STATE OF CALIFORNIA ARNOLD SCHWARZENEGGER, *Governor*

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

November 20, 2006

Magalie Roman-Salas, Secretary
Office of the Secretary
Docket Room
Federal Energy Regulatory Commission
888 First Street, N.E., Room 1A, East
Washington, D.C. 20002

Re: California Independent System Operator Corporation
Docket Nos. ER06-615-000, ER02-1656-027, ER02-1656-029, ER02-1656-030, and ER02-1656-031

Dear Ms. Salas:

Enclosed for filing in the above-docketed case, please find an electronic filing of a document entitled **"COMMENTS AND PROPOSAL OF THE CALIFORNIA PUBLIC UTILITIES COMMISSION FOR INCORPORATION OF DEMAND RESPONSE INTO THE CAISO MARKETS IN ACCORDANCE WITH THE COMMISSION'S SEPTEMBER 21, 2006 ORDER CONDITIONALLY ACCEPTING THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR'S ELECTRIC TARIFF FILING TO REFLECT MARKET REDESIGN AND TECHNOLOGY UPGRADE."**

Thank you for your cooperation in this matter.

Sincerely,

/s/ Joseph P. Como

Joseph P. Como
Staff Counsel

JOC:ngs

Enclosure

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

California Independent System Operator Corporation	Docket Nos.: ER06-615-000 ER02-1656-027 ER02-1656-029 ER02-1656-030 ER02-1656-031

COMMENTS AND PROPOSAL OF THE CALIFORNIA PUBLIC UTILITIES COMMISSION FOR INCORPORATION OF DEMAND RESPONSE INTO THE CAISO MARKETS IN ACCORDANCE WITH THE COMMISSION'S SEPTEMBER 21, 2006 ORDER CONDITIONALLY ACCEPTING THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR'S ELECTRIC TARIFF FILING TO REFLECT MARKET REDESIGN AND TECHNOLOGY UPGRADE

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Dated: November 20, 2006

The California Public Utilities Commission ("CPUC") appreciates the opportunity to provide comments on demand response issues to the Federal Energy Regulatory Commission ("FERC" or "Commission") on the California Independent System Operator Corporation ("CAISO") Electric Tariff Filing to Reflect Market Redesign and Technology Upgrade" ("MRTU Tariff"), which was submitted to the Commission on February 9, 2006. In accordance with the Order of September 21, 2006 conditionally accepting the MRTU tariff (also referred to as the "September 21, 2006 Order," and herein referred to as "Order"), the CPUC respectfully submits the following comments on demand response.[1]

I. INTRODUCTION AND SUMMARY

The CPUC appreciates the Commission's commitment to demand response as a viable market resource, and fully acknowledges that demand response resources can be used as an important tool to mitigate market power and protect customers in areas of congestion or insufficient generation resources. (¶10[2]) In a fully operational Integrated Forward Market ("IFM"), as energy and congestion prices are more transparent through location-specific prices, demand response could become as valuable an investment option as a supply side resource. Demand response is one of several important products that

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[1] Pursuant to Rule 713 of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission ("Commission" or "FERC"), 18 CFR §385.713, the CPUC submitted its request for clarification or in the alternative rehearing of the September 21, 2006 Order. In submitting these comments and proposal, the CPUC does not waive its right to seek further rehearing or appeal of the September 21, 2006 Order.

[2] All paragraph references are to the Commission's September 21, 2006 Order Conditionally Accepting The California Independent System Operator's Electric Tariff Filing To Reflect Market Redesign And Technology Upgrade, unless otherwise noted.

could be competitive with generation and could be relied upon to produce rates that are just and reasonable for customers.

The CPUC believes that demand response should be integrated and implemented by CAISO to the maximum extent possible, before MRTU release 2.[3] The Commission agreed with this goal by ordering CAISO to "*work with LSEs and account for expected demand response within RUC procurement*." (¶690) It is important to recognize that Residual Unit Commitment ("RUC") procurement is a potentially expensive backstop for closing the gap between the Day-Ahead and Real-Time markets. Demand Response can mitigate market power that may be created through the RUC procurement process or in the Integrated Forward Market ("IFM").

Additionally, FERC ordered CAISO to "*collaborate with the interested parties and assist them in developing their proposals*" for price-responsive demand response that was <u>measurable</u>, <u>dispatchable</u> and <u>capable of being included in MRTU</u>. (¶690) The CPUC, along with other California state agencies have actively pursued the expansion of demand response programs for several years. Given its jurisdictional authority over resource reliability, the CPUC plans to be an active and willing stakeholder with the CAISO to help integrate demand response into the MRTU.

