California ISO
Your Link to Power

California Independent
System Operator Corporation

July 21, 2008

The Honorable Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

**Re: California Independent System Operator Corporation,
Docket Nos. ER08-73-000
Compliance Filing**

Dear Secretary Bose:

In compliance with the Commission order issued in this docket on June 20, 2008, 123 FERC ¶ 61,288 (2008) ("June 20 Order"), the California Independent System Operator Corporation ("CAISO") respectfully submits for filing an original and five copies of the enclosed modifications to its Market Redesign and Technology Upgrade ("MRTU Tariff").[1] The CAISO is also tendering two copies of this filing to be time and date stamped and returned to our courier.

I. BACKGROUND

On October 19, 2007, the CAISO filed an amendment to its MRTU Tariff ("SU-ML Cap Amendment") to provide limits to Start-Up and Minimum Load Costs for suppliers that are eligible to recover such Costs in accordance with the Registered Cost Option, as set forth in Section 30.4 of the MRTU Tariff. As the CAISO explained in the transmittal letter accompanying the filing, it proposed adding these limits in order to protect against the potential exercise of market power by suppliers through the submission of extremely high Start-Up and Minimum Load Costs, particularly in resource-constrained areas of the CAISO grid.

The CAISO's proposal consisted of two levels of caps, based on whether a unit is

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located in a Local Capacity Area ("LCA"). For those units within LCAs, Start-Up and Minimum Load Costs under the Registered Cost Option may not exceed 200 percent of the unit's projected Start-Up and Minimum Load Costs. For units outside of LCAs, Start-Up and Minimum Load Costs under the Registered Cost Option may not exceed 400 percent of the unit's projected Start-Up and Minimum Load Costs. In the SU-ML Cap Amendment, the CAISO explained that it would determine gas prices used in calculating caps based on the highest price for monthly gas contracts at Henry Hub over a forward-looking six month period. Also, in order to address concerns expressed by generators that caps under the Registered Cost Option could increase the risk that spikes in the spot market for gas could cause their actual Start-Up or Minimum Load cost to exceed their Registered Costs, the CAISO proposed that in the event that daily spot market gas prices increase to the point where a unit's Start-Up or Minimum Load costs (calculated based on daily spot market gas prices) exceed the amount registered in the Master File under the Registered Cost Option, units will have the option to switch to the Proxy Cost Option. If the unit elects to switch, then it will remain under the Proxy Cost Option for the remainder of the six month period.

In the June 20 Order, the Commission accepted the SU-ML Cap Amendment, but required the CAISO to make two modifications to its proposal. First, although the Commission accepted the CAISO's proposal to develop the projected proxy cost based on monthly gas contracts over a forward-looking six month period at the time the bid is submitted, the Commission found that natural gas futures contracts with the delivery point at Henry Hub are not sufficiently representative of natural gas prices in California, and therefore directed the CAISO to modify its proposal "to incorporate a more geographically appropriate index" for use in determining projected future gas prices to be used in applying caps under the registered cost option.[2] Also, with respect to the definition of Projected Proxy Cost the Commission found that the explanation as well as the methodology derivation needs to be clear in the MRTU Tariff, and directed the CAISO to revise the MRTU Tariff accordingly.[3]

II. MODIFICATIONS TO MRTU TARIFF MADE PURSUANT TO JUNE 20 ORDER

A. The CAISO has not Revised the Index for Gas Costs Used to Calculate Start-Up and Minimum Load Caps Because no Publicly Available Futures Prices are Available for California Delivery Points

As noted above, the Commission accepted the CAISO's proposal to use natural gas futures contracts to determine Start-Up and Minimum Load caps, but found that natural gas futures contracts with a delivery point at Henry Hub are not sufficiently representative of natural gas prices in California, and therefore directed the CAISO to calculate Start-Up and Minimum Load caps using "a more geographically appropriate index."[4] As the CAISO explains in detail in its request for clarification, or in the alternative, rehearing of the June 20

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2 June 20 Order at P 37.
3 *Id.* at P 38.
4 June 20 Order at P 37.

