

ALSTON & BIRD LLP

The Atlantic Building
950 F Street, NW
Washington, DC 20004-1404

202-756-3300
Fax: 202-756-3333

Bradley R. Miliauskas

Direct Dial: 202-756-3405

Email: bradley.miliauskas@alston.com

March 30, 2009

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

**Re: California Independent System Operator Corporation
Compliance Filing
Docket Nos. ER09-556-____, ER08-367-____, and ER06-615-____**

Dear Secretary Bose:

The California Independent System Operator Corporation ("ISO") hereby submits an original and five copies of the instant filing in compliance with the Commission's "Order Accepting California Independent System Operator Corporation's Tariff Clarifications Amendment and Compliance Filing, Subject to Conditions," 126 FERC ¶ 61,262, issued on March 24, 2009 ("March 24 Order").¹ Two additional copies of this filing are enclosed to be date-stamped and returned to our messenger.

¹ Capitalized terms not otherwise defined herein have the meanings set forth in the Master Definitions Supplement, Appendix A to the CAISO Tariff (also known as the Market Redesign and Technology Upgrade or MRTU Tariff), and in the instant compliance filing.

I. Revisions to the MRTU Tariff to Comply with the March 24 Order²

A. Dispatch of Contingency Only Operating Reserves in the Real-Time Market

The Commission accepted the proposal the ISO made in its February 23, 2009 answer in these proceedings ("Answer") to modify the definition of the term Contingency Only to be consistent with other tariff sections in which Contingency Only Operating Reserves are discussed.³ Accordingly, the ISO has modified the definition of Contingency Only to state that it means "[a] resource providing Operating Reserve capacity that may be Dispatched by the [ISO] only in the event of a Contingency or an imminent or actual System Emergency."

B. Bidding Rules

The Commission accepted the ISO's proposal in its Answer to make three clarifications to Section 30.5.2.6. The first clarification is to acknowledge in Section 30.5.2.6 that Dynamic System Resources can be used for self-provision of Ancillary Services as specified in Section 8. The second clarification is to delete the requirement in Section 30.5.2.6 that all Ancillary Services Bid components of a Supply Bid must contain the Maximum Operating Limit and the Minimum Operating Limit, because the ISO's Scheduling Infrastructure Bidding Rules ("SIBR") software does not require that information. The third clarification relates to self-provision of Ancillary Services. In this regard, each Scheduling Coordinator that proposes to self-provide an Ancillary Service is required to have a Self-Schedule but the ISO is clarifying that this requirement simply means that self-provision of an Ancillary Service must relate to a Self-Schedule; in other words, a Scheduling Coordinator cannot self-provide an Ancillary Service in the absence of a Self-Schedule. In addition, the ISO is clarifying the circumstances when a Self-Schedule from a particular resource for self-provision of an Ancillary Service is required. No Self-Schedule is required for Fast Start Units. Scheduling Coordinators proposing to self-provide Spinning Reserve from non-Fast Start Units are required to submit Self-Schedules for those resources.⁴ The ISO has revised Section 30.5.2.6 to make these clarifications.

The Commission also accepted the ISO's proposal in its Answer to make two clarifications to Section 30.5.2.6.1. The first clarification is to delete the requirement that, in the case of Regulation Up or Regulation Down from Dynamic System Resources, an Ancillary Services Bid must contain the Scheduling Point, Interchange ID, Balancing Authority Area ID, and NERC tag number, because

² The names of the section headings below correspond to the names of section headings contained in the March 24 Order. Also, except where otherwise noted herein, references to actions the Commission has taken are references to actions taken in the March 24 Order.

³ Order at PP 33-34.

⁴ Order at PP 53-57, 62.

the ISO's SIBR software does not require that information. The second clarification is to specify that an Energy Bid or Self-Schedule from a resource offering Regulation must allow for the resource to provide Regulation Down consistent with the capacity offered in the resource's Regulation Down Bid, which may or may not reflect the resource's certified Regulation Down capacity.⁵ The ISO has made these clarifications to Section 30.5.2.6.1.

Further, the Commission accepted the proposal of the ISO in its Answer to clarify Sections 30.7.3.1, 30.7.6.1, and 40.6.8 to state that, in the absence of submitted Bids or if only partial capacity is reflected in the submitted Bids, the ISO will not insert or extend any Bid for a Resource Adequacy Resource that is a Use-Limited Resource.⁶ The ISO has revised those tariff sections as directed by the Commission.

