



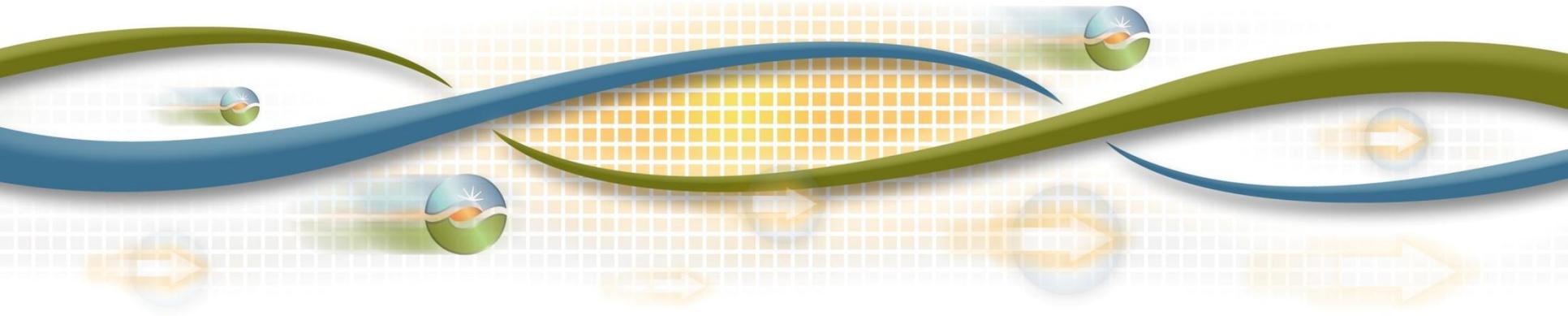
California ISO
Shaping a Renewed Future

Flexible Resource Adequacy Criteria and Must-Offer Obligation: Revised Draft Final Proposal

March 12, 2014

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Market Design and Regulatory Policy Lead



Stakeholder Meeting – Agenda – 2/13/14

Time	Topic	Presenter
9:00 – 9:05	Introduction	Tom Cuccia
9:05 – 10:50	Revisions in the Revised Draft Final Proposal	Karl Meeusen
10:50 – 11:00	Next Steps	Tom Cuccia

ISO Policy Initiative Stakeholder Process



Initiative scope includes ISO tariff changes to address ISO system flexible capacity requirements

- Stakeholder process targeted to be completed by March 2014 for 2015 implementation
- Initiative scope includes:
 - ISO study process to determine flexible capacity requirements
 - Allocation of flexible capacity requirements
 - RA showings of flexible capacity to the ISO
 - Flexible capacity must-offer obligation
 - (Some provisions for use-limited resources may occur in 2016)
 - Backstop procurement of flexible capacity

The ISO has revised the Draft Final Proposal based on stakeholder feedback

- Additional clarity of the roles of the ISO and LRAs
- Aggregation of use-limited resources
- Energy storage resource EFC counting criteria
- Backstop costs for simultaneous deficiencies allocated proportionally
- Assessment of 15-minute inerties for providing flexible capacity in the Reliability Services initiative

The ISO has clarified the role of the LRA and the ISO

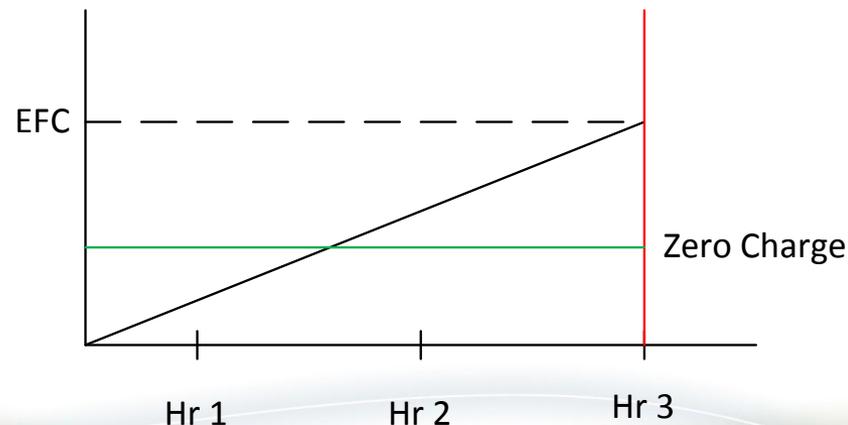
- The ISO will identify and calculate the operational needs for system flexible capacity
- The ISO will use the proposed EFC criteria for two purposes:
 - As default EFC in the event that an LRA does not have specific counting criteria
 - Assessing the need for backstop procurement
- The ISO may also conduct backstop procurement if the portfolio of flexible capacity resources does not meet forecasted ISO operational needs
 - ISO EFC criteria applies in determining the need for backstop procurement (i.e. determining collective deficiency and allocating costs)
 - ISO will apply an EFC criteria that is consistent across all LRAs

LSEs may aggregate use-limited resources to meet the Base Flexibility minimum availability requirements.

- LSEs may aggregate use-limited resources that are not able to meet the minimum operational and availability
 - Starts
 - Energy
- Aggregated resource will:
 - Be based on lowest EFC of the resources used in the aggregation
 - Both resources be subject to the applicable must offer obligation

Energy storage resources wishing to participate as flexible capacity must be listed as a non-generator resource in the ISO's Master File

- Energy storage resources selecting the REM option must be listed as REM resources in the ISO's Master File.
- The EFC of energy storage resources selecting the full flexible capacity option based on the MW output range the resource can provide over three hours of *charge/discharge* at a constantly increasing *charge/discharge* (i.e. constant ramp rate).
 - May not be listed as a regulation energy management resource in the ISOs Master File.



The ISO will allocate costs of simultaneous flexible and generic capacity deficiencies proportionally based on LSE's relative deficiency

- The ISO will first look to procure a resource that addresses both deficiencies simultaneously
- Backstop procurement costs allocated proportionally to each LSE based on their relative deficiency
- Example:
 - ISO system is deficient in both flexible and system capacity
 - LSE A is deficient 100 MW of system
 - LSE B is deficient 50 MW of flexible capacity
 - ISO issues CPM designation for 100 MW resources that addresses both deficiencies
 - Costs allocation:
 - Two-thirds of the costs to LSE A
 - One-third of the costs to LSE B

Other proposed changes

- The ISO will:
 - The ISO will identify and calculate the operational needs for system flexible capacity seasonally
 - Provide an assessment of reliability impact of allowing 15 minute inerties to meet flexible capacity needs designed to simultaneously address five minute load-following needs and longer steep ramps in phase one of the recently opened Reliability Services initiative.

Next Step

- Board of Governors
 - March 2014