Order, filed on the same date as this compliance filing, it is not possible for the CAISO to comply with the literal terms of the Commission's mandate to use futures prices for California delivery points, because, to the CAISO's knowledge, there is no publicly available natural gas futures data analogous to Henry Hub available for California delivery points; *i.e.* no futures price that extends at least six months into the future as would be required for use in setting caps for Start-Up and Minimum Load bids under the Registered Cost option. The CAISO also explains in its request for clarification and rehearing that it explored the alternative of adjusting the Henry Hub prices using data on "basis swaps," which represent the differential between prices for monthly contracts at Henry Hub compared to various delivery points in California, but found that this alternative has significant drawbacks, and offers little benefit to Market Participants, because the prices at Henry Hub closely correspond to those for delivery points in California. For these reasons, the CAISO believes that the best alternative is to calculate Start-Up and Minimum Load caps using natural gas futures contracts as reported for Henry Hub, as originally proposed in the SU-ML Cap Amendment. Although normal procedure would be for the CAISO to file the compliance changes required by the Commission and await an affirmative order by the Commission on its request for clarification and/or rehearing before implementing its preferred approach, in this case, as described above and in its request for clarification, compliance with the Commission's directive is not feasible, and that additional guidance from the Commission is needed in order to implement an alternative approach based on data that may be available for various basis swaps. Therefore, the CAISO has not made any changes relating to this issue to the MRTU Tariff in this filing.

B. The CAISO Has Added Additional Detail to the MRTU Tariff Regarding the Calculation of the Projected Proxy Cost

Pursuant to the Commission's finding that the definition and methodology derivation of Projected Proxy Cost needs to be clear in the MRTU Tariff, the CAISO is proposing several modifications to the MRTU Tariff. First, the CAISO has modified the definition of Projected Proxy Cost to specify precisely how the CAISO will determine the price of gas used in calculating Start-Up and Minimum Load. The CAISO has done so using the language from its November 26, 2007 answer to comments and protests on the SU-ML Cap Amendment, which the Commission described as "easier to follow and more transparent" than the explanation contained in the transmittal letter and tariff provisions included in the October 19 SU-ML Cap Amendment filing. In addition, the CAISO has added detail to the portion of Section 30.4 regarding the Proxy Cost Option for specifying Start-Up and Minimum Load Costs in order to make clear that Start-Up Costs also include the cost of auxiliary power calculated using the unit-specific MWh quantity of auxiliary power used for Start-Up multiplied by a resource specific electricity price, and that Minimum Load Costs include operations and maintenance costs as provide in Section 39.7.1.1.2.

III. CONTENTS OF FILING

This filing comprises:

This Transmittal Letter	
Attachment A	Clean MRTU Tariff Sheets
Attachment B	MRTU Tariff Sheets Redlined Against Provisions of the MRTU Tariff as Filed with the Commission on October 19, 2007

IV. COMMUNICATIONS

Correspondence and other communications regarding this filing should be directed to:

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* Parties designated for service.

V. REQUEST FOR WAIVER OF ORDER NO. 614 REQUIREMENTS

The CAISO requests that the Commission approve the changes in this compliance filing to be effective upon implementation of MRTU. As discussed in the monthly status reports the CAISO has submitted in Docket No. ER06-615, the CAISO will not be able to announce a new proposed implementation date for MRTU until the CAISO is confident that the MRTU software is operating successfully. Accordingly, the CAISO is filing clean MRTU Tariff sheets without indicating a proposed effective date and therefore requests waiver of Order No. 614 and applicable provisions of Section 35.9 of the Commission's regulations.

VI. SERVICE

The CAISO has served copies of this filing on all parties on the parties listed on the official service lists compiled by the Secretary in the above-captioned proceedings, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

VIII. CONCLUSION

For the reasons set forth above, the CAISO respectfully requests that the Commission accept its proposed modifications to the MRTU Tariff.