C. Voltage Support and Black Start

The Commission accepted the proposal of the ISO in its Answer to clarify Section 11.10.8 to reflect the intended policy under the MRTU Tariff that Black Start costs are not allocated to exports to neighboring Balancing Authority Areas.⁷ The ISO has revised Section 11.10.8 to make this clarification.

D. Ramping Issues

The Commission granted the motion the ISO filed in these proceedings on March 6, 2009 to make the ISO's proposed revisions to Sections 34.5(10), 34.15.1(c), and 34.15.5, which concern the use of ramp rates for dispatching resources, effective October 1, 2009 rather than March 31, 2009 as the ISO had originally proposed.⁸ Pursuant to this Commission directive, the ISO provides in the instant filing clean MRTU Tariff sheets that include revised Sections 34.5(10), 34.15.1(c), and 34.15.5 and that bear an effective date of October 1, 2009.⁹

E. Inter-Scheduling Coordinator Trades

The Commission accepted the ISO's proposal in its Answer to clarify in Section 28.1.6.3 that, during the post-market confirmation process, the MWh quantity of Physical Trades that passed the ISO's pre-market validation process may be reduced if the resource supporting the Physical Trades has a Day-Ahead Schedule or HASP Advisory Schedule that is, on average, below the quantity of

⁵ *Id.* at PP 56-59, 62.

⁶ *Id.* at PP 60-62.

⁷ *Id.* at PP 81-83.

⁸ *Id.* at PP 93-103.

⁹ The Commission made the other tariff revisions it accepted in the March 24 Order effective March 31, 2009. *Id.* at Ordering Paragraph (A).

Physical Trades at that Location.¹⁰ The ISO has revised Section 28.1.6.3 to make this clarification.

F. Clarification to Settlement Language to Ensure Revenue Neutrality Related to Congestion Revenue

The Commission accepted the proposal of the ISO in its answer to clarify Section 11.5.4.2 to reflect the netting out of the Real-Time Marginal Cost of Losses Offset, and to correct a typographical error (namely, the phrase “ETC, Converted Rights or”).¹¹ The ISO has revised Section 11.5.4.2 to make these changes.

The Commission also accepted the ISO’s proposal in its Answer to modify the definition of the term Real-Time Congestion Offset to mean “[a] component of the neutrality adjustments as provided in Section 11.5.4.2 to account for the distribution of excess Real-Time Congestion revenue and for the non-assessment of the Marginal Cost of Congestion to Measured Demand for ETCs and TOR Self-Schedules in the Real-Time as provided in Section 11.5.7.” Similarly, the Commission accepted the ISO’s proposal to modify the definition of the term Real-Time Marginal Cost of Losses Offset to mean “[a] component of the neutrality adjustments as provided in Section 11.5.4.2 to account for the distribution of excess Real-Time Marginal Cost of Losses and for the non-assessment of Marginal Cost of Losses charged to Measured Demand for TOR Self-Schedules for the RTM Marginal Cost of Losses Credit for Eligible TOR Self-Schedules as provided in Section 11.5.7.2.”¹² The ISO has revised these defined terms as directed by the Commission.

G. Scheduling Issues

The Commission accepted the proposal of the ISO in its Answer to include in the MRTU Tariff the clarifications, previously provided to Market Participants through a Market Notice, that: (i) Scheduling Coordinators that submit Day-Ahead Bids or Self-Schedules for ETCs, TORs, or Regulatory Must-Take Generation must also submit Real-Time Self-Schedules at or below the awarded Day-Ahead quantities of those Self-Schedules in order to retain the defined scheduling priorities of their ETCs, TORs, or Regulatory Must-Take Generation; and (ii) if a Scheduling Coordinator fails to submit such Real-Time Self-Schedules, the defined scheduling priorities of the ETCs, TORs, or Regulatory Must-Take Generation may be subject to adjustment in the HASP and Real-Time Market as further provided in Sections 31.4 and 34.10 in order to meet operating

¹⁰ *Id.* at PP 106, 109.

¹¹ *Id.* at PP 116-17, 119.

¹² *Id.* at PP 118-19.

conditions.¹³ Accordingly, the ISO has included these clarifications in new Section 30.5.1(f).

