

Docket No.: R.12-03-014

Exhibit No.: \_\_\_\_\_

Date: July 23, 2012

Witness: William A. Monsen

**REPLY TESTIMONY OF WILLIAM A. MONSEN ON BEHALF OF THE  
INDEPENDENT ENERGY PRODUCERS ASSOCIATION CONCERNING TRACK  
ONE OF THE LONG-TERM PROCUREMENT PROCEEDING**

# Table of Contents

- I. **Introduction and Summary** ..... 1
- II. **There is General Agreement Regarding Certain Aspects of Opening Testimony** ..... 5
- III. **There is Significant Disagreement About Other Aspects of CAISO’s Studies; All-Source RFOs Provide A Possible Means to Accommodate Disparate Positions** ..... 12
  - A. **Do the studies assume enough uncommitted “preferred” resources?** ..... 12
  - B. **Should procurement be deferred?** ..... 18
  - C. **Perform sensitivity analysis?**..... 19
  - D. **Solution: Authorize local capacity procurement to level identified by CAISO and allow uncommitted preferred resources to bid to provide local capacity** ..... 20
- IV. **The Commission Should Establish Longer-Term Need for Flexible Resources in the Current LTPP, with Track 1 as the Starting Point** ..... 22
- V. **Conclusion** ..... 24

1 **I. Introduction and Summary**

2

3 **Q. Please state your name and business address.**

4 A. My name is William A. Monsen. I am a Principal and Executive Vice-President  
5 at MRW & Associates, LLC. (MRW). My business address is 1814 Franklin  
6 Street, Suite 720, Oakland, California.

7

8 **Q. Please describe your professional background.**

9 A. I have been an energy consultant with MRW since 1989. During that time, I have  
10 assisted independent power producers, electric consumers, financial institutions,  
11 and regulatory agencies with issues related to power project development, project  
12 valuation, purchasing electricity, and regulatory matters. I have directed or  
13 worked on projects in a number of states and regions in the United States,  
14 including California, Oregon, Colorado, New England, Wisconsin, and Nevada.  
15 Prior to joining MRW, I worked at Pacific Gas and Electric Company (PG&E).  
16 At PG&E, I held a number of positions related to energy conservation,  
17 forecasting, electric resource planning, and corporate planning. I hold a Bachelor  
18 of Science degree in engineering physics from the University of California at  
19 Berkeley and a Master of Science degree in mechanical engineering from the  
20 University of Wisconsin-Madison. Additional information about my  
21 qualifications is provided in Attachment A.

22

1 **Q. On whose behalf are you testifying?**

2 A. I am submitting testimony on behalf of the Independent Energy Producers  
3 Association (IEP).

4  
5 **Q. What is IEP's interest in this proceeding?**

6 A. IEP represents the interests of independent power producers (IPPs). IEP members  
7 collectively own and operate approximately one-third of California's installed  
8 generating capacity, which includes renewable products derived from biomass,  
9 geothermal, small hydro, solar, and wind; highly efficient cogeneration; and gas-  
10 fired merchant facilities. IEP has been active in the Commission's procurement  
11 proceedings for many years. IEP's interests include fostering, to the maximum  
12 extent practical, truly competitive solicitations in order to lower consumers' costs;  
13 ensuring that a competitive, level playing field exists for various technologies and  
14 ownership types (e.g., cost-of-service utility-owned generation (UOG) vs. market-  
15 based IPPs); and ensuring that the products sought by policy-makers and the grid  
16 operator are clearly and transparently defined so that competitive markets can  
17 plan for and respond to specific resource needs in a timely and cost-effective  
18 manner.

19

20 **Q. Did you submit opening testimony in this proceeding?**

21 A. No.

22

1 **Q. What is the purpose of your testimony in this proceeding?**

2 A. The purpose of this testimony is to respond to the opening testimony of certain  
3 parties regarding Track 1 issues in this proceeding. This testimony will also  
4 respond to the Assigned Commissioner's Ruling of Commissioner Florio dated  
5 July 13, 2012, which seeks testimony regarding three issues: (1) how to procure  
6 long-term resources in the Los Angeles basin and Big Creek/Ventura local areas,  
7 (2) what role should cost-based contracts play in the procurement of local  
8 capacity and (3) how to facilitate the effective participation of new types of  
9 resources in all-source solicitations for local resources.

