

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE  
STATE OF CALIFORNIA**

Application of Southern California Edison Company (U338-E) for Approval of Demand Response Programs, Goals, and Budgets for 2009-2011

Application 08-06-001  
(filed June 2, 2008)

Application of San Diego Gas & Electric Company (U 902M) for Approval of Demand Response Programs, Goals, and Budgets for 2009-2011

Application 08-06-002  
(Filed June 2, 2008)

Application of Pacific Gas and Electric Company for Approval of the Demand Response Programs, Goals, and Budgets for 2009-2011 (U 39-E)

Application 08-06-003  
(Filed June 2, 2008)

**RESPONSE OF  
THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR  
TO AMENDED UTILITY APPLICATIONS FILED SEPTEMBER 19, 2008 FOR  
APPROVAL OF DEMAND RESPONSE PROGRAMS AND BUDGETS  
FOR 2009-2011**

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Pursuant to Rule 2.6 (c) of the Commission’s Rules of Practice and Procedure and the Rulings of ALJ Hecht on August 7, 2008 and August 27, 2008<sup>1</sup>, the California Independent System Operator Corporation (“CAISO”) submits this Response to the Amended Applications of Southern California Edison Company (“SCE”); San Diego Gas & Electric Company (“SDG&E”), and Pacific Gas and Electric Company (“PG&E”), which the IOUs filed on September 19<sup>th</sup>:

**I. GENERAL COMMENTS AS TO THE AMENDED APPLICATIONS**

1. The CAISO supports the DR Working Group process to resolve technical and operational issues. The CAISO appreciates the Commission’s past support for the

<sup>1</sup> The August 7<sup>th</sup> Ruling determined that there were deficiencies in the IOU applications filed June 2, 2008. The August 27<sup>th</sup> Ruling amended the schedule for filings related to the Amended DR Applications.

DR working groups and encourages the CPUC to continue to be an active participant in future working groups.

2. The CAISO encourages the Commission to support the pilot projects proposed by the utilities, especially those pilots that promote the future enhancement, infrastructure development and capability of DR resources. Examples include:

- The Participating Load Pilot Projects;
- PG&E's Small Load Aggregation Pilot, SmartAC A/S Pilot, and the Intermittent Resource Management Pilot;
- SCE's DR Portal Project and Home Battery Pilot;
- SDG&E's DR Business System.

The CAISO encourages and supports the development of the DR business systems that SCE and SDG&E have each proposed. The CAISO has previously engaged with the utilities and other interested parties on such a concept and infrastructure for California. The CAISO would encourage the Commission to call on the utilities to redouble their efforts to coordinate and consolidate aspects of these pilots and to develop a consensus regarding purpose, business requirements, system design, architecture and access. Fundamentally, the CAISO would like to see investment in a common set of DR protocols that seek to integrate the exchange of DR information through common systems, communication infrastructure, and data architecture for all of California.

3. The CAISO respectfully submits that the Commission should consider opening a future phase in the DR proceeding (R.07-01-041) to consider the benefits and burdens of allowing the direct participation of DR in the market, i.e. the ability for a DR provider (utility, ESP, third-party aggregator, etc.) to offer DR resources directly into the

wholesale electricity markets. Correlated to this issue, the Commission should also incorporate, in the same phase, DR program participation by direct access customers.<sup>2</sup>

4. The Commission should insist that avoided costs are real. For example, Avoided T&D costs should only apply if the utility can demonstrate that the MW quantities associated with specific DR programs are explicitly incorporated into utility grid/distribution planning studies, and investments in transformers or other grid/distribution related equipment can actually be “deferred” as a result of a DR program’s MW contribution; this goes beyond the “right place”, “right certainty” criteria<sup>3</sup> and instead simply seeks to determine if this is a real benefit, or not. The CAISO believes that incorporating an avoided T&D cost may be a stretch for most, if not all, DR programs, given that the utilities are generally unable to define DR program impacts down to a level of granularity that is fine enough to materially impact distribution investment plans. Geographic specificity has been one of those fundamental issues to resolve, as the CAISO’s MRTU market design pushes for greater geographic specificity around resources. As such, an avoided T&D cost may be justifiable and appropriate, once DR program impacts can be mapped and relied upon, down at the premise, circuit, feeder and/or substation level.

