

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  
(Filed October 20, 2011)

**COMMENTS OF ENERNOC, INC.,  
ON PROPOSED DECISION ADOPTING 2015 LOCAL PROCUREMENT AND  
FLEXIBLE CAPACITY OBLIGATIONS AND RA PROGRAM REFINEMENTS**

June 16, 2014

**Mona Tierney Lloyd**  
**Director, Regulatory Affairs**  
**EnerNOC, Inc.**  
P.O. Box 378  
Cayucos, CA 95630  
Telephone: (805) 995-1618  
Facsimile: (805) 995-1678  
Email: [mtierney-lloyd@enernoc.com](mailto:mtierney-lloyd@enernoc.com)

**TABLE OF CONTENTS**

*Page*

Table of Contents ..... i

Table of Authorities ..... ii

I. INTRODUCTION .....1

II. THE PROPOSED DECISION MUST BE MODIFIED TO CLARIFY DR RESORUCE CAPACITY DETERMINATIONS, ELIMINATE BUNDLING OF SYSTEM AND FLEXIBLE RESOURCE ATTRIBUTES, AND SIGNAL THAT LOCAL DELIVERIES FROM SYSTEM RESOURCES ARE INCONGRUOUS .....2

III. CONCLUSION.....9

APPENDIX A: PROPOSED FINDINGS OF FACT, PROPOSED CONCLUSIONS OF LAW, AND PROPOSED ORDERING PARAGRAPHS

**TABLE OF AUTHORITIES**

*Page*

**CPUC RULES OF PRACTICE AND PROCEDURE**

Rule 14.3 .....1

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  
(Filed October 20, 2011)

**COMMENTS OF ENERNOC, INC.,  
ON PROPOSED DECISION ADOPTING 2015 LOCAL PROCUREMENT AND  
FLEXIBLE CAPACITY OBLIGATIONS AND RA PROGRAM REFINEMENTS**

EnerNOC, Inc. (EnerNOC) respectfully submits these Comments on the Proposed Decision of Administrative Law Judge (ALJ) Gamson Adopting Local Procurement and Flexible Capacity Obligations for 2015 and Further Refining the Resource Adequacy (RA) Program (“Proposed Decision”) issued in R.11-10-023 (RA) on May 27, 2014. These Comments are timely filed and served pursuant to Rule 14.3 of the Commission’s Rules of Practice and Procedure.

**I.  
INTRODUCTION**

EnerNOC has actively participated in the Commission’s workshops, including providing comments and reply comments on Energy Division Staff’s Proposals, as well as the California Independent System Operator’s (CAISO’s) stakeholder process for Flexible Resource Adequacy Criteria Must Offer Obligation (FRACMOO). While EnerNOC appreciates that implementing a flexible capacity resource procurement requirement is complex, EnerNOC is, nonetheless, concerned that certain aspects of the flexible capacity resource requirements contained within the Proposed Decision will restrict demand response (DR) resource participation as a flexible capacity resource or result in significant confusion as to the DR resources’ obligations as between buyers, sellers, the Commission and the CAISO.

To avoid these outcomes, EnerNOC recommends that the Proposed Decision be modified as follows. These modifications are also reflected in EnerNOC's Proposed Modifications to the Proposed Decision's Findings of Fact, Conclusions of Law, and Ordering Paragraphs, included in Appendix A hereto. Specifically:

1. The manner in which qualifying capacity (QC) and effective flexible capacity (EFC) is determined and adopted by the Proposed Decision for DR Resources is problematical. To correct this outcome, the Proposed Decision must be modified to delay the application of Load Impact Protocols (LIP), including for EFC purposes; eliminate the proposed requirement to bundle system and flexible resource attributes; and require that the Energy Division confer with the resource owner and provide objective criteria before adjusting QC and EFC values, and
2. The Proposed Decision must be modified to require CAISO and parties to explore the ability of developing a system-wide DR resource option to allow DR Providers to bid system resource, like flexible capacity, into the wholesale market on a basis other than a sub-LAP basis. Failure to make this change discriminates against distributed energy resources.

