

August 21, 2002

The Honorable Magalie R. Salas
Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

**Re: California Independent System Operator Corporation,
Docket No. ER02-1656-000**

**Investigation of Wholesale Rates of Public Utility Sellers of
Energy and Ancillary Services in the Western Systems
Coordinating Council, Docket No. EL01-68-017**

Dear Secretary Salas:

On August 16, 2002, the California Independent System Operator Corporation ("ISO")¹ submitted, in the above-referenced dockets, a filing in compliance with the Commission's July 17, 2002 "Order On the California Comprehensive Market Redesign Proposal," 100 FERC ¶ 61,060 (2002) ("July 17 Order"). The ISO explained that it would provide revised Tariff sheets incorporating the changes described in the August 16 ISO compliance filing within three business days of August 16. Transmittal Letter for August 16, 2002 ISO Compliance Filing at 11. Accordingly, the ISO now provides the revised Tariff sheets in Attachment A to the present filing.

Please note that Section 5.13.2.1 (titled "Real-Time Market") in the revised Tariff sheets in Attachment A to the present filing includes the sentence in black-lined ISO Tariff Section 5.13.2.1, contained in Attachment B to the August 16 ISO compliance filing, that reads, "Submitted Energy Bids shall be subject to the Damage Control Bid Cap as set forth in Section 28.1 and to the Mitigation Measures set forth in Appendix A to the Market Monitoring and Information Protocol." This sentence was provided in black-line in the Market Design 2002 ("MD02") filing the ISO provided on May 1, 2002.² However, it was inadvertently omitted from the revised Tariff sheets provided in that filing. The ISO now includes this change in the present filing.

¹ Capitalized terms not otherwise defined herein are used in the sense given in the Master Definitions Supplement, Appendix A to the ISO Tariff.

² See May 1, 2002 MD02 Filing, Docket Nos. EL01-95-001, *et al.* and ER02-1656-000, at Attachment M.

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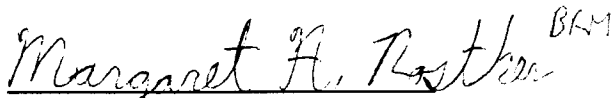
Page 2

Additionally, it has also come to the ISO's attention that the August 16 ISO compliance filing mistakenly included a new Section 4.2.2(d) in Appendix A of the Market Monitoring and Information Protocol ("MMIP"), that was not intended to be included in that filing. The ISO withdraws its proposal to include the new Section 4.2.2(d). The changes to Section 4.2.2 of Appendix A of the MMIP that the ISO did intend to include in the compliance filing are provided in black-lined format in Attachment B to the present filing; these are also the changes that are reflected in the revised Tariff sheets provided in Attachment A to the present filing.

Also included in the present filing is a form notice of filing suitable for publication in the Federal Register (Attachment C), and a computer diskette containing the notice in WordPerfect format.

Two additional copies of this filing are enclosed to be date-stamped and returned to our messenger. If there are any questions concerning this filing, please contact the undersigned.

Respectfully submitted,

 ^{BKM}

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ATTACHMENT A

- (d) Generating Unit operating limits (high and low MW);
- (e) Generating Unit ramp rate (MW/Min); and
- (f) Such other information as the ISO may determine it requires to evaluate bids, as published from time to time in ISO Protocols.

2.5.22.5 Information used in the Real Time Dispatch. The ISO shall place all the bid price information (except for Regulation bid prices and Adjustment Bids carried forward from the Day-Ahead and Hour-Ahead Markets) received from available Generating Units, Loads, System Units and System Resources in a database for use in real time Dispatch of Balancing Energy. The database shall indicate:

If the ISO declares a System Emergency, e.g. during times of supply scarcity, and involuntary load shedding occurs during the real time Dispatch, the ISO shall set the Hourly Ex Post Price at the Administrative Price.

2.5.23.3 [Not Used]

2.5.23.3.1 [Not Used]

2.5.23.3.1.1 [Not Used]

2.5.23.3.1.2 [Not Used]

2.5.23.3.1.3 [Not Used]

2.5.23.3.2 [Not Used]

2.5.23.3.3 Requirement of Must-Offer Generators to File Heat Rate and Emissions Rate Data

Must-Offer Generators, as defined in Section 5.11 of this ISO Tariff, that own or control gas-fired Generating Units must file with the ISO and the FERC, on a confidential basis, the heat rates and emissions rates for each gas-fired Generating Unit that they own or control. Heat rate and emissions rate data shall be provided in the format specified by the ISO as posted on the ISO Home Page. Heat rate data provided to comply with this requirement shall not include start-up or minimum Load fuel costs. Must-Offer Generators must also file periodic updates of this data upon the direction of either FERC or the ISO. The ISO will treat the information provided to the ISO in accordance with this Section 2.5.23.3.3 as confidential and will apply the procedures in Section 20.3.4 of this ISO Tariff with regard to requests for disclosure of such information.

2.5.23.3.4 Calculation of the Proxy Price

The ISO shall calculate each day separate Proxy Prices for each gas-fired Generating Unit owned or controlled by a Must-Offer Generator by applying the filed heat rates for those Generating Units to a daily proxy figure for natural gas costs with an additional \$6/MWh allowed for operations and maintenance expenses. The proxy figures for natural gas costs shall be based on the most recent data available and shall be posted on the ISO Home Page by 8:00 AM on the day prior to which the figures will be used for calculation of the Proxy Price.

