

Flexible Resource Adequacy Criteria and Must Offer Obligation - Phase 2 Straw Proposal

Submitted by	Company	Date Submitted
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The Office of Ratepayer Advocates (ORA) provides the following comments on the Straw Proposal, presentations, materials provided, and discussion related to the Flexible Resource Adequacy Criteria and Must-Offer Obligation Phase 2 (FRACMOO2) at the Stakeholder Meeting held on December 21, 2015.

Provision of flexible capacity by import or export resources

ORA generally supports the California Independent System Operator’s (CAISO) proposal to allow qualified 15-minute inertie resources to provide effective flexible capacity (EFC). These resources can provide reliability benefits to the grid and potentially lower costs for consumers. ORA supports the basic concept of avoiding double-counting of the same resource by ensuring that a non-resource specific flexible capacity import does not “count towards meeting the flexible capacity requirement of two [Balancing Authorities]: one as a resource specific flexible capacity resource; and the other as the resource backing a non-resource specific flexible capacity resource.”¹ However, ORA does not support the exclusion of non-resource specific flexible capacity resources as the right approach for imports from non-Energy Imbalance Market (EIM) entities.

As pointed out during the Stakeholder Meeting on December 21, 2015, many large hydro resources in the Pacific Northwest participate in the energy market as non-resource specific resources because they are operated as an integrated system and are not unit specific. Imposing a resource

¹ Straw Proposal, p. 14.

specific requirement on the 15-minute inertie resources from non-EIM participating areas will decrease liquidity at the inerties as many of these hydro facilities could be excluded.

While allowing non-resource specific imports to provide flexible capacity might allow a resource to count towards meeting the flexible capacity requirement of two balancing authorities, instead of excluding non-resource specific resources from participating as EFC providers, the CAISO should consider the creation of criteria whereby an EFC provider is required to specify whether or not the resource being provided as EFC has commitments in other balancing authority areas to avoid double-counting.

Flexible capacity from pumped-storage hydro model

ORA appreciates the CAISO's commitment to reassess the pumped-storage hydro unit model, which is the model used by the CAISO for non-generator resources (NGR) to assess EFC.² This effort is in response to Pacific Gas and Electric Company's (PG&E) request that the CAISO alter its flexible capacity counting rules for storage resources that do not fit into the CAISO's model for non-NGR resources.

The example in Figure 4 of the CAISO's Straw Proposal appears to be a limited case of a non-NGR model resource "stopping" at a certain critical time of steep net load ramp, thereby lowering the net load while still within the net load ramping period of concern. If transition time parameters were specific enough, such a resource could still provide valuable EFC during the required period of net load ramp. The CAISO's dispatch algorithms should be able to account for multiple EFC resources which in total can provide upward EFC as long as the transition time parameters for dispatch are coordinated. This could effectively turn a series of separate and discrete start/stop resources into an aggregate resource that provides the continuous operability throughout the critical ramping period.

Merchant Variable Energy Resources

The Straw Proposal indicates that the CAISO will not at this time pursue additional flexible Resource Adequacy (RA) capacity requirements for uncontracted merchant Variable Energy Resources (VERs) given the present *de minimis* contribution of these resources to the three hour ramp needs.³ ORA does not oppose this approach. Based on the CAISO's estimates, there are about 200

² Straw Proposal, p. 17.

³ Straw Proposal, p. 22.

MW of merchant wind resources and zero MW of merchant solar VERs in the CAISO's balancing authority area which are not under contract to the CAISO-based load serving entities.⁴ According to the CAISO, these resources accounted for 4.48 percent of all wind capacity included in the 2016 flexible capacity technical needs study.⁵ The study showed that wind resources' forecasted contribution to the three hour net load ramp was about 1-2 percent.⁶ Given the CAISO's estimates that the total flexible capacity contribution of these merchant VERs in non-summer months would be between -7.93 (benefit to grid reliability) and 23.3 (contribution to the need) MW, ORA does not oppose CAISO's conclusion that there is no need to change the existing RA construct by allocating RA requirements to merchant VERs. However, ORA recommends that the CAISO report annually on the contribution of VERs to the three hour ramp needs so that stakeholders can monitor the impact. The CAISO should provide an estimate of the level of merchant VERs which would exceed a *de minimus* threshold and require further consideration.

Allocating negative contributions to flexible capacity requirements

The CAISO's proposal to allocate negative contributions to flexible capacity requirements to local regulatory authorities (LRAs) needs to be vetted and clarified further. The magnitude of the negative contributions should be quantified so that it is clear if they are more than *de minimis*. ORA does not oppose the general concept of providing each LRA with its actual contribution, even if it is negative, and allowing LRAs to allocate that capacity to their respective jurisdictional load-serving entities (LSEs). Likewise, ORA does not oppose allowing LSEs to then sell those negative contributions as a credit towards meeting another LSE's flexible RA showing. However, the Straw Proposal is not clear on whether LSEs would be able to trade only within the jurisdiction of their respective LRA's or within the entire CAISO balancing authority. Entities located outside of the CAISO's current balancing authority area may soon join to form a multi-state regional organization. Therefore, it is important to assess advantages and disadvantages of inter and intra-LRA trading among LSEs and to clarify the rules of such transactions.

⁴ Straw Proposal, p. 21.

⁵ *Ibid.*

⁶ *Ibid.*