BEFORE THE
PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Oversee the Resource Adequacy Program, Consider Program Refinements, and Establish Annual Local Procurement Obligations.	)	Rulemaking 11-10-023

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION REPLY COMMENTS ON THE PROPOSED FLEXIBLE CAPACITY PROCUREMENT FRAMEWORK

The California Independent System Operator Corporation ("ISO") respectfully submits these reply comments in response to the comments other parties submitted on the California Public Utilities Commission ("Commission" or "CPUC") Staff Proposal on the Implementation of the Flexible Capacity Procurement Framework.[1]

In its initial comments, the ISO requested that the Commission hold a workshop in this proceeding to discuss the Energy Division's flexible capacity proposal. The Energy Division presented its proposal in a paper, but the parties have not yet had the opportunity to ask questions and discuss concerns about the proposal with the staff in a workshop setting. The ISO's comments identified several aspects of the Energy Division's proposal where greater transparency and further explanation are needed. The comments submitted by the other parties echo the need for a workshop to discuss the questions that remain, both at the conceptual level and technical level, about the

[1] The ISO submits these reply comments in accordance with the Ruling of the Administrative Law Judge dated February 27, 2014 that set March 6, 2014 as the date for the parties to file and serve reply comments on the Energy Division's flexible capacity proposal.

methodologies that will be used and the details of the flexible capacity structure that will be implemented. For example, the Independent Energy Producers Association requests a workshop to provide additional clarity regarding the flexible capacity need and allocation methodology.[2] Southern California Edison Company ("SCE") requests clarification of how the proposed rules regarding selling and showing generic and/or flexible capacity will apply to a resource owner, a load serving entity, and a scheduling coordinator.[3] The Utility Reform Network[4] and NRG Energy, Inc. ("NRG")[5] support conducting a workshop for parties to clarify and discuss the Energy Division proposal. The ISO urges the Commission to hold a workshop in which these important matters can be adequately addressed.

I. THE ISO SHOULD DETERMINE EFFECTIVE FLEXIBLE CAPACITY AS THE BASIS FOR BACKSTOP PROCUREMENT

In its comments, SCE asserts "that the role a resource's EFC contributes towards maintaining a reliable electrical system is more of an operational than a planning product. As such, SCE believes that the CAISO should ultimately be the agency who determines how a resource's value is to be calculated."[6]

The ISO agrees. Like net qualifying capacity, the ISO must be able to set the maximum effective flexible capacity value of each resource through a process that coincides with the current process for determining each resource's qualifying generic resource adequacy capacity. For setting generic resource adequacy eligible capacity,

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2 IEP Comments, pp. 1-2.

3 SCE Comments, p. 8.

4 TURN Comments, p. 3.

5 NRG Comments, p. 6.

6 SCE Comments, p. 3.

the CPUC calculates the qualifying capacity of resources and provides those values to the ISO. The ISO then calculates the net qualifying capacity of the resources, taking into account each resource's deliverability[7] and any relevant performance testing information.[8]

In an analogous way, the CPUC will calculate the flexible capacity value of eligible resources and provide those values to the ISO. The ISO will in turn assess each resource's effective flexible capacity, taking into account net qualifying capacity values, minimum operating levels, start-up times, and ramp rates and, in so doing, publish a corresponding effective flexible capacity value that will be used by the ISO to determine whether its operational needs have been met when evaluating resource adequacy flexible capacity showings.

There are several reasons why it is essential for the ISO to set the effective flexible capacity value for resources, similar to how the ISO sets the NQC value for resources today.

First, the ISO is uniquely situated to calculate the effective flexible capacity of a resource given the unique insight, knowledge, and documentation the ISO maintains regarding the operational characteristics and actual performance of resources in its balancing authority area. The ISO uses this information daily to validate resource capabilities for bidding, scheduling, and operational purposes and to effectively plan for operational needs. The ISO also has unique insight into how operational constraints of resources are managed and optimized through the ISO market systems. This allows the ISO to assess the effectiveness of resources at meeting grid reliability needs when

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7 ISO Tariff Section 40.4.6.