## **II.**

### **THE PROPOSED DECISION MUST BE MODIFIED TO CLARIFY DR RESOURCE CAPACITY DETERMINATIONS, ELIMINATE BUNDLING OF SYSTEM AND FLEXIBLE RESOURCE ATTRIBUTES, AND SIGNAL THAT LOCAL DELIVERIES FOR SYSTEM RESOURCES ARE INCONGRUOUS.**

#### **A. The Proposed Decision Is Confusing and Requires Clarification Regarding the Manner in which DR Resources Will be Measured for Providing QC and EFC.**

The Proposed Decision states that the ex-ante load impact protocols (LIP) will be used for measuring DR performance, as is already done for retail DR programs.<sup>1</sup> This section of the Proposed Decision infers that the QC and EFC for DR resources will be determined based upon the LIP and, potentially, adjusted by ex-post test results or dispatches. The DR resource provider

---

<sup>1</sup> Proposed Decision, Appendix B, at pp. B-7 – B-8.

can also request adjustments based upon “weather, enrollment or program design”<sup>2</sup> and if Energy Division chooses to alter test results, it will provide a public explanation as to what changes were made.<sup>3</sup> There are several problems with this adopted approach.

**1. The use of LIP for supply-side DR resources must be clarified.**

While ex-ante LIPs are currently used for determining capacity associated with utility retail DR programs, EnerNOC has no idea as to whether the investor-owned utilities (IOUs) can “tease” out individual customer’s ex-ante LIP performance from what is currently a program-level figure.<sup>4</sup> It is unlikely that all or most of the customers currently enrolled with a single DR resource provider in a retail DR program will participate as a supply-side resource. Therefore, it is unclear to EnerNOC whether the program-level LIP can be “disaggregated” to the customer level for determining QC and EFC. In addition, if a customer is new to participating as a DR resource, there will not be a LIP value for that customer.

These circumstances mean that the Proposed Decision has not adequately explained how its approach could be practically applied in reality. Further consideration and modification of this approach is required before it can be adopted by the Commission.

**2. The Use of LIP for Determining EFC for DR Resources is Untested and Must Be Examined Further Before it is Adopted by the Commission.**

The Proposed Decision’s method for determining QC and EFC is unclear and must be clarified. The LIP was developed for the purpose of determining QC for peaking resources, not for determining the EFC of flexible capacity resources. However, the Proposed Decision has determined that LIP will be used for determining EFC as well. While the Proposed Decision

---

<sup>2</sup> Proposed Decision, at p. B-8.

<sup>3</sup> *Id.*, Appendix B, at pp. B-7 – B-8

<sup>4</sup> For example, there is only one ex-ante LIP value provided for Aggregator-Managed Portfolio (AMP) contracts.

recognizes that LIP was not specifically developed for EFC, it nonetheless adopts its use for that purpose, on an interim basis, until Energy Division can further examine the matter.<sup>5</sup>

There has been no examination of the application of the LIP in determining EFC for DR resources. There is no evidence that the application is appropriate. The Commission must not adopt a position before parties have had an ample opportunity to explore whether LIP can be appropriately applied to DR resources for the purpose of determining EFC. As such, EnerNOC recommends that the Proposed Decision be revised to exclude the application of LIP for the purpose of determining EFC until after the Energy Division has conducted public workshops on the matter.

The issue of how capacity attribution will be determined is the single-most important aspect of how a resource will be paid for capacity. The Proposed Decision adopts a methodology without regard to the impact of that decision on resource capacity attribution and, therefore, payment to the resource for delivering capacity to the system. It is EnerNOC's recommendation to conduct the examination first, before determining what methodology will apply for purposes of ascribing a capacity value.

### **3. Bundling QC and EFC for DR Resources is Inappropriate, Will Limit DR Participation and Must be Modified.**

The Proposed Decision determines that a DR resource must bundle its system and flexible capabilities together. EnerNOC has expressed its concern with this bundling proposal both in its comments on the CAISO's FRACMOO Stakeholder process and in this proceeding, repeatedly. The CAISO has recognized the concerns with bundling EFC and QC expressed by EnerNOC and others in the DR community and, in turn, has adjusted its FRACMOO proposal accordingly.

---

<sup>5</sup> Proposed Decision, at p. 36.

The Energy Division Staff, however, has not been attentive to these concerns and has not adjusted its proposal, and the Proposed Decision adopts the Energy Division's position.<sup>6</sup> EnerNOC object to the Proposed Decision's finding on this matter and instead support CAISO's treatment. Specifically, this bundled approach will restrict the amount of DR participation in the wholesale market because it will be very difficult to build a single that will be able to meet all resource requirements. The failure to acknowledge this key point reflects a failure to understand the differences between DR resources and generation.

