Stakeholder Comments Template

Submitted by	Company	Date Submitted
Danielle Osborn Mills <u>danielle@renewableenergystrat.com</u> (916) 320-7584	American Wind Energy Association – California Caucus (ACC)	May 17, 2018

Please use this template to provide your comments on the FRACMOO Phase 2 stakeholder initiative Second Revised Draft Framework Proposal posted on April 27, 2018.

Submit comments to InitiativeComments@CAISO.com

Comments are due May 17, 2018 by 5:00pm

The Second Revised Draft Framework Proposal posted on April 27, 2018 and the presentation discussed during the May 3, 2018 stakeholder meeting may be found on the <u>FRACMOO</u> webpage.

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

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 were related to operational needs.

Comments:

ACC offers no comments on this issue at this time.

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:

ACC offers no comments on this issue at this time.

Quantification of the flexible capacity needs

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

Comments:

ACC offers no comments on this issue at this time.

Eligibility criteria, counting rules, 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 has proposed new EFC counting rules for VERs and storage resources that are willing to provide flexible RA capacity.

Comments:

Generally, the ISO should strive to utilize an ELCC-like methodology for ramping hours for determining the EFC of VERs. ACC understands the challenges associated with this approach but believes that ensuring consistency with the CPUC's future RA counting rules should be given significant weight in the CAISO's development of the Flexible RA construct.

Should the ISO move forward with the "simple" approach for determining the EFC of VERs, as currently proposed, then, at a minimum, the ISO should calculate EFCs not only by technology type but also by geographic area. This is important because location of wind and solar may alter the resource's contribution to the three-hour net load, which should be accounted for in determining a resource's EFC. Therefore, even in the simple approach to calculating EFCs for VERs, CAISO should differentiate wind and solar resources based on their regional location.

In the current proposal, CAISO proposes to establish EFC for VERs based on the "technology's contribution to the three-hour net load as determined by the ISO's annual flexible capacity needs assessment." But regional differences associated with each technology need to be taken into account to ensure the CAISO can meet its flexible RA requirements. Therefore, if the ISO continues with the simple approach, the ISO should determine the contribution of technologies in various regional locations to the three-hour net load. This would result in CAISO calculating, for instance, the contribution to the three-hour net load (and the associated EFCs) for:

- Solar in northern California
- Solar in southern California/southern Nevada
- Wind in northern California

- Wind in southern California
- Wind in the Pacific Northwest
- Wind in New Mexico/Wyoming

Resource geographies may play an important role in the resource's contribution to the threehour net load and, therefore, must be accounted for in the CAISO's simple approach to determining EFCs. This relatively simple addition will improve the accuracy of VER EFCs, while the CAISO, hopefully, moves toward an ELCC-like methodology.

Additionally, the CAISO should provide additional details on how resources that may help reduce the net load ramp (such as wind coming online in the evening) will have its EFC calculated. As discussed during the stakeholder meeting, these resources should be provided their full nameplate capacity as EFC. ACC looks forward to additional details from CAISO in a subsequent proposal.

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:

ACC offers no comments on this issue at this time but appreciates the CAISO's efforts to align flexible capacity requirement with reasonable causation principles.

Next Steps

The ISO is currently planning to issue a draft final framework on June 6, 2018. However, given the schedule change in the CPUC's RA proceeding, the ISO will not release a draft final framework until July 10, 2018. The ISO seeks stakeholder input regarding next steps that should be taken to further enhance the ISO's framework. Options include, but are not limited to, another full iteration or working groups.

Comments:

ACC would support an additional iteration from the CAISO with the additional time and, specifically with additional details on the EFC for VERs and, particularly, VERs that help to reduce the three-hour net load ramp.

<u>Other</u>

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

Comments:

ACC offers no comments on this issue at this time.