

**Center for Energy Efficiency and Renewable Technologies
Comments on Supplemental Foundational Approach on
Flexible Ramping Products**

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The Center for Energy Efficiency and Renewable Technologies (CEERT) appreciates the opportunity to comment on the CAISO's "Supplemental Foundational Approach on Flexible Ramping Products" presentation of July 17, 2012 and the associated white paper.

CEERT continues to recognize the need for incentivizing generators to provide their flexible ramping capacity to the CAISO in order to manage net load. In fact, almost 90% of all energy transactions within the current CAISO market are self scheduled, providing the CAISO with very little headroom for managing net load. It is precisely this lack of dispatchable generation that is creating the problem for which the Flexible Ramping Product (FRP) is the proposed solution. However, the underlying problem is the lack of a sufficiently deep stack of dispatchable generation resulting from the Load Serving Entities (LSEs) excessive reliance on the practice of self scheduling. And while FRP may indeed incentivize generators to reduce self scheduling, thereby providing the CAISO with sufficient headroom to manage net load, doing so comes at a high price. It is CEERT's primary concern that FRP is an excessively complex solution to a problem that could be solved through other more transparent and potentially less costly means. For example, simply limiting the amount of energy transactions that can be self scheduled by requiring those generators receiving RA payments to bid economically could potentially mitigate the need for FRP. In addition, we are concerned that the highly complex nature of the proposed FRP may give rise to gaming opportunities, the cost of which would ultimately be borne by utility customers. For example, a generator withholding their flexible ramping capacity from the CAISO could receive payments from the FRP market for solving the problem which it ultimately created.

CEERT also recognizes the need for preserving ramping capacity for use in subsequent dispatch periods as a means of ensuring sufficient operational flexibility to manage variable and uncertain net load. However, the existing Flexible Ramping Constraint (FRC) already provides this functionality to the CAISO market in a relatively transparent manner. CEERT does not believe the CAISO has sufficiently justified the need to move to FRP when the FRC already serves the same purpose.

Regarding the current supplemental proposal, CEERT believes that the difference between the option 1 and option 2 approaches – the unexpected ramp versus real ramp approaches – are completely arbitrary, and arise based on certain restrictions placed on the actual ramping needs. For example, on page 5 of the initiative paper, it is stated that for the morning ramp

example, the downward real ramp need is 0 MW because load is not going to decrease in the next interval. However this constraint, while logical, introduces a direct bias into the comparison between the option 1 and option 2 approaches which is the source of the different results between these two approaches. A more consistent approach would be to allow the downward real ramp need to take on negative values, since the forecast load is increasing, and the lower confidence limit is above the current load.

We also believe that the conclusion reached in the paper, namely, that "...[t]he only option to model flex ramp without incurring false opportunity cost payment is to model flex ramp in the energy binding interval meeting the real ramp need of the next interval..." is false because it is based on the systematic bias described above. Furthermore, regardless of whether option 1 or 2 is chosen as the mechanism for procuring flexible ramping, we are concerned that other false opportunity costs still remain in that charging both load and generation for the cost of these flexible ramping services may give rise to a double recovery of these costs.

CEERT also supports CalWEA comments¹ regarding the manner in which cost allocation may be applied to ancillary services as defined under current FERC tariff:

FERC policy requires the costs of ancillary services to be charged to the transmission customers serving load that benefit from reliable grid operations, and permits transmission providers to charge generators for ancillary services only insofar as their transactions cause the transmission provider to incur ancillary service costs that are not recovered from load. For example, transmission providers are permitted to recover the costs of "generator imbalance service" only to the extent that the costs incurred by the transmission providers are not already recovered from transmission customers under Schedules 3 or 4. The CAISO simply does not discuss how it proposes to ensure that generators will not be charged for flexible ramping services that are already being paid for by load, or how it will distinguish between "flexible ramping" and traditional regulation service to ensure that generators are not forced to overpay for flexible ramping to subsidize traditional regulation services that are paid for by load under the CAISO's current tariff.

CEERT appreciates the efforts of the CAISO to establish a robust manner in which to operationally deal with variable and uncertain net load. However we have significant reservations that the current proposed FRP approach will lead to a more stable and efficient market, and encourage the CAISO to look at other market approaches to dealing with these issues.

¹ Comments of the California Wind Energy Association on the April 9, 2012, CAISO Draft Final Proposal on Flexible Ramping Products