If a gross margin is to be applied, given that a simple-cycle CT is the proxy resource, ancillary service (“A/S”) rents, specifically estimated revenues from selling non-spinning reserve, must also be factored into the gross margin calculation. Like a CT,

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<sup>2</sup> SCE details this issue in its testimony, under *SC-to-SC Trades*, (Testimony of L. Oliva, at p. 17, Volume II, Market Redesign & Technology Upgrade). Note that this subject pertains to existing direct access customers and is a separate issue from the policy issue of whether to reopen direct access.

<sup>3</sup> SDG&E’s testimony provides perspective and details on avoided T&D costs and additional background on the “right time, right size, right place and physical assurance” criteria. (Direct Testimony of Kevin C. McKinley, pp 7-9 [Section B. Transmission and Distribution Avoided Costs], Volume VI, Chapter IV of Testimony of SDG&E.

a DR resource that can offer both energy and non-spinning reserves can capture those energy and A/S rents back from the wholesale market. To leave this important revenue stream out of the gross margin calculation perverts the underlying CT proxy resource basis for comparison and begs the question as to whether the appropriate proxy resource is really a simple-cycle CT or should be something different, with more constrained attributes.

5. The Commission should support and allow the utilities to make adjustments to new DR programs, or to apply for new programs, via Advice letters. As the CAISO adds functionality and enhancements for DR resources under MRTU MAP, program changes may well be necessary and, therefore, accordingly, the Commission consider accommodating the utilities' need for flexibility, so that they may make appropriate and cost-effective program adjustments.

## **II. GENERAL COMMENTS AS TO THE PILOT PROGRAMS**

The CAISO appreciates the support of the Commission and the utilities to design and implement Participating Load Pilot Projects (PL Pilots) under the initial release of MRTU. The CAISO believes that the PL Pilots will be a good investment in the future development and promotion of DR in California. The CAISO expects that much will be learned through the pilot experience and anticipates that the PL Pilots will provide important input and guidance with regard to the way DR programs are designed and implemented in the future. As such, the CAISO encourages the Commission to timely resolve any funding impediments to the PL Pilots and hopes that a suitable resolution, or a bridge funding mechanism, will be approved, so that work may begin on the PL Pilots as soon as November 2008, in anticipation of a June 2009 implementation date.

Overall, the utilities have provided thoughtful responses to the proposed PL Pilot in their respective applications and have obviously undertaken meaningful efforts to understand the CAISO's PL and PDR models. This is reflected in the Utilities' initial PL Pilot project scopes and MRTU summaries. The CAISO looks forward to working collaboratively with the CPUC, the utilities, DR providers and other interested parties, to further integrate DR resources, to enhance the wholesale markets and grid reliability. In this spirit, the CAISO provides these comments on the PL Pilots:

- Regarding all IOU proposals: The CAISO believes SDG&E's proposal seeks to achieve the right objectives, by performing a Pilot Load Impact Evaluation and a Pilot Process Evaluation of their PL Pilot to "assess the effectiveness of the program and to develop recommendation for changes to program design and delivery."<sup>4</sup> The CAISO would encourage each of the utilities to perform a similar study at the end of their respective PL Pilots, so that all parties may capture and document what was learned and what can be improved and, therefore, applied to future DR programs.
- The CAISO appreciates SCE's continued commitment to the Spinning Reserve Pilot project and looks forward to utilizing the knowledge and expertise gained from this project and transforming it into a PL resource. In addition, the CAISO anticipates that the knowledge and experience gained from this project can aide and inform the other PL Pilots. Finally, the CAISO supports SCE's Scope of Work for its PL Pilot and offers the following specific inputs/suggestions to SCE's PL Pilot proposal.
  - The CAISO encourages SCE to determine a way to deploy their SmartConnect meters on the circuits that will be part of its PL Pilot, even if SCE's original meter deployment plan did not include these particular circuits. It would be beneficial to have the PL pilot initiated with this

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<sup>4</sup> Prepared Direct Testimony of Mark Gaines and Tony Choi, Volume VI, Chapter VI at p. 12.

metering infrastructure in place, so that we can test the application of this infrastructure in the context of PL.