10

11 **Q. Please summarize your recommendations.**

12 A. My primary recommendations are as follows:

- 13 • The Commission should authorize procurement of some quantity of local  
14 resources through competitive means as an outcome of Track 1 of this  
15 proceeding.
- 16 • The Commission should wait for the completion of studies necessary to  
17 determine the need for, and preferred characteristics of, flexible resources  
18 before authorizing specific procurement of flexible resources (for the purpose  
19 of providing either local or system-wide flexibility).
- 20 • If the IOUs can make a showing that solicitations for procurement of  
21 resources in certain local areas were issued and found to be not workably  
22 competitive, the IOUs should be allowed to negotiate cost-based Power

- 1 Purchase Agreements (PPAs) to serve the need for a specified duration of  
2 time.
- 3 • The Commission should set procurement targets based on overall grid  
4 reliability needs and resource policy objectives, then provide procurement  
5 vehicles (e.g. Requests for Offers (RFOs)) such that the Load-Serving Entities  
6 procure their Incremental Need, which would be calculated only assuming  
7 committed resources.
  - 8 • Preferred resources previously included as “uncommitted resources” would be  
9 permitted to participate in “all-source” solicitations to meet the identified  
10 Incremental Need, and would be appropriately counted once selected and  
11 subject to meeting performance obligations on par with other resources.
  - 12 • The CAISO should be requested to run additional scenarios in Track 1 to  
13 account for uncertainties regarding the future operation of SONGS and the  
14 timing of retirement of OTC units.
  - 15 • The Commission should establish longer-term need for flexible resources in  
16 the current LTPP, which will require working with the CAISO to 1) define  
17 with specificity the flexible capacity products the CAISO believes it needs to  
18 ensure reliability, 2) establish a schedule for the completion of studies for  
19 local and system-wide flexibility needs, 3) finalize the CAISO’s studies on  
20 system flexibility.
  - 21 • Once the need for flexible resources is determined, the Commission should  
22 require IOUs to meet their flexible procurement obligations through  
23 competitive means.

1 **II. There is General Agreement Regarding Certain**  
2 **Aspects of Opening Testimony**  
3

4 **Q. Based on your review of the opening testimony in this proceeding, do you**  
5 **find some areas of agreement between parties?**

6 A. Yes. I address three areas in which parties generally concurred.<sup>1</sup> First, there is no  
7 disagreement that, given the potential retirement of at least a portion of the  
8 existing once-through cooling (OTC) units over the next several years, there will  
9 be a need for some form of replacement capacity. As discussed below, the real  
10 questions are the form of that replacement capacity (e.g., new flexible gas-fired  
11 generation, demand-side resources (such as energy efficiency or demand  
12 response), transmission upgrades, storage resources, or others), the location of the  
13 resources, and the timing for procurement.<sup>2</sup>

14  
15 Second, parties generally agree that the existing California Independent System  
16 Operator (CAISO) studies do not definitively answer the question: “Is there  
17 enough flexibility in the system given the characteristics of the generating units  
18 that are expected to operate in the future?”<sup>3</sup> This consensus opinion is not a

---

<sup>1</sup> Assuming that the party commented on this particular issue.

<sup>2</sup> Testimony of The Utility Reform Network, R.12-03-014, June 25, 2012, pp. 1-4 (TURN Testimony); Testimony of Southern California Edison, R.12-03-014, June 25, 2012, p. 1-3 (SCE Testimony); Testimony of Bill Powers on Behalf of the California Environmental Justice Alliance, R.12-03-014, June 25, 2012, p. 4-10 (CEJA Testimony); Testimony of Robert Fagan on Behalf of the Division of Ratepayer Advocates, R.12-03-014, June 25, 2012, pp. 1-5 (DRA Fagan Testimony); Testimony of Calpine Corporation, R.12-03-014, June 25, 2012, pp. 2-7; Testimony of the Center for Energy Efficiency and Renewable Technologies, R.12-03-014, June 25, 2012, pp. II-1, II-2; Testimony of the Clean Coalition, R.12-03-014, June 25, 2012, pp. 3-7.

<sup>3</sup> For example, see SCE Testimony, p. 12; Testimony of San Diego Gas & Electric, R.12-03-014, June 25, 2012, p. 3 (SDG&E Testimony); DRA Fagan Testimony, pp. 23-25; TURN Testimony, p. 2.

1 surprise since the CAISO's studies of the need for flexible resources on a system  
2 basis are far from completed at this point.<sup>4</sup> In fact, the Commission does not  
3 expect the CAISO's studies of the need for system flexibility to be completed  
4 until sometime in 2013.<sup>5</sup> Based on plans submitted by OTC units to the State  
5 Water Resources Control Board (SWRCB), it appears that a certain amount of  
6 flexible, local generating resources will retire as a result of regulatory  
7 requirements, particularly the OTC regulations.<sup>6</sup> However, new generation is  
8 under construction, and some of the owners of the retiring units may repower  
9 those units.<sup>7</sup>

10

11 Even if the repowered units are not as flexible as the units that they are replacing,  
12 their presence on the grid might free up other, more flexible units that are  
13 currently used to generate energy to instead provide a greater amount of flexibility  
14 to the grid. Also, some existing combined cycle units may be able to improve  
15 their flexibility through capital improvements.<sup>8</sup> The CAISO touched upon this

---

<sup>4</sup> Comments of the California Independent System Operator Corporation on the Preliminary Scoping Memo, R.12-03-014, April 6, 2012, pp. 2-4; Testimony of Mark Rothleder on Behalf of the California Independent System Operator Corporation, R.12-03-014, May 23 2012, pp. 6-7.