2.5.23.3.5 [Not Used]

[Page Not Used]

2.5.23.3.6 Emissions Costs

2.5.23.3.6.1 Obligation to Pay Emissions Cost Charges

Each Scheduling Coordinator shall be obligated to pay a charge which will be used to pay the verified Emissions Costs incurred by a Must-Offer Generator as a direct result of an ISO Dispatch instruction, in accordance with this Section 2.5.23.3.6. The ISO shall levy this administrative charge (the "Emissions Cost Charge") each month, against all Scheduling Coordinators based upon each Scheduling Coordinator's Control Area Gross Load and Demand within California outside of the ISO Control Area that is served by exports from the ISO Control Area. Scheduling Coordinators shall make payment for all Emissions Cost Charges in accordance with the ISO Payments Calendar.

2.5.23.3.6.2 Emissions Cost Trust Account

All Emissions Cost Charges received by the ISO shall be deposited in the Emissions Cost Trust Account. The Emissions Cost Trust Account shall be an interest-bearing account separate from all other accounts maintained by the ISO, and no other funds shall be commingled in it at any time.

2.5.23.3.6.3 Rate For the Emissions Cost Charge

The rate at which the ISO will assess the Emissions Cost Charge shall be at the projected annual total of all Emissions Costs incurred by Must-Offer Generators as a direct result of ISO

the ISO. The ISO's obligation to pay Start-Up Fuel Costs is limited to the obligation to pay Start-Up Fuel Cost Charges received. All disputes concerning payment of Start-Up Fuel Cost Invoices shall be subject to ISO ADR Procedures, in accordance with Section 13 of this ISO Tariff.

2.5.23.3.8 [Not Used]

2.5.23.3.8.1 [Not Used]

2.5.23.3.8.2 [Not Used]

2.5.24 Verification of Performance of Ancillary Services.

Availability of both contracted and self provided Ancillary Services shall be verified by the ISO by unannounced testing of Generating Units, Loads and System Resources, by auditing of response to ISO Dispatch instructions, and by analysis of the appropriate Meter Data, or interchange schedules. Participating Generators, owners or operators of Loads, operators of System Units or System Resources and Scheduling Coordinators shall notify the ISO immediately whenever they become aware that an Ancillary Service is not available in any way.

Payments.

Scheduling Coordinators for owners of Reliability Must-Run Units (or Black Start Generators, as the case may be) shall receive the following payments for Energy output from Black Start facilities:

$$BSEN_{ijt} = (EnQBS_{ijt} * EnBid_{ijt}) + BSSUP_{ijt} - Adjustment$$

where BSSUP_{ijt} is the start-up payment for a Black Start successfully made by Generating Unit i of Scheduling Coordinator j (or Black Start Generator j) in Trading Interval t calculated in accordance with the applicable Reliability Must-Run Contract (or the Interim Black Start agreement as the case may be).

2.5.27.7 [Not Used]

2.5.27.7.1 [Not Used]

2.5.27.7.2 **[Not Used]**

2.5.27.7.3 **[Not Used]**

2.5.27.7.4 **[Not Used]**

2.5.28 Settlement for User Charges for Ancillary Services.

(a) The ISO shall determine a separate hourly user rate for Regulation, Spinning Reserve, Non-Spinning Reserve and Replacement Reserve for each Settlement Period purchased in the Day-Ahead market, and in the Hour-Ahead Market. Each rate will be charged to Scheduling Coordinators on a volumetric basis applied to each Scheduling Coordinator's obligation for the Ancillary Service concerned which it has not self provided, as adjusted by any Inter-Scheduling Coordinator Ancillary Service Trades.

Each Scheduling Coordinator's obligation for Regulation, Spinning Reserve, Non-Spinning Reserve and Replacement Reserve for each Zone shall be calculated in accordance with Section 2.5.20.1, notwithstanding any adjustment to the quantities of each Ancillary Service purchased by the ISO in accordance with Section 2.5.3.6.

The cost of Voltage Support and Black Start shall be allocated to Scheduling Coordinators as described in Sections 2.5.28.

each non-hydroelectric Generating Unit located in California they own or control: (i) the Unit's minimum operating level; (ii) the Unit's maximum operating level; and (iii) the Unit's ramp rates at all operating levels; and (iv) such other information the ISO determines is necessary to determine available generation and to dispatch Must-Offer Generators. In addition, Must-Offer Generators that are not Participating Generators must, consistent with the notification obligations of Participating Generators and in order to comply with the intent of this Section 5.11, notify the ISO, as soon as practicable, of any Planned Maintenance Outages, Forced Outages, Force Majeure Event outages or any other reductions in their maximum operating levels.

5.11.4 Obligation To Offer Available Capacity

All Must-Offer Generators shall offer to sell in the ISO's Real Time Market for Imbalance Energy, in all hours, all their Available Generation as defined in Section 5.11.2.

