

**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  
Load Procurement Obligations

Rulemaking 11-10-023  
(Filed October 20, 2011)

**COMMENTS OF THE CALIFORNIA LARGE ENERGY CONSUMERS  
ASSOCIATION IN RESPONSE TO THE ADMINISTRATIVE LAW JUDGE'S  
RULING OF MARCH 13, 2013**

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**I. Introduction**

These comments are submitted pursuant to the Ruling of Administrative Law Judge (ALJ) David Gamson (Ruling) issued on March 11, 2013; the California Large Energy Consumers Association (CLECA) herein provides its comments on the proposal of the Energy Division (ED) attached to that Ruling. CLECA also comments on the Flexible Capacity Proposal of Southern California Edison Company, San Diego Gas and Electric Company and the California Independent System Operator (Joint Parties) which was presented at the workshop on January 23, 2013. The Ruling at page 3 invites comments and replies on all issues in the scope of Phase 2 of this proceeding as well as the ED proposal and matters raised at the January 23 workshop.

**II. Issues to Address**

At the January 23, 2013 workshop, ALJ, David Gamson, asked a number of questions, which he then rephrased in the March 11, 2013 ruling as follows:

First, does the Commission need to make a decision on the matters

this year? We have a Commission decision in resource adequacy which will occur in June of this year, the last Commission meeting in June.

Second, does the Commission need to make a decision on either the DG deliverability or flexible capacity procurement issues this year? Is there a need? If there is such a need to make a decision in those proceedings, in those matters, what decision should it be? Should it be a policy decision? Should it be an implementation decision?

And, third, then the question will be if you believe that there is a detailed decision that needs to be made either on policy or implementation, what should that be? Regarding flexible capacity, should it be the ISO proposal? Should it be the Energy Division proposal? Should it be something in between? Should it be something completely different?<sup>1</sup>

### **III. Summary of CLECA Position**

First, no need has been established in the record of this proceeding to implement any flexibility requirement for the RA Procurement Year 2014.

Furthermore, there is no proposal before this Commission that could be implemented by June of this year; the barriers to a June 2013 implementation include the lack of sufficient specificity to assure that the flexibility requirement would:

- (1) mesh well with current contractual commitments,
- (2) provide clarity regarding the obligations of suppliers and LSEs,
- (3) clarify compliance and enforcement provisions, or
- (4) provide a demonstrated means to pay for such flexibility in a manner that would create an incentive for generators who are not currently offering flexibility to do so.

We detail the basis for these conclusions below.

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<sup>1</sup> Ruling, at 2.

We do not deny that there will be a need for flexibility in the future in order to address changing net load shapes resulting from the integration of increasing amounts of intermittent renewable generation. However, there are several key questions that must be answered **before** the Commission adopts a flexibility requirement, in order to align the interest of suppliers and consumers as to availability and cost. First, when is the additional flexibility needed? The data provided to date do not support a finding of need in 2014. Second, do the proposals appropriately address the full and appropriate array of resources that can provide flexibility? Third, what is the best way to pay for procuring the needed flexibility—is it through a capacity payment, energy and ancillary services payments, or both? It is not known if increased flexibility can be achieved through price alone or if some other form of obligation is required. Fourth, what are the challenges of initiating a flexible capacity requirement for RA compliance year 2014? Lastly, we address several other areas of concern with the proposals in this proceeding.

#### **IV. Data Provided Do Not Show Need in 2014**

The data presented at the workshop on January 23, 2013 showed estimates only for the years 2014 and 2015; these data were seen for the first time at that workshop. No supporting data were provided. These 2014 and 2015 estimates showed no need for flexible capacity in 2014 or 2015.

At the March 20, 2013 workshop, the ISO admitted that there is no shortage of flexibility in the current RA fleet or in overall generation for 2014. However, it raised a concern that the need for flexible capacity increases at the

shoulders where there is not as much need for generic RA capacity. The issue was framed as getting *the right type* of RA capacity. Despite its various proposed changes to its analysis over time, the ISO's results to date do not make the case that there is a need in 2014.

The ED's proposal similarly provides no support for its conclusion that a flexible RA requirement should begin in 2014. The ED proposal simply repeats a list of reasons why the load shape appears to be changing, as well as concerns about retirement of generating plants using once-through cooling and the risk of retirement of existing fossil generation. None of these reasons justifies a revised RA requirement in 2014. Indeed, the ED says "[i]t is believed that sufficient flexible resources without use limitations should provide plenty of head room for LSEs to meet their flexible obligations".<sup>2</sup> If there is plenty of headroom, there should be sufficient flexibility among the RA resources in 2014 without the need to impose a new flexibility requirement.