- For possible clarification by SCE, the CAISO believes that “events” should only be counted when energy is actually dispatched, not when SCE successfully bids and is awarded non-spinning reserve capacity. The mere award of non-spinning reserve capacity should not be considered an “event,” since this is merely a financial transaction. An A/S capacity award merely represents the CAISO’s payment for a call option (to dispatch the energy behind that A/S capacity if and when it is needed). A physical, tangible system event is only triggered when energy is dispatched. The CAISO assumes this is what SCE actually intends, but the description was not fully clear in this regard. If, however, SCE does actually intend that the mere award of an A/S bid should be considered as an “event,” then the CAISO would urge the Commission to reject this approach.
- Total test minutes should allow for more than 400 minutes or 6.7 hours. The CAISO would encourage extending the total test minutes to 720 minutes or 12 hours to give the PL Pilot more bandwidth for testing and proof of concept.
- For the pilot, the CAISO will not insist that SCE aggregate circuits to a minimum of 1 MW, but the CAISO does support and encourages SCE to achieve this level of response and customer commitment, where possible.
- The CAISO believes that SDG&E does a nice job of conveying the approach and the overall direction for its PL Pilot. The CAISO also appreciates the forward thinking and longer-term perspective that SDG&E is taking with regard to integrating price-responsive DR within the SDG&E service territory into the wholesale markets as a general course of business.<sup>5</sup> The CAISO offers the following comments on SDG&E’s PL Pilot proposal:

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<sup>5</sup> SDG&E has employed four guiding principles for developing a cost effective, successful DR portfolio. SDG&E’s fourth principle is to enable DR programs to transition to participation in the CAISO’s MRTU in the future. (Prepared Direct Testimony of Mark Gaines, Volume I, Chapter 1 at p. 1.)



- SDG&E should ensure that there is continual close coordination between the PL Pilot and the important work regarding SDG&E's IT system modifications, outlined in SDG&E's testimony of Terry Mohn<sup>6</sup>. As such, the CAISO appreciates that SDG&E's proposed DR business system is "in direct alignment with CAISO's MRTU plans...."<sup>7</sup> The CAISO believes that this coordination is essential and that there needs to be a close link between the PL Pilot and this IT work, so that the IT system modifications that SDGE is proposing can benefit from this pilot and, ultimately, accommodate the bidding of reliability products, like A/S, into the wholesale electricity markets.
- The CAISO looks forward to working with SDG&E and the other utilities to address and resolve telemetry concerns and consider changes and/or refinements to the applicable telemetry standards as specified in the PL Technical Specification guide which the CASO has developed.<sup>8</sup>
- The CAISO will not insist or enforce a minimum 1 MW aggregation size for the PL Pilot. In fact, the CAISO has previously proposed to Working Group 2<sup>9</sup> that the CAISO is interested in reducing this minimum size requirement with the DDR implementation under MAP.
- PG&E provides a good overview of what PG&E intends to do and accomplish through its PL Pilot. The CAISO supports and appreciates all of PG&E's proposed pilot projects and finds them all meaningful and relevant. As such, the CAISO encourages the Commission support them.

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<sup>6</sup> See, generally, Prepared Direct Testimony of Terry Mohn, Volume V, Chapter V. Mr. Mohn's testimony states at page 1 that the purpose of his testimony is to discuss the utility's proposed IT enhancements to support the 2009-2011 DR program portfolio.

<sup>7</sup> Prepared Testimony of Terry Mohn, Volume V, Chapter 4 [*IT System Modifications, Complimentary to MRTU and Need for Automation*] at p. 4.

<sup>8</sup> This document, The Participating Load Technical Standard, is currently being updating by the CAISO, but the document can be found in its original form, along with other documents relating to Participating Load, at: <http://www.caiso.com/docs/2005/10/05/2005100520280423155.html>.

