

Stakeholder Comments Template

FRACMOO 2 Stakeholder Working Group

This template has been created for submission of stakeholder comments on the FRACMOO 2 Working Group Call that was held on August 2, 2017. The working group presentations and other information related to this initiative may be found at:

<http://www.caiso.com/informed/Pages/StakeholderProcesses/FlexibleResourceAdequacyCriteria-MustOfferObligations.aspx>

Submitted by	Company	Date Submitted
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Upon completion of this template, please submit it to initiativecomments@caiso.com. Submissions are requested by close of business on **August 18, 2017**.

Please provide your organization's comments on the following items:

1. Operational issues discussed during the working group related to flexible capacity needs.

SCE believes that very deliberate consideration should be given to determine whether it is the Resource Adequacy (RA) program that is falling short of the Flex RA reliability need or if it is the products within the wholesale energy and ancillary services markets that are not properly allocating the valuable uses of the resources made available. The RA program has long been a program in which the LSEs are required to procure capacity sufficient to meet reliability planning needs. Those resources are then made available to the CAISO via a must-offer obligation to provide energy or ancillary services in the wholesale markets. SCE does not see a need to alter this structure for capacity needed to provide ramping services. Rather the RA program should define the quantity of ramping needed and the wholesale markets should then best allocate the use of that resource.

2. Proposed flexible capacity procurement framework presented by The Brattle Group.

As stated above, SCE does not see the RA framework as developing products for operational purposes. Rather it is a program to ensure that sufficient capacity exists for the wholesale market to utilize. Within the Brattle presentation, the following statements appear:

Step 2: Specify Flexible Capacity Procurement Quantities

- a. Define products for procurement

- Products to optimally utilize resources, minimize participation barriers

SCE does not believe it is the role of the RA program to “optimally utilize” resources. That is the role of the wholesale market. The RA program should simply ensure that sufficient capacity with the attributes necessary are made available via a must offer obligation. Optimal utilization is then up to the energy and ancillary service products including the Flexible Ramping Product.

3. Proposed flexibility metrics and any additional metrics that you believe the CAISO should consider.

SCE does not believe that the CAISO has clearly demonstrated where the current three-hour product is failing. SCE understands and agrees that there are ramps both shorter and longer than the three-hour duration. SCE has performed its own studies of the fleet of resources, the Flex RA requirements and the net load changes on the system. From that data, SCE has concluded that even the slowest ramping fleet that meets the current Flex RA requirements (both quantity and resource qualifications) satisfies the net load ramping needs in both shorter and longer ramp intervals. The CAISO has expressed concerns about multiple ramps and repeated uses of the same resources but has not quantified this concern. SCE finds it very difficult to agree to a new product or products on the basis of the information provided thus far. It is not possible to ascertain whether the issue is simply with the dispatch of the available Flex RA resources, the wholesale market products ineffectively allocating those resources, or a fundamental failure of the RA program to provide sufficient installed capacity with the necessary attributes for the market to utilize. While the information of CPS violations was interesting and informative, SCE does not necessarily see the Flex RA program requirements including quantities and qualifications as being the sole cause of such violations.

SCE asks that the CAISO better define where and how the current requirements and product are failing to produce a fleet of resources which the wholesale market can then utilize to address net load ramping needs.

Finally, SCE notes that in 2017, the CPUC issued a decision to implement ELCC. The result of this implementation will be a significant derate in the amount of capacity from Solar resources that can count toward system and local RA. The system and local requirements have not gone down and so to meet those requirements, LSEs are likely to provide other resources that are more flexible within their system and local showings. SCE asks that the CAISO evaluate the expected changes in the ability to meet flex needs given this change.

4. Plan to move the flexible capacity initiative forward.

Within their presentation, the CAISO states:

A new RA assessment methodology is needed to evaluate the interaction of the fleet to meet the needs of the transforming grid

- Ensure there is sufficient capacity & energy 8760 hrs/yr
- Satisfy all operational needs all hours of the year (emphasis added)

SCE notes that this is not the structure of the RA program and has not been the structure from the beginning. System and Local RA are developed based upon forecasts of load and for local, transmission system constraints. These forecasts are based upon some level

of certainty that load can be served under certain stress conditions. It does not ensure that load will be served under all stress conditions.

The first step then of the Flex RA program should be to define the level of expected reliability based upon ramping volatility. While a system may be configurable to meet this need in “all hours of the year” SCE suspects that like system and local, the effort to do so would result in costs that exceed the value of such extreme reliability. Local RA uses a 1 in 10 year load forecast and does not utilize a planning reserve margin. System RA, utilizes a 1 in 2 year load forecast and adds to that requirement a 15% planning reserve margin. At this time, the Flex requirement is established based on the sum of the following:

- The maximum three hour ramp in the CAISO net load forecast¹
- The maximum of the single largest contingency or 3.5% of the expected peak load
- An error term to account for load forecast error and variability.

It is not clear, what level of reliability (1 in X year) this formulation will have. SCE believes that a more defined level of reliability should be established in order to evaluate the need for product changes as compared to potentially simpler solutions such as utilization of the already available error term to ensure that the CAISO has sufficient resources with the correct attributes to enable the system to reach the expected level of reliability.

5. Any other comments.

¹ It is not clear what level of certainty this net load forecast represents as SCE could not find documentation indicating whether this is a 1 in 2 year net load forecast or for some other level of certainty.