5.11.5 Submission of Bids and Applicability of the Proxy Price

For each Operating Hour, Must-Offer Generators shall submit Supplemental Energy bids for all of their Available Generation to the ISO in accordance with Section 2.5.22.4. In addition, the ISO shall calculate for each gas-fired Must-Offer Generator, in accordance with Section 2.5.23, a Proxy Price for Energy.

If a Must-Offer Generator fails to submit a Supplemental Energy bid for any portion of its Available Generation for any BEEP Interval, the unbid quantity of the Must-Offer Generator's Available Generation will be deemed by the ISO to be bid at the Must-Offer Generator's Proxy Price for that hour if: (i) the applicable Generating Unit is a gas-fired unit and (ii) the Must-Offer Generator has provided the ISO with adequate data in compliance with Sections 2.5.23.3.3 and 5.11.3 for the applicable Generating Unit. For all other Generating Units owned or controlled by a Must-Offer Generator, the unbid quantity of the Must-Offer Generator's Available Generation will be deemed by the ISO to be bid to receive the BEEP Interval Ex Post Price. In order to dispatch resources providing Imbalance Energy in proper merit order, the ISO will insert this unbid quantity into the Must-Offer Generator's Supplemental Energy bid curve above any lower-priced segments of the bid curve and below any higher-priced segments of the bid curve as necessary to maintain a non-decreasing bid curve over the entire range of the Must-Offer Generator's Available Generation.

5.11.6 Waiver of Must-Offer Obligation

Must-Offer Generators may seek a waiver of the obligation to offer all available capacity, as set forth in Section 5.11.4 of this ISO Tariff, for one or more of their generating units for periods other than Self-Commitment Periods, which are defined as the hours when Must-Offer Generators submit Energy Schedules or are awarded Ancillary Services bids or self-provision schedules. Self-Commitment Periods determined from Day-Ahead Schedules shall be extended by the ISO as necessary to accommodate generating unit minimum up and down times such that the scheduled operation is feasible. If a Must-Offer Generator has a Final Schedule in the Day-Ahead Market, such a generator will be deemed to be self-committed for the ensuing 24-hour period and not eligible for a waiver until the

5.12.8.2.1 Allocation of Total Underscheduling Hourly Unit Commitment Cost. The Total Underscheduling Hourly Unit Commitment Cost shall be allocated each hour to all Scheduling Coordinators based on the ratio of that Scheduling Coordinator's Net Negative Demand Deviations to total Net Negative Demand Deviations.

5.12.8.2.1.1 Net Negative Demand Deviation shall be the number that is equal to the lesser of zero (0) and the Demand scheduled by that Scheduling Coordinator in the Final Day-Ahead Schedules submitted to the ISO for that Trading Day less the Scheduling Coordinator's actual hourly Metered Demand.

5.12.8.3 Total Excess Hourly Unit Commitment Cost shall be the Total Hourly Unit Commitment Cost less a) the Total Underscheduling Hourly Unit Commitment Cost and b) the sum of any amounts available pursuant to Section 11.2.4.1.2 for such hour..

5.12.8.3.1 Allocation of Total Excess Hourly Unit Commitment Cost. The Total Excess Hourly Unit Commitment Cost shall be allocated each hour to all Scheduling Coordinators based on the ratio of that Scheduling Coordinator's Metered Demand to total Metered Demand.

5.12.8.3.2 Local Reliability Commitments. All start-up costs, minimum load costs and Energy costs from Generating Units the ISO selects to meet local reliability requirements shall be charged to the Participating Transmission Owner in whose Service Area the Generating Unit was selected.

5.13 Energy Bids.

5.13.1 Energy Bid Definition.

A single Energy Bid curve per resource per hour shall be used in: (a) the Real-Time Hourly Pre-Dispatch as set forth in Dispatch Protocol 8.6.4, and (b) the Real-Time Economic Dispatch (10-minute

Imbalance Energy market). The Energy Bid shall be a staircase price (\$/MWh) versus quantity (MW) curve of up to 10 segments. The Energy Bid shall be submitted to the Real Time Imbalance Energy Market using the Supplemental Energy Bid template. The Energy Bid curve shall be monotonically increasing, i.e., the price of a subsequent segment shall be greater than the price of a previous segment.

5.13.2 Energy Bid Submission.

5.13.2.1 Real Time Market. Bids shall be submitted for use in the Real-Time Hourly Pre-Dispatch in DP 8.6.4(j) and the Real-Time Economic Dispatch up to 45 minutes prior to the Operating Hour. Resources required to offer their Available Generation in accordance with Section 5.11.4 shall be required to submit Energy Bids for 1) all of their Available Generation and 2) any Ancillary Services capacity awarded or self-provided in the Day-Ahead or Hour-Ahead Ancillary Services markets. In the absence of submitted bids, default bids will be used for resources required to offer their Available Generation in accordance with Section 5.11.4. Resources not required to offer their Available Generation in accordance with Section 5.11.4 that were awarded or self provided Ancillary Services capacity must submit an Energy Bid for no less than the amount of awarded or self-provided Ancillary Services capacity. Resources not required to offer their Available Generation in accordance with Section 5.11.4 may voluntarily submit Energy Bids. Submitted Energy Bids shall be subject to the Damage Control Bid Cap as set forth in Section 28.1 and to the Mitigation Measures set forth in Appendix A to the Market Monitoring and Information Protocol.