<sup>5</sup> Scoping memo and Ruling of Assigned Commissioner and Administrative Law Judge, R.12-03-014, May 17, 2012, p. 10.

<sup>6</sup> Testimony of Robert Sparks on Behalf of the California Independent System Operator Corporation, R.12-03-014, May 23, 2012, pp. 14-15 (CAISO Sparks Testimony), noting the flexible characteristics of retiring OTC generation that must be replaced.

<sup>7</sup> The California Energy Commission issued a decision approving a license for NRG Energy's Carlsbad Energy Center Project on June 20, 2012 (Docket No. 07-AFC-06. Commission Decision, June 20, 2012. CEC-800-2011-004-CMF (Attachment B). The CAISO specifically noted that repowering retiring OTC units is an option (CAISO Sparks Testimony, pp. 14-15).

<sup>8</sup> GE and Siemens appear to offer products and services to improve the flexibility of existing generation, including combined cycles. For example, see "Operational Flexibility Enhancements of Combined Cycle Power Plants," Dr. Norbert Henkel, Erich Schmid and Edwin Gobrecht, Siemens AG, Energy Sector Germany (Attachment C). See also the information brochure regarding GE's OpFlex Advanced Control Solutions (Attachment D).



1 issue in its presentation in this proceeding, in which it noted that, “Need for  
2 ramping capability is not the same thing as need for new resources...Conversion  
3 of existing resources to something more flexible could solve a ramping problem  
4 without changing the [Planning Reserve Margin].”<sup>9</sup> Thus, it is clear that the  
5 CAISO has not yet determined how much flexible capacity is needed (let alone  
6 the timing and location of that need), nor has it determined how future resource  
7 additions or changes to the existing generation fleet will change the need for  
8 either local or system flexibility.

9  
10 Third, parties generally agree that it is Commission policy that the investor-owned  
11 utilities (IOUs) should procure resources through competitive solicitations or in  
12 wholesale markets (e.g., Southern California Edison’s (SCE’s) recommendation  
13 to implement a capacity market).<sup>10</sup> Most recently, the Commission affirmed this  
14 policy in its decision on the 2010 Long-Term Procurement Plan (LTPP).<sup>11</sup>

15  
16 As is discussed below, the point of contention is whether specific resources are  
17 granted priority over other resources because of their location, fuel, or operational  
18 characteristics.

19  

---

<sup>9</sup> Mark Rothleder, CAISO, “Operating Flexibility Analysis for R.12-03-014,” June 4, 2012, p. 81 (Attachment E).

<sup>10</sup> For example, see: SCE Testimony, pp. 17-21; Testimony of Peter Spencer on Behalf of the Division of Ratepayer Advocates, R.12-03-014, June 25, 2012, pp. 14-15 (DRA Spencer Testimony); TURN Testimony, p. 22.

<sup>11</sup> D.12-04-046, pp. 70-74.

1 **Q. What is IEP's position regarding these three issues?**

2 A. IEP agrees in general with the consensus on each of these issues. The CAISO  
3 studies confirm that the retirement of some existing OTC units would result in a  
4 need for some form of new resources (or additional transmission upgrades beyond  
5 those already assumed by the CAISO) to meet local reliability requirements. It is  
6 also clear that the CAISO studies do not yet provide enough information upon  
7 which to base decisions regarding the need for specific amounts of additional  
8 flexibility. Also, consistent with IEP's long-held position, competitive  
9 procurement results in ratepayers receiving the least-cost slate of resources  
10 (whether they are supply-side or demand-side resources). As a result, IEP  
11 recommends that the Commission should authorize procurement of some quantity  
12 of local resources through competitive means as an outcome of Track 1 of this  
13 proceeding. At the same time, IEP believes that it is premature for the  
14 Commission to authorize specific procurement of flexible resources (for the  
15 purpose of providing either local or system-wide flexibility) because the studies  
16 necessary to determine the need for, and preferred characteristics of, flexible  
17 resources have not been finalized.