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[3] On page 96 of the Transmittal Letter accompanying the filing of the MRTU Tariff in this docket, the CAISO states that it plans to address participating load demand response in the day-ahead market as a Release 2 item.

The CPUC has directed the investor-owned utilities to develop a robust portfolio of price-responsive demand response programs for end-use customers to consider.[4] In 2002, the CPUC instituted Rulemaking (R.) 02-06-001 to provide the forum to formulate comprehensive policies to develop demand flexibility as a resource to enhance electric system reliability, reduce power purchases and individual consumer costs, and to protect the environment. The desired outcome of that effort was to broaden the spectrum of demand response programs and tariff options that would be available so that customers that make their demand-responsive resources available to the electric system.

Over the course of approximately four years, the CPUC has made significant progress in advancing demand response. In 2003, the CPUC adopted demand response MW goals for the utilities to attain as part of their effort in building their demand response portfolios. The MW target for July 2007 is 5% of system peak demand. In March 2006, the CPUC approved three-year demand response program budgets (a combined total of $262 million) for the three large California regulated utilities. The CPUC will soon consider a proposed decision which authorizes improvements to existing demand response programs and approves new demand response programs for the purpose of increasing demand response resources by summer 2007. Currently the three large electric utilities in California have enrolled approximately 900 MWs of price-responsive programs and 1,600 MWs of emergency-triggered demand response programs. The

[4] California Independent System Operator Corporation, Docket No. ER06-615-000, Request Of The California Public Utilities Commission For Clarification Or In The Alternative Rehearing Of The Commission's September 21, 2006 Order Conditionally Accepting The California Independent System Operator's Electric Tariff Filing To Reflect Market Redesign And Technology Upgrade. October 23, 2006.

CPUC directed the utilities to propose critical peak pricing tariffs as a default tariff for customers with demand exceeding 200 kW in their next General Rate Cases (Decision 06-05-038). Pacific Gas & Electric Company received authorization from the CPUC in July 2006 to begin deployment of an advanced metering infrastructure throughout its service territory (Decision 06-07-028). San Diego Gas & Electric's advanced metering deployment application is currently under consideration (A.05-03-015). Additionally, Southern California Edison Company is currently exploring the viability of advanced metering for its territory, and has recently indicated that it will file a full deployment AMI application in mid-2007.

On a parallel track, the CPUC, the California Energy Commission (CEC) and the California Consumer Power and Conservation Financing Authority (CPA) jointly adopted the Joint Agency Energy Action Plan (EAP). The EAP established a "loading order" of energy resource procurement to guide decisions made by state agencies. The purpose of the EAP is to help ensure that adequate, reliable, and reasonably-priced electrical power and natural gas supplies are available, by optimizing all strategies for increasing conservation and energy efficiency and to minimize increases in electricity and natural gas demand. That loading order recognizes demand response as a preferred resource to be considered before adding additional transmission or generation resources.

It is therefore incumbent upon the CAISO to integrate such resources into the MRTU market design without delay. The CPUC Resource Adequacy program allows for demand response resources that meet certain deliverability criteria to count as qualifying resources, but the CAISO's market rules do not fully reflect this policy. It is accordingly a matter of the highest priority for the CAISO to accelerate its work on demand response prior to Release 1, to continue to work with stakeholders to shape demand response products to facilitate their integration into the CAISO's operations, and to fully incorporate all demand response into MRTU Release 2.

II. PROPOSAL FOR INCORPORATING DEMAND RESPONSE INTO THE CAISO MARKETS

As an initial effort to follow the Commission's directive, the CAISO convened a meeting of parties on November 2, 2006 to address the actions that could and should be taken to incorporate demand response into the CAISO markets. The CAISO also received stakeholder input.

It was clear to a number of stakeholders, including the CPUC, that there are opportunities and challenges to finding ways of incorporating demand response that is measurable, dispatchable, and capable of being included in MRTU, but that it could be done. However, it was also recognized that integrating demand response proposals into the MRTU will require more of an ongoing effort among stakeholders. Many parties identified areas that need more work, such as:[5]

- Better coordination between CAISO and LSEs on how demand response will be used/incorporated into the RUC (Residual Unit Commitment) process. This should be coordinated and memorialized in written protocol so there is no confusion.
- Establishing a procedure that ensures that LSE and ISO communications allow for manual adjustments in the RUC processes.
- Integration of DR and resource adequacy under MRTU.

[5] This is a partial list of the written feedback that CAISO received on November 2, 2006. See MRTU Workshop on Demand Response- November 2, 2006 Post-it® Notes Feedback at http://www.caiso.com/18a7/18a7bc6b1e1b0.pdf for a complete list.

