

## Stakeholder Comments Template

Submitted by	Company	Date Submitted
Laura Trolese, <a href="mailto:ltrolese@publicgeneratingpool.com">ltrolese@publicgeneratingpool.com</a> , (360) 513-6465  Therese Hampton, <a href="mailto:thampton@publicgeneratingpool.com">thampton@publicgeneratingpool.com</a> , (360) 852-7366	Public Generating Pool	February 21, 2018



Please use this template to provide your comments on the FRACMOO Phase 2 stakeholder initiative Revised Draft Framework Proposal posted on January 31, 2018.

Submit comments to [InitiativeComments@CAISO.com](mailto:InitiativeComments@CAISO.com)

**Comments are due February 21, 2018 by 5:00pm**

Public Generating Pool (PGP) appreciates the opportunity to comment on the California ISO's Flexible Resource Adequacy and Must Offer Obligation Phase 2 (FRACMOO2) Revised Flexible Capacity Framework dated January 31, 2018.

PGP continues to be generally supportive of the ISO's direction in developing a new Flexible Resource Adequacy (RA) framework that aligns forward procurement with the ISO's actual operational needs and how the ISO commits and dispatches resources through the various market runs. PGP is also supportive of many of the revisions the ISO has made in its Revised Flexible Capacity Framework, while some of the revisions raised further questions for PGP. PGP offers the following comments.

### **Identification of ramping and uncertainty needs**

The ISO has identified two drivers of flexible capacity needs: General Ramping needs and uncertainty. The ISO also demonstrated how these drivers related to operational needs.

**Comments:**

PGP reiterates its support for the ISO's proposal to separate the total flexible capacity requirements into ramping needs that can be forecasted ahead of time and uncertainty that is not known until real-time. PGP agrees with CAISO's proposal to include regulation as part of the 5-minute flexible capacity need.

**Definition of products**

The ISO has outlined the need for three different flexible RA products: Day-ahead load shaping, a 15-minute product, and a 5-minute product.

**Comments:**

PGP reiterates its support for CAISO's definition of flexible RA products: day-ahead load shaping, a 15-minute product, and a 5-minute product. PGP agrees that the day-ahead load shaping product should ensure the ISO is able to meet its 3-hour net load ramps while the five- and fifteen-minute flexible RA capacity should be designed to address real-time uncertainty between IFM and RTD. PGP also agrees that flexible RA needs should be procured to cover both upward and downward uncertainty ranges.

**Quantification of the flexible capacity needs**

The ISO has provided data regarding observed levels of uncertainty, in addition to previous discussions of net load ramps.

**Comments:**

PGP finds the ISO's removal of the additional upward uncertainty from the overall flexible capacity need to contradict prior analysis put forward by the ISO. In the ISO's Draft Flexible Capacity Framework Proposal dated November 20<sup>th</sup>, 2017, the ISO stated it required additional upward flexible capacity to address uncertainty, even during the largest three-hour net load ramps. The ISO stated the upward uncertainty during the largest three-hour net load ramps can routinely reach 2,000 MW. Based on the ISO's initial assessment comparing the forecast error on the 5 largest three-hour net load ramps between October 2016 and December 2016, the ISO finds that there is 1,000 MW to 2,000 MW of upward ramping capability required during three-hour net load ramps to address uncertainty.

In its Revised Flexible Capacity Framework dated January 31, 2018, the ISO modified its proposal by removing the additional upward uncertainty requirement based on the reasoning that the uncertainty need is already contained within the three-hour net load ramp. However, the ISO's reasoning for the revision seems to contradict the analysis the ISO put forward in the

previous version of the Flexible Capacity Framework. PGP requests clarity regarding how the upward uncertainty is already contained within the three-hour net load ramp.

Regarding other aspects of the quantification of flexibility needs, PGP agrees with the ISO's proposal to set flexible capacity requirements to encompass the widest range of uncertainty for all real-time flexible capacity products. PGP also supports inclusion of an additional growth factor as load and resource variability continue to increase.

### **Eligibility criteria and must offer obligations**

The ISO has identified a preliminary list of resource characteristics and attributes that could be considered for resource eligibility to provide each product. Additionally, the ISO is considering new counting rules for VERs that are willing to bid into the ISO markets.