18

19 **Q. Considering your recommendation regarding procurement of local**  
20 **resources, are there some nuances that the Commission needs to consider?**

21 A. Yes. TURN and SCE point out that relying on Requests for Offers (RFOs) to  
22 procure local capacity might result in uncompetitive solicitations.<sup>12</sup> To avoid such

---

<sup>12</sup> TURN Testimony, pp. 20-21; SCE Testimony, pp. 21-22.

1 a result, these parties recommend allowing the IOUs to enter into cost-of-service  
2 based power purchase agreements (PPAs) with generators that possess local  
3 market power.

4

5 **Q. In which local sub-areas do these parties believe generators possess local**  
6 **market power?**

7 A. TURN indicates that generation owners may have local market power in the  
8 Moorpark and Ellis sub-areas.<sup>13</sup> TURN also indicates that there may be market  
9 power issues in the larger Western Los Angeles Basin area.<sup>14</sup>

10

11 **Q. Have parties provided any formal demonstration that generators in these**  
12 **areas have local market power?**

13 A. No. TURN merely suggests that the results of future solicitations in these local  
14 sub-areas might reveal instances of local market power. TURN makes this clear in  
15 stating that its recommendations regarding market power are intended to “mitigate  
16 potential market power issues.”<sup>15</sup>

17

18 **Q. What is IEP’s position on this issue?**

19 A. IEP supports competitive procurement. However, in situations in which there are  
20 not enough actual bidders, it may not be possible to obtain competitive results  
21 from RFOs. When an RFO does not result in a competitive outcome, IEP supports

---

<sup>13</sup> TURN Testimony, p. 20.

<sup>14</sup> TURN Testimony, p. 21.

<sup>15</sup> TURN Testimony, p. 3.

1 offering generators cost-based PPAs to serve the need for a specified duration of  
2 time (to be negotiated bilaterally and subject to Commission approval). In these  
3 circumstances, the IOUs should be required to make a showing that the  
4 solicitations were not workably competitive as part of their request for the  
5 Commission's approval of a cost-based rate for individual generators.

6

7 **Q. Does the Public Utilities Code provide adequate guidance for the**  
8 **Commission to allow such cost-based PPAs?**

9 A. Yes. As noted by SCE, Assembly Bill (AB) 1576, enacted in 2005, added section  
10 454.6 to the Public Utilities Code. Section 454.6 authorizes the use of cost-of-  
11 service contracts to facilitate investment in the replacement or repowering of  
12 older, less-efficient thermal generation facilities when the CAISO certifies that  
13 the project is needed for local area reliability. The Legislature also found that  
14 replacement or repowering of older thermal units would enhance environmental  
15 performance, reliability, efficiency, and cost-effectiveness of these facilities.<sup>16</sup>

16

17 **Q. How should the Load-Serving Entities (LSEs) procure long-term local**  
18 **resources in these areas with potential local market power?**

19 A. The first step in the procurement process is to establish competitive solicitations.  
20 These solicitations should clearly define in a public and transparent manner the  
21 specific products that are being procured, including the technical characteristics  
22 necessary to provide specific products (e.g., regulation, ramping). Once parties

---

<sup>16</sup> Assembly Bill 1576 (Nunez), Stats. 2005, Ch. 374, § 1(g) (Attachment F).

1 have had the opportunity to respond to these RFOs, if the LSEs identify, based on  
2 the results of the RFO, a situation in which there is local market power within one  
3 or more sub-areas, then the LSE should inform the Energy Division within 10  
4 working days of opening bids. The Energy Division should respond to the LSE's  
5 notice of local market power within 10 working days and inform the LSE if the  
6 Energy Division agrees with the LSE's determination of local market power.  
7 While the LSE is waiting for the Commission to respond, it should begin the  
8 negotiation of a cost-based PPA with the bidder or bidders possessing local  
9 market power. Once a cost-based PPA is finalized, the LSE should submit it to the  
10 Commission for approval via Application or Advice Letter as appropriate.

11

12 **Q. What do you recommend if the LSE is fairly certain before the issuance of**  
13 **the RFO that a single entity will have local market power?**

14 A. In this case, the LSE should still proceed with the RFO. This will allow new types  
15 of resources to compete and will ensure that the LSE's intuition is supported by  
16 market data.

17

1 **III. There is Significant Disagreement About Other**  
2 **Aspects of CAISO’s Studies; All-Source RFOs**  
3 **Provide A Possible Means to Accommodate**  
4 **Disparate Positions**  
5

6 **Q. Are there disagreements about other issues raised in the opening testimony?**

7 A. Yes. I focus on three broad areas of contention. First, there is significant  
8 disagreement over the level of uncommitted energy efficiency, demand response,  
9 distributed generation, and combined heat and power that the CAISO assumed in  
10 its Local Capacity Requirement (LCR) study.<sup>17</sup> Second, some parties believe that  
11 it is premature to procure long-run LCR resources at the present time, while other  
12 parties believe that the results of the CAISO’s study definitively identify LCR  
13 needs.<sup>18</sup> Third, there is dispute over whether the CAISO should examine scenarios  
14 in which the San Onofre Nuclear Generating Station (SONGS) does not return to  
15 service.<sup>19</sup> I address each issue in turn below.