<sup>9</sup> Working Group 2 is a reference to one of the five working groups spearheaded by the CPUC, CEC, and CAISO as a collaborative effort for the development of Demand Response. Working Group 2 is addressing post MRTU release issues, which the CAISO now references as Market and Product enhancements or "MAP." Information about the working groups can be found on the CAISO's Demand Response Initiative Web page at <http://www.caiso.com/1893/1893e350393b0.html>.

### III. COMMENTS AS TO PG&E'S AMENDED APPLICATION

#### 1. Witness Testimony, Chapter 3: "Integrating Demand Response with the Markets"

##### a. **Witness Testimony Section F (1)(c)(4)(e):** **(Witness Testimony, Page 3-28)**

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- F. Additional Information of MRTU and DR;
  - 1. Background
    - c. General Process for Determining If a DR Program Should Transition to PL or DPR From NPL
      - (4) Major Areas that Impact Cost and Feasibility;
        - (e) Identification of DR Customers by Location and Callable by Location

In this portion of Witness Ken Abreu's Testimony, PG&E states that:

The Conversion to calling DR by LCA is being built into the PeakChoice, BIP, and SmartAC programs for 2009. ... Other programs will transition later. This may be a significant issue for programs like default CPP for small customers, which may included millions of meters.<sup>10</sup>

The CAISO encourages PG&E to resolve the issue of how mass market and residential customers can be called "locationally" under "CPP-like" tariffs. The CAISO would encourage PG&E to further explore how its investment in Advanced Metering Infrastructure and, in particular, the Home Area Network capability, can be used to overcome this customer identification and dispatch problem.

##### b. **Witness Testimony Section F (1)(c)(4)(j):** **(Witness Testimony, Page 3-29)**

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- F. Additional Information of MRTU and DR;
  - 1. Background;
    - c. General Process for Determining If a DR Program Should Transition to PL or DPR From NPL
      - (4) Major Areas that Impact Cost and Feasibility;
        - (j) Participating Load Agreement Certification

Here, PG&E states:

Participating Loads are implemented by the CAISO's "Participating Load Agreement," (PLA) [,] approved by FERC as part of CAISO's Tariff. ...

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<sup>10</sup> PG&E Amended Prepared Testimony, Chapter 3, Testimony of Kenneth E. Abreu (hereinafter, "Testimony of Kenneth E. Abreu"), at p. 3-28, lines 23-27.

Schedules under the PLA need amending [,] as DR customers migrate into and out of DR programs. Every customer change will require an amended PLA and [a] revision to applicable LAP Distribution Load Factors.<sup>11</sup>

The CAISO disagrees with this characterization that there will be a constant need to amend the PLA as customers migrate into and out of DR programs. This would be impractical, from both a contractual and implementation perspective. To avoid this potentiality, the CAISO would consider establishing the DR resource at a high enough “PMax”<sup>12</sup> to enable a reasonable level of migration into and out of a DR program, so that frequent adjustments would not be necessary. The CAISO is open to other suggestions, and, like PG&E, would not want perfunctory contract management issues to overwhelm utility and CAISO personnel resources, so as impede the growth of Participating Load resources. In addition, the CAISO is open to discussion regarding the frequency at which Distribution Load Factors would need adjustment, given that the CAISO wants to mitigate potentially significant hurdles or burdens for DR Providers who want to offer Participating Load resources into the wholesale electricity markets.

**c. Witness Testimony Section F (1)(c)(4)(m):**  
**(Witness Testimony, Page 3-32)**

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- F. Additional Information of MRTU and DR;
  - 1. Background;
    - c. General Process for Determining If a DR Program Should Transition to PL or DPR From NPL
    - (4) Major Areas that Impact Cost and Feasibility;
    - (m) Impact to Scarcity Pricing of NPL, PL and PDR

Respectfully, the CAISO continues to take issue with PG&E’s characterization, as demonstrated in the witness’s testimony in this passage, that the CAISO’s process for scarcity pricing is still being developed and “no final design has been established at this time.”<sup>13</sup> This characterization is hyperbole. The CAISO responds by noting that the

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<sup>11</sup> Testimony of Kenneth E. Abreu, at page 3-29, lines 28-32 to page 3-30, lines 1-4.

