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Comments of Northern California Power Agency
Flexible Resource Adequacy Criteria and Must-Offer Obligation – Phase 2
Working Group Meeting presentation

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Northern California Power Agency ("NCPA") appreciates the opportunity to comment on the CAISO's July 22, 2015 Working Group Meeting presentation on Flexible Resource Adequacy Criteria and Must-Offer Obligation ("FRAC-MOO") Phase 2. NCPA offers the following comments:

Framing the Flexible Capacity Needs Issue

NCPA recognizes that as the State of California continues to advance its policy objective of increasing the amount of electric supply generated by renewable energy resources, the way in which the electric grid is operated will continue to evolve. Notwithstanding these known challenges, NCPA believes that all proposed changes in how the market is designed, or how the grid is operated by the CAISO, should be based on material evidence. NCPA is concerned that the industry is attempting to create a solution to a problem that has not been clearly defined or identified. As the CAISO works toward defining the scope of this initiative, NCPA requests consideration of the following concepts:

- The CAISO should provide more data and/or evidence to justify its statement of the problem. The CAISO has not provided sufficient evidence to prove that existing resources' minimum operational constraints are the source of the "burden" on the system, or that self-scheduling directly results in over-generation conditions. The CAISO itself has implemented a minimum online constraint to ensure that sufficient generation is online and operating at minimum load to ensure reliable operations of the grid.

  As another example, slide 11 of CAISO's presentation seems to imply that negative real-time LMPs experienced on April 12, 2014 are evidence that there is material over-generation concern on the system today. CAISO further seems to imply that the existence of negative prices is a clear sign that a solution needs to be created to mitigate such outcome. However, CAISO's stated presumption conflicts with the asserted basis for CAISO's recent filing (accepted by FERC) to reduce the market bid price floor to allow for the very outcomes CAISO now states should be mitigated. Accordingly NCPA requests that the CAISO provide a more robust data set that at least demonstrates the scope of the asserted over-generation, minimum load and self-scheduling problems and their impact on the market.

- While current state policies seem to imply that renewable generators should be treated as a preferred class, when considering market design changes that direct impact system reliability, all renewable generation should not be assumed to be “non-dispatchable.” Establishing market design rules that by default treat renewable generators as a group of resources that are presumed to be impervious to market signals, and in turn developing incentives for other resources to compensate for this, fails to provide renewables with the economic incentives to evolve. NCPA notes that the CAISO eliminated the PIRP program and lowered the energy bid floor precisely out of recognition of this very issue.

Market Signals Should Elicit Flexibility

Resource adequacy is an integral planning tool and serves an important reliability need. It is not, however, intended to take the place of market signals. The CAISO has myriad past and ongoing market design changes aimed at providing incentives for resources, especially flexible resources, to bid into the CAISO markets.

- The CAISO implemented the Fifteen Minute Market which was intended to provide for more temporally granular intertie bidding. Due to seams issues and administrative costs (which the CAISO may consider addressing), the amount of economic bidding at the interties has plummeted as the CAISO shows on slide 32 of its presentation.

- The Energy Imbalance Market, as it continues to expand, will provide the CAISO with additional tools to manage real-time system conditions.

- The CAISO lowered the bid floor in order to provide the incentive for intermittent resources to bid into the market, and that floor will be further reduced. On slide 11 of the presentation, the CAISO depicts a day on which there were negative prices in the real-time market and states that this is due to over-generation. This provides the proper economic incentive for downward flexible generation, as well as the incentive to reduce self-scheduling. While the negative prices may well indicate that there was over-generation, they also indicate that the market was sending the appropriate economic signals to deal with those conditions.

- The CAISO is developing the flexible ramping product which is intended to provide additional incentive to bid flexible generation into the market.

NCPA advocates that the CAISO refine and leverage the tools it has in the market and that it take time to evaluate the impacts of the implementation of upcoming market changes. Relying solely on additional administrative requirements rather than leveraging the market is a “blunt instrument” approach and runs counter to the aims of improving market efficiency, minimizing implementation and administrative costs, and avoiding unneeded complexity.

Proposed Effective Flexible Capacity Rules

On slide 29 of the presentation, the CAISO described its proposed change to the criteria to determine the effective flexible capacity ("EFC") of a resource for non-summer months. NCPA appreciates the necessity of considering minimum run time and minimum down time given that the CAISO anticipates needing to have the resource off during the middle of the day when solar output is at its peak and then have it on in time to help meet the evening load ramp.

NCPA notes that, in the event that the rules are changed as proposed and the flexible resources are not cycled off, the reduction in the amount of EFC a resource can provide will necessitate more resources to meet the same flexible RA requirement and could potentially add to the "Pmin problem" the CAISO seeks to mitigate.

Out of recognition that the criteria used to determine EFC for upward flexibility may be different than for downward flexibility, NCPA recommends that the CAISO evaluate the potential to procure those products separately. Leaving the (almost) existing FRAC-MOO policy in place for upward flexible capacity and developing separate rules for downward flexible capacity would enable those rules to be tailored to the need. This will also help mitigate the potential exacerbation of the Pmin problem described above.

Allowances for Inflexible Capacity

NCPA notes that by defining "inflexible capacity allowances" as being from dispatchable load, dispatchable intermittent resources, storage load, and exports, the CAISO is effectively enabling resources that don't meet the flexible RA criteria to count for flexible capacity. While this may support other policy goals, it seems that allowing a one-for-one exchange between those resources and an "inflexible" RA resource effectively enables resources that don't meet the flexible RA criteria to command the same flexible capacity price as resources that do meet the established criteria. In addition, the purpose of revising the flexible capacity rules is to ensure that the grid can be operated reliably, and establishing policy that allows resources not subject to those rules to provide flexible capacity runs counter to that purpose.

Non-RA Self-Scheduling

On slide 56 of the presentation, the CAISO lays out three options to address its concerns about the exacerbation of over-generation problems allegedly due to self-scheduling of resources. NCPA opposes all of these options.

- <u>Option 1</u>: "Prohibit self-scheduling of non-RA resources in the day-ahead and real-time markets." NCPA strongly believes that this is simply not an option.

There are crucial operational and economic reasons for which a market participant would self-schedule a resource.

- Option 2: "Day-ahead awards for non-RA capacity that do not rebid into real-time markets are automatically rebid by the ISO." A market participant who has made the decision to self-schedule a resource will re-submit a self-schedule in real-time. This option would be effective in getting more "economic" bids only in rare instances that a market participant effectively fails to participate in the real-time market. Developing policy around the anticipation of such mistakes by market participants is a stretch at best.

- Option 3: "Non-RA capacity would have a lower penalty price parameter in the scheduling rule." This change would create differential treatment by exposing non-RA resources to greater market risk than RA resources.