16 **A. *Do the studies assume enough uncommitted***  
17 ***“preferred” resources?***  
18

19 **Q. What is the source of the first dispute?**

20 A. SDG&E in particular supported the CAISO’s conservative approach of assuming  
21 no incremental uncommitted preferred resources above and beyond that already

---

<sup>17</sup> SCE Testimony, p. 7; SDG&E Testimony, pp. 6-7; TURN Testimony, pp. 9-10; DRA Fagan Testimony, pp. 16-17; CEJA Testimony, p. 4-10; Women’s Energy Matters Opening Testimony – LCRs, R.12-03-014, June 27, 2012, pp. 9-10 (WEM Testimony).

<sup>18</sup> CAISO Sparks Testimony, pp. 15-17; SCE Testimony, p. 1; SDG&E Testimony, pp. 1-3; TURN Testimony, pp. 3 and 5; DRA Fagan Testimony, pp. 1-4.

<sup>19</sup> CAISO Sparks Testimony, p. 15; SCE Testimony, p. 4; SDG&E Testimony, p. 2; TURN Testimony, p. 16.

1 embedded in the CEC’s demand forecast.<sup>20</sup> Other parties believe that the  
2 CAISO’s approach is overly conservative since (1) it is State policy under the  
3 Energy Action Plan to procure energy efficiency, demand response, renewables,  
4 and combined heat and power before procuring clean gas-fired generation, (2) the  
5 IOUs will continue to add these preferred resources above the levels embedded in  
6 the CEC’s load forecast, and (3) these preferred resources can in fact provide  
7 comparable levels of flexibility as can be provided by gas-fired generation that is  
8 procured to meet the LCR.<sup>21</sup>

9

10 **Q. What is IEP’s position regarding this issue?**

11 A. As pointed out in the CAISO Testimony,<sup>22</sup> reliance on “uncommitted resources”  
12 to meet long-term local resource requirements is risky. It is not unusual for new  
13 conventional resources to require 6-8 years or more to move from a planned  
14 project, through the RFO selection process, then through the construction phase,  
15 to achieve a commercial online date (COD). If the “uncommitted” resources do  
16 not show up as planners expect, then local grid reliability could be undermined  
17 due to a lack of capacity. The two visions before the Commission reflect, on the  
18 one hand, the view of the grid operator concerned with overall grid reliability  
19 versus, on the other hand, the vision of policy planners promulgating “stretch  
20 goals” that they would optimistically like to achieve for preferred resources. IEP  
21 believes these two different visions can be bridged.

---

<sup>20</sup> SDG&E Testimony, pp. 5-8.

<sup>21</sup> TURN Testimony, pp. 9-10; DRA Fagan Testimony, pp. 16-17; CEJA Testimony, p. 4; WEM Testimony, pp. 12-14.

<sup>22</sup> CAISO Sparks Testimony, p. 15.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22

First, we recommend addressing so-called “uncommitted resources” by no longer treating them as uncommitted; rather, the Commission should set procurement targets based on overall grid reliability needs and resource policy objectives, then provide procurement vehicles (e.g. RFOs) such that the Load-Serving Entities procure their Incremental Need, which is defined as follows:

$$\text{Incremental Need} = [\text{Forecast Load}]^{23} - [\text{Forecast Supply, including committed energy efficiency (EE), demand response (DR), distributed generation (DG), combined heat and power (CHP), and conventional resources}]$$

In this manner, uncommitted resources (and the risk they never appear) no longer are a part of the supply/demand balance equation, and the grid operator will have significantly greater assurance that the resources it anticipates will be available to serve load will actually be physically available to ensure overall grid reliability. All selected resources (including the “preferred” resources) will be “committed” to be available as expected and planned, subject to performance obligations on par with other resources. Thus, the RFO process is a vehicle to help facilitate achievement of the “stretch policy goals” while providing the grid operator a greater measure of assurance that planned and procured resources will actually be available to meet demand over the 10-year planning horizon.

---

<sup>23</sup> Forecast Load would not include committed EE, DR, or behind-the-meter DG or CHP.