Not only is there no evidence that there will be a need in 2014, there is an underlying issue with how that need is defined. The flexibility need is defined in terms of a load forecast less the output of intermittent renewable resources. Both are treated as static, but they are not. There are opportunities to change the shape of the load curve to reduce the ramp and potentially reduce costs for consumers compared to paying for flexible RA. At the March 20 workshop, SCE stated that changing load shapes would not affect the proposals. This is unlikely. The two proposals are based on load shapes as they exist today, scaled up for demand growth. A different load curve **would** affect the ISO's forecasts that are

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<sup>2</sup> ED Report attached to Ruling, at 6.

used to forecast the flexible RA requirement. Given the conservative nature of the RA process and the ISO's input to it, we would expect the RA procurement to assume the worst case as SCE argued it was designed to do. However, in this case the worst case is not a reliability problem over the next few years that could require rolling blackouts; rather, the worst case is a possible need to occasionally pay higher prices for energy for very limited periods of time.

In addition, at the March 20 workshop the ISO said that part of its over-generation problem is due to the fact that intermittent renewables do not have to schedule on a day-ahead basis. It commits resources in the residual unit commitment (RUC) process and will not de-commit them if renewable generation shows up in real-time. Thus, it is clear that one significant source of the need for flexibility is intermittent renewable resources whose output must be taken but cannot be planned for. The result is that consumers must now pay for flexible resources to address a problem that is a result of limitations in the market design.<sup>3</sup> The alternative is for consumers to adjust their own behavior to work around the output of these renewable facilities that are supposed to be serving them, not the other way around. Since the grid was set up to serve customers rather than having customers serve the needs of the grid, the Commission should reflect on the merits of this role reversal. The Commission should also question whether the best solution is one of the current flexible capacity proposals, as both

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<sup>3</sup> Doing more procurement in the day-of market and requiring renewable resources to be scheduled before real-time would be a significant change, but it would reduce the degree to which retail customers are put at risk for scheduling excess generation and would also likely reduce the over-generation problem cited by the ISO.

are clearly awkward and complex solutions to more fundamental policy and market problems.

**V. Questions Remain About the ISO's Analysis And ISO's Conservatism Undermines the Case for 2014**

At the workshop on January 23, 2013, it was abundantly clear that the ISO's presentation was incomplete. It was also served too late for participants to seriously evaluate and question it.

At the March 20, 2013 workshop, the ISO provided additional data. While there was limited opportunity at the workshop to ask questions about those data, there was not enough time to ask questions about some of the most important changes from the previous presentation at the January 23 workshop. However, the ISO's analysis appears to be based on layers of conservative assumptions.

The Joint Parties' proposal only considers RA capacity for flexibility, and, of that, only RA capacity in the 2012 RA showings, not all contracted RA capacity. It does not consider non-RA capacity, although there are generators that are contracted to supply energy but not RA, e.g. under tolling arrangements. If this generation is under contract for energy, assuming contractual terms permit, it could be used to provide flexibility as well.

These limitations are important because the key source of support for the ISO's (and thus the Joint Parties' and ED's) position was Slide 19, which used these 2012 RA showings (not all contracted RA capacity) to estimate the availability of flexible resources in the RA fleet. Slide 19 was not updated for any of the new fossil-fired resources that are anticipated to come online in 2014-2016, though the ISO made a point of including new renewables that are expected to

begin operating during that period. This approach appears to cumulatively result in an understatement of available RA resources, including flexible ones. Since it also excluded resources from the interties<sup>4</sup> and non-RA resources, the analysis is shown to be very conservative and unlikely to understate available flexibility. Lastly, the ISO assessed dispatchability on the basis of flags in its master file, which may not correspond to the full flexibility possible from resources in its markets.

There are other unanswered questions that support the conclusion that the analysis is conservative. The ISO did not explain why it used a single forced outage rate of eight percent for all resources, including hydro, whose forced outage rate is likely to be far lower. It did not assess whether altering scheduled maintenance<sup>5</sup> could mitigate its forecast need during periods where it expects high ramping needs. Its assumptions about the amount of flexibility available from pumped storage seem to seriously understate what should be available from the combination of PG&E's 1200 MW Helms plant and SCE's 200 MW Eastwood plant. The consistent conservatism of the modeling and assumptions used by the ISO support a conclusion that there is no need to implement a flexible capacity procurement policy in 2014.

