



Order Instituting Rulemaking regarding policies and protocols for demand response load impact estimates, cost-effectiveness methodologies, megawatt goals and alignment with California Independent System Operator Market Design Protocols.

Rulemaking 07-01-041  
(Filed January 25, 2007)

## **RESPONSE OF THE DIVISION OF RATEPAYER ADVOCATES**

### **I. INTRODUCTION**

As requested in ALJ Hecht's June 9, 2008 Ruling,<sup>1</sup> the Division of Ratepayer Advocates ("DRA") submits its comments on the June 25, 2008 filing of the California Independent System Operator ("CAISO")<sup>2</sup> on emergency-triggered Demand Response ("DR").

DRA commends CAISO for clearly laying out its perspective on emergency-triggered DR. CAISO describes its core mission is to "maintain system operations for the bulk power grid."<sup>3</sup> This requires CAISO to procure enough resources (consistent with maintaining operating reserves per the Western Electricity Coordinating Council minimum standard) in its day-ahead markets to meet the next day's anticipated load, and sometimes taking extreme measures such as load shedding due to unanticipated operating or transmission emergencies.

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<sup>1</sup> Administrative Law Judge's Ruling Requesting California Independent System Operator Information on Emergency-Triggered Demand Response.

<sup>2</sup> Comments of The California Independent System Operator Re: ALJ Ruling Requesting Information on Emergency-Triggered Demand Response, dated June 25, 2008 ("June 25 CAISO Comments").

<sup>3</sup> June 25 CAISO Comments, p.3.

According to CAISO, emergency-triggered DR programs cannot act as a tool to mitigate the potential for scarcity pricing with respect to reserves because CAISO must already be in a reserve shortage before it can call on emergency-triggered DR programs—these DR programs are useful to mitigate the emergency, but not useful as a generation substitute.<sup>4</sup>

The CAISO uses a three-track analysis approach to determine the amount of emergency-triggered demand response the state needs: 1) historic load shedding events and MW quantities; 2) estimates the amount of emergency-triggered demand response needed for protecting spinning reserves and minimizing the potential for firm load shedding; and 3) makes a comparison to what other ISOs/RTOs carry with respect to similar emergency DR products.<sup>5</sup> Based on this approach, CAISO recommends a range of 500 to 1000 megawatts, corresponding to a range between 1 and 2 percent of peak system load, as an appropriate quantity of emergency-triggered DR.<sup>6</sup> The CAISO notes the amount of currently-available megawatts of expected emergency triggered DR within the aggregated California IOU territories is approximately 1,700 megawatts.<sup>7</sup>

## **II. DRA RESPONSE**

### **A. CAISO’s Three-Track Analysis is Useful on An Interim Basis**

Given the limited role emergency-triggered DR plays in CAISO’s core mission—either serving as a function of protecting spinning reserves or providing an orderly prioritized process of load shedding—DRA finds the CAISO’s three-track analysis approach for determining the amount of emergency-triggered DR reasonable on an

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<sup>4</sup> Administrative Law Judge’s Ruling Requesting California Independent System Operator Information on Emergency-Triggered Demand Response, pp. 2-3.

<sup>5</sup> June 25 CAISO Comments, p. 5.

<sup>6</sup> June 25 CAISO Comments, pp. 9-10.

<sup>7</sup> June 25 CAISO Comments, p. 19.

interim basis.<sup>8</sup> Based on this approach, DRA notes the current level of emergency-triggered DR programs exceeds the CAISO's recommended amount by several hundred megawatts. DRA also agrees with CAISO's conclusion that "the Commission has an opportunity to clarify a policy of transitioning away from counting emergency-triggered DR resources to meet local and system RA requirements, in order to pave the way for the future state of DR which is tightly integrated within wholesale electricity markets and contributes meaningfully to the reliable operation of the grid."<sup>9</sup>

DRA has consistently argued that IOUs' emergency-triggered DR programs should be frozen at current levels while CAISO and IOUs seek ways to transition these programs from emergency type to price-responsive type DR.<sup>10</sup> Fortunately, if the Commission does conclude that about 500 to 1,000 megawatts of emergency-triggered DR resources are necessary to avoid involuntary firm load shedding during serious system emergencies, only a portion of the current 1,700 megawatts of emergency-triggered DR will need to be transitioned to price-responsive type DR.

#### **B. Emergency-Triggered DR Programs Should Count For Resource Adequacy**

DRA does not, however, agree with CAISO's contention that emergency-triggered DR should not "count" as Resource Adequacy (RA) capacity now, even before CAISO's wholesale electricity markets are functioning fully.<sup>11</sup> As envisioned in CAISO's MRTU Release 1A, the earliest these markets are expected to start functioning is in sometime during fall 2009. DRA is concerned that not counting emergency-triggered DR program as RA capacity will require IOUs' ratepayers to replace such lost capacity with new RA-

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<sup>8</sup> DRA understands that during the first quarter of 2009 CAISO plans to employ a more sophisticated method to determine cost-benefit of carrying a quantity of emergency-triggered DR that is above and beyond the Planning Reserve margin (PRM). See Comments of The California Independent System Operator Re: ALJ Ruling Requesting Information on Emergency-Triggered Demand Response, pp. 16-17.