<sup>12</sup> PMax is defined in the CAISO MRTU Tariff, Appendix A [*Master Definition Supplement*] as follows: “the minimum normal capability of the Generating Unit. PMax should not be confused as an emergency rating of the Generating Unit.”

<sup>13</sup> Testimony of Kenneth E. Abreu, at p. 3-32, lines 8-14.

relationship between scarcity pricing and demand response has been clearly communicated in exchanges with CAISO's stakeholders as part of the CAISO's Scarcity Pricing Stakeholder Initiative. The nature of the relationship of DR and scarcity pricing, as we have articulated it, has not changed since February 2008. In this regard, the issue of scarcity pricing has been discussed for over a year, with a white paper on scarcity pricing having been initially released in May 2007.<sup>14</sup> In the last number of months, the discussion has focused on finer details, and, in fact, the CAISO published its final scarcity pricing design proposal for stakeholders on July 15<sup>th</sup>. Accordingly, the CAISO is of the opinion that sufficient information regarding the mechanics of scarcity pricing has been presented and is available to stakeholders and DR program developers alike, regarding the relationship between scarcity pricing and demand response.

**d. Witness Testimony Section F (1)(e);  
(Witness Testimony, Page 3-33)**

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- F. Additional Information of MRTU and DR;
  - 1. Background;
    - e. Criteria for Programs that are a Best Fit for PL

The CAISO generally supports PG&E's attempt to characterize the best fit for each of the CAISO's DR models, specifically for NPL, PL and PDR. This classification by wholesale DR product type should be useful for framing discussions during future working groups. The CAISO does have a concern about the consistent issues raised in the utilities' applications regarding DR's application to unbundled, direct access customers. PG&E's characterization in this particular section presupposes that wholesale DR products could only apply to bundled customers.

As the CAISO highlighted above in its *General Comments as to the Pilot Programs* (Section II, above, of this Response), the CAISO emphasizes that the

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<sup>14</sup> Information regarding the CAISO's Scarcity Pricing Initiative can be found on the CAISO's Web site at <http://www.caiso.com/1bef/1bef12b9b420b0.html> (last accessed Sept. 26, 2008), and the May issue paper can be found at the hyperlink <http://www.caiso.com/1bef/1bef12e2453e90.pdf> (last accessed Sept. 26, 2008.).

Commission must address this DR/DA issue head on and, along with it, address the closely-related issue of direct DR participation in the wholesale markets. Unless the Commission acts, these issues will remain unresolved and will, ultimately, hinder DR's growth potential in California.

#### **IV. COMMENTS AS TO SCE'S AMENDED APPLICATION**

##### **1. Volume II- "Market Redesign & Technology Upgrade"**

The CAISO appreciates the effort that SCE undertook to outline its plans to prepare for and support participation of DR under MRTU. SCE accurately reflects much of interplay and evolution that demand response will experience over this upcoming DR application cycle, as enhancements are made to the wholesale market design and to retail DR programs and infrastructure. The CAISO also appreciates SCE's input regarding the challenges of integrating intermittent resources, as well as the perspective that SCE offers regarding small load aggregation. The CAISO offers the following comments to that portion of SCE's testimony pertaining to wholesale markets--Volume II- Market Redesign & Technology Upgrade<sup>15</sup>—in order to clarify points, provide interpretation, and/or seek further understanding.

##### **a. Witness Testimony Section C (1); Discussion of Price Responsive NPL (Witness Testimony, Page 5)**

- C. Summary of CAISO's Planned Demand Response Products for MRTU
  - 1. Non-Participating Load;  
Price Responsive NPL

SCE's witness states that

[T]he CAISO's interests in incorporating NPL into its wholesale markets have led to enhancements to the core definition of NPL....

...

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<sup>15</sup> Amended Testimony of L. Oliva, Volume II Market Redesign & Technology Update (hereinafter "Amended Testimony of L. Oliva..")

The CAISO characterizes price-responsive NPL as demand submitted as price responsive energy bids at LAPs in the DAM. It seeks to adjust its RUC targets after the DAM executes, based on determined available Real-Time DR.”<sup>16</sup>

The CAISO agrees that it has sought ways to better incorporate “price-responsive” NPL into the “market,” but the CAISO struggled with how it could differentiate between Day-ahead (DA) arbitrage and price-responsive demand response, given the submission in the DA market of a single price-sensitive demand curve. To try and parse the demand curve was impractical and would have added significant complexity to the CAISO’s market systems.