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<sup>4</sup> The ISO's analysis did not consider imports for flexibility. At the March 20, 2013 workshop, the ISO also said that it would only consider dynamically-scheduled and pseudo-tie resources to provide flexibility. However, the ISO or LSEs could procure other imports in the hour-ahead time frame and use that energy to back down internal resources that can ramp over the hour. This source of additional flexibility should have been considered.

<sup>5</sup> The ISO's analysis supporting its forecast net load shape assumes the current pattern of planned maintenance in the spring and fall, regardless of its projected changing net load shape. If the load shape changes, prices will change, and generators are likely to change their maintenance practices. The ISO analysis thus is unduly limited in its assumptions on maintenance.



## VI. Concerns About the Resource Mix Defined for Flexibility

One aspect of both proposals is a singular focus in the short term on generation resources, and not even all generation resources. Each proposal allows for special treatment of hydro resources but makes no provision for other use-limited resources, simply stating that a role for these resources can be addressed in 2014 for the 2015 RA compliance year. Exclusion of all non-hydro use-limited resources will understate the level of availability of potential flexibility. Both proposals result in a lower priority for the development of flexible preferred resources like DR. They will also deny a role for any cost-effective storage that might otherwise develop.

In addition, the ED's Must Offer Obligation (MOO), which requires a resource to be bid in every day for the period from 5 am to 10 pm, will also rule out most DR and most storage; this is because neither is currently available for such a long period of time. If hydro can receive special treatment, there is no reason why these other resources cannot. Furthermore, while there was discussion of addressing such resources next year, there is no assurance that a viable proposal to allow use-limited preferred resources will emerge next year.

This concern is heightened by the ED's statement about future discussions on "whether a limit should be imposed on the amount of use-limited resources that should qualify under these criteria." This proposed restriction is raised **before** the use of such resources is even being contemplated, much less addressed. The implication is that use-limited resources may never qualify on an equal basis with gas-fired generation to provide flexibility, especially since many

of these use-limited resources are preferred resources. This would contravene Commission policy to encourage the use of preferred resources.

Another concern is that if only generation resources can provide flexibility in 2014 under both proposals, the mix of these resources and their operating characteristics are clearly critical, not just the MW of flexible resources. Different types of resources (such as the gas-fired generation we assume is expected to provide most of the flexibility) have different start-up times, ramp speeds, and operating restrictions. But generator flexibility, for example, is not cast in stone. Generating resources can be ramped harder or started more quickly, while incurring greater O&M costs, if they are paid more. Such operations may only be infrequently required. Price signals may stimulate more responsiveness when and as needed. Whether this is as likely to come from capacity payments and administrative rules as it is from short-term price signals from energy and ancillary services markets, however, is questionable.

The existing fleet of generators and non-generation resources less those that will be retired plus those expected to come on line over the rest of the decade may not provide sufficient flexibility; this may be because of their operating characteristics, even allowing for increased flexibility at a price. Thus the Commission should be considering whether those resources in the pipeline or already built should be replaced or modified in some manner to increase their flexibility, and the cost consequences of doing so. One lesson from the ISO's presentation at the January 23, 2013 workshop appears to be that too many combined cycle gas turbine (CCGT) facilities have been added to the fleet. The

problem is associated with their high  $P_{\min}$ s. If their operating characteristics are problematic for future operations, perhaps procurement should be targeted or revised to add more combustion turbines (CTs) or gas engines in combination with cost-effective storage, when and if the latter exists. Adding more capacity that does not meet future needs will simply suppress market prices for existing resources and burden consumers with costly contractual or rate base obligations for many years to come.

## **VII. How to Pay for Flexibility**

There is an inherent assumption on the part of the Joint Parties and the ED that a flexible capacity requirement with a must-offer requirement (MOO) will lead to additional revenue for suppliers. The additional revenue is expected to create an incentive for suppliers to agree to the MOO and bid into the ISO's markets, thus assuring sufficient flexible resources. This runs counter to the comments of parties in an earlier part of this proceeding that the compensation should come from the energy and ancillary services (A/S) markets; these commenters included generators who would presumably receive the revenue.