5.13.2.2 Real-time Energy Bid Partition. The portion of the single Energy Bid that corresponds to the high end of the resource's operating range, shall be allocated to any awarded or self-provided Ancillary Services in the following order from higher to lower capacity: (a) Regulation Up; (b) Spinning Reserve; (c) Non-Spinning Reserve; and (d) Replacement Reserve. For resources providing Regulation Up, the upper regulating limit shall be used if it is lower than the highest operating limit. The remaining portion of the Energy Bid (i.e. that portion not associated with capacity committed to provide Ancillary Services) shall constitute a Bid to provide Supplemental Energy.

5.13.3 Requirement to Submit Energy Bids For Awarded or Self-Provided Ancillary Services Capacity

Scheduling Coordinators for resources that have been awarded or self-provide Regulation Up, Spinning Reserve, Non-Spinning Reserve or Replacement Reserve capacity must submit a Supplemental Energy bid for at least all the awarded or self-provided Ancillary Services capacity. To the extent a Supplemental Energy bid is not so submitted for a gas-fired resource, the ISO shall calculate a Supplemental Energy bid in accordance with Section 2.5.23.3.4 and insert that bid into the Real Time Imbalance Energy Market. To the extent a Supplemental Energy bid is not so submitted for a non-gas-fired resource, the ISO shall insert a bid of \$0/MWh into the Real Time Imbalance Energy Market.

[Page Not Used]

Controlled Grid, unless: (a) the ISO Governing Board reviews the basis for the charges above that level and approves the collection of charges above that level for a defined period; and (b) the ISO provides at least seven days' advance notice to Scheduling Coordinators of the determination of the ISO Governing Board.

11.2.10 Payments Under Section 2.3.5.1 Contracts

The ISO shall calculate and levy charges for the recovery of costs incurred under contracts entered into by the ISO under the authority granted in Section 2.3.5.1 in accordance with Section 2.3.5.1.8 of this ISO Tariff.

11.2.11 FERC Annual Charge Recovery Rate

The ISO shall calculate and levy the rates for recovery of FERC Annual Charges in accordance with Section 7.5 of this ISO Tariff.

11.2.12 [Not Used]

11.2.13 Emissions and Start-Up Fuel Cost Charges

The ISO shall calculate, account for and settle charges and payments for Emissions Costs and Start-Up Fuel Costs in accordance with Sections 2.5.23.3.6 and 2.5.23.3.7 of this ISO Tariff.

which this Section 27 shall cease to apply, which date shall not be less than seven (7) days after the Notice of Full-Scale Operations is posted.

27.2 For so long as this Section 27.2 remains in effect, Scheduling Coordinators shall continue to be allowed to specify Adjustment Bids for Dispatchable Loads and exports, conditioned on the rule that the last segment of the Adjustment Bid (i.e., the maximum MW value) must equal the preferred MW operating point specified for the Dispatchable Load or export.

28. RULES LIMITING CERTAIN ENERGY AND ANCILLARY SERVICE BIDS

28.1 Damage Control Bid Cap

28.1. Notwithstanding any other provision of this ISO Tariff, Damage Control Bid Cap provisions of Sections 28.1.2 and 28.1.3 shall apply to the ISO's Energy and Ancillary Service capacity markets.

28.1.2 Maximum Bid Level. The maximum bid level shall be \$250/MWh. The ISO shall reject any bid above this level.

28.1.3 Negative Decremental Energy Bids

Negative decremental Energy bids into the ISO Markets less than $-\$30/\text{MWh}$ (minus thirty dollars per MWh) shall not be eligible to set any market clearing price and, if Dispatched, shall be paid as bid. If the ISO Dispatches a bid below $-\$30/\text{MWh}$, the supplier must submit a detailed breakdown of the component costs justifying the bid to the ISO and to the Federal Energy Regulatory Commission no later than seven (7) days after the end of the month in which the bid was submitted. The ISO will treat such information as confidential and will apply the procedures in Section 20.3.4 of this ISO Tariff with regard to requests for disclosure of such information. The ISO shall pay suppliers for amounts in excess of $-\$30/\text{MWh}$ after those amounts have been justified.

29. [NOT USED]

30. YEAR 2000 COMPLIANCE

30.1 Y2K Compliance

"Y2K Compliance" or "Y2K Compliant" means hardware, software, firmware, or other systems or processes (hereafter "systems and processes") that correctly manage, calculate, compare and sequence date data from, into and between the 20th and 21st centuries, including leap year calculations, without human intervention. Y2K Compliant systems and processes must utilize input and output date formats that are compatible with the ISO's systems and processes, must conform to the International Organization for Standardization ISO 8601:1988 standards for representation of dates and must not cause incorrect date calculations.

**Low Voltage
Transmission Revenue
Requirement**

The portion of a Participating TO's TRR associated with and allocable to the Participating TO's Low Voltage Transmission Facilities and Converted Rights associated with Low Voltage Transmission Facilities.

**Low Voltage Wheeling
Access Charge**

The Wheeling Access Charge associated with the recovery of a Participating TO's Low Voltage Transmission Revenue Requirement in accordance with Section 7.1.