8 ISO Tariff Section 40.4.4.

establishing maximum effective flexible capacity values.

Second, and perhaps most importantly, the ISO must have an agreed-to EFC value for each resource to equitably assess the collective flexible capacity showings by the local regulatory authority and among all local regulatory authorities. Because local regulatory authorities have the option to set their own flexible capacity values by resource, the ISO must, in the end, maintain the effective flexible capacity values so that it can assess and compare showings across local regulatory authorities on a level playing field. For instance, how could the ISO perform an assessment that is effective, efficient, and equitable if its assessment was based on different flexible capacity counting methodologies from different local regulatory authorities? In other words, what if the amount of qualifying flexible capacity was different for the same resource depending on each local regulatory authority's flexible capacity calculation? Should the ISO use the flexible capacity method of LRA1 or of LRA2 to determine if a deficiency exists across all local regulatory authorities? If the ISO is unable to set its own EFC counting standard, and LRA1 sets a low threshold flexible capacity value (low quality) and LRA2 sets a high, more rigorous flexible capacity threshold (high quality), which is the more appropriate method for the ISO to use? The answer would be debatable from each local regulatory authority's perspective, and likely contested among the local regulatory authorities if there are perceived inequities between their methods. If the ISO were not performing this task, the potential would exist for local regulatory authorities to "lean" on other local regulatory authorities, which would be an inequitable result. Thus, the ISO must ultimately calculate and set the final effective capacity values to ensure that all local regulatory authorities are treated equitably when assessing if a flexible capacity deficiency exists and when allocating backstop procurement costs.

Third, in the situation described above, a single resource could have two distinct flexible capacity values based on different counting methods by LRA 1 and LRA 2. How would a resource owner determine the amount of flexible capacity that could be sold from the resource, absent a standard effective flexible capacity value? One local regulatory authority could claim that the resource has 100 MW of qualifying flexible capacity while the other local regulatory authority claims it has 75 MW. The complexities and challenges of a single resource having multiple flexible capacity values would be unmanageable. It is vital that the ISO set a single EFC value for each resource. Consolidating this function at the ISO will allow greater market efficiency, provide transparency, and greatly simplify the transaction and contracting process for load serving entities and resource owners.

For these reasons, and in harmony with the existing NQC process and logic, the ISO must have the authority to set the maximum effective flexible capacity value for resources.

II. THE FLEXIBLE CAPACITY NEED IS BASED ON UPWARD RAMPING CAPABILITY

The comments of the Large-scale Solar Association ("LSA") and the Concentrating Solar Power Alliance ("CSPA") assert that flexible capacity costs should be allocated to baseload generating resources.[9] They support the Energy Division's statement in its proposal that: "Staff supports an approach where inflexible generation, including all baseload units, and not just wind and solar generation resources bear the cost of flexibility."[10]

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[9] LSA Comments, pp. 1-2; CSPA Comments, pp. 2-3.

[10] Staff Proposal on the Implementation of the Flexible Capacity Procurement Framework (February 10, 2014), p. 5.

To date, the flexible capacity need has been defined in terms of upward ramping capability, not downward. Like other parties, the ISO clearly recognizes that downward ramping capability will be an essential resource attribute to address growing over-generation concerns, and, therefore, downward ramping must become a planned-for capability in the supply fleet sooner rather than later. Once vetted and established, a downward ramping capability will open up opportunities for resources, like solar resources configured to curtail their output, to qualify as downward ramping flexible capacity resources. Similarly, certain baseload resources may be able and willing to curtail their output, if and when such a resource capacity attribute is valued. Thus, baseload generating resources, like solar, could be flexible in addressing over-generation to the extent that such resources can reduce their energy output when needed.

At this juncture, however, both the ISO's and Energy Division's flexible capacity proposals do not yet include a defined downward flexible capacity need or obligation. Accordingly, without an express downward flexible capacity need or obligation identified, the ISO believes it would be premature and unjustifiable to assume that certain resource types are totally inflexible and subject to flexible capacity costs associated with downward ramping capability, which is yet undefined. Thus, unless and until there is an explicit obligation for downward flexible capacity, the ISO recommends that the CPUC, for now, allocate the upward flexible capacity need to its jurisdictional load serving entities based on resources' contribution to the required upward flexible capacity need.