- Review research done by other ISOs and learn from successful programs.
- The need for CAISO to expand opportunities for DR to qualify as participating load.
- Treating DR resources like generation resources in a resource planning framework in terms of order of dispatch – i.e. creation of a DR resource stack where the least cost resource is dispatched first.

CAISO staff agreed that the most realistic proposal for incorporating demand response into the MRTU is to establish a CAISO led initiative process that would move in parallel with MRTU development. After outlining key milestones and determining stakeholder roles, the process would identify and work through the opportunities, challenges and barriers to demand response.

A. TO ACCOMPLISH FERC'S DIRECTIVE, THE CAISO SHOULD WORK WITH LSEs AND OTHER STAKEHOLDERS NOW TO ACCOUNT FOR EXPECTED DEMAND RESPONSE WITHIN THE RUC PROCUREMENT PRIOR TO RELEASE 1

The CAISO should account for existing California demand response programs are accounted for in the RUC procurement so that ratepayers do not foot the bill for CAISO procurement of redundant resources (those procured by CAISO and the LSEs for the same purpose). In other words, the CAISO should not procure for additional resources when DR procured by LSEs will meet the same requirements. Similarly, it is important that the CAISO know which demand response resources are already allocated for resource adequacy by an LSE, so that the CAISO does not count a resource twice.

As a first element in assisting CAISO in meeting its obligation under the RUC procurement, the CAISO should establish a stakeholder process, possibly modeled after the New England or Mid Atlantic Demand Response Initiatives, although the specific elements should be guided by what is needed for incorporation of demand response in the CAISO. The New England Demand Response Initiative ("NEDRI") involved a broad-based, facilitated process that involved the region's independent system operator (ISO-New England), state utility and environmental regulators, power generators and marketers, utilities, consumer and environmental advocates, and other stakeholder groups. Stakeholders throughout New England, as well as key stakeholders in New York and the Mid-Atlantic region (through PJM), were all involved in the decision-making and implementation process. NEDRI was created to develop a comprehensive, coordinated set of demand response programs for the New England regional power markets. NEDRI's goal was to outline workable market rules, public policies, and regulatory criteria to incorporate customer-based demand response resources into New England's electricity markets and power systems. The Initiative studied a full range of demand response resource options, including short-term price-responsive load, retail pricing and metering strategies, reliability-driven DR, and longer-term energy efficiency investments.

A similar California Demand Response Initiative ("CADRI") could first be used to facilitate ongoing dialogue between CAISO and various stakeholders, including the LSEs and CPUC, to identify the easiest ways to incorporated existing state approved day-ahead demand response programs into the RUC procurement. This should be accomplished in the near term so that actions can be promulgated by the CAISO before MRTU is implemented. Other associated actions, such as updating business practice manuals and tariffs also need to be addressed in the next few months.[6]

B. THE STATE'S INVESTOR OWNED UTILITIES ADMINISTER SEVERAL APPROVED DAY-AHEAD DEMAND RESPONSE PRODUCTS THAT CAISO SHOULD PROMOTE IN RELEASE 1

In D.03-06-032 the CPUC directed the utilities to include the adopted DR goals in their procurement plans, along with documentation of the amount of megawatts ("MWs") to be achieved by July of each year, the programs and/or tariffs they will rely upon to achieve the MWs targets and a contingency plan for covering capacity needs should they fall short of meeting the MW goals. To date, the regulated utilities have achieved the following results:

2006 Demand Response Capability (enrolled MWs)
"Day-Ahead"/ Price Responsive[7]

Southern California Edison Company	527
Pacific Gas & Electric Company	358
San Diego Gas & Electric Company	78
Total	963

[6] This would be a working group to explore ideas. In the case of CPUC staff in the working group, they would have no authority to make binding recommendations absent formal approval of the CPUC. Any recommended changes made to the IOU's DR tariffs/programs may have to be examined through the CPUC's formal hearing process.

[7] Source: July 2006 IOU Reports on Interruptible and Outage Programs.

