

**Comments of the California Wind Energy Association (CalWEA)
on the January 17, 2014 CAISO Fifth Revised Straw Proposal on
Flexible Resource Adequacy Criteria and Must-Offer Obligation (FRACMOO)**

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The California Wind Energy Association (CalWEA) appreciates the opportunity to comment on the California Independent System Operator's (CAISO's) fifth revised straw proposal on Flexible Resource Adequacy Criteria and Must-Offer Obligation (FRACMOO). In general, CAISO's FRACMOO Proposal is intended achieve three objectives:

1. Ensure that CAISO will have sufficient flexible capacity available in order to reliably manage the operation of its controlled grid;
2. Ensure that all sources of flexible capacity (of all technologies and sizes) are properly assessed for their qualifications to provide such capacity and are properly assigned proper credit for providing flexibility service to CAISO; and
3. Properly allocate the need for Flexible Resource Capacity (FRC) procurement to the Local Regulatory Authorities (LRAs) and/or Load-Serving Entities (LSEs) in the CAISO's footprint based on the contribution of these entities to the overall FRC requirement by accounting for their overall supply/demand variations as well as their renewable procurement strategies.

The CAISO's latest FRACMOO proposal by and large addresses the first two objectives. This latest FRACMOO proposal also better achieves the third objective by allocating the FRC requirement in a way that better accounts for the impact of some of the factors that contribute to the need for FRC, namely variations in the load of each LSE and variations in the wind, solar-PV, and solar-thermal generation within each LSE portfolio. The improvement mainly comes from the intention to incorporate these forecasted variations during the five steepest net-load ramps during the month. However, the allocation formula requires further modification to fully account for all the significant drivers of the FRC need -- the needs attributable to distributed resources and fixed generation and import schedules. In that regard, we would like to make the following critical points:

- a) The contribution of Distributed Energy Resources to FRC procurement must be explicitly and accurately identified. CalWEA strongly objects to CAISO removing the change in Distributed Energy Resources from the allocation factors for the following reasons:
- The state is in the midst of an explosive rise in distributed renewable energy (including solar rooftops); thus, relying on historical information on the performance of distributed energy resources subsumed in load variation is likely to result in an erroneous (and thus unfair) allocation of the FRC requirement, especially given the common understanding that one of the two major ramps in the day is due, in significant part, to variations in the output of distributed resources; and
 - By subsuming the contribution of distributed energy resources within load, the ISO would mask the impact that these resources are having on the cost of grid operation. This information is needed to inform policy makers about the integration costs associated with distributed resources and related policies. The main objective of this exercise is, after all, to inform LSEs and policymakers about the indirect costs associated with the procurement decisions and procurement choices that they make.

The CAISO can readily access from LSEs all the data that is necessary to explicitly forecast and account for the impact of “ Δ Distributed Energy Resources.”

- b) The FRC allocator presented in all FRACMOO proposals attempts to identify all the “uncontrollable” drivers of the 3-hour maximum net-load ramp, but misses one of the biggest of these “uncontrollable” drivers: the LSEs’ fixed import/generation schedules. The impact of these schedules must be added into the FRC allocator to reflect the impact that they have on the procurement of FRC. Given that the CAISO performs the allocation on forecasted system condition, the data to determine the FRC allocation to fixed schedules should be readily available to CAISO.