1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23

In order to allow all-source bidding, it will be necessary to clearly define the performance requirements and obligations of the various resource types. Once there are clear definitions of those products, if a particular resource can help meet the CAISO’s local capacity requirements, then that resource should be allowed to bid to supply local capacity. Of course, it is important to ensure that all resources that are ultimately selected face comparable performance assurance obligations and other delivery responsibilities. Comparable requirements allow for a fair comparison between disparate resource types and also provide the CAISO with assurance that the resources would ultimately deliver as promised.

**Q. What are some of the challenges that exist regarding allowing all-source procurement of these resources?**

A. Generation resources (including combined heat and power and grid-connected distributed generation resources) can typically demonstrate performance through performance tests. In addition, these resources typically have a single counterparty that is responsible for performance. They have well-defined locations and can easily demonstrate provision of local capacity. It might be more difficult for EE and DR to provide similar assurances. However, it will be critical for these resources to be held accountable for non-performance on par with conventional generation resources if they are to be used to defer or replace generating resources.

1 **Q. Are there concerns about relying on DR and EE resources for firm capacity?**

2 A. There might be. Depending on the penetration of DR or EE, there could be a  
3 concern about the ability of program proponents to enroll sufficient customers and  
4 to provide reliable performance. For example, the PJM regional transmission  
5 organization has examined the question of how to ensure that greater levels of DR  
6 would adequately provide firm capacity as bid into its capacity market. PJM's  
7 findings indicate that it may be necessary to improve verification of the  
8 performance of DR prior to the compliance year, including the use of random  
9 tests.<sup>24</sup>

10

11 **Q. Are there concerns regarding the measurement and verification of impacts**  
12 **for DR and EE?**

13 A. Possibly. If these resources are to be used to defer need for local capacity, then it  
14 will be imperative to have robust measurement and verification plans in place.  
15 The timely provision of results from those studies will be essential to allow the  
16 LSEs to understand whether EE and DR resources are providing the capacity  
17 impacts that the project sponsors promised.

18

19 **Q. What is the concern with EE and DR regarding counter-party assurances?**

20 A. When a third-party provider of an EE or DR resource is the counter-party in a  
21 local capacity auction, then it is clear who is the responsible party. When the EE

---

<sup>24</sup> Pfeifenberger, Johannes, et al., "Second Performance Assessment of PJM's Reliability Pricing Model: Market Results 2007/08 through 2014/15," The Brattle Group, August 26, 2011, pp. 131-143 (Attachment G).

1 or DR resource is provided through a utility program, then the line of  
2 responsibility is less clear. The recent proposals for Regional Energy Networks<sup>25</sup>  
3 to provide energy efficiency services would reduce this concern.<sup>26</sup>  
4

5 **Q. Why might proving delivery of local resources be a problem for EE and DR?**

6 A. For mass-market programs like EE and DR, it will be necessary for the projects to  
7 demonstrate their ability to deliver capacity targeted at specific locations. For  
8 example, this issue was discussed in the Resource Adequacy (RA) proceeding as  
9 it relates to DR, with the Commission granting PG&E an exemption from the  
10 Local Dispatchability Requirement for certain DR in the 2013 RA compliance  
11 year.<sup>27</sup> The Decision grants PG&E's request for the current compliance year but  
12 also emphasizes that local dispatchability requirements are important and that this  
13 capability should be in place by May 2013. Thus, at least for PG&E, certain DR  
14 resources might not be eligible to participate in solicitations until such time as  
15 they can demonstrate their ability to provide local capacity. Given the hurdles  
16 associated with even modeling EE in the CAISO's integration and OTC studies,  
17 verifying local impacts could prove to be a major hurdle.<sup>28</sup>  
18

---

<sup>25</sup> For example, see: Motion for Consideration of the San Francisco Bay Area Regional Energy Network, A.12-07-001, July 16, 2012; Motion for Consideration of the Marin Energy Authority Energy Efficiency Program for 2013-2014, A.12-07-001, July 16, 2012; Motion for Consideration of the Southern California Regional Energy Network for Southern California Edison's Service Territory for 2013-2014, A.12-07-001, July 16, 2012 (Attachment H).

<sup>26</sup> Regional Energy Networks (RENs) would allow local governments to implement energy efficiency programs in the 2013-2014 CPUC energy efficiency program cycle. These organizations, rather than a utility, would likely be the counter-party.

<sup>27</sup> D.12-06-25, pp. 34-35.

<sup>28</sup> CAISO Sparks Testimony, p. 15.

