

Stakeholder Comments Template

Subject: Reliability Services

Submitted by	Company	Date Submitted
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1. Please provide feedback on Part 1: Minimum eligibility criteria and must-offer rules.

a. Comments on proposal portion of section

i. Eligibility criteria

CESA Response: CESA applauds the CAISO for its efforts to develop default qualifying capacity availability and eligibility criteria for non-generator resources (NGR), including energy storage.

CESA agrees with the CAISO that, similar to distributed generation facilities, NGRs must fall under the classification of a participating generator or a system resource. CESA asserts that NGRs less than 0.5MW should be eligible for aggregation to meet the minimum size of 0.5MW to qualify as a participating generator or a system resource. While the details of this aggregation may be beyond the scope of the current Reliability Services Initiative (RSI) as the CAISO stated similarly for distributed generation facilities in Section 4.3.2 of its Straw Proposal, CESA requests that this consideration for NGRs less than 0.5MW be mentioned explicitly in the Straw Proposal.

¹ The California Energy Storage Alliance consists of 1 Energy Systems, A123 Systems, AES Energy Storage, Alton Energy, American Vanadium, Aquion Energy, ARES, North America, Beacon Power, Bosch Energy Storage Solutions, Bright Energy Storage Technologies, Brookfield Renewable Energy Group, CALMAC, ChargePoint, Clean Energy Systems, CODA Energy, Consolidated Edison Development, Customized Energy Solutions, DN Tanks, Duke Energy, Eagle Crest Energy Company, EaglePicher Technologies, East Penn Manufacturing Company, EDF Renewable Energy, EnerSys, EnerVault, EV Grid, FAFCO Thermal Storage Systems, FIAMM Group, FIAMM Energy Storage Solutions, Flextronics, Foresight Renewable Solutions, GE Energy Storage, Green Charge Networks, Greensmith, Gridscape Solutions, Gridtential, Halotechnics, Hitachi Chemical Co., Hydrogenics, Ice Energy, Imergy Power Systems, ImMODo Energy Services Corporation, Innovation Core SEI, Invenergy, K&L Gates, KYOCERA Solar, LG Chem, LightSail Energy, LS Power, Mitsubishi International Corporation, NextEra Energy Resources, NRG, OCI, OutBack Power Technologies, Panasonic, Parker Hannifin, PDE, Powertree, Primus Power, RES Americas, Rosendin Electric, S&C Electric Company, Saft, SeaWave Battery, SEEQ, Sharp Labs of America, SolarCity, Sovereign Energy Storage, STEM, Stoel Rives, SunPower, TAS Energy, Tri-Technic, UniEnergy Technologies, and Wellhead. The views expressed in these Comments are those of CESA, and do not necessarily reflect the views of all of the individual CESA member companies. (<http://storagealliance.org>)

Furthermore, CESA agrees with the general approach the CAISO has taken to differentiate Regulation Energy Management (REM) NGRs from Energy NGRs and their corresponding default qualifying capacity determinations.

ii. Must-offer requirements

CESA Response: CESA is pleased with the CAISO’s attention to NGRs’ must-offer requirements in the Straw Proposal. In particular, CESA agrees with the CAISO proposal “not to include a minimum number of hours when non-generator resources must be available” and its determination “that a non-generator resource be classified as non-use-limited” (p. 23). The CAISO correctly determines that excluding these limits for NGRs will allow the CAISO to optimize the dispatch of an NGR for ISO system needs.