H. Extended Self-Commitment Intervals

The Commission accepted the ISO's proposal in its Answer to clarify in Section 11.8.1.2 that the variable "t" as used in that section represents the time interval between the Real-Time Market Self-Commitment Period and the IFM or RUC Commitment Period.¹⁴ The ISO has revised Section 11.8.1.2 to specify what the variable means.

II. Materials Provided in the Instant Compliance Filing

In addition to this transmittal letter, the instant compliance filing includes Attachment A and B. Attachment contains clean MRTU Tariff sheets reflecting the modifications to the MRTU Tariff described in Section I, above, and Attachment B shows these modifications in red-line format.

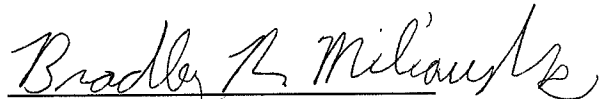
¹³ *Id.* at PP 140-42, 144.

¹⁴ *Id.* at PP 145-47.

III. Conclusion

For the foregoing reasons, the ISO requests that the Commission accept the instant filing as complying with the applicable directives in the March 24 Order. Please contact the undersigned with any questions concerning this filing.

Respectfully submitted,



Sean A. Atkins
Bradley R. Miliauskas
Alston & Bird, LLP
The Atlantic Building
950 F Street, NW
Washington, DC 20004
Tel: (202) 756-3300
Fax: (202) 654-4875
E-mail: sean.atkins@alston.com
bradley.miliauskas@alston.com

Sidney M. Davies
Assistant General Counsel
Anna A. McKenna
Senior Counsel
Michael D. Dozier
Senior Counsel
California Independent System
Operator Corporation
151 Blue Ravine Road
Folsom, CA 95630
Tel: (916) 608-7048
Fax: (916) 608-7222
E-mail: sdavies@caiso.com
amckenna@caiso.com
mdozier@caiso.com

Attorneys for the California Independent System Operator Corporation

Attachment A – Clean Sheets

Miscellaneous Tariff Clarifications Compliance Filing

4th Replacement CAISO Tariff (MRTU)

ER09-556-000

March 30, 2009

11.5.7.2, and excluding Demand associated with TOR Self-Schedules for which an IFM Marginal Cost of Losses Credit for Eligible TOR Self-Schedules was provided as specified in Section 11.2.1.7. For Scheduling Coordinators for MSS Operators regardless of whether the MSS Operator has elected gross or net Settlement, the CAISO will allocate the Real-Time Congestion Offset based on the MSS Aggregation Net Non-ETC/TOR Measured Demand. To the extent that the sum of the Settlement amounts for IIE, UIE, UFE and the Real-Time Ancillary Services Congestion revenues, less Real-Time Congestion Offset, does not equal zero, the CAISO will assess charges or make payments for the resulting differences to all Scheduling Coordinators, including Scheduling Coordinators for MSS Operators that are not Load following MSSs and have elected gross Settlement, based on a pro rata share of their Measured Demand for the relevant Settlement Interval. For Scheduling Coordinators for MSS Operators that have elected Load following or net Settlement, or both, the CAISO will assess charges or make payments for the resulting non-zero differences of the sum of the Settlement amounts for IIE, UIE, and UFE and the Real-Time Ancillary Services Congestion Revenues, less Real-Time Congestion Offset based on their MSS Aggregation Net Measured Demand.

11.5.5 Settlement Amount for Residual Imbalance Energy.

For each Settlement Interval, Residual Imbalance Energy Settlement amounts shall be the product of the MWh of Residual Imbalance Energy for that Settlement Interval and the Bid that led to the Residual Imbalance Energy from the relevant Dispatch Interval in which the resource was dispatched. For MSS Operators the Settlement for Residual Imbalance Energy is conducted in the same manner, regardless of any MSS elections (net/gross Settlement, Load following or opt-in/opt-out of RUC).