Maintenance Outage

A period of time during which an Operator (i) takes its transmission facilities out of service for the purposes of carrying out routine planned maintenance, or for the purposes of new construction work or for work on de-energized and live transmission facilities (e.g., relay maintenance or insulator washing) and associated equipment; or (ii) takes its Generating Unit or System Unit out of service for the purposes of carrying out routine planned maintenance, or for the purposes of new construction work.

Marginal Generators

Those Generating Units which, in an hour, are the sources of the last increments of Generation in the Preferred Schedule, excluding: (i) Must-Run Generation, (ii) Must-Take Generation, (iii) units scheduled to ramp at their maximum ramp rate throughout the hour, or (iv) units operating at minimum operating levels (when less costly Generation must be backed down).

Marginal Loss Factor

The marginal impact of a given Generating Unit's output on total system Transmission Losses.

<u>New Facility</u>	A planned or Existing Generating Unit that requests, pursuant to Section 5.7 of the ISO Tariff, to interconnect or modify its interconnection to the ISO Controlled Grid.
<u>New Facility License</u>	A license issued by a federal, state or Local Regulatory Authority that enables an entity to build and operate a Generating Unit.
<u>New Facility Operator</u>	The owner of a planned New Facility, or its designee.
<u>New High Voltage Facility</u>	A High Voltage Transmission Facility of a Participating TO that enters service after the beginning of the transition period described in Section 4 of Schedule 3 of Appendix F, or a capital addition made after the beginning of the transition period described in Section 4.1 of Schedule 3 of Appendix F to an Existing High Voltage Transmission Facility.
<u>New Participating TO</u>	A Participating TO that is not an Original Participating TO.
<u>Nomogram</u>	A set of operating or scheduling rules which are used to ensure that simultaneous operating limits are respected, in order to meet NERC and WSCC operating criteria.

Preliminary Settlement Statement

The initial statement issued by the ISO of the calculation of the Settlements and allocation of the charges in respect of all Settlement Periods covered by the period to which it relates.

Price Overlap

The price range of bids for Supplemental Energy or Energy associated with Ancillary Services bids for any BEEP Interval that includes decremental and incremental Energy Bids where the price of the decremental Energy Bids exceeds the price of the incremental Energy Bids.

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 3.2 of the ISO Tariff.

Proxy Price

The value determined for each gas-fired Generating Unit owned or controlled by a Must-Offer Generator in accordance with Section 2.5.23.3.4.

PX (Power Exchange)

The California Power Exchange Corporation, a state chartered, nonprofit corporation charged with providing a Day-Ahead forward market for Energy in accordance with the PX Tariff. The PX is a Scheduling Coordinator and is independent of both the ISO and all other Market Participants.

PX Auction Activity Rules

The rules by which bids submitted to and validated by the PX may be modified or withdrawn during a PX Energy market auction.

Qualifying Hours

Qualifying Hours has the meaning set forth in Section 5.12.7.1.1.2.5.

<u>Wheeling Out</u>	Except for Existing Rights exercised under an Existing Contract in accordance with Sections 2.4.3 and 2.4.4, the use of the ISO Controlled Grid for the transmission of Energy from a Generating Unit located within the ISO Controlled Grid to serve a Load located outside the transmission and distribution system of a Participating TO.
<u>Wheeling Through</u>	Except for Existing Rights exercised under an Existing Contract in accordance with Sections 2.4.3 and 2.4.4, the use of the ISO Controlled Grid for the transmission of Energy from a resource located outside the ISO Controlled Grid to serve a Load located outside the transmission and distribution system of a Participating TO.
<u>Wholesale Customer</u>	A person wishing to purchase Energy and Ancillary Services at a Bulk Supply Point or a Scheduling Point for resale.
<u>Wholesale Sales</u>	The sale of Energy and Ancillary Services at a Bulk Supply Point or a Scheduling Point for resale.
<u>WSCC (Western System Coordinating Council)</u>	The Western Systems Coordinating Council or its successor.
<u>WSCC Reliability Criteria Agreement</u>	The Western Systems Coordinating Council Reliability Criteria Agreement dated June 18, 1999 among the WSCC and certain of its Member transmission operators, as such may be amended from time to time.
<u>Zone</u>	A portion of the ISO Controlled Grid within which Congestion is expected to be small in magnitude or to occur infrequently. "Zonal" shall be construed accordingly.

APPENDIX A

ISO Market Monitoring Plan

Market Mitigation Measures

1 PURPOSE AND OBJECTIVES

1.1 These ISO market power mitigation measures ("Mitigation Measures") are intended to provide the means for the ISO to mitigate the market effects of any conduct that would substantially distort competitive outcomes in the ISO Real Time Market while avoiding unnecessary interference with competitive price signals. These Mitigation Measures are intended to minimize interference with an open and competitive market, and thus to permit, to the maximum extent practicable, price levels to be determined by competitive forces under the prevailing market conditions. To that end, the Mitigation Measures authorize the mitigation only of specific conduct that exceeds well-defined thresholds specified below.