Regarding calculation of an NGR’s default energy bid, CESA suggests considering a framework that includes the energy price to charge the NGR based on the CAISO’s dispatch of the NGR for system needs plus an accounting methodology for resource-specific efficiency losses and allocation of other resource-specific variable and fixed costs.

b. Comments on phase 2 consideration items

i. Intertie resources

CESA Response: CESA has no comment at this time.

ii. Block dispatchable pumping load

CESA Response: To address block dispatchable pumping load and dispatchable charging load for energy storage in general, CESA proposes that the CAISO develop an additional deliverability study to evaluate flexible delivery for spring partial peak system needs, including generation (discharge), load (charge), and ramping (flexible charge/discharge). CESA’s proposal would be an additional study to the interconnection study process that would be structured as follows:

- 1) *Existing* Reliability Study (energy only)
- 2) *Existing* Deliverability Study (full capacity deliverability status or FCDS)
- 3) *Proposed* Flexibility Study (flexible deliverability status or Flex DS)

CESA recognizes that the value of this additional “Flex DS” status would not exist without future synchronization with CPUC Flexible RA counting methodologies in future proceedings. However, CESA believes a viable interconnection study methodology for Flex DS is important to assess resource flexibility properly as an independent attribute from a resource’s traditional deliverability status.

CESA intends to file similar comments through the CAISO’s energy storage interconnection initiative.

iii. ISO dependence on MCC buckets

CESA Response: CESA has no comment at this time.

c. Other comments**2. Please provide feedback on Part 2: Availability Incentive Mechanism.****a. Comments on the general direction of the design**

CESA Response: CESA is generally pleased with the direction of the Availability Incentive Mechanism design. Moving toward a bid-based assessment rather than an outage-based assessment enables an efficient evaluation of how resources provide reliability services to the grid as well as a more equitable framework across resources.

b. Comments on design features**i. Bid-based assessment**

CESA Response: CESA has no comment at this time.

ii. Fixed availability percentage band

CESA Response: CESA has no comment at this time.

iii. Single assessment for flexible and generic overlapping capacity

CESA Response: CESA has no comment at this time.

iv. Other features

CESA Response: CESA has no comment at this time.

c. Comments on price

CESA Response: CESA has no comment at this time.

d. Comments on capacity and resource exemptions

CESA Response: CESA has no comment at this time.

e. Other Comments

CESA Response: While potentially outside the scope of this initiative, CESA urges the CAISO to include the ability for NGRs to place multi-segment bids. As with other conventional resources such as multi-stage generators (MSGs), different bids for different levels of MW output should be considered. Certain classes of energy storage technologies may have different

incremental costs at various output levels for charge and/or discharge. Segmented bidding would capture these incremental costs.

3. Please provide feedback on Part 3: Replacement and Substitution.

a. Comments on scope

CESA Response: CESA has no comment at this time.

b. Comments on replacement and substitution issues

i. Complexity

CESA Response: CESA has no comment at this time.

ii. CPM designation risk

CESA Response: CESA has no comment at this time.

iii. Resource leaning

CESA Response: CESA has no comment at this time.

iv. Other issues

CESA Response: CESA has no comment at this time.

c. Comments on flexible replacement proposal

CESA Response: CESA proposes that for flexible replacement, Category 1, 2, and 3 resources should be replaced with resources in the same flexibility category. CESA also urges the CAISO to consider equal or greater ramp rates when performing a replacement.

d. Comments on flexible substitution proposal

CESA Response: Similar to replacement, CESA proposes that for flexible substitution, Category 1, 2, and 3 resources should be substituted with resources in the same flexibility category. CESA also urges the CAISO to consider equal or greater ramp rates when performing a substitution.

e. Other comments

CESA Response: CESA has no additional comments at this time.

4. Please provide feedback on Part 4: Capacity Procurement Mechanism.

a. Comments on index price

CESA Response: CESA has no comment at this time.

b. Comments on competitive solicitation process

CESA Response: CESA has no comment at this time.

c. Comments on other changes potentially needed to CPM

CESA Response: CESA has no comment at this time.

d. Comments on CPM price

CESA Response: CESA has no comment at this time.

e. Comments on supply-side market power mitigation measures

CESA Response: CESA has no comment at this time.

f. Comments on demand-side market power mitigation measures

CESA Response: CESA has no comment at this time.

g. Other comments

CESA Response: CESA has no additional comments at this time.