At the March 20, 2013 workshop, the ISO stated that providing compensation through energy and A/S markets would not necessarily provide incentives to get the right resource mix in the day-ahead and real-time markets. It also stated that while in theory spot market prices might provide incentive for availability of the right resources, the combined effects of California's price limitations and mitigations would likely not provide sufficiently strong incentives.

This focus on capacity payments due to low and mitigated energy and A/S prices in the short-term markets should raise additional concerns, beyond those

about how to provide compensation for flexibility. These same price limitations and mitigations, to the extent they minimize spot market price variability that might be used as the basis for dynamic pricing or price-based demand response, actually undermine key Commission policy goals. Since anticipated savings from price-responsive demand was a major part of the justification for the massive investment in advanced metering, flat, stable prices effectively undermine the benefits of that investment. Before agreeing that compensation for flexibility should or must come from capacity payments, the Commission should first consider the comments of parties recommending compensation in short-term markets; the Commission should also consider the broader consequences for many of its policy initiatives that result from aggressive price mitigation.

#### **VIII. There Are Significant Hurdles to Starting in 2014**

The Joint Parties' proposal is to begin the flexible capacity obligation in 2014 but delay any MOO until 2015. ED proposes that the flexible capacity requirement begin in 2014 with a MOO. Why start in 2014 with or without a MOO? We have already established that there is no compelling argument based on need. While the Joint Parties' posit that parties could or should become familiar with the requirement before it is critically needed, the ED provides no basis for starting in 2014.

Furthermore, the ED proposal to begin a MOO in 2014 would require contractual changes in a very short period of time. The ED proposal states that flexible resources "must be contractually bound to operate subject to economic dispatch" and "the LSE would be responsible to negotiating flexible capacity

provisions within their capacity contracts with generators.”<sup>6</sup> Self-scheduling would not be permitted by flexible resources. Only limited information has been presented as to the degree of self-scheduling among RA resources.<sup>7</sup> It is therefore impossible for parties not representing generators or LSEs to know how much of a difference the potential increase in bidding into the ISO’s markets would make. Since no information has been presented as to how many contracts would have to be modified, there is no way to determine the potential scale of the renegotiation effort.

As acknowledged by the Joint Parties, many existing RA contracts may not encompass or permit the provision of flexible capacity under the definition proposed by the ED and Joint Parties. At the January 23, 2013 workshop, Mr. Beatty of NRG, pointed out that the nature of the MOO as presented at the workshop differed from the written proposal of the Joint Parties; further, its precise conditions could have a material impact on whether a plant would choose to bid flexibility into the market.<sup>8</sup> If a MOO is to be added to a flexible procurement requirement, even if not in the first year, it must be fully vetted and clearly understood by all parties; it must also be developed to accommodate existing contractual requirements or allow for changes to those requirements, and it must be feasible for generators to provide and for load-serving entities to acquire through new contracts. There is no information as to the likelihood of this

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<sup>6</sup> ED Report attached to Ruling, at 5 and 7.

<sup>7</sup> In the ISO’s March presentation, first seen on March 17, there is a slide that includes a figure of 2000 MW for self-scheduling. No support was provided for this figure.

<sup>8</sup> Tr. at 64-66.

happening in the next few months in time to be adopted by the Commission in a June decision for the RA year 2014.

Another issue that came up at the March 20, 2013 workshop was the nature of enforcement of the flexible capacity requirements. ED stated that it was working on a proposal, which would be in the final decision. However, such an outcome would preclude any possibility that affected parties would be able to examine and comment on the enforcement requirement. Therefore the ED's attempt to include an enforcement proposal in a final decision should be discouraged.

There is also an apparent presumption that generators would want to agree to a MOO in 2014 because this could lead to greater revenue through increased capacity payments compared to generic RA capacity. There is no way at present to value any additional revenue from providing flexibility. If there is to be the hoped-for premium for flexibility in RA contracts, it is unlikely to appear in 2014, since the ISO's own data show there is plenty of flexible capacity available. Why would generators want to be obligated to bid into the market from 5 am to 10 pm every day for little or no additional financial reward? ED states that its own proposal as well as that of the Joint Parties "incentivize generators with the necessary operational characteristics to submit economic bids rather than self-schedule".<sup>9</sup> Where are these incentives? There is no guarantee that there will be increased payments for providing flexibility or that those payments will offset any increased operating costs associated with its provision.

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<sup>9</sup> ED Report attached to Ruling, at 8.

Furthermore, under both proposals, load-serving entities (LSEs) would have to make a showing for 2014 RA purposes by the fall of 2013. Any existing multi-year RA contracts would have to be changed by that time. No reason has been given to require this amount of re-contracting in the space of several months.