For example, the DR resource will apparently start with the same ex-ante value from the LIP for both the QC and the EFC, assuming that the concerns identified above are addressed. This value may be modified based upon actual dispatch or testing. Flexible capacity resources will be tested or dispatched at least once in a calendar year period, during a three-month window, selected by the resource owner, with the actual test determined randomly by the LSE, within the 5-hour availability window, for at least two hours.<sup>7</sup> The window for testing the QC for DR resources, for either system or local capacity purposes, can be determined by a test specified by the resource owner, so long as it is within the availability window required for system or local resources.<sup>8</sup> There are many unanswered questions about this approach.

EnerNOC has repeatedly asked for the resource owner to be able to designate the testing window for EFC, just as is permitted for generators in determining their NQC (net qualifying capacity), per CAISO's Tariff.<sup>9</sup> While the reasons for requiring a different testing regime for

---

<sup>6</sup> Proposed Decision, at pp. 33-34.

<sup>7</sup> Proposed Decision, Appendix B, at pp. B-6 and B-7.

<sup>8</sup> Proposed Decision, Appendix B, at p. B-7.

<sup>9</sup> R.11-10-023 (RA) EnerNOC Comments (February 18, 2014), at pp. 8-9; EnerNOC's Comments (April 18, 2014), at p. 7; EnerNOC Reply Comments (April 25, 2014), at pp. 4-6.



DR resources have not been adequately explained by either the CAISO or Energy Division, both have rejected resource-designated tests for determining EFC for DR resources.<sup>10</sup>

The testing regime makes very little sense to EnerNOC for several reasons. First, there are two seasons identified for Category 3 resources to deliver EFC. From May-September, DR resources will be required to be available to be dispatched from 7 AM until noon. From October-April, DR resources will be required to be available to be dispatched in the late afternoon/evening between 3 PM and 8 PM. EnerNOC fails to see how a test in one of the seasons is going to reflect the capability of the resource in the other season.<sup>11</sup> These are two very different products. The DR resource owner would have to build a resource that is equally capable of dropping load in the evening in the winter and in the morning in the summer, for EFC, and in the afternoon (between 1 and 6 PM between May and September) for peak purposes. Essentially, the resource would have to be able to meet all of these various requirements, sometime resulting in the availability of the resource over 11 hours per day.

Energy Division Staff must envision that DR Providers would have to register a “super” DR resource into CAISO, or a resource that has many customers, of which some would provide morning ramping needs in the summer, some would provide evening ramping needs in the winter and some would provide afternoon peak reduction capabilities. Yet, performance, per the CAISO, is determined across the entire resource for any dispatch. So, if EnerNOC registers a 10 MW resource, of which 2 MW is EFC (for summer mornings), 3 MW is EFC (for winter evenings) and 5 MW is for peaking purposes (May-Sept between 1 and 6 PM), there would need to be 3 different baseline calculations in order to measure performance across the various

---

<sup>10</sup> Energy Division Staff proposes that tests are conducted by the DR Provider within a 3-month period, designated by the resource owner, within the availability window and for a 2-hour test. CAISO proposed random testing of the DR resource.

<sup>11</sup> R11-10-023 (RA) EnerNOC Reply Comments (April 25, 2014), at pp. 4-6.

availability windows, but performance would be measured against the entire 10 MW resource registration. CAISO does not allow a demand response resource provider to pick and choose which customers within a resource registration are actually performing to meet these various requirements.

This circumstance further supports EnerNOC's contention that bundling of system, local and flexible resource characteristics does not make sense, especially if it is necessary to pull the information apart to determine the resource's performance, which is not possible in CAISO's demand response system (DRS). The Staff Proposal errs in assuming that it does not matter what the requirement is or when it is applied and that a monolithic DR resource can meet all requirements, as opposed to building specific resources to meet the requirement. These assumptions are incorrect.

The Staff Proposal, as adopted by the Proposed Decision, in trying to maintain consistency with generation by requiring the resource attributes to be bundled, fails to recognize a fundamental difference between generation and DR. DR is not a machine that either can or cannot provide ramping alongside its other RA obligations. A generator may have different physical operating capabilities, within parameters, based upon how it was built. DR resources are assembled to meet specific requirements, not to meet any and all requirements that may come along. Requiring one resource to do everything a generator would do will result in customers deciding not to do any of it.