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Attachment A – Clean Sheets

Bid Caps for Start-Up Costs and Minimum Load Costs Compliance Filing

4th Replacement MRTU Tariff

July 21, 2008

30.2 Bid Types.

There are three types of Bids: Energy Bids, Ancillary Services Bids, and RUC Availability Bids. Each Bid type can be submitted as either an Economic Bid or a Self-Schedule (except for RUC Availability Bids, which cannot be self-scheduled). Economic Bids specify prices for MW amounts of capacity or MWh amounts of Energy. Self-Schedules do not have any prices associated for MW or MWh. Energy Bids, including both Economic Bids and Self-Schedules, may be either Supply Bids or Demand Bids. Ancillary Services Bids and RUC Availability Bids are Supply Bids only. Ancillary Services may be self-provided by providing a Submission to Self-Provide an Ancillary Service and having that submission accepted by the CAISO. Rules for submitting the three types of Bids vary by the type of resource to which the Bid applies as described in Section 30.5 and as further required in each CAISO Markets process as specified in Sections 31, 33, and 34.

30.3 [NOT USED]

30.4 Election for Start-Up Costs and Minimum Load Costs.

Scheduling Coordinators for Generating Units and Resource-Specific System Resources may elect on a semi-annual basis either of the two options provided below (the Proxy Cost option or the Registered Cost option) for specifying their Start-Up Costs and Minimum Load Costs to be used for those resources in the CAISO Markets Processes. Unless the Scheduling Coordinator has registered Start-Up Costs and Minimum Load Costs in the Master File in accordance with the Registered Cost option, the CAISO will assume the Proxy Cost option as the default option.

(1) **Proxy Cost Option.** For natural gas fired resources, the Proxy Cost option uses fuel-cost adjusted formulas for Start-Up Costs and Minimum Load Costs based on the resource's actual unit-specific performance parameters. The Start-Up Costs and Minimum Load Costs values utilized in the CAISO Markets Processes will be these formulaic values adjusted for fuel-cost variation on a daily basis as calculated pursuant to a Business Practice Manual. Start-Up Costs also include the cost of auxiliary power calculated using the unit-specific MWh quantity of auxiliary power used for Start-Up multiplied by a resource specific electricity price. Minimum Load Costs also includes operations and maintenance costs as provided in Section 39.7.1.1.2. For all other resources, this

Prior Period Change Worksheet A worksheet prepared by the RMR Owner and submitted to the CAISO following discovery of a necessary change to an RMR Invoice after the Revised Adjusted RMR Invoice for the billing month has been issued.

Projected Proxy Cost A calculation of a resource's Start-Up Costs and Minimum Load Costs for a prospective six-month period used to determine the maximum Registered Cost for the resource. Projected Proxy Costs will be calculated whenever a Scheduling Coordinator elects the Registered Cost option. For natural gas fired resources, the CAISO will calculate a gas price to be used in calculating maximum Start-Up Costs and Minimum Load Costs after the twenty-first day of each month and post it on the CAISO Website by the end of each calendar month. The price will be applicable for the following month until a new gas price is calculated and posted on the CAISO Website. The gas price will be calculated as follows. First, daily closing prices for monthly NYMEX Natural Gas Futures contracts at Henry Hub for each of the next six monthly contracts are averaged over the first twenty-one days of the month. A separate average is calculated for each of the six monthly contracts, based on the average closing price of the contract over the first twenty-one days. Second, the maximum of the six monthly averages will be calculated and be used as the gas price applicable for calculating Start-Up Bid and Minimum Load Bid caps. For non-gas fired resources, the Projected Proxy Costs for Start-Up Costs and Minimum Load Costs will be calculated using the information contained in the Master File used for calculating the Proxy Cost, as set forth in the Business Practice Manual.

Project Sponsor A Market Participant or group of Market Participants or a Participating TO that proposes the construction of a transmission addition or upgrade in accordance with Section 24.

Proposal for Installation A written proposal submitted by a CAISO Metered Entity to the CAISO describing a proposal for the installation of additional Metering Facilities.

Proxy Cost The cost basis of a generating resource for which the operating cost is calculated as an approximation of the actual operating cost pursuant to Section 30.4(1).

PSS Power System Stabilizers

PTDF Power Transfer Distribution Factor

PTO Participating TO or Participating Transmission Owner

Attachment B – Blacklines

Bid Caps for Start-Up Costs and Minimum Load Costs Compliance Filing

4th Replacement MRTU Tariff

July 21, 2008

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30.4 Election for Start-Up Costs and Minimum Load Costs.

