

Stakeholder Comments Template

Subject: Reliability Services

Submitted by	Company	Date Submitted
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This template has been created for submission of stakeholder comments on the Draft Straw Proposal for the Reliability Services initiative that was posted on June 5th, 2014. Upon completion of this template please submit it to RSA@caiso.com. Submissions are requested by close of business on **June 26th, 2014**.

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

a. Comments on proposal portion of section

i. Eligibility criteria

Section 4.1 (Purpose):

A. CDWR supports the continuation of allowing LRAs to develop their own eligibility criteria. Default eligibility criteria apply to the extent an LRA does not establish its own eligibility criteria.

Section 4.3 (Establishing new default qualifying capacity provisions):

B. CDWR supports developing default eligibility criteria for DGs, NGRs, and modifying PDR criteria.

ii. Must-offer requirements

C. CDWR seeks clarification on the existing bidding requirements with regard to the current tariff section 40.6.4.3.2 (quoted and highlighted below).

Since review of existing must offer rules is in the scope of Reliability Services Initiative (RSI), provision in the tariff section 40.6.4.3.2 should be reviewed to accommodate a participating load (PL) resource limitation that they cannot offer energy in the IFM and that offering non-spin ancillary service in the IFM satisfies the RA must offer obligation. Accordingly, the IFM availability measurement should be based on non-spin ancillary service offer for a PL resource when there is an associated demand bid. RTM availability can be based on energy bid as it offers energy bid in the RTM.

Resource Type	Bidding Requirements			
	IFM	RUC	RTM	ISO Inserts Required Bids
Hydro, Pumping Load, and Non-Dispatchable Use-Limited Resources	Economic Bids or Self-Schedules are to be submitted for RA Capacity that the market participant expects to be available Plan (ISO Tariff 40.6.4.3.2).	No RUC Availability Bids required (ISO Tariff 40.6.4.3.2).	Economic Bids or Self-Schedules are to be submitted for RA Capacity that the market participant expects to be available (ISO Tariff 40.6.4.3.2).	No (2)

“40.6.4.3.2 Hydro, RDRR, and Non-Dispatchable Use-Limited Resources

Hydroelectric Generating Units, Pumping Load, and Non-Dispatchable Use-Limited Resources, but not Reliability Demand Response Resources, shall submit Self-Schedules or Bids in the [Day-Ahead Market for their expected available Energy or their expected as-available Energy, as applicable, in the Day-Ahead Market and RTM](#). Such resources shall also revise their Self-Schedules or submit additional Bids in RTM based on the most current information available regarding Expected Energy deliveries. Hydroelectric Generating Units, Pumping Load, Reliability Demand Response Resources, and Non-Dispatchable Use-Limited Resources will not be subject to commitment in the RUC process. The CAISO will retain discretion as to whether a particular resource should be considered a Non-Dispatchable Use-Limited Resource, and this decision will be made in accordance with the provisions of Section 40.6.4.1.”

Issues:

1) Participating Load (PL), which is represented by Pumping Load in section 40.6.4.3.2, as a resource is not able to offer “energy” bids in the DAM, due to existing software limitations. The existing PL functionality limits a PL resource to bidding only non-spin ancillary service in the IFM, and an “energy” bid in the RTM to drop load in the real-time. The currently effective Participating Load Agreement (PLA) with CDWR recognizes this limitation and allows bidding of non-spin ancillary service in the IFM to meet the RA must offer requirement. The relevant PLA provision states:

“4.6.3 Resource Adequacy Capacity. DWR shall submit a Supply Plan and a Resource Adequacy Plan that meets the requirements of DWR’s Local Regulatory Authority to the extent permitted by the CAISO Tariff. When a Participating Load is a Resource Adequacy Resource used to meet a Resource Adequacy obligation provided in DWR’s monthly Resource Adequacy Plan, DWR must follow that plan for its Resource Adequacy Resources and may submit a Bid or Submission to Self-Provide an Ancillary Service in the Day-Ahead Market for such purpose.”

2) Clarity in the terms “expected available energy” and “expected as-available energy”: Please explain the difference between “expected available energy” and “expected as-available energy”.