#### **4. Energy Division Must Not Have a Unilateral Ability to Adjust EFC and QC.**

The ability for Energy Division to unilaterally adjust the QC and EFC of a resource's capacity and only explain those changes on an after-the-fact basis is not acceptable.<sup>12</sup> The resource owner has no indication of what the Energy Division will use in making that decision,

---

<sup>12</sup> Proposed Decision, Finding of Fact 39, at p. 65.

which could have a significant financial impact to the resource owner. EnerNOC recommends developing a process and exploring whether there is a way of establishing objective criteria for capacity adjustments.

For all of these reasons, EnerNOC feels that the methods of determining QC, EFC, testing and performance are incomplete, unclear and should not be adopted until more rigorous examination is conducted by the Commission. EnerNOC has proposed specific findings, conclusions, and ordering paragraphs to that end in Appendix A hereto and asks for the Proposed Decision to be modified accordingly.

**B. Requiring DR Resources to be Dispatched on a Sub-Lap Basis in Order to Provide a System Resource Will Limit DR Participation and Disadvantages DR Resources.**

EnerNOC has repeatedly raised concerns, both through the CAISO Stakeholder Process on FRACMOO and in this proceeding, about how the CAISO market design limits DR resources to providing locally-dispatched resources exclusively, even if the resource requirement is for a system resource.<sup>13</sup> The Proposed Decision maintains the status quo. EnerNOC knows that the Commission cannot change the CAISO's market design; that must happen through the CAISO Stakeholder processes. However, the Commission can at least acknowledge this inconsistency and support the concerns expressed by EnerNOC that the resource description and the delivery requirements are in conflict with one another. A way of addressing this concern is for the CAISO to develop a DR resource that allows for dispatch and delivery across a larger geographic area. EnerNOC would like to see the Commission support such a proposal, especially if it results in more DR participation in the wholesale market.

Given the apparent dedication to integrating demand response resources into the wholesale market, such effort should also include a commitment to making the experience as

---

<sup>13</sup> R11-10-023 (RA) EnerNOC Opening Comments (April 18, 2014), at pp. 6-7; EnerNOC Comments, (February 28, 2014), at pp. 4-6.

successful as possible. This design flaw is one that EnerNOC believes will limit DR participation in the wholesale market.

### **III. CONCLUSION**

In a rush to move toward wholesale market integration, some important aspects as to how resources will obtain QC and EFC and how performance will be measured have not been fully considered in the Proposed Decision. As this is the primary way in which resources will receive capacity payments, this lack of attention to detail undermines the adopted methodologies. Further, Energy Division's Proposals on bundling EFC and QC, adopted by the Proposed Decision, reflect a fundamental lack of understanding of how DR participation in the wholesale market will work.

Collectively, the Proposed Decision contains findings that will limit DR participation if it remains unchanged. For that reason, EnerNOC urges the Commission to modify the Proposed Decision as recommended in these Comments and reflected in EnerNOC's Proposed Findings of Fact, Conclusions of Law, and Ordering Paragraphs in Appendix A hereto.

Respectfully submitted,

June 16, 2014

/s/ MONA TIERNEY-LLOYD

Mona Tierney-Lloyd  
EnerNOC, Inc.

**Mona Tierney Lloyd**  
**Director, Regulatory Affairs**  
**EnerNOC, Inc.**  
P.O. Box 378  
Cayucos, CA 93430  
Telephone: (805) 995-1618  
Facsimile: (805) 995-1678  
Email: [mtierney-lloyd@enernoc.com](mailto:mtierney-lloyd@enernoc.com)

## APPENDIX A

### PROPOSED FINDINGS OF FACT, PROPOSED CONCLUSIONS OF LAW, AND PROPOSED ORDERING PARAGRAPHS

EnerNOC recommends that the following modifications be made to the Findings of Fact, Conclusions of Laws, and Ordering Paragraphs of the Proposed Decision Administrative Law Judge (ALJ) Gamson Adopting Local Procurement and Flexible Capacity Obligations for 2015 and Further Refining the Resource Adequacy (RA) Program (“Proposed Decision”). Please note the following:

- A page citation to that Proposed Decision is provided in brackets for each Finding of Fact, Conclusion of Law, and Ordering Paragraph in the Proposed Decision for which a modification is proposed.
- Any proposed additional Finding of Fact, Conclusion of Law, or Ordering Paragraph is not numbered, but is identified as a “**ADDED FINDING OF FACT,**” “**ADDED CONCLUSION OF LAW,**” or “**ADDED ORDERING PARAGRAPH.**”
- Added language is indicated by **bold type**; removed language is indicated by **bold strike-through**.