Scheduling Coordinators for Generating Units and Resource-Specific System Resources may elect on a semi-annual basis either of the two options provided below (the Proxy Cost option or the Registered Cost option) for specifying their Start-Up Costs and Minimum Load Costs to be used for those resources in the CAISO Markets Processes. Unless the Scheduling Coordinator has registered Start-Up Costs and Minimum Load Costs in the Master File in accordance with the Registered Cost option, the CAISO will assume the Proxy Cost option as the default option.

(1) **Proxy Cost Option.** For natural gas fired resources, the Proxy Cost option uses fuel-cost adjusted formulas for Start-Up Costs and Minimum Load Costs based on the resource's actual unit-specific performance parameters. The Start-Up Costs and Minimum Load Costs values utilized in the CAISO Markets Processes will be these formulaic values adjusted for fuel-cost variation on a daily basis as calculated pursuant to a Business Practice Manual. Start-Up Costs also include the cost of auxiliary power calculated using the unit-specific MWh quantity of auxiliary power used for Start-Up multiplied by a resource specific electricity price. Minimum Load Costs also includes operations and maintenance costs as provided in Section 39.7.1.1.2. For all other resources, this option shall be based on the relevant cost information of the particular resource, which will be provided to the CAISO by the Scheduling Coordinator and maintained in the Master File. In the event that the Scheduling Coordinator for a unit does not provide sufficient data for the CAISO to determine the unit's Proxy Costs, the CAISO will assume that the unit's Start-Up Costs and Minimum Load Costs are zero.

(2) **Registered Cost Option.** Under the Registered Cost option, the Scheduling Coordinator may register values of its choosing for Start-Up

Costs and Minimum Load Costs in the Master File subject to the maximum limit specified in Section 39.6.1.6. For a resource to be eligible for the Registered Cost option there must be sufficient information in the Master File to calculate the Proxy Cost option. The Start-Up Cost and Minimum Load Cost values utilized in the CAISO Markets Processes will be these pre-specified values and will be fixed for six months in the Master File unless the resource's costs, as calculated pursuant to the Proxy Cost option, exceed the Registered Cost option, in which case the Scheduling Coordinator may elect to switch to the Proxy Cost option for the balance of the six-month period.

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CAISO Tariff Appendix A

Master Definitions Supplement

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Projected Proxy Cost A calculation of a resource's Start-Up Costs and Minimum Load Costs for a prospective six-month period used to determine the maximum Registered Cost for the resource. Projected Proxy Costs will be calculated whenever a Scheduling Coordinator elects the Registered Cost option. For natural gas fired resources, ~~the Projected Proxy Cost will be based on applying the highest average price for monthly forward gas contracts at Henry Hub for the six-month period during which the Registered Cost option is in effect to the fuel consumption parameters used for calculating the Proxy Cost, as set forth in a Business Practice Manual~~ the CAISO will calculate a gas price to be used in calculating maximum Start-Up Costs and Minimum Load Costs after the twenty-first day of each month and post it on the CAISO Website by the end of each calendar month. The price will be applicable for the following month until a new gas price is calculated and posted on the CAISO Website. The gas price will be calculated as follows. First, daily closing prices for monthly NYMEX Natural Gas Futures contracts at Henry Hub for each of the next six monthly contracts are averaged over the first twenty-one days of the month. A separate average is calculated for each of the six monthly contracts, based on the average closing price of the contract over the first twenty-one days. Second, the maximum of the six monthly averages will be calculated and be used as the gas price applicable for calculating Start-Up Bid and Minimum Load Bid caps. For non-gas fired resources, the Projected Proxy Costs for Start-Up Costs and Minimum Load Costs will be calculated using the information contained in the Master File used for calculating the Proxy Cost, as set forth in the Business Practice Manual.

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Certificate of Service

I hereby certify that I have this day served a copy of this document upon all parties listed on the official service list compiled by the Secretary in the above-captioned proceedings, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated this 21st day of July, 2008 at Washington, D.C.

Michael Kunselman
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