1.2 In addition, the ISO shall monitor the markets it administers for conduct that it determines constitutes an abuse of market power but does not trigger the thresholds specified below for the imposition of mitigation measures by the ISO. If the ISO identifies any such conduct, and in particular conduct exceeding the thresholds for presumptive market effects specified below, it shall make a filing under Section 205 of the Federal Power Act, 16 U.S.C. § 824d, with the Commission requesting authorization to apply appropriate mitigation measures. Any such filing shall identify the particular conduct the ISO believes warrants mitigation, shall propose a specific mitigation measure for the conduct, and shall set forth the ISO's justification for imposing that mitigation measure.

2.4 Categories of Conduct that May Warrant Mitigation

2.4.1 The following categories of conduct, whether by a single firm or by multiple firms acting in concert, may cause a material effect on prices or generally the outcome of the ISO Real Time Market if exercised from a position of market power. Accordingly, the ISO shall monitor the ISO Markets for the following categories of conduct, and shall impose appropriate Mitigation Measures if such conduct is detected and the other applicable conditions for the imposition of Mitigation Measures are met:

- (1) Physical withholding of an Electric Facility, in whole or in part, that is, not offering to sell or schedule the output of or services provided by an Electric Facility capable of serving an ISO Market. Such withholding may include, but not be limited to: (i) falsely declaring that an Electric Facility has been forced out of service or otherwise become totally or partially unavailable, (ii) refusing to offer bids or schedules for an Electric Facility when it would be in the economic interest, absent market power, of the withholding entity to do so, (iii) declining real-time bids called upon by the ISO (unless the ISO is informed in accordance with established procedures that the relevant resource for which the bid is submitted has undergone a forced outage or derate), or (iv) operating a Generating Unit in real-time to produce an output level that is less than the ISO's Dispatch instruction.
- (2) Economic withholding of an Electric Facility, that is, submitting bids for an Electric Facility that are unjustifiably high (relative to known operational characteristics and/or the known operating cost of the resource) so that: (i) the Electric Facility is not or will not be dispatched or scheduled, or (ii) the bids will set a market clearing price.
- (3) Uneconomic production from an Electric Facility, that is, increasing the output of an Electric Facility to levels that would otherwise be uneconomic in order to cause, and obtain benefits from, a transmission constraint.

2.4.2 Mitigation Measures may also be imposed to mitigate the market effects of a rule, standard, procedure, design feature, or known software imperfection of an ISO Market that allows a Market Participant to manipulate market prices or otherwise impair the efficient operation of that market, pending the revision of such rule, standard, procedure design feature, or software defect to preclude such manipulation of prices or impairment of efficiency.

2.4.3 Taking advantage of opportunities to sell at a higher price or buy at a lower price in a market other than an ISO Market shall not be deemed a form of withholding or otherwise inconsistent with competitive conduct.

2.4.4 The ISO shall monitor ISO Markets for other categories of conduct, whether by a single firm or by multiple firms acting in concert, that have material effects on prices in an ISO Market or other payments. The ISO shall: (i) seek to amend the foregoing list as may be appropriate to include any such conduct that would substantially distort or impair the competitiveness of any of the ISO Markets; and (ii) seek such other authorization to mitigate the effects of such conduct from the FERC as may be appropriate.

3 CRITERIA FOR IMPOSING MITIGATION MEASURES

3.1 Identification of Conduct Inconsistent with Competition

Conduct that may potentially warrant the imposition of a mitigation measure includes the categories described in Section 2.4 above. The thresholds listed in section 3.1.1 below shall be used to identify substantial departures from competitive conduct indicative of an absence of workable competition.

3.1.1 Conduct Thresholds for Identifying Economic Withholding

The following thresholds shall be employed by the ISO to identify economic withholding that may warrant the mitigation of the bid from a resource and shall be determined with respect to a reference level determined as specified in Section 3.1.1.1:

For Energy Bids to be Dispatched as Imbalance Energy through the BEEP stack:
the lower of a 200 percent increase or \$100/MWh increase in the bid with respect to its
Reference Level

For Energy Bids to be Dispatched out of merit order to manage Intra-Zonal
Congestion: any bid with a price of \$91.87/MWh or greater.

being examined by the ISO, and provided the Market Participant has provided sufficient data on a unit's energy limitations and operating costs (opportunity cost for energy limited resources) in accordance with specifications provided by the ISO.

4. The mean of the Economic Market Clearing Prices for the units' relevant location (zone or node commensurate with the pricing granularity in effect) during the lowest-priced 25 percent of the hours that the unit was dispatched or scheduled over the previous 90 days for peak and off-peak periods, adjusted for changes in fuel prices; or
 5. If sufficient data do not exist to calculate a reference level on the basis of the first, second, or fourth methods and the third method is not applicable or an attempt to determine a reference level in consultation with a Market Participant has not been successful, the ISO shall determine a reference level on the basis of:
 - i. the ISO's estimated costs of an Electric Facility, taking into account available operating costs data, opportunity cost, and appropriate input from the Market Participant, and the best information available to the ISO; or
 - ii. an appropriate average of competitive bids of one or more similar Electric Facilities.
- (b) The reference levels (\$/MWh bid price) for the different bid segments of each resource (or import bid curve of a Scheduling Coordinator at a Scheduling Point) shall be made monotonically non-decreasing by the ISO by proceeding from the lowest MW bid segment moving through each higher MW bid segment. The reference level of each succeeding bid segment shall be the higher of the reference level of the preceding bid segment or the reference level determined according to paragraph (a) above.