#### **PROPOSED FINDINGS OF FACT:**

4. [61] The revised Staff Flexible Capacity Proposal **does not fully takes into consideration** the CAISO’s FRAC-MOO proposal and issues brought up by parties in workshops and comments.

8. [62] The flexible capacity needs identified by the CAISO for 2015 **in**decreased from those **identified for 2014, but did not increase by the amount** forecasted from the CAISO’s 2013 study, primarily because fewer renewable resources are expected to be brought on line before or during 2015.

23. [64] In order to ensure that supply-side demand response resources can perform at their qualifying capacity levels, such resources must be tested **or dispatched within a calendar yearregularly**.

24. [64] Testing for demand response resources, **if not dispatched within a calendar year**, needs to balance the practical needs of resources operators with the functional requirement to verify performance in real world situations.

38. [65] Load impact protocols are already successfully in place **to calculate capacity associated with generic and local** for retail demand response, ~~and~~ **However, load impact protocols, and** alternatives, have **not** been insufficiently vetted for **determining effective flexible capacity for** supply-side demand response.

39. [65] **Modifications to T**the EFC and QC of supply-side demand response resources **need in order** to incorporate the results of actual dispatches and/or ~~be determined via~~ testing lasting at least two hours **must be accomplished using objective criteria that has not yet been developed.**

40. [66] ~~The Energy Division proposes to allow demand response providers to select a three-month window for~~ testing of Flexible RA resources **by (or to choose**ing a precise test date and time in advance, **like for System/Local RA) is appropriate and may** needs to be reconciled with CAISO tariffs as they develop.

**ADDED FINDING OF FACT:** Energy division shall work closely with parties to explore what, if any, adjustments that need to be made to the LIPs, or alternatives to the LIPs, for purposes of determining EFC for next RA year.

**ADDED FINDING OF FACT:** It is not reasonable to require EFC and QC to be bundled for DR resources and the Commission will, instead, allow these elements to be unbundled for DR resources, consistent with the CAISO's FRACMOO on this point.

**ADDED FINDING OF FACT:** Flexible capacity resources are system resources. CAISO should work with stakeholders to develop a product where in DR resources can provide system resources.

**PROPOSED CONCLUSIONS OF LAW:**

17. [68] ~~The Energy Division proposal that~~ testing for Flexible RA resources, **if not dispatched within a calendar year**, is **required if it occurs during a three-month window specified by the demand response provider is generally** reasonable, so long as the resource

owner can choose the testing window, on a basis comparable with generation resources. ~~However, this proposal should be modified so that, if the CAISO sets a more stringent requirement (such as testing randomly selected to occur at any time within the resource's availability period), that testing will be required instead.~~

20. [68] It is reasonable to adopt the existing LIPs as the basis for determining the QC. ~~However, use of the LIPs to determine and EFC of supply-side demand response requires further analysis before it is adopted. in the 2015 RA compliance year on an interim basis.~~

**ADDED CONCLUSION OF LAW:** The Staff Proposal will be revised to unbundle QC and EFC for DR resources, consistent with the CAISO's FRACMOO Proposal.

**PROPOSED ORDERING PARAGRAPHS:**

13. [75] Any Load Serving Entity (LSE) which seeks to show a supply-side demand response resource in its RA compliance filings shall provide evidence of resource performance at least once per calendar year. If the resource is dispatched by the California Independent System Operator (CAISO) for at least two consecutive hours, the dispatch will meet this requirement. Otherwise, the LSE must provide test results. Testing must comply with the requirements detailed in Appendix B to this decision. If the CAISO sets a testing requirement that meets these criteria, then this testing will be required. Otherwise, the LSE must conduct the testing. Demand response providers may select the date and time of testing for System, **Flexible** and Local Resource Adequacy resources. ~~For Flexible Resource Adequacy resources, the demand response provider may select a three-month testing window, with the precise date and time randomly selected by the LSE.~~ Compensation shall occur according to the applicable CAISO tariff.

**ADDED ORDERING PARAGRAPH:** Energy Division Staff will convene workshops to examine whether the LIPs need to be adapted for purposes of determining EFC and QC of supply-side resources or if there are suitable alternatives. In addition, Energy Division Staff will develop a process and explore whether there are objective criteria for adjusting EFC and QC of DR resources, before such changes are made.