The CPUC also directed the Investor Owned Utilities ("IOUs") to file advanced metering infrastructure ("AMI") applications along with business case analyses by 2005. AMI is critical to the advancement of demand response for residential and small commercial customers as it will provide these customers the hardware to participate in demand response programs and tariffs. In response to the CPUC's directive in R.02-06-001, the IOUs filed AMI applications in 2005 along with their respective business case analyses. The CPUC has taken or is taking action on these applications:

> **PG&E**: approved PG&E's pre-deployment plan (D.05-09-044), and subsequently approved PG&E's full deployment ($1.7 billion) AMI application (D.06-07-028). PG&E is now beginning its deployment of advanced metering throughout its territory which will take 5 years to complete. Residential customers may now voluntarily sign up for time-differentiated rates, such as critical peak pricing after they receive their advanced meter.
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> **SDG&E**: approved SDG&E's pre-deployment plan (D.05-08-018) and is currently considering SDG&E's full deployment AMI application (A.05-03-015). A decision is expected in the 1st quarter of 2007. If SDG&E's AMI project is approved by the Commission, SDG&E will begin its deployment effort in 2008.
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> **SCE**: approved SCE's pre-deployment plan (D.05-12-001). SCE is currently exploring the conceptual and market feasibility of its AMI project, and has recently reported to the Commission that its project is conceptually feasible and will be available from vendors. SCE plans to file its full deployment application in mid-2007.

Since D.03-06-032 ushered in new price-responsive DR programs for large customers, the CPUC approved three-year DR budgets totaling approximately $262 million to support the IOUs' continuation and expansion of their DR programs through 2008. (A.05-06-006; D.06-03-024.) In 2004, the CPUC began exploring the need to make critical peak pricing a default tariff for large customers. Currently all DR programs are voluntary. The CPUC in D.06-05-038 ordered each IOU to file in its next General Rate Case ("GRC") a default critical peak pricing tariff for its large customers. PG&E's GRC (A.06-03-005) is the first GRC to address the issue and the Assigned Commissioner for this rate case has indicated her intent to develop dynamic pricing tariffs for all PG&E customers in 2011.

In August 2006, CPUC President Peevey issued a series of rulings directing the IOUs to file proposals (such as increasing SCE's AC cycling program) to augment their demand response programs for the purpose of having additional demand resources by summer 2007 in light of the heat wave of 2006. The utilities have filed various proposals in A.05-06-006, and a CPUC decision is expected in late November 2006.

Thus, the CPUC has demonstrated its commitment to aggressively expanding the use of DR programs to meet California's energy needs. There is therefore opportunity now for CAISO to use these foundational programs to promote demand response in the RUC procurement for MRTU Release 1.

C. THE CAISO SHOULD CONTINUE COLLABORATING WITH STAKEHOLDERS TO REFINE AND INTEGRATE PRICE-RESPONSIVE DEMAND RESPONSE INTO RELEASE 2

The CAISO should continue the initiative process to aid stakeholders to advance and develop additional DR as part of the ongoing improvements to MRTU. There may be several fundamental incompatibilities between the operation of current IOU sponsored demand response programs and the way the CAISO requires participation. For example, the CAISO's current market design will require demand response bids be submitted by 10 am the day before they are implemented. But under the current design of the programs, the IOUs' decision to trigger the current day-ahead programs are not made until the afternoon of the day before and it is unknown at this time what the effect will be, if any, on the IOUs or end-use customers if the triggering condition were moved to 10 am. The triggers for demand response will have to be made more transparent and more discussion and data sharing is needed with respect to the performance of each program so that the CAISO can better understand the "firmness" of the resource. There are disconnects between the wholesale and retail markets such that retail prices are too insulated from the wholesale price changes.

It was anticipated by CAISO staff at the November 2, 2006 meeting that Release 2 would not be ready for at least two years after Release 1. In the interim CAISO can be working with stakeholders, including the CPUC, to shape future proposals and to shape MRTU software to better integrate demand response into CAISO's markets as a fully qualifying resources.

III. THE FERC SHOULD NOT REQUIRE IMPLEMENTATION OF SCARCITY PRICING UNTIL AFTER THE CAISO HAS INTEGRATED PRICE-RESPONSIVE DEMAND RESPONSE INTO RELEASE 2

The CPUC has already explained its position vis-à-vis scarcity pricing in its request for clarification of the September 21, 2006 order and will not repeat that argument here. However, we call FERC's attention to scarcity pricing here because of its interdependence with demand response. Under active demand response programs, scarcity pricing can encourage load to drop demand as scarcity conditions increase prices significantly. We therefore request that FERC delay the requirement for scarcity pricing until price-responsive demand response products are fully integrated into the CAISO energy markets.

Respectfully submitted,

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By: /s/ JOSEPH P. COMO

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Dated: November 20, 2006

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CERTIFICATE OF SERVICE

I hereby certify that I have this day caused the foregoing document to be served electronically according to Rule 385.2010(f) of the Commission's Rules of Practice and Procedure.

Dated at San Francisco, California, this 20th day of November, 2006.

/s/ JOSEPH P. COMO

JOSEPH P. COMO

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