11.8.1.2 Real-Time Self-Commitment Period.

A Real-Time Market Self-Commitment Period for a Bid Cost Recovery Eligible Resource shall consist of all consecutive Dispatch Intervals not in an IFM Commitment Period or a RUC Commitment Period where the Bid Cost Recovery Eligible Resource has a Self-Schedule or, except for Self-Provided Ancillary Services for Non-Spinning Reserve by a Fast Start Unit, has a non-zero amount of Self-Provided Ancillary Services. A Real-Time Market Self-Commitment Period for a Bid Cost Recovery Eligible Resource may not be less than the relevant MUT (rounded up to the next 15-minute Commitment Interval) when considered jointly with any adjacent IFM Self-Commitment Period. For example, if a Bid Cost Recovery Eligible Resource self-commits at time h , the self-commitment will be extended to Commitment Interval $h + \text{MUT}$, unless an IFM or RUC Commitment Period exists starting after hour h , in which case the self-commitment will be extended to Commitment Interval $h + \min(\text{MUT}, t)$, where t represents the time interval between the Real-Time Market Self-Commitment Period and the IFM or RUC Commitment Period. A Real-Time Market Self-Commitment Period for a Bid Cost Recovery Eligible Resource may not be apart from an IFM or RUC Commitment Period by less than the relevant MDT (rounded up to the next 15-minute Commitment Interval). For example, if a Bid Cost Recovery Eligible Resource self-commits at time $T1$ and has a RUC Schedule at time $T2 < T1$, the Real-Time Market Self-Commitment Period will be extended to the interim Commitment Intervals if $T1 - T2 < \text{MDT}$. The number of Real-Time Market Self-Commitment Periods for a Bid Cost Recovery Eligible Resource within a Trading Day, when considered jointly with any adjacent IFM Self-Commitment Period, may not exceed the relevant MDS (or $\text{MDS} + 1$ if the first Real-Time Market Self-Commitment Period is the continuation of a Real-Time Market Commitment Period from the previous Trading Day). For example, if a Bid Cost Recovery Eligible Resource self-commits at time $T1$ and has a RUC Schedule at time $T2 > T1$, the Real-Time Market Self-Commitment Period will be extended to the interim Commitment Intervals if an additional Real-Time Market Start-Up at $T1$ would violate the MDS constraint.

11.10.8 Black Start.

The Black Start Energy payment user rate for any Settlement Period will be calculated based on the sum of Black Start Energy payments to Scheduling Coordinators paid in accordance with Section 11.10.1.5, including any Exceptional Dispatch Instructed Imbalance Energy payments for Black Start, in the applicable Settlement Period divided by Measured Demand, excluding exports to neighboring Balancing Authority Areas and excluding Demand within an MSS except as provided by Section 4.9.4.5.

The Black Start Energy user charge for any Settlement Period for a Scheduling Coordinator will be the Black Start Energy payment user rate multiplied by the quantity of Measured Demand, excluding exports to neighboring Balancing Authority Areas and excluding Demand within an MSS except as provided by Section 4.9.4.4, for which that Scheduling Coordinator is responsible in that Settlement Period.

considers final Inter-SC Trades of Energy for the DAM in determining whether the HASP Physical Trades are physically supported individually or in the aggregate. Specifically, the CAISO determines whether the resource's submitted Bid in HASP is greater than or equal to the sum of: (1) final Day-Ahead Inter-SC Trades of Energy at that location, (2) the additional Inter-SC Trades of Energy for the HASP at that location and (3) the sum of all upward Day-Ahead Ancillary Services Awards at that location. If the amounts are greater than the resource's submitted Bids in HASP, the CAISO will adjust down on a prorated basis the HASP Physical Trades. Final Day-Ahead Physical Trades are not adjusted in the HASP pre-market validation. The CAISO does not perform any Settlement on Physical Trade quantities (MWh) that are curtailed during Physical Trade pre-market validation.

28.1.6.3 Physical Trade Post-Market Confirmation.

The CAISO conducts post-market confirmation of Physical Trades that pass pre-market validation in Section 28.1.6.2 after the Market Clearing and the market results are posted to ensure that the Generating Unit or Physical Scheduling Plant has a Schedule that can support all of the Physical Trades. During the post-market confirmation process, the MWh quantity of Physical Trades that passed the CAISO's pre-market validation process may be reduced if the resource supporting the Physical Trades has a Day-Ahead Schedule or HASP Advisory Schedule that is, on average, below the quantity of Physical Trades at that Location. The MWh quantities of Physical Trades that are reduced during the post-market confirmation process are settled at the Existing Zone Generation Trading Hub price for the Existing Zone associated with the resource identified in the Inter-SC Trade of Energy. The portion of Physical Trades that remains intact will be settled at the relevant LMP for the identified PNode for the Generating Unit or Aggregated Pricing Node for the Physical Scheduling Plant.