#### **IX. Changing RA Requirements Can Confuse the Market**

The Joint Parties said at the January 23, 2013 workshop (and in their written proposal) that the proposal for 2014 is for three years only after which the requirements will change. The ISO stated at the March 20, 2013 workshop that its proposal *is only for 2014* and that it is not proposing a fix for 2015-2017 now. This implies that the changes proposed for the 2014 RA compliance period could be changed again the following year. CLECA would certainly support the inclusion of other use-limited resources that have been ignored as potential sources of flexible capacity for 2014 in the current proposals. But what other changes might be sought by the ISO and others in 2015? The implications for contracts for RA capacity in a continuously changing environment cannot and should not be disregarded.

ED refers to its own proposal as “an interim flexible procurement mechanism” and says its objective is to establish “a path that allows for evolution of the RA program”.<sup>10</sup> We question whether frequent changes in RA requirements are good for market stability and ease of contracting. Current multi-year contracts may not be easily modified. This problem would be vastly

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<sup>10</sup> Ruling Attachment, at 2.

diminished if the Commission were this year to adopt a provision for new flexible RA requirements two to three years forward, rather than for 2014.

#### **X. Other Technical Issues**

The ISO expressed concern at the January 23 workshop about the fact that there are higher  $P_{\min}$ s for CCGTs than for existing steam plants. However, it provided

- 1) no assessment of whether lower  $P_{\min}$ s might be available from the same CCGT plants at a price,
- 2) no acknowledgement of the claims of generators that ISO scheduling practices keep plants like CCGTs out of the market and, by extension, may cause them to adjust their  $P_{\min}$ s higher and their ramp rates lower, and
- 3) no countervailing recognition that the long start period of current steam plants increases overgeneration problems and may increase emissions problems.

If there is still a concern about high  $P_{\min}$ s for CCGTs, why are the utilities building or contracting with so many? As more renewables come on line, CCGT capacity factors will diminish, and thus their energy and ancillary services revenues will decline even as the need for them to ramp up and down more than once per day will increase. Should there be any more CCGTs in the next decade? Should the strategy shift to CTs and IC engines? How would this change the  $P_{\min}$  problem?

#### **XI. Obligation Based on Peak Load Share Ignores Contribution to the Problem**

The current concern for flexibility results from a “net” load curve that subtracts intermittent renewable generation from the demand forecast. The



amount of intermittent renewable generation related to load or peak load will vary among LSEs based on the types of renewable generation they have procured. If an LSE's RPS obligation is met with geothermal power, for example, it will not impose the same flexibility requirement as one whose RPS obligation is met with wind and PV. Consequently, it is unfair to allocate responsibility for flexibility obligations and costs based on peak load ratio shares because this metric does not reflect cost causation. Those LSEs whose procurement practices drive the need for flexibility should pay for it.

## **XII. Hearings**

CLECA agrees with the concerns raised by TURN and the Sierra Club as to areas of material disputed fact in this proceeding. The information presented in support of a flexible capacity procurement requirement for compliance year 2014 has been limited and continuously changing; moreover, it is based on a series of assumptions that have not been subject to sufficient testing. Evidentiary hearings may not be ideal for further elucidating the need for and availability of flexible capacity for the next several years. However, the workshop process has failed to provide answers to many of the questions of the parties and, indeed, has generated more questions as time goes on. In the interest of gaining a true understanding of this important issue, the Commission would be well served by conducting an evidentiary hearing process. The hearing process may provide sufficient clarity so that a settlement agreement may be reached with participation from far more parties than the proponents of the proposals.

### **XIII. Conclusion**

CLECA acknowledges that there will be an increasing need for flexible capacity due to a changing net load shape. However, the ED and Joint Parties' proposals suffer from similar limitations. Their timing is based on a need that has not been demonstrated for 2014. Their insistence on a 2014 start date will create contracting problems and may not provide any or sufficient additional value to resources to encourage them to agree to bid into the ISO's markets. Their proposals and their time line are based on some questionable and clearly conservative assumptions. They focus on gas-fired and hydro generation only and ignore other use-limited resources. Furthermore, they do not consider what type of fossil generation will best meet the flexibility need rather than exacerbating the problem they are trying to solve. For all these reasons we do not support either proposal for implementation in the 2014 RA compliance year.

Respectfully submitted,

/s/

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