III. FLEXIBLE CAPACITY CRITERIA

A. The CPUC Flexible Capacity Categories Account For Use-Limited Resources and Preferred Resources

SDG&E claims that the Energy Division's proposed categories of flexible resources diverge from what the ISO is proposing in its stakeholder initiative on flexible resource adequacy criteria and the must-offer obligation. SDG&E points to Category 1 in the Energy Division proposal where use limited resources must have the ability to start at least two times per day, in comparison to the proposed requirement in the ISO stakeholder initiative where that category would have a start minimum of once a day with longer run times.[11]

The ISO has considered SDG&E's comment and believes that a clarification of the Energy Division proposal will close the perceived gap between the proposed eligibility requirements for use-limited resources to qualify as category 1 flexible capacity.[12] Specifically, the ISO requests that the Energy Division clarify its description of the category 1 eligibility requirements to include resources with a limitation of one start per day that can provide at least 11 hours of energy at PMin and six hours of energy at the effective flexible capacity value.

The comments of LSA and CSPA discuss the structure of the flexible capacity categories, and assert that the proposed construct does not facilitate participation by preferred resources.[13] Specifically, LSA states that they "continue to have concerns

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[11] SDG&E Comments, p. 11.

[12] Additional information about the ISO stakeholder initiative on flexible resource adequacy criteria and the must-offer obligation is available on the ISO's website at: http://www.caiso.com/informed/Pages/StakeholderProcesses/FlexibleResourceAdequacyCriteria-MustOfferObligations.aspx

[13] LSA Comments, pp. 2-3; CSPA Comments, pp. 3-4.

that the current proposal neither enables full participation of these resources, particularly variable energy resources, in the 2015 RA Compliance Year, nor will it send the necessary market signals to ensure the future development of preferred resources and storage that can contribute to meeting the flexible capacity requirements."[14]

The ISO disagrees with these assertions.[15] The Energy Division proposal includes provisions for preferred resources to participate in flexible capacity procurement to the degree that resources can provide upward ramping capability. The proposal states that: "We recommend adopting a three-category approach with fixed monthly percentage limits. We believe this approach is simple and creates provisions for preferred resources to participate in the flexible capacity procurement framework."[16] Further, the Energy Division proposal indicates that the offer-obligations of resources in categories 2 and 3 would be determined seasonally. The ISO requests that Energy Division clarify this statement by adding "based on the timing of the maximum 3-hour net-load ramp needs." This clarification would demonstrate that it is the Energy Division's intention that preferred resources would not only be available during these times, but well suited to assist in providing flexible capacity to address flexible capacity needs.

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[14] LSA Comments, p. 2.

[15] The comments of LSA and CSPA additionally discuss the eligibility requirements proposed by the ISO in its stakeholder initiative on flexible resource adequacy criteria and the must-offer obligation. LSA also requests transparency regarding the ISO's flexible capacity needs assessment. The ISO will not address these comments in this proceeding. The issues raised about the ISO's stakeholder initiative are outside of the scope of this proceeding. The ISO notes that it hosted a stakeholder call to discuss the assumptions that will be used in determining the flexible needs for the upcoming year, and will host a stakeholder call later this month to discuss the final assumptions and the initial results of its flexible capacity needs assessment. Stakeholders will have an opportunity to comment on these results before they are finalized. We invite LSA and CSPA to participate and voice their concerns in the ISO's stakeholder processes.

[16] Energy Division proposal, p. 13.

In discussing its suggested long-term approach, the Energy Division proposal states that: "Further, the Commission will design a long-term approach with an eye toward enabling greater consistency with the State's loading order for preferred resources to meet flexible capacity requirements, based on learning following implementation of this proposal, which may include a revision of percentage or timing limitations on all flexible categories."[17]

As the ISO stated above, downward ramping capability should be a future planned-for resource attribute. The ISO believes that it will be an important factor in addressing over-generation conditions and will create opportunities for resources, like solar, to provide a downward ramping flexible capacity capability.

