Stakeholder Comments Template

Submitted by	Company	Date Submitted
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Please use this template to provide your comments on the FRACMOO Phase 2 stakeholder initiative Supplemental Issue Paper posted on November 9.

Submit comments to InitiativeComments@CAISO.com

Comments are due January 6, 2017 by 5:00pm

The Supplemental Issue Paper posted on November 9 and the presentation discussed during the December 9 stakeholder web conference may be found on the <u>FRACMOO</u> webpage.

Please provide your comments on the Supplemental Issue Paper topics listed below and any additional comments you wish to provide using this template.

Identified opportunity for enhancing flexible capacity product

- 1. Ramping speed
 - a. Large single hour net load ramps

Comments:

The resource characteristics of hydroelectric generation provide excellent capability to respond to large single hour net load ramps. As the FRACMOO2 stakeholder process continues, Seattle encourages the ISO to study and evaluate the ability of Northwest hydroelectric generation resources to export fast-start, flexible resources from the Northwest region to help manage the large and fast load ramp conditions found within CAISO's BAA. b. The transition from low net loads to steep ramps

Comments:

No Comment

c. Intra-hour variability

Comments:

No Comment

2. Cycle time and flexible capacity qualifications

Comments:

No Comment

3. High minimum operating levels from both RA and flexible RA

Comments:

No Comment

4. Most significant net load ramps occur on weekends or holiday weekdays

Comments:

No Comment

 Significant quantities of long start resources may limit the ISO's ability to address realtime flexibility needs
Comments:

No Comment

 There is currently no means in place for the ISO to assess the likelihood that the flexible RA showings will adequately meet all ramping needs
Comments:

No Comment

Other comments

Please provide any additional comments not associated with the topics above.

Comments:

Seattle City Light believes the ISO should move forward with study and review of how hydroelectric imports from the Pacific Northwest may provide flexible RA resources during this round (FRACMOO2) of the initiative. City Light does not support a cap on imports to meet flexible RA requirements. However, if a cap is established, it should only come with a commitment to re-evaluate that cap when more data is available.

Seattle encourages the ISO to continue down their path to develop robust flexible RA requirements that meet foreseeable ISO operational needs and hopes the above comments provided insight for continued discussion.