1           **B.     Should procurement be deferred?**

2  
3           **Q.     What is the source of the second dispute?**

4           A.     Some parties argued that, given the uncertainty in future loads and levels of  
5           preferred resources, it may be the case that there is little or no need for long-term  
6           PPAs with gas-fired resources.<sup>29</sup> Other parties believe that delay could result in  
7           potential shortages in LCR resources, which would result in very high costs.<sup>30</sup>

8  
9           **Q.     What is IEP’s position regarding this issue?**

10          A.     IEP is concerned about the potential asymmetric risks associated with under- and  
11          over-procurement of local resources. As noted by the CAISO, under-procurement  
12          of integrating resources could result in significant societal costs as a result of the  
13          need to curtail firm load. However, over-procurement could result in higher costs  
14          to ratepayers. Over-procurement of long-run capacity could also cause significant  
15          financial difficulties for existing generators that sell market-based capacity (as  
16          was seen for Sutter). However, on balance, IEP supports a somewhat more  
17          conservative approach to procurement, in order to ensure that firm load  
18          curtailments do not occur. Given the State’s history with rolling blackouts and the  
19          aversion to repeating that experience, a conservative procurement approach is the  
20          most politically palatable option.<sup>31</sup>

21

---

<sup>29</sup> DRA Fagan Testimony, pp. 1-4; WEM Testimony, p. 14.

<sup>30</sup> SCE Testimony, pp. 16-17; TURN Testimony, pp. 21-24.

<sup>31</sup> IEP would note that certain parties appear to not dismiss involuntary curtailment of firm load as a potential resource option. See “Prepared Direct Testimony Of Julia May On Behalf Of The California Environmental Justice Alliance,” R.12-03-014, June 25, 2012, pp. 41-43.

1 In addition, IEP is concerned about delaying decisions regarding procurement of  
2 local capacity because of the amount of time necessary to permit and construct  
3 certain local resources. As noted above, the lead-time for constructing new  
4 resources can be 6-8 years or more. If the Commission were to delay resource  
5 decisions in certain local sub-areas (such as areas where OTC units provide the  
6 vast majority of local capacity), then the Commission might find that it is not  
7 possible to repower those units and, as a result, the units will be shut down in  
8 order for the owners of those units to meet their SWRCB requirements. Thus,  
9 delaying decisions would effectively preclude reuse of sites that are most  
10 effective for providing local capacity.

11

12 **C. Perform sensitivity analysis?**

13

14 **Q. What is the source of the third dispute?**

15 A. DRA disputes that the CAISO studies have adequately accounted for two major  
16 sources of uncertainty: the future operation of SONGS and the timing of  
17 retirement of OTC units.<sup>32</sup> DRA therefore argues that the CAISO's analysis is an  
18 insufficient basis for approving LCR-related procurement and that further review  
19 of LCR sub-area needs is required.<sup>33</sup> Other parties believe that the existing  
20 analysis provides an adequate basis for approving LCR procurement.<sup>34</sup> While

---

<sup>32</sup> DRA Fagan Testimony, pp. 21-22.

<sup>33</sup> DRA Fagan Testimony, p. 27.

<sup>34</sup> SCE Testimony, pp. 10 and 24; Track 1 Prepared Testimony of Hala N. Ballouz on Behalf of AES Southland, R.12-03-014, June 25, 2012, pp. 3-4.

1 SDG&E generally notes the importance of meeting local requirements in the Los  
2 Angeles basin, it recommends a sensitivity analysis assuming a SONGS outage.<sup>35</sup>

3

4 **Q. What is IEP’s position on this issue?**

5 A. IEP believes that it is critical for the Commission to understand the range of  
6 potential risks that any long-term plan entails, regardless of whether the plan  
7 addresses only local resources or the broader consideration of system needs.  
8 Therefore, IEP recommends that the CAISO should run additional scenarios in  
9 Track 1 to account for these two major uncertainties. DRA’s recommended  
10 scenarios are reasonable.

11

12 ***D. Solution: Authorize local capacity procurement to***  
13 ***level identified by CAISO and allow uncommitted preferred***  
14 ***resources to bid to provide local capacity***

15

16 **Q. What is IEP’s recommendation regarding trying to harmonize these**  
17 **disparate positions?**

18 A. IEP believes that the Commission should authorize the IOUs to procure resources  
19 to meet the level of local capacity requirements identified by the CAISO but also  
20 acknowledge that the need could be met by both supply resources and other  
21 preferred resources if they are “committed.” The LSEs should hold all-source  
22 RFOs to procure local capacity. If the LSEs are able to procure committed  
23 “supply” from preferred resources, then that would effectively lower the need for  
24 supply-side resources. On the other hand, if the LSEs are unable to obtain firm

---

<sup>35</sup> SDG&E Testimony, pp. 1-2.

1 commitments from suppliers of preferred resources, then the LSE should move  
2 quickly to fill local need from traditional supply resources. These solicitations  
3 should require all resources to provide assurance of delivery at the locations  
4 proposed and have penalty provisions for failure to perform.