In developing a solution, the CAISO was able to resolve these issues simply and accommodate DA “price-responsive” NPL through the development of the Proxy Demand Resource (“PDR”) model. (This is not to say that all NPL must fall under the PDR model. The PDR model is a mechanism to more actively engage NPL in the DA market. But not all price responsive NPL must be PDR. Under MRTU, a load-serving entity continues to have the ability to submit a simple price-sensitive demand curve in the DA market for its load.)

Given this context, the witness’s testimony regarding “Price Responsive NPL” brings unnecessary complication into the discussion. NPL that wants to bid into the market can simply use the PDR mechanism; if not, then the LSE scheduling the load can continue the practice of submitting a price-sensitive demand curve.

**b. Witness Testimony Section C (2); Discussion of “Interval Meter and Telemetry Requirements”  
(Witness Testimony, Page 7)**

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- C. Summary of CAISO’s Planned Demand Response Products for MRTU  
 2. Participating Load (Dispatchable Demand Response or DDR);  
Interval Meter and Telemetry Requirements

<sup>16</sup> Amended Testimony of L. Oliva at p. 5, lines 13 to 21.

Here, Mr. Oliva states that “for PL to participate in the DAM and RTM for Energy and/or Ancillary Services, it must have telemetry capability.<sup>17</sup>” The CAISO again emphasizes telemetry is required only for PL that provides Ancillary Services to the CAISO. In contrast, PL that strictly participates as an energy-only resource in the CAISO’s DAM or RTM does not require telemetry. The only requirement for PL providing energy is an interval meter.

**c. Witness Testimony Section C (3); Discussion of “PDR as Proxy Generator”  
(Witness Testimony, Page 9)**

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C. Summary of CAISO’s Planned Demand Response Products for MRTU  
3. Proxy Demand Resource  
PDR as Proxy Generator

In this portion of his testimony, SCE’s witness states that “...unlike NPL the DR bids are segmented into required time differentiated stages and are provided to the market using a proxy generator resource identifier.”<sup>18</sup>

If the CAISO understands SCE’s point correctly, then CAISO would offer the clarification that the utility must be able to take a DR program, break it down into a MW quantity and price, by hour (for the hours the program applies), and then submit those price/quantity bid pairs to the CAISO in the DA market, as a proxy generator resource.

For example, a resource can be represented by up to ten price/quantity bid pair segments. Therefore, a Proxy Demand Resource could accommodate:

- 1) ten (10) separate DR programs, with each program represented by a single price/quantity bid pair, or
- 2) a single DR program, broken down into ten (10) unique price/quantity bid pair segments.

A PDR would need to be defined in a geographically specific area and tied to a DR program or set of programs. Therefore, the bid on a PDR would represent the MW

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<sup>17</sup> Amended Testimony of L. Oliva, at p. 7, lines 11 to 21.

<sup>18</sup> Amended Testimony of L. Oliva at p. 9, line 10 to page 10, line 2.

quantity and price portion of a DR program or set of programs that exist in that geographic area.

**d. Witness Testimony Section E (1)(b); DA and RT Tradeoffs**  
**(Witness Testimony, Page 18)**

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E. Issues and Barriers”;

1. Issues and Barriers n MRTU Release 1;
- b. Day-Ahead/Real Time Tradeoffs

Here, SCE’s witness states that:

The CAISO seeks DR available for the Day-Ahead and Real-time markets, and as soon as possible, for Ancillary Services. However, there is an operational issue concerning the manual work around environment for 2009 that should be addressed. As currently structured and envisaged going forward, DR must be bid into the Day-Ahead market, and thus is not be [sic] available to participate in the Real-time market. However, Day-of DR resources may be more useful, and more valuable, in the Real-time market.<sup>19</sup>

The CAISO wishes to clarify the following points with regard to this statement by SCE. First, the CAISO does agree with SCE that DR participating in the real-time market will have significant value and utility. However, the CAISO would disagree that, going forward, DR must bid into the day-ahead market and, therefore, will not be available to participate in the real-time market. This constraint is strictly limited to MRTU Release 1, and, as the CAISO presented at the Technical Design Session on August 8, 2008, the CAISO is considering how to enable PL resources under MRTU Release 1 to be eligible to participate in the real-time market as economic energy, independent of a DA ancillary service bid, which would eliminate this concern.<sup>20</sup>

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<sup>19</sup> Testimony of L. Oliva at p.18, lines 13-17.

