

## Stakeholder Comments Template

Submitted by	Company	Date Submitted
Nathan Sandvig <a href="mailto:nathan.Sandvig@nationalgrid.com">nathan.Sandvig@nationalgrid.com</a> 503.602.0998	National Grid	2/21/18

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](#)**

The Revised Draft Framework Proposal posted on January 31, 2018 and the presentation discussed during the February 7, 2018 stakeholder web conference may be found on the [FRACMOO](#) webpage.

Please provide your comments on the Revised Draft Framework Proposal topics listed below and any additional comments you wish to provide using this template.

The ISO is in the process of updating the data provided in the Revised Draft Framework Proposal. The ISO will include additional observations for 2016 and 2017. Additionally, the ISO will estimate the impacts of 15-minute IFM scheduling. The ISO will release this updated analysis as soon as possible.

### **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:**

No comments

### **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:**

National Grid supports the proposed flexible RA products.

**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:**

No comments

**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 VEs that are willing to bid into the ISO markets.

**Comments:**

National Grid is pursuing development of pumped storage hydro projects with the intent to participate in the CAISO's market for flexible resources. The CAISO has specific counting rules related to the contribution of pumped storage to resource adequacy. National Grid encourages the CAISO to ensure that its counting rules related to the flexible RA products take into account the ability of pumped hydro storage to provide flexible capacity in both pumping and generation modes; as well as the speed with which a project can switch between modes.

**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:**

National Grid continues to support the proposal to allow external resources to meet a portion of the CAISO's need for flexible capacity. National Grid looks forward to more detail on the proposed Day Ahead Market enhancements; specifically how will the proposed Day Ahead Market enhancements work in conjunction with the other changes proposed in the FRACMOO2 process.