

Docket: : R.13-09-011  
Exhibit Number : \_\_\_\_\_  
Commissioner : Michael R. Peevey  
Admin. Law Judge : Kelly J. Hymes  
ORA Project Mgr. : Sudheer Gokhale  
ORA Witnesses : Sudheer Gokhale



**OFFICE OF RATEPAYER ADVOCATES**  
**CALIFORNIA PUBLIC UTILITIES COMMISSION**

**REPLY TESTIMONY**

**R.13-09-011**

San Francisco, California  
May 22, 2014

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1 **I. INTRODUCTION**

2 **Q. Please state your name and position.**

3 **A. My name is Sudheer Gokhale, and I am a Senior Utilities Engineer in the**  
4 **Office of Ratepayer Advocates.**

5 **Q. Please summarize the points you will be making in this section of your reply**  
6 **testimony.**

7 A. The Commission's Office of Ratepayer Advocates (ORA) welcomes the  
8 opportunity to present this reply testimony on the issues and questions posed in  
9 the Assigned Commissioner and the Administrative Law Judge's April 2, 2014  
10 Ruling (Ruling) in the Phase Three of the Demand Response (DR) Rulemaking  
11 (R.) 13-09-011. ORA provides the following responses to the opening testimony  
12 submitted by various parties on May 6, 2014 in the Phase Three of this  
13 rulemaking.

14 **II. SUMMARY**

15 Parties provided opening testimony on May 6, 2014. In their comments some  
16 parties support bifurcation; some oppose. Even more strongly, many parties oppose the  
17 proposed Demand Response Auction Mechanism (DRAM). Some parties want DRAM  
18 procurement goal to be incremental to the existing level of Investor Owned Utilities  
19 (IOU) Demand Response (DR) programs; others see DRAM to be part of the overall  
20 goal, with the expectation that DRAM procurement will increase with time with a  
21 corresponding decrease in the IOUs' DR programs. ORA agrees with the latter approach.  
22 All parties do argue for procuring DR that is cost-effective, whether procured as currently  
23 done through IOU DR Program cycles or as proposed, through DRAM. ORA sees merit  
24 in the DRAM to potentially decrease costs, provide efficiency, and support piloting  
25 DRAM as the current IOU administered model has not achieved the Commission's goals  
26 for DR.

27 ORA provided a number of recommendations in its May 6, 2014 opening  
28 testimony. Nothing in the parties' testimony require ORA to make any changes to those  
29 recommendations. ORA's recommendations are based on the principle of procuring cost-  
30 effective DR for meeting specific needs. To that end, ORA supports both supply  
31 resource DR and load modifying DR. The Commission's Resource Adequacy (RA)

1 process addresses the characteristics/requirements of supply resource DR to meet RA.  
2 Unfortunately, there is no comparable process to address the characteristics/requirements  
3 of load modifying DR for reducing RA need. ORA urges the Commission to undertake  
4 such process in collaboration with the California Energy Commission (CEC) as soon as  
5 possible.

6 **III. REPLIES TO OPENING COMMENTS**

7 **1. The Commission Should Evaluate Each Supply-side DR**  
8 **Resource on a Case-by-Case basis to Determine Which**  
9 **Resources Can Be Integrated in a Cost-effective Manner and**  
10 **Prioritize the Integration of the Resources Based on Value and**  
11 **Ease of Integration.**

12 The California Independent System Operator’s (CAISO) testimony argues why  
13 supply-side demand response resources must be integrated into the CAISO market if  
14 these resources are to be available to mitigate reliability concerns. CAISO states that the  
15 current manual notification process is completely untenable in today’s operating  
16 environment. CAISO provides shortcomings of the current manual notification of DR to  
17 CAISO in three areas: 1) transparency of location 2) accuracy on availability on a day  
18 ahead and real time basis and 3) price discovery. CAISO argues that continuing to  
19 coordinate and dispatch emergency demand response programs during stressful operating  
20 conditions through phone calls and email with third parties is not a productive, efficient,  
21 or convenient way to manage critical resources. CAISO explains it is exploring more  
22 sophisticated contingency modeling enhancements to its market software, which will put  
23 even greater emphasis on the need for all resources to be fully integrated into the market.  
24 For the overall efficacy of resource and grid management processes, CAISO states that  
25 there must generally be standard dispatch and operational practices between supply-side  
26 demand response resources and other conventional supply resources.<sup>1</sup> But CAISO does  
27 not address the costs that IOU ratepayers will incur to achieve the integration. ORA does  
28 not support integration at any cost.

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<sup>1</sup> Testimony Of Neil Millar On Behalf Of The CAISO, pp.7-9.

