



Stakeholder Comments Template

Resource Adequacy Enhancements

This template has been created for submission of stakeholder comments on the Resource Adequacy Enhancements fifth revised straw proposal that was published on July 7, 2020. The proposal, stakeholder meeting presentation, and other information related to this initiative may be found on the initiative webpage at:

<http://www.caiso.com/StakeholderProcesses/Resource-Adequacy-Enhancements>

Upon completion of this template, please submit it to initiativecomments@caiso.com. Submissions are requested by close of business on **August 7, 2020**.

Submitted by	Organization	Date Submitted
<i>J. Arnold Quinn (301) 832-0167</i>	<i>Vistra Corp.</i>	<i>August 7, 2020</i>

Please provide your organization's overall position on the RA Enhancements fifth revised straw proposal:

- Support
- Support w/ caveats
- Oppose
- Oppose w/ caveats
- No position

Please provide your organization's comments on the following issues and questions.

Our comments are limited to section 4.1.7.

Please provide your organization's feedback on the Operationalizing Storage Resources topic as described in section 4.1.7. Please explain your rationale and include examples if applicable.

Vistra is opposed the minimum state of charge proposal for shown resource adequacy storage devices. Vistra agrees with CAISO's objective to ensure that shown resource adequacy storage devices are available when most needed in the real-time market. However, the examples in the Fifth Revised Straw Proposal do not accomplish this

objective. Vistra believes that CAISO can modify the end-of-hour state of charge rules discussed in ESDER to address any concerns about compliance with the must-offer requirement.

Real-time prices are an accurate measure of when any resource is most needed. As the examples illustrate, the minimum state of charge proposal fails to allow a shown resource adequacy storage device from operating when most needed in the real-time market. Specifically, Example 1 summarized in Table 14 highlights that the storage device would not discharge at its maximum discharge rate during hour 17 when the real-time price is \$1,000/MWh. As a result, consumers lose the access to energy that could reduce the cost of real-time energy below \$1,000/MWh so that they have access to energy that contributes to a real-time price of \$100/MWh. This is simply inefficient and bad for consumers.

The Fifth Revised Straw Proposal also justifies the minimum state of charge proposal out of a concern that inconsistencies between the day ahead and real-time optimization periods (24 hours vs. 65 minutes) will lead to inconsistencies between the day ahead schedule and real-time operations. However, the entire point of a two-settlement system is to allow differences between real-time operations and day ahead schedules when such changes enhance efficiency. Of course, any resource that deviates from its day ahead schedule will be subject to settlement of deviations at the real-time price. A storage device shown for resource adequacy is no different than any other energy-limited resource – the optimal real-time operation may differ from the optimal day ahead schedule precisely because conditions change between day ahead and real-time. For instance, a gas-fired unit that is emissions-limited may deviate from its day ahead schedule to ensure that it operates in the most valuable real-time intervals. Singling out storage devices shown for resource adequacy as needing to adhere to their day ahead schedules is both inefficient and unduly discriminatory.

Finally, the CAISO's minimum state of charge proposal appears to violate FERC's requirement in Order No. 841 that storage resources are allowed to manage their own state-of-charge.¹ FERC states that "each RTO/ISO must permit electric storage resources to manage their state of charge because it allows these resources to optimize their operations to provide all of the wholesale services that they are technically capable of providing, similar to the operational flexibility that traditional generation resources have to manage the wholesale services that they offer."² FERC explicitly addressed the concern that a storage resource may use state of charge management to physically or economically withhold and noted that "if an RTO/ISO determines that *additional* rules are needed to ensure electric storage resources are not managing their state of charge in a way that could manipulate market outcomes through withholding, then the RTO/ISO could propose such rules in response to this Final Rule or through a separate FPA section 205 filing. (emphasis added)"³

¹ Electric Storage Participation in Markets Operated by Regional Transmission Organizations and Independent System Operators, 162 FERC ¶ 61,127, Order No. 841, P 246-252, (2018).

² *Id.* at P 246.

³ *Id.* at P 252.

Based on these concerns, Vistra suggests that CAISO eliminate the Minimum Charge requirement. To the extent that CAISO is concerned about compliance with the must-offer requirement, it should allow storage devices shown for resource adequacy to submit an end-of-hour state of charge in all hours except during AAH hours. Doing so would ensure that a storage resource's maximum capability is available in the hours when CAISO believes are most relevant when planning to have adequate capacity.