3.2 Material Price Effects

3.2.1 Market Impact Thresholds

In order to avoid unnecessary intervention in the ISO Market, Mitigation Measures for economic withholding shall not be imposed unless conduct identified as specified above causes or contributes to a material change in one or more of the ISO market-clearing prices (MCPs). Initially, the thresholds to be used by the ISO to determine a material price effect shall be as follows:

For Energy Bids to be Dispatched as Imbalance Energy through the BEEP stack: the lower of an increase of 200 percent or \$50 per MWh in the projected Hourly Ex Post Price at any location (zone or node) commensurate with the relevant pricing structure in effect in accordance with the ISO Tariff.

For Energy Bids to be Dispatched out of economic merit order to manage Intra-Zonal Congestion: if the price of the bid is \$50/MWh or 200 percent greater than the BEEP Interval Ex Post Price at that location (zone or node) commensurate with the relevant pricing structure in effect in accordance with the ISO Tariff.

3.2.2 Price Impact Analysis

3.2.2.1 Bids to be Dispatched as Imbalance Energy.

The ISO shall determine the effect on prices of questioned conduct through automated computer modeling and analytical methods. An Automatic Mitigation Procedure (AMP) shall identify bids that have exceeded the conduct thresholds and shall compute the change in projected Hourly Ex Post Prices as a result of simultaneously setting all such bids to their Reference Levels. If a change in the projected Hourly Ex Post Price exceeds the Impact threshold stated in Section 3.2.1, those bids would be kept mitigated at their default bid levels as specified in Section 4.2.2 below.

3.2.2.2 Bids to be Dispatched out of economic merit order to manage Intra-Zonal Congestion. If the price of the bid is \$50/MWh or 200 percent greater than the BEEP Interval Ex Post Price at that location (zone or node) commensurate with the relevant pricing structure in effect in accordance with the ISO Tariff, the bid price shall be mitigated to the reference price and the Scheduling Coordinator for that

resource shall be paid the greater of the reference price or the relevant BEEP Interval Ex Post Price. Bids mitigated in accordance with this section 3.2.2.2 shall not set the BEEP Interval Ex Post Price.

3.2.3 Section 205 Filings

In addition, the ISO shall make a filing under Section 205 of the Federal Power Act with the Commission seeking authorization to apply an appropriate mitigation measure to conduct that departs significantly from the conduct that would be expected under competitive market conditions but does not rise to the thresholds specified in section 3.1.1 above, unless the ISO determines, from information provided by the Market Participant or Parties that would be subject to mitigation or other information available to the ISO that the conduct is attributable to legitimate competitive market forces or incentives. The following are examples of conduct that are deemed to depart significantly from the conduct that would be expected under competitive market conditions:

has responded to such condition by engaging in the economic withholding of an Electric Facility. In designing and implementing default bids, the ISO shall seek to avoid causing an Electric Facility to bid below its marginal cost.

4.2.2 Implementation

- (a) If the criteria contained in Section 3 are met, the ISO may substitute a default bid for a bid submitted for an Electric Facility. The default bid shall establish a maximum value for each component of the submitted bid, equal to a reference level for that component determined as specified in Section 3.1.1.
- (b) The Mitigation Measures will be applied to 1) all bids submitted to the Real Time Imbalance Energy Market during the pre-dispatch process prior to the Real Time Imbalance Energy Market based on the projected Real-time MCPs that are computed during this process; and 2) to the Day-Ahead and the Hour-Ahead Energy markets when these markets are made operational.
- (c) An Electric Facility subject to a default bid shall be paid the MCP applicable to the output from the facility. Accordingly, a default bid shall not limit the price that a facility may receive unless the default bid determines the MCP applicable to that facility.
- (d) The ISO shall not use a default bid to determine revised MCPs for periods prior to the imposition of the default bid, except as may be specifically authorized by the Commission.

- (e) The Mitigation Measures shall not be applied to Energy bids projected to be Dispatched as Imbalance Energy through the BEEP stack in the hours in which all Zonal BEEP Interval Ex Post Prices are projected to be below \$91.87/MWh.
- (f) The Mitigation Measures shall not be applied to bids below \$25/MWh.
- (g) The posting of the MCP may be delayed if necessary for the completion of automated mitigation procedures.
- (h) Bids not mitigated under these Mitigation Measures shall remain subject to mitigation by other procedures specified in the ISO Tariff as may be appropriate.

4.3 Sanctions for Physical Withholding

The ISO may report a Market Participant the ISO believes to have engaged in physical withholding, including providing the ISO false information regarding the derating or outage of an Electric Facility, to the Federal Energy Regulatory Commission in accordance with Section 2.3.3.9.5 of the ISO Tariff. In addition, a Market Participant that fails to operate a Generating Unit in conformance with ISO dispatch instructions shall be subject to the penalties set forth in Section 11.2.4.1.2 of the ISO Tariff.

4.4 Duration of Mitigation Measures

Bids will be mitigated only in the specific hour that they violate the price and market impact thresholds.