5

6 **Q. When should these all-source RFOs occur?**

7 A. I recommend that the LSEs hold annual solicitations. Since EE, DR, and DG are  
8 relatively short lead-time resources, if it is clear that a proposal from one of these  
9 technologies is not going to succeed, it is important to procure backstop capacity  
10 quickly. Because generation resources may have longer development cycles, it is  
11 critical to give those resources adequate time to come online before there is a  
12 system emergency.

13

14 **Q. Are there other procurement-related issues that need to be addressed?**

15 A. Yes. In order to allow certain providers of long-run local capacity to develop their  
16 projects, it will be necessary for the LSEs to negotiate PPAs expeditiously. Given  
17 the time constraints facing certain owners of OTC plants in local areas, timely  
18 decisions are required in order to allow the owners to make decisions regarding  
19 project repowers.

1 **IV. The Commission Should Establish Longer-Term**  
2 **Need for Flexible Resources in the Current LTPP,**  
3 **with Track 1 as the Starting Point**  
4

5 **Q. Based on the above, what steps should the Commission take to ensure that**  
6 **adequate flexible resources will be available to meet future requirements?**

7 A. There are four steps to ensuring that there are sufficient flexible resources  
8 available when needed. These are:

- 9 1. Define with specificity the products that CAISO believes it needs to  
10 ensure reliability under greater levels of renewables. The CAISO  
11 should define these products so that parties clearly understand the  
12 specific attributes that the CAISO seeks. Developing specific  
13 definitions of flexible products has proven to be controversial. The  
14 CAISO has made a proposal in the RA proceeding regarding specific  
15 flexibility products<sup>36</sup> but there was some disagreement among the  
16 parties regarding whether the CAISO's proposal for categorization of  
17 flexible products for local RA was appropriate. In the recent Decision  
18 the Commission noted that the CAISO's proposal for defining flexible  
19 resources in the context of local RA was not "sufficiently detailed and  
20 ready for implementation at this time."<sup>37</sup> However, it is clear that  
21 without a definition of the local flexibility products that load-serving  
22 entities need to procure, or even the metrics with which to measure the

---

<sup>36</sup> California Independent System Operator Corporation, Proposal on Phase 1 Issues, R.11-10-023, January 13, 2012 (Attachment I); and California Independent System Operator Corporation, Submission of Supplemental Information to Proposal, R.11-10-023, March 2, 2012 (Attachment J).

<sup>37</sup> D.12-06-025, p. 2.



1 performance of resources proposing to provide these resources, it will  
2 be difficult, if not impossible, to procure the least-cost portfolio of  
3 flexible local (or system) resources.

4 2. Establish a schedule with the CAISO to ensure the CAISO completes  
5 its studies to determine the need for flexible resources in both the local  
6 resource areas and on a system-wide basis.

7 3. Finalize studies on system flexibility. These studies should account for  
8 major uncertainties, including but not limited to, load growth, resource  
9 availability, and technological change. By evaluating the need under a  
10 range of future scenarios, the CAISO should produce a range of need  
11 for each of the different attributes.

12 4. Require the IOUs to meet their flexible procurement obligations  
13 through competitive RFOs.

14  
15 **Q. Can you provide an example of how such an RFO might work?**

16 A. Yes. Assume that the CAISO breaks down flexibility into three attributes: (1)  
17 quick starting/stopping, (2) fast ramping, and (3) dependability of response. A  
18 combustion turbine presumably can offer all three attributes. However, an older  
19 combined cycle might only be able to offer attributes (2) and (3). On the other  
20 hand, demand response might only offer attributes (1) and (3). The LSE should  
21 value each attribute separately and develop an optimization tool, based on the  
22 principle of least-cost/best-fit, to select a portfolio of resources that meet its  
23 flexibility needs. This portfolio might consist of a combined cycle and a demand

1 response program that is lower in cost than a portfolio that consists of only  
2 combustion turbines.

3

4 **Q. From this roadmap, what should be the Commission's goals for Track 1 of**  
5 **this LTPP?**

6 A. The Commission should ensure that items 1 and 2 (as they relate to local  
7 flexibility requirements) are completed in Track 1. Item 2 (as it relates to system  
8 need) is already a part of Track 2.

9

10 **Q. Why do you believe that completion of items 1 and 2 is critical at this time?**

11 A. PG&E has asked the Commission to approve the Oakley project based on the  
12 rationale that it provides flexible resources and is highly efficient. However, since  
13 the Commission has not yet determined what the utilities needs are for flexible  
14 resources (or even the specific attributes that make up flexibility), it is premature  
15 to consider this major resource decision without having completed items 1 and 2  
16 above.

17

## 18 **V. Conclusion**

19 **Q. Does this conclude your reply testimony?**

20 A. Yes.