<sup>20</sup> See CAISO presentation from the August 8, 2009 Technical Design Session, entitled *Scarcity Bidding and Demand Response*, Slide 3, found at: <http://www.caiso.com/202a/202adee138520.pdf> (last accessed Sept. 26, 2008).



This day-ahead bidding constraint does not exist in the DDR model proposed under MAP. In the DDR model, DR resources will be able to participate in all the markets, including day-ahead, RUC, ancillary services, and real-time.

Concerning the bidding of ancillary services under MRTU, it is important to understand that the CAISO will seek to procure 100% of its ancillary service requirement in the day-ahead market. Thus, if a DR resource wants to participate in the A/S market, its best opportunity to be awarded A/S is in the DA market. Accordingly, A/S-eligible PL resources would want to schedule and bid in the DA market.

The implication from SCE comments is that SCE may essentially need to “hold back” real-time DR resources, for local reliability needs. The CAISO is cognizant of the local need, but would rather have the utility bid these resources into the day-ahead and real-time markets and then, as an alternative, have the utility and CAISO reach a resolution and accommodation, wherein these resources may continue to be used to address overloads and system conditions, should they occur at the distribution system level, without penalty to the SC for having bid these resources into the market.

**e. Witness Testimony Section E (5)(a); Discussion of “PL and RUC Value”  
(Witness Testimony, Page. 26)**

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- E. Issues and Barriers;
  - 5. Issues and Barriers Associated with Participating Load;
    - a. PL and RUC Value

Here, SCE states that: “It remains unclear how RUC value is treated under MAP.”<sup>21</sup>

CAISO offers the following discussion in response: Under MAP, DDR is offered comparable treatment to that of a generator. DDR can participate in all the markets, including the market for resources for RUC capacity. If the DDR offers in the DA forward energy market, then any portion of uncommitted capacity from the DDR’s DA

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<sup>21</sup> Amended Testimony of L. Oliva, page 26, lines 15-16.

bid can be offered as RUC capacity. If this bidding DDR resource is a RA resource, then any uncommitted capacity from the DA forward energy market run can be committed in RUC, at a \$0 bid. Because demand response is considered a use-limited resource by the CAISO, it is excluded from the RA must offer provisions that typically apply to other, non-use limited resources.<sup>22</sup>

## V. COMMENTS AS TO SDG&E'S AMENDED APPLICATION

The CAISO does not have specific comments pertaining to SDG&E's Amended Application.

Dated: September 29, 2008

Respectfully submitted,

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By: /s/ *Baldassaro "Bill" Di Capo*

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<sup>22</sup> CAISO MRTU Tariff, Section 40.6.1 sets forth the availability obligations of RA Capacity, including the requirement to submit uncommitted capacity into RUC. Use Limited Resources (including Participating Load and Pumping Load) are subject to additional availability requirements under MRTU Tariff Section 40.6.4.

**CERTIFICATE OF SERVICE**

I hereby certify that on October 2, 2008. I served, on the Service List for Consolidated Proceedings A08-06-001, A08-06-002, A08-06-003 and R.07-01-041 by electronic mail, a copy of the foregoing:

RESPONSE OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR TO AMENDED UTILITY APPLICATIONS FILED SEPTEMBER 19, 2008 FOR APPROVAL OF DEMAND RESPONSE PROGRAMS AND BUDGETS FOR 2009-2011

Executed on October 2, 2008 at Folsom,  
California

*/s/ Anna Pascuzzo*

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Anna Pascuzzo,  
An employee of the California Independent  
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A.08-06-001; A.08-06-002; A.08-06-003 – Service List

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