1           On the other hand, PG&E argues that mandating the integration of IOU DR  
2 programs without first ensuring the resolution of fundamental challenges in the CAISO  
3 markets will burden providers of DR resources with substantial additional costs, which,  
4 in turn, will negatively impact cost effectiveness and limit opportunities for customers to  
5 engage in DR.<sup>2</sup> PG&E states that the CAISO energy markets from their inception were  
6 mainly designed and implemented taking into account the characteristics, constraints and  
7 economics of the conventional generation-like resources. PG&E states that integrating  
8 PG&E's DR programs into CAISO market will likely be very costly without significant  
9 changes.<sup>3</sup> PG&E states that there are ways to reduce the cost and complexity of bidding  
10 Supply Resource DR into the CAISO market but it will require changes in CAISO rules  
11 and processes. PG&E provides a number of recommendations that it says have the  
12 potential to reduce the cost, complexity and risk to LSEs and DRPs.<sup>4</sup> PG&E also claims  
13 that the incremental benefits of dispatching DR in the CAISO market as supply relative to  
14 dispatching the same DR as load is small. The major value of bidding in DR as Supply  
15 Resources in the CAISO markets will likely come from the participation in Ancillary  
16 Services markets.<sup>5</sup>

17           Olivine, Inc. prepared a report for PG&E to determine the feasibility of  
18 integrating existing PG&E DR programs into the CAISO market based on the current  
19 design of the CAISO market and the PG&E DR programs. According to Olivine, the  
20 main conclusion of the report was that a number of the current programs are a poor fit for  
21 integration at this time while there were others that were reasonably compatible and for  
22 those it was possible to integrate portions of the enrolled capability over a reasonable  
23 time horizon.<sup>6</sup>

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<sup>2</sup> PG&E Opening Testimony, Volume 1, pp.1-7 - 1-8.

<sup>3</sup> *Id.*

<sup>4</sup> PG&E Opening Testimony, Volume 2, Appendices, pp. A10-A-20.

<sup>5</sup> *Id.*, p. A-21.

<sup>6</sup> *Id.*, p. B-2.

1           ORA does not support integration at any cost. A more prudent approach would  
2 be to address each supply-side DR resource on a case-by-case basis to determine which  
3 resources can be integrated in a cost-effective manner and prioritize the integration of the  
4 resources based on value and ease of integration. Likewise, there may be some common-  
5 sense accommodations that CAISO can provide based on PG&E’s recommendations to  
6 lower the costs of integration and speed up the implementation.

7                           **2. Any Numerical Goals for DR Should Consider Cost**  
8                           **Effectiveness And The Need for DR**

9           ORA supports TURN, SCE, PG&E, and SDG&E’s recommendation that the  
10 Commission’s numerical goal for DR needs to be assessed based on relevant factors.

11           TURN argues that adopted goals for DR should be based on analysis of a)  
12 technical potential, b) cost effectiveness, and c) electric system needs. TURN notes that  
13 in the energy efficiency sector, the Commission sets goals and budgets based on detailed  
14 market evaluations and analyses of both technical and economic potential for energy  
15 efficiency programs.<sup>7</sup>

16           SCE recommends replacing the currently adopted goals with ones that are based  
17 on clearly identified needs (e.g., relieving transmission and distribution constraints;  
18 mitigating high priced hours; meeting system or local capacity requirements, avoiding  
19 capacity procurement) that can be met by a balanced portfolio of resources and then  
20 understanding the role DR can play among those resources. SCE states that DR goals  
21 should be informed by a DR potential study to determine the amount of DR feasible to  
22 contribute to meeting the identified needs. SCE recommends that this process be used to  
23 develop goals to replace the broad goal of five percent price-responsive DR because such  
24 a goal is only useful for meeting the peak load for the system and does not address using  
25 MW during non-peak hours or other system reliability needs.<sup>8</sup>

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<sup>7</sup> TURN Opening Testimony, p. 12.

<sup>8</sup> SCE Opening Testimony, p. 9.

1 PG&E recommends that the Commission avoid quantitative megawatt (MW)  
2 goals for DR and instead focus on implementing an action plan that enables the  
3 maximum amount of cost-effective DR to be deployed in California.<sup>9</sup>

4 SDG&E argues that if a target is chosen for price responsive supply-side DR, it  
5 should be IOU-specific and the result of an analysis of the amount of cost effective  
6 supply-side DR potential available in the IOU service area. SDG&E believes that the  
7 goal should be to encourage all cost effective DR and that there should be no specific  
8 MW targets. The range of unknowns for CAISO market participation will impact the  
9 amount of cost effective DR participation as supply resources.<sup>10</sup> SDG&E states that  
10 accurate price signals through rate programs has a much more important role in  
11 promoting DR for its customer base than supply-side DR and argues that because pricing  
12 DR (e.g., CPP program) is an equally beneficial approach to reducing the use of  
13 electricity in peak times, there should not be targets for amounts of supply-side DR in  
14 general and targets for DRAM in particular.<sup>11</sup>

15 ORA finds merit in all these arguments but much will depend on how to cost-  
16 effectively integrate supply-side DR resources into CAISO. The Commission should  
17 only procure the amount of supply-side DR that can be cost-effectively integrated into the  
18 CAISO wholesale market and put more effort in making any remaining utility-run load  
19 modifying DR programs dependable, result-oriented, and cost-effective.