#### **Comments:**

PGP supports the ISO changing all EIM sufficiency tests to credit the ISO with any capacity from resources based in an EIM BAA shown as flexible RA capacity and remove the resources from any EIM entity's sufficiency tests. Otherwise the resources would be double counted in resource sufficiency showings.

PGP also supports the ISO's requirement for external resources to identify all physical resources supporting flexible RA capacity to ensure physical resources are behind the flexible RA capacity and that the resource attributes align with the flexible capacity requirements.

Regarding the eligibility criteria, the proposed requirements for startup time and ramping capability appear to capture the ISO's need to ensure the flexible RA resources procured are able to meet the ISO's needs. However, the ISO's assessment of historic flexible RA showings with the new flexible capacity framework seems to contradict the ISO's previous assessment of the current flexible RA fleet. In its November 2016 Supplemental Issue Paper, the ISO stated that its assessment of the current flexible capacity product shows that it is overly inclusive, and risks exacerbating the ISO's operational challenges by sustaining largely inflexible resources (long starting, long minimum run times, and high Pmins) at the expense and financial viability of more flexible resources. The ISO also stated that under the current flexible RA paradigm, there is no assurance the flexible RA resources procured are capable of meeting real-time ramping uncertainty.

In the Revised Flexible Capacity Framework, the ISO provided an assessment of historic flexible RA showings with the new flexible capacity framework to determine if existing flexible RA procurement practices would fulfill the new flexible RA framework. The table showed there is a

large pool of resources that qualify to meet the new flexible RA requirements and there is not much need to change procurement practices, in particular after the effects of the day-ahead 15-minute scheduling initiative are incorporated into the analysis, which are anticipated to result in lower 15-minute flexible RA capacity needs. This result appears to contradict the ISO's previous assessment. PGP requests the ISO provide clarity regarding whether a discrepancy exists between the two assessments. PGP also requests additional analysis from the ISO that provides further assurance that the new flexible capacity framework does not continue to result in criteria that is overly inclusive of inflexible resources.

Regarding solar resources, PGP appreciates the ISO's caution in limiting the quantity of solar capacity providing any single flexible RA product as a starting point. As the ISO has stated, the value solar resources provide in meeting flexibility needs is through the ISO dispatching solar resources to less than full output during the mid-day hours to reduce the evening ramping needs. As such, it is important that the ISO have the right incentives and penalties in place to assure performance and dissuade solar resources from over-generating during the mid-day hours.

Lastly, PGP agrees with the ISO's overarching goal to ensure resources procured under the flexible RA program can perform during times of greatest flexible capacity need. As such, PGP recommends the ISO explore measures that ensure performance of flexible RA resources.

### **Equitable allocation of flexible capacity needs**

The ISO has proposed a methodology for equitable allocation of flexible capacity requirements. The ISO seeks comments on this proposed methodology, as well as any alternative methodologies.

#### **Comments:**

No comments.

### **Other**

Please provide any comments not addressed above, including comments on process or scope of the FRACMOO2 initiative, here.

#### **Comments:**

In closing, PGP generally supports the ISO's Revised Flexible Capacity Framework with additional measures added to ensure its effectiveness and durability. Furthermore, PGP reiterates its comments regarding the ISO's Maximum Import Capability (MIC) process. PGP agrees with the ISO that reform to the MIC process would be too much to include within the scope of this stakeholder process. However, CAISO made no commitments to address the shortcomings of the MIC process as originally requested by PGP and other stakeholders. As mentioned in previous comments, the current MIC allocation process hinders the efficient and least-cost procurement of RA capacity and artificially limits participation by external resources when the amount allocated to an LSE goes unused. The ISO could consider a solution that does not pre-allocate MIC or allocates MIC only when it is within a certain percentage of the total MIC for a given path. In either case, there is a greater opportunity for external resources to participate in the flexible RA program if MIC is allocated in a manner that doesn't leave unused import capability stranded and unusable. PGP continues to believe this is an important issue that needs to be addressed and requests the ISO consider MIC reform in the broader context of CAISO's Resource Adequacy framework.