28.1.6.4 Inter-SC Trades of Energy at Aggregated Pricing Nodes.

Inter-SC Trades of Energy at Aggregated Pricing Nodes that are also defined Trading Hubs or Default LAPs are subject to the general validation procedures in Section 28.1.5 but are not subject to the three-stage physical validation procedures for Physical Trades described in Section 28.1.6 above.

- (d) Bids for Energy or capacity that are submitted to one CAISO Market, but are not accepted in that market are no longer a binding commitment and Scheduling Coordinators may submit Bids in a subsequent CAISO Market at a different price;
- (e) The CAISO shall be entitled to take all reasonable measures to verify that Scheduling Coordinators meet the technical and financial criteria set forth in Section 4.5.1 and the accuracy of information submitted to the CAISO pursuant to this Section 30; and
- (f) In order to retain the priorities specified in Section 31.4 and 34.10 for scheduled amounts in the Day-Ahead Schedule associated with ETC and TOR Self-Schedules or Self-Schedules associated with Regulatory Must-Take Generation, a Scheduling Coordinator must submit to the HASP and Real-Time Market ETC or TOR Self-Schedules, or Self-Schedules associated with Regulatory Must-Take Generation, at or below the Day-Ahead Schedule quantities associated with the scheduled ETC, TOR or Regulatory Must-Take Generation Self-Schedules. If the Scheduling Coordinator fails to submit such HASP or Real-Time Market ETC, TOR or Regulatory Must-Take Generation Self-Schedules, the defined scheduling priorities of the ETC, TOR, or Regulatory Must-Take Generation Day-Ahead Schedule quantities may be subject to adjustment in the HASP and the Real-Time Market as further provided in Section 31.4 and 34.10 in order to meet operating conditions.

30.5.2 Supply Bids.

30.5.2.1 Common Elements for Supply Bids.

In addition to the resource-specific Bid requirements of this Section, all Supply Bids must contain the following components: Scheduling Coordinator ID Code; Resource ID; Resource Location; PNode or Aggregated Pricing Node as applicable; Energy Bid Curve; Self-Schedule component; Ancillary Services Bid; RUC Availability Bid; the Market to which the Bid applies; Trading Day to which the Bid applies; Priority Type (if any). Supply Bids offered in the CAISO Markets must be monotonically increasing. Energy Bids in the RTM must also contain a Bid for Ancillary Services to the extent the resource is certified and capable of providing Ancillary Service in the RTM up to the registered certified capacity for that Ancillary Service less any Day-Ahead Ancillary Services Awards.

30.5.2.2 Supply Bids for Participating Generators.

In addition to the common elements listed in Section 30.5.2.1, Supply Bids for Participating Generators shall contain the following components: Start-Up Bid, Minimum Load Bid, Ramp Rate, Minimum and Maximum Operating Limits; Energy Limit, Regulatory Must-Take/Must-Run Generation; Contingency Flag; and Contract Reference Number (if any). A Scheduling Coordinator for a Physical Scheduling Plant or a System

Forecast for the MSS. For an MSS that elects Load following, the MSS Operator shall also self-schedule or bid Supply to match the Demand Forecast. All Bids for MSSs must identify each Generating Unit on an individual unit basis or a System Unit. For an MSS that elects Load following consistent with Section 4.9.13.2, the Scheduling Coordinator for the MSS Operator must include the following additional information with its Bids: the Generating Unit(s) that are Load following; the range of the Generating Unit(s) being reserved for Load following; whether the quantity of Load following capacity is either up or down; and, if there are multiple Generating Units in the MSS, the priority list or distribution factors among the Generating Units. The CAISO will not dispatch the resource within the range declared as Load following capacity, leaving that capacity entirely available for the MSS to dispatch. The CAISO uses this information in the IFM runs and the RUC to simulate MSS Load following. The Scheduling Coordinator for the MSS Operator may change these characteristics through the Bid submission process in the HASP. If the Load following resource is also an RMR Unit, the MSS Operator must not specify the Maximum Net Dependable Capacity specified in the RMR Contract as Load following up or down capacity to allow the CAISO to access such capacity for RMR Dispatch.