3) The Ancillary Services (A/S) must offer obligation should not apply to use limited resources (ULRs), as is the case for generic RA, as provided in section 40.6.4.3.2 implicitly. Pursuant to FERC order, use limited resources are exempt from the A/S must

offer requirement. In addition to the exemption from RUC commitment provided already to ULRs, this section should also explicitly exempt ULRs from the A/S must offer requirement.

4) The restarted Flexible Ramping Product (FRP) initiative proposes to apply a DAM FRP must offer requirement to flexible RA resources. Since FRP is similar to A/S, a ULR flexible RA resource should be exempt from a FRP must offer requirement consistent with the A/S must offer exemption for ULRs. CDWR has also provided its comment in this context on the FRP initiative.

b. Comments on phase 2 consideration items

i. Intertie resources

No comments at this time.

ii. Block dispatchable pumping load

D. CDWR seeks clarification whether or not voltage instability and congestion is still a concern for generic RA capacity from pump load in which load is dropped if required, but not increased. CDWR's understanding of the straw proposal is that if a pumping load was to be a flexible RA resource, and in the event of over-generation (swollen duck belly), it could be dispatched by ISO to increase load to consume energy in order to mitigate over-generation; however, voltage instability and congestion may occur and further assessment would be needed by ISO for a deliverability study similar to that done for a generating unit. DWR would also have to study the implications for its own operations related to the pumping load. CDWR believes such an assessment is necessary to determine possible constraints affecting the provision of flexibility by pump load, consistent with the Participating Load Agreement.

iii. ISO dependence on MCC buckets

No comments 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

No comments at this time.

b. Comments on design features

i. Bid-based assessment

E. For a Participating Load (Pumping Load as referenced in the tariff section 40.6.4.3.2), the non-spin ancillary service bid should be counted towards availability in the DAM instead of "energy" as discussed in 1(ii) above. Otherwise, if an energy bid is required in the DAM, its availability would be zero as it cannot submit an energy bid in the DAM due to the current BPM rules and modeling of PL, which would effectively eliminate current provisions that allow participating load to meet generic RA obligations. Alternatively, if an energy bid must be considered, then the Participating Load's RTM energy bid could be used without DAM bid assessment.

F. For a Participating Load used for RA, bid assessment should also include tracking demand bids for the same hour. If there is no demand bid for that hour, then there won't be an ancillary service bid in the DAM or an energy bid in the RTM. When there is no demand bid during the availability assessment hour, such hours should be taken out of the availability assessment so that the resource is not penalized for not having load to meet. This may happen because water demand varies on a daily basis. Reducing demand does not cause reliability concerns to ISO, especially during availability assessment hours which normally fall during the system peak.

hours	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
RA capacity	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
IFM demand schedule	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	0	30	90	90	90	90	90	90	90
IFM non-spin bid														50	50	0	30	50						
IFM non-spin Award														50	30	0	30	50						
RTM Energy bid														50	30	0	30	50						
Monthly RA Capacity used for availability calculation														50	30	0	30	50						
Hrly AIM Availability, %														100%	100%	100%	100%	100%						

In the example above, in a random day, there is no demand schedule in the IFM at hour 16. Consequently there is no non-spin bid for the same hour in the IFM and no energy bid in the RTM also. For availability assessment, Hour 16 should be excluded from the calculation since there is no demand in that hour. Ideally, availability assessment for the Participating Load in this scenario should be based on hours 14, 15, 17 and 18, only when there is A/S non- spin bids for these hours with demand schedules. Alternatively, if energy bids must be considered, then an RTM energy bid only could be considered for the hours when there is actual demand. If IFM non-spin and RTM energy bids are to be considered for the availability assessment, then hours when demand schedule is zero should be excluded. In case of a non-zero demand schedule that is less than the RA capacity (Hour 17), RA capacity for that hour should be equal to the IFM demand schedule (similar to wind and solar updated dynamic forecast proposed under section 6.9) which is 30 MW for the hour 17 in this example. With the concept illustrated above, the availability for the day should be 100% assuming availability assessment hours are hours 14 through 18. For reference, CDWR has developed and attached a Calculation Model for a Participating Load based on RTM energy bid as indicated by ISO during June 23rd web-conference.