5 FERC-ORDERED MEASURES

In addition to any mitigation measures specified above, the ISO shall administer, and apply when appropriate in accordance with their terms, such other mitigation measures as it may be directed to implement by order of the FERC.

6 DISPUTE RESOLUTION

If a Market Participant has reasonable grounds to believe that it has been adversely affected because a Mitigation Measure has been improperly applied or withheld, it may seek a determination in accordance with the dispute resolution provisions of the ISO Tariff. In no event, however, shall the ISO be

ATTACHMENT B

MARKET MONITORING & INFORMATION PROTOCOL

APPENDIX A

ISO Market Monitoring Plan

Market Mitigation Measures

* * *

4.2.2. Implementation

- (a) If the criteria contained in Section 3 are met, the ISO may substitute a default bid for a bid submitted for an Electric Facility. The default bid shall establish a maximum value for ~~one or more~~ **each** components of the submitted bid, equal to a reference level for that component determined as specified in Section 3.1.1.
- (b) The Mitigation Measures will be applied to 1) ~~the Residual Unit Commitment Process based on the projected Real Time MCPs that are computed during this process;~~ 2) all bids submitted to the Real Time Imbalance Energy Market during the pre-dispatch process prior to the Real Time Imbalance Energy Market based on the projected Real-time MCPs that are computed during this process; and 3) **bids submitted** to the ~~d~~**Day-a**head and the ~~h~~**Hour-a**head ~~e~~**Energy** markets when these markets are made operational.
- ~~(c) The bids that are mitigated in the Residual Unit Commitment Process shall be retested for both conduct and impact thresholds in the real time pre-dispatch process, and if the pre-dispatch market impact threshold is not violated, shall be included in the real time supply stack at their original (unmitigated) prices.~~
- (cd) An Electric Facility subject to a default bid shall be paid the MCP applicable to the output from the facility. Accordingly, a default bid shall not limit the price that a facility may receive unless the default bid determines the MCP applicable to that facility. ~~With regards to imports into the ISO Control Area, importers will~~

~~be paid the higher of the MCP or their default bid price. However, default bids by importers will not establish the MCP.~~

(ed) The ISO shall not use a default bid to determine revised MCPs for periods prior to the imposition of the default bid, except as may be specifically authorized by the Commission.

~~(f) The Mitigation Measures shall not be applied for the hours when the day-ahead system load forecast exceeds 40,000 MW. However, the bids used during the hours when the day-ahead system load exceeds 40,000 MW, even if in economic merit order, shall be excluded from the computation of the Reference Levels.~~

(e) The Mitigation Measures shall not be applied to Energy bids projected to be Dispatched as Imbalance Energy through the BEEP stack in the hours in which all Zonal BEEP Interval Ex Post Prices are projected to be below \$91.87/MWh.

(f) The Mitigation Measures shall not be applied to bids below \$25/MWh.

(g) The posting of the MCP may be delayed if necessary for the completion of automated mitigation procedures.

(h) Bids not mitigated under these Mitigation Measures shall remain subject to mitigation by other procedures specified in the ISO Tariff as may be appropriate.

ATTACHMENT C

**NOTICE OF FILING SUITABLE FOR PUBLICATION
IN THE FEDERAL REGISTER**

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

**California Independent System) Docket No. ER02-1656-000
Operator Corporation)**

**Investigation of Wholesale Rates of) Docket No. EL01-68-017
Public Utility Sellers of Energy and)
Ancillary Services in the Western)
Systems Coordinating Council)**

Notice of Filing

[]

Take notice that on August 21, 2002, the California Independent System Operator Corporation (ISO) submitted, in the above-referenced dockets, revised tariff sheets in compliance with the Commission's July 17, 2002 "Order On the California Comprehensive Market Redesign Proposal," 100 FERC ¶ 61,060 (2002), and pursuant to the August 16, 2002 compliance filing submitted by the ISO. Additionally, the ISO provided a black-lined change to the August 16 compliance filing. The ISO has served copies of this filing upon all entities that are on the official service lists for the dockets.

Any person desiring to be heard or to protest said filing should file a motion to intervene or protest with the Federal Energy Regulatory Commission, 888 First Street, N.E., Washington, D.C. 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 C.F.R. §§ 385.211, 385.214). All such motions and protests should be filed on or before [], 2002. Protests will be considered by the Commission to determine the appropriate action to be taken, but will not serve to make protestants parties to the proceedings. Any person wishing to become a party must file a motion to intervene. Copies of this filing are on file with the Commission and are available for public inspection. This filing may also be viewed on the Internet at <<http://www.ferc.gov>> using the "RIMS" link, select "Docket#" and follow the instructions (call 202-208-2222 for assistance). Comments, protests, and interventions may be filed electronically via the Internet

in lieu of paper. See 18 C.F.R. § 385.2001(a)(1)(iii) and the instructions on the Commission's Internet site under the "e-Filing" link.

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service lists compiled by the Secretary in the above-referenced dockets, in accordance with Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated at Washington, D.C. on 21st day of August, 2002.


Margaret A. Rostker
Margaret A. Rostker
Counsel for The California Independent
System Operator Corporation.