30.5.2.6 Ancillary Services Bids.

There are four distinct Ancillary Services: Regulation Up, Regulation Down, Spinning Reserve and Non-Spinning Reserve. Participating Generators are eligible to provide all Ancillary Services. Dynamic System Resources are eligible to provide Operating Reserves and Regulation. Non-Dynamic System Resources are eligible to provide Operating Reserves only. No System Resource (including Non-Dynamic Resource-Specific System Resources) can be used for self-provision of Ancillary Services, except for Dynamic System Resources which can be used for self-provision of Ancillary Services as specified in Section 8. All System Resources, including Dynamic Resource-Specific System Resources and Non-Dynamic Resource-Specific System Resources, will be charged the Shadow Price as prescribed in Section 11.10. Participating Loads are eligible to provide Non-Spinning Reserve only. A Scheduling Coordinator may submit Ancillary Services Bids for Regulation Up, Regulation Down, Spinning Reserve, and Non-Spinning Reserve for the same capacity by providing a separate price in

\$/MW per hour as desired for each Ancillary Service. The Bid for each Ancillary Services is a single Bid segment. Only resources certified by the CAISO as capable of providing Ancillary Services are eligible to provide Ancillary Services. In addition to the common elements listed in Section 30.5.2.1, all Ancillary Services Bid components of a Supply Bid must contain the following: (1) the type of Ancillary Service for which a Bid is being submitted; (2) Ramp Rate (Operating Reserve Ramp Rate and Regulation Ramp Rate, if applicable); and (3) Distribution Curve for Physical Scheduling Plant or System Unit. An Ancillary Services Bid submitted to the Day-Ahead Market when submitted to the Day-Ahead Market may be, but is not required to be, accompanied by an Energy Bid that covers the capacity offered for the Ancillary Service. Submissions to Self-Provide an Ancillary Services submitted to the Day-Ahead Market when submitted to the Day-Ahead Market may be, but are not required to be, accompanied by an Energy Bid that covers the capacity to be self-provided; provided, however, that such an Energy Bid shall be submitted prior to the close of the Real-Time Market for the day immediately following the Day-Ahead Market in which the Ancillary Service Bid was submitted if the Submission to Self-Provide an Ancillary Service is qualified as specified in Section 8.6. Submissions to Self-Provide an Ancillary Services submitted in the Day-Ahead Market must be accompanied by a Self-Schedule to which the Submission to Self-Provide an Ancillary Service is related. Except as provided below, the Self-Schedule need not include a Self-Schedule from the resource that will be self-providing the Ancillary Service. If a Scheduling Coordinator is self-providing an Ancillary Service from a Fast Start Unit, no Self-Schedule for that resource is required. If a Scheduling Coordinator proposes to self-provide Spinning Reserve, the Scheduling Coordinator is obligated to submit a Self-Schedule for particular resource, unless as discussed above the particular resource is a Fast Start Unit. When submitting Ancillary Service Bids in the Real-Time, Scheduling Coordinators for resources that either have been awarded or self-provide Spinning Reserve or Non-Spinning Reserve capacity in the Day-Ahead Market must submit an Energy Bid for at least the awarded or self-provided Spinning Reserve or Non-Spinning Reserve capacity, otherwise the CAISO will apply the Bid validation rules described in Section 30.7.6.1. As provided in Section 30.5.2.6.4, a Submission to Self-Provide an Ancillary Service shall contain all of the requirements of a Bid for Ancillary Services with the exception of Ancillary Service Bid price information. In addition, Scheduling Coordinators must comply with the Ancillary Services requirements of Section 8.

30.5.2.6.1 Regulation Up or Regulation Down Bid Information.

In the case of Regulation Up or Regulation Down, the Ancillary Services Bid must also contain: (a) the upward and downward range of generating capacity over which the resource is willing to provide Regulation within a range from a minimum of ten (10) minutes to a maximum of thirty (30) minutes; and (b) the Bid price of the capacity reservation, stated separately for Regulation Up and Regulation Down (\$/MW). In the case of Regulation Up or Regulation Down from Dynamic System Resources, the Ancillary Services Bid must also contain the Contract Reference Number, if applicable. Ancillary Services Bids submitted to the Real-Time Market for Regulation need not be accompanied by an Energy Bid that covers the Ancillary Services capacity being offered into the Real-Time Market. A Regulation Down Bid will be erased unless there is an Energy Bid or Self-Schedule at a level that would permit the resource to provide Regulation Down to its lower Regulation Limit. The resource's Energy Bid or Self-Schedule must allow for the resource to provide Regulation Down consistent with the capacity offered in the resource's Regulation Down Bid.

30.5.2.6.2 Spinning Reserve Capacity Bid Information.

In the case of Spinning Reserve capacity, the