA market participation will be allowed, exemption of SATA bids from Local Market Power Mitigation (LMPM), and use of Exceptional Dispatch (ED) if the SATA is unexpectedly needed as transmission and the commitment or dispatch must be modified intra-day.

However, if a SATA is recalled from market participation (through an ED or otherwise), the ISO should ensure that the SATA is made whole, i.e., is not liable for imbalance or other charges for not following the regular market dispatch. NextEra Energy recommended this protection in its comments on the prior proposal, and it continues to believe that this feature is needed if the ISO can unexpectedly reassert operational control over the SATA for transmission purposes.

Market participation determination for reliability-driven SATAs

With respect to the timing of the market-participation notice to the SATA owner, NextEra Energy continues to believe that the ISO should implement the market-participation methodology and timing alternative that is easiest to manage and consider further refinements at a later date. The Proposal states that this is the "Day Ahead" (DA) option, i.e., the option that uses DA market results to determine transmission need for the SATA and, therefore, does not allow for SATA participation in the DA Market.

However, given the potential benefits of allowing SATA participation in the DA Market (e.g., possible Ancillary Services sales and revenues), NextEra Energy believes that the GridBright proposal should be seriously considered – i.e., to increase the proposed 10% operational margin that would be used in determining the transmission need for the SATA, to a level that

might make ISO operators comfortable with the earlier notice under the prior "Day + 2" proposal.

Market participation determination for other SATA resources

NextEra believes that the ISO should consider a second phase of this initiative to examine, among other things, how the ISO would determine the daily need for transmission service for policy-driven and economic SATA resources. This issue is not addressed at all in the current proposal. (That second phase could also further consider the issue of shared resources – please see NextEra Energy's discussion under "Other" below.)

Market notices for SATA market participation notices

NextEra Energy supports the ISO's proposal to share widely the SATA market-participation notice, so all Market Participants have access to this important information. That issuance to the rest of the market should take place at the same time the notice is provided to the SATA owner.

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:

NextEra Energy believes that the ISO's proposed SATA methodology is consistent with FERC's policy statement.

<u>Draft final proposal meeting or phone call</u>

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:

NextEra Energy has no position on this question generally. However, as noted below, the "partial resource" issue still requires further consideration, and the ISO should use whatever meeting format would best allow for discussion of that important issue.

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: NextEra Energy offers additional comments on the issues below.

Partial resources and shared facilities

This issue requires more consideration than it has received in this initiative – e.g., through the proposed additional initiative phase discussed above. The ISO has said that it will contract only for capacity needed, and that the contracted resource must have its own Resource ID (i.e., cannot be a share of a larger resource). However, the CAISO should be more specific – including examples – about how it intends to apply this concept.

This additional information is needed in particular for resources (like pumped storage) where the likely size of the resource overall may require extensive shared facilities. (NextEra Energy notes that pumped-storage resources are mentioned specifically in the tariff as "integration resources" and, therefore, could be particularly appropriate for use as SATA policy-driven transmission substitutes.)

Specifically, the ISO should address these questions explicitly:

- Revenue recovery for generation tie-lines or substations (or other Interconnection Facilities) needed by a SATA but shared with market resources, e.g., allowing recovery in TAC as long as the entities sharing the resource cover their incremental costs
- How this provision would apply to pumped storage facilities (e.g., separate Resource ID requirement), if the capacity of one or more turbines, but not all of them, could serve as a SATA.

ISO Operational Control

As noted in NextEra Energy's comments on the last version of the proposal, the proposal should state clearly the definition of "operational control" that would apply to SATAs. The ISO has said that it will not operate SATA assets directly but will define operational control as an obligation to follow ISO directions regarding the asset State of Charge, similar to the tariff definition of Operational Control for transmission assets:

"The rights of the CAISO under the Transmission Control Agreement and the CAISO Tariff to direct Participating TOs how to operate their transmission lines and facilities and other electric plant affecting the reliability of those lines and facilities for the purpose of affording comparable non-discriminatory transmission access and meeting Applicable Reliability Criteria."

NextEra Energy supports application of this definition to SATAs and believes that it should be specifically stated in the final proposal and associated tariff language.

No GIDAP

The ISO has said that SATA resources need not go through the generator interconnection process but will be studied in the TPP (and modeled in later generator interconnection studies) as a transmission addition. However, bids can be made for assets already in the queue.

NextEra Energy continues to support this provision and agrees that SATA resources – like other transmission solutions – should not go through the generation interconnection process. Unless the ISO identifies any specific reason otherwise, no additional studies beyond those in the Transmission Planning Process should be needed.