20 **3. ORA Shares Concern That Load Modifying Programs May**  
21 **Lose Their Current RA Value Due To Bifurcation**

22 SCE states that DR programs that currently receive RA value should continue to  
23 receive RA value, regardless of how these programs are categorized. SCE is concerned  
24 that its critical peak pricing (CPP) and peak time rebate (PTR) may lose their RA value  
25 because they are categorized as Load Modifying Resources in the Proposed Bifurcation

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<sup>9</sup> PG&E Opening Testimony, Volume 1, p. 1-1.

<sup>10</sup> SDG&E Opening Testimony, Chapter II, p. LW-5.

<sup>11</sup> SDG&E Opening Testimony, Chapter VI, p. DTB-15.

1 of Demand Response Programs table in D.14-03-026. SCE states that these programs  
2 currently earn RA value because they provide value to the grid in terms of reliability  
3 and/or flexibility. Because these programs will continue to provide that value in the  
4 future, the RA value received should not be lost simply because the programs may be  
5 categorized as Load Modifying Resources. SCE is concerned that failure to maintain the  
6 RA value of these programs will require SCE to procure additional capacity, which will  
7 be more costly for our customers and less favorable for the state’s resource planning  
8 vision of including DR as a preferred resource.<sup>12</sup> SDG&E also expressed confusion as to  
9 how, and to what extent, load modifying DR will impact RA requirements.<sup>13</sup>

10 ORA has similar concerns about maintaining RA value for programs that may be  
11 classified as Load Modifying Resources. The Ruling does not elaborate or discuss a  
12 mechanism for assessing load modifying programs’ ability to lower the RA need  
13 requirement.<sup>14</sup> As ORA recommended in its opening comments, the Commission and the  
14 CEC should jointly establish a transparent process and protocols to 1) determine program  
15 requirements 2) megawatts load impacts to be used, and 3) how different trigger events  
16 will influence the shape of the net load.<sup>15</sup>

17 **4. To Clearly Gauge the Success of DRAM, the First Few DRAM**  
18 **Auctions Should Have Access to As Many Potential DR**  
19 **Participants As Possible**

20 In their opening comments, many parties either oppose or cast doubt on the  
21 success of DRAM. SDG&E says DRAM is an unnecessary complication and a flawed  
22 approach for procurement of supply-side DR.<sup>16</sup> SCE says it does not support adoption of  
23 the DRAM proposal at this time because there are a number of critical policy choices that  
24 must be explored and addressed before the efficacy of such an approach to DR resource

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<sup>12</sup> SCE Opening Testimony, pp. 10-11.

<sup>13</sup> SDG&E Opening Testimony, Chapter III, p. VK-2.

<sup>14</sup> ORA Opening Testimony, pp. 4-5.

<sup>15</sup> *Id.*, p. 14.

<sup>16</sup> SDG&E Opening Testimony, Chapter I, p. JPA-6.



1 procurement can be determined.<sup>17</sup> The Joint DR Parties state that the DRAM contains  
2 several elements that are concerning or problematic, in particular, the “pay-as-bid”  
3 approach, subject to an administrative cap, and the failure to provide any meaningful  
4 information as to the results of the auction.<sup>18</sup> However, TURN supports DRAM as a  
5 method to procure cost-effective DR based on capacity prices so as to achieve state  
6 energy goals.<sup>19</sup> ORA sees the merits in the DRAM to potentially decrease costs and  
7 support piloting DRAM as the current IOU administered DR model has not achieved the  
8 Commission’s goals for DR.

9 To clearly gauge the success of DRAM, the first few DRAM auctions should have  
10 access to as many potential DR participants as possible. ORA is concerned that if the  
11 Commission adopts a schedule for approving 2017- 2019 IOU DR programs<sup>20</sup> before the  
12 first substantial DRAM auction takes place in 2016<sup>21</sup> many eligible customers would  
13 have enrolled or decided to enroll in the IOUs’ programs already – thus casting doubt on  
14 knowing the true potential of DRAM auctions in attracting sufficient number of  
15 customers and lowering costs. Commission should also consider that bids for DRAM in  
16 2015 could be influenced by expectation of IOU DR program continuation and incentive  
17 levels provided in those programs. The Commission should address this issue in this  
18 rulemaking to ensure robust participation in DRAM. At a minimum, the current bi-  
19 lateral Aggregated Managed Portfolio (AMP) contracts and Capacity Bidding Program  
20 (CBP) should not be allowed to continue in 2017 and beyond. All Aggregators should be  
21 required to go through the DRAM for any chance of the success of DRAM.

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<sup>17</sup> SCE Opening Testimony, p. 31.

<sup>18</sup> Joint Parties Opening Testimony, p. 5.

<sup>19</sup> TURN Opening Testimony, p. 14.

<sup>20</sup> For the 2017-2018 Cycle, the IOUs would need to file applications in early 2016 or sooner so guidance from the Commission needs to be provided in 2015.

<sup>21</sup> ORA Opening Testimony, p. 8. The Commission’s Energy Division explained that it considers first DRAM auction in 2015 a “pilot” representing only 0.5 percent of the System Peak.