B. The ISO Supports Exploring Unbundling Of System and Flexible Capacity

SDG&E's comments offer persuasive reasons why unbundling of system and flexible capacity is beneficial and how certain originally perceived disadvantages and concerns about unbundling are outweighed by its advantages. SDG&E states:

> SDG&E initially supported the bundling concept on the assumption that it would curb the potential exercise of market power, and on the further ground that bundling would increase the simplicity of procuring flexible capacity. SDG&E also initially believed the bundling rule would lower transaction costs associated with the procurement of flexible capacity. SDG&E's procurement experience during 2013 and 2014, however, revealed that the bundling of generic and flexible capacity actually decreases market liquidity and increases transaction costs.[18]

As SDG&E noted in its comments, the ISO's proposal in its stakeholder initiative on the flexible resource adequacy criteria and must-offer obligation treats flexible attributes

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[17] Id. at 15.

[18] SDG&E Comments, p. 4 (footnotes omitted).

separately and in a way that would enable unbundling. Given this convergence of ideas and the benefits SDG&E espouses, e.g. SDG&E's anecdotal procurement experience, the Energy Division should further explore the advantages that capacity unbundling might offer in the next resource adequacy proceeding.

C. The Maximum Cumulative Capacity Categories Should Not Be Eliminated

In initial comments, the ISO suggested that the Energy Division's proposal to eliminate the maximum cumulative capacity categories (*i.e.,* the MCC buckets) be deferred for review in the next annual resource adequacy proceeding. A number of other parties have also questioned the reasonableness or timing of eliminating the MCC buckets.

NRG is concerned that abolishing the current buckets would not be reasonable if it is the Energy Division's intent to rely on the proposed flexible capacity categories to manage the commitment of use limited resources in overall RA procurement.[19]

SCE maintains that eliminating the MCC buckets would be premature because the objectives of the existing buckets and the proposed flexible capacity categories are very different and the alignment of the existing buckets with the proposed flexible capacity categories has not been discussed.[20]

Pacific Gas and Electric Company ("PG&E") opposes eliminating the MCC buckets at this time. PG&E observes that it is not clear how the implementation of the flexible capacity categories will alleviate the need for the MCC bucket, particularly since the parameters of the new categories have not yet been determined and there is no

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[19] NRG Comments, p. 5.

[20] SCE Comments, p. 7.

operational experience under the categories. PG&E suggests that the proposal to eliminate the MCC buckets be revisited after such experience has been gained.[21]

The California Large Energy Consumers Association ("CLECA") opposes eliminating the MCC buckets because it could disadvantage demand response from qualifying to be counted as system or local resource adequacy capacity. CLECA explains that the current buckets do not limit counting demand response but that the proposed flexible capacity categories will limit the ability of demand response to count for only up to five percent of the total flexible capacity requirement.[22]

EnerNOC, Inc. ("EnerNOC") strongly opposes eliminating the buckets until the proposal can be discussed. EnerNOC is concerned that the resource requirements in the existing buckets and those in the proposed flexible capacity categories were developed for different purposes, are quite different, and are not substitutable for each other.[23]

The parties' comments are clear. Summarily eliminating the MCC buckets now, without discussion or consideration of the impacts, such as how the quality of RA resources is maintained, would be premature and could have unintended consequences that degrade the quality of resource adequacy capacity and limit participation of higher quality resources due to displacement by lower quality RA resources. Thus, the ISO recommends that the Commission maintain the MCC buckets in their current form and explicitly include a thorough evaluation of the buckets in the scope of the next resource adequacy proceeding, in order to consider whether they should be retained, redesigned

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21 PG&E Comments, pp. 4-5.

22 CLECA Comments, pp. 1-3.

23 EnerNOC Comments, p. 7.

or replaced.

IV. CONCLUSION

For the foregoing reasons, the ISO respectfully requests that the Commission issue an order consistent with the ISO's comments and reply comments in this matter

Respectfully submitted,

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