<sup>9</sup> *Id.*, p. 21.

<sup>10</sup> Opening Comments of the Division of Ratepayer Advocates, November 26, 2007, p.7.

<sup>11</sup> DRA has supported the counting of DR resources for RA purposes in the Commission's Resource Adequacy proceeding; see, e.g. DRA's Comments filed in R.05-12-013, dated April 6, 2007 and June 19, 2006.

eligible resources while at the same time maintaining the current level of contracted non-RA-eligible emergency-triggered DR programs. Under the Commission's current direction, the capacity provided by the IOUs' emergency-triggered DR programs is counted towards IOUs' RA requirements.<sup>12</sup> It appears to DRA that under the current RA counting rules, CAISO has been able to function reasonably well, despite emergency-triggered DR capacity being counted as RA capacity. Indeed, as CAISO points out over the five-year period from 2003-2007, CAISO declared only three Stage 2 Emergencies and zero Stage 3 Emergencies.<sup>13</sup>

To the extent CAISO must commit to non-RA resources to serve the forecasted demand because of the current designation of emergency-triggered DR capacity as RA capacity, the trade-off for ratepayers is the additional cost of CAISO acquiring non-RA resources in the markets, whenever necessary to maintain the required operating reserves, versus cost to ratepayers of IOUs procuring additional RA-eligible resources immediately to replace the RA capacity currently provided by emergency-triggered DR programs. DRA believes additional economic analysis is needed to evaluate this trade-off before changing the current RA counting rules. DRA recommends that the Commission request CAISO to work with IOUs to perform an economic analysis of the trade-off before concluding that emergency-triggered DR resources should not count for RA in the near-term.

### **C. The Commission Should Direct Rapid Transition of IOU Emergency Programs to Price-Responsive Programs**

Ideally, IOUs would move rapidly, as they have generally proposed in their 2009-2011 DR program applications to transition their emergency programs into price-

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<sup>12</sup> D.06-06-064 at p. 54; in D.07-06-029 at p. 40-41, the Commission again declined the CAISO's suggestion, stating that it was "at best premature to order a reversal of our earlier decision to allow emergency and interruptible DR programs to count for RA purposes." Finally, DRA notes that the consideration of any changes to the approved RA counting rules are appropriately scoped for Phase 2 of R.08-01-025 the current Annual Revisions to Local Procurement Obligation and Refinements to Resource Adequacy proceeding.

<sup>13</sup> Comments of The California Independent System Operator Re: ALJ Ruling Requesting Information on Emergency-Triggered Demand Response, pp. 8-9.

responsive programs. DRA believes both SCE's approximately 600 megawatt AC cycling program ("SDP program") and PG&E's on-going 300 megawatt AC cycling program ("SmartAC") are ideal candidates for such transition. DRA understands PG&E has already worked with CAISO to make its AC cycling program available to the grid before CAISO declares a Stage 2 Emergency. DRA recommends that the Commission require SCE to move rapidly to transition its AC cycling program as well. If this potential 900 megawatts (600 MW for SCE and 300 MW for PG&E) of AC cycling load is transitioned from emergency-triggered DR to price-responsive DR, it will achieve two goals simultaneously. First, it will reduce CAISO's need to commit to non-RA resources by 900 megawatts and second, it will still preserve about 700 megawatts of emergency-triggered DR – about the same amount CAISO is recommending – to help with system emergencies and to help prevent involuntary firm load shedding.

### **III. CONCLUSION**

In summary, DRA recommends that the Commission:

1. Adopt, on an interim basis, a need of between 500 MW and 1000 MW of emergency-triggered DR programs, to help with system emergencies and to help prevent involuntary firm load shedding.
2. Allow IOUs to count emergency-triggered DR programs for their RA capacity requirements until CAISO's wholesale electricity markets are in place.
3. Request that CAISO and IOUs perform an economic analysis of the trade-off between CAISO acquiring non-RA resources in the markets versus IOUs procuring additional RA-eligible resources to replace the RA capacity currently provided by emergency-triggered DR.
4. Clarify a policy of transitioning away from counting emergency-triggered DR resources to meet local and system RA requirements, in order to pave the way for the future state of DR, which will be tightly integrated within wholesale electricity markets and contributes meaningfully to the reliable operation of the grid.

5. Require PG&E and SCE to rapidly transition their AC Cycling programs from emergency-triggered to price-responsive triggers.

Respectfully submitted,

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July 9, 2008

**CERTIFICATE OF SERVICE**

I hereby certify that I have this day served a copy of “**RESPONSE OF THE DIVISION OF RATEPAYER ADVOCATES**” in **R.07-01-041** by using the following service:

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Executed on **July 9, 2008** at San Francisco, California.

/s/            REBECCA ROJO

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Rebecca Rojo

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