- ii. Fixed availability percentage band
No comments at this time.
- iii. Single assessment for flexible and generic overlapping capacity

G. Complexity seems to be the main issue in terms of overlapping of two types of RA capacities for the same resource. The CAISO example (Figure 8, page 36-37) shows 40 % total availability even when the resource met its generic RA by 100%. Same

price for incentive whereas different availability for the same capacity creates inconsistency between value and availability for the same capacity of the resource. It would be interesting to see if separate assessments for flexible and system RA would yield value based availability. The CAISO concern that separate assessment would impose a double penalty in case the resource performs poorly in both types of RA, could be addressed by different prices for the flexible and generic RA.

iv. Other features

c. Comments on price

No comments at this time.

d. Comments on capacity and resource exemptions

H. To the extent, CDWR's proposed availability assessment calculation model for Participating load under 2b(i) above is not acceptable, Participating Load resources should be exempt from AIM (section 6.12), as it is currently exempt from the availability assessment so that such resources could be used for RA obligation as established by the Local Regulatory Authority (LRA) criteria.

e. Other Comments

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

a. Comments on scope

I. The scope should include the exemption for participating load (potentially DR resources). This is discussed under 3b (iv) below:

b. Comments on replacement and substitution issues

i. Complexity

No comments at this time.

ii. CPM designation risk

No comments at this time.

iii. Resource leaning

No comments at this time.

iv. Other issues

J. Participating Load should be exempt from the replacement and substitution requirements, at least for generic RA. These requirements are unnecessary and would add more complexity. The availability assessment methodology proposed above addresses the conditions when there is no A/S bid in the IFM or energy bid in the RTM.

Replacement and Substitution rules are designed to address resource availability when RA resource capacity is in planned outage or forced outage, respectively. How do the concepts of Planned outage and Forced outage apply to a DR resource? A DR resource perhaps would be on outage if: a) there is no load to drop because demand does not exist, or b) demand cannot be dropped (similar to a generator not

generating). How do Replacement and Substitution apply to DR resource since the concept of outage is not yet defined for DR resources? As CDWR commented to ISO in the 2012 replacement requirement stakeholder process:

“Demand response RA resources such as pseudo gen of a participating load may have different outage scenarios compared to a generating unit resource. A pseudo gen that is a RA resource provides RA capacity for its own load. This pseudo gen may have three different situations as it relates to outage:

- a) Outage of pseudo gen due to reduced or no water demand: when there is no water demand (which can vary hour by hour), there will be reduced or no pumping. Hence, the RA pseudo gen capacity cannot be offered.*
- b) Outage of pseudo gen due to planned maintenance of pump: if due to a planned maintenance, a pump is not pumping, the pseudo gen cannot be made available (offer non-spin in the IFM and energy in the RTM for load drop).*
- c) Outage of pseudo gen due to forced outage of pump: if a pump suffers a forced outage, then the RA pseudo gen cannot be made available.*

In each of the above conceptual outage scenarios concerning demand response self-providing RA, whatever the reason may be for an outage, the outage of pseudo gen does not cause reliability concerns because an equal amount of demand is reduced due to that same outage. Therefore, there should be no replacement requirement imposed on these type of resources, and nor should there be any penalty for forced outage of pseudo gen. As such, the Standard Capacity Product Tariff availability standard is not imposed on these resources.”

CDWR reiterates its position on this issue.

- c. Comments on flexible replacement proposal
 - K. Similar to local RA replacement by a system RA resource in planned outages, CAISO should allow replacement of flexible RA by generic RA resources.
 - d. Comments on flexible substitution proposal
 - No comments at this time.
 - e. Other comments
- L. CDWR supports development of many-to-many automated substitution.
4. Please provide feedback on Part 4: Capacity Procurement Mechanism.
- a. Comments on index price
 - No comments at this time.
 - b. Comments on competitive solicitation process
- M. CDWR supports competitive solicitation process for backstop.
- c. Comments on other changes potentially needed to CPM

- No comments at this time.
- d. Comments on CPM price
No comments at this time.
- e. Comments on supply-side market power mitigation measures
No comments at this time.
- f. Comments on demand-side market power mitigation measures
No comments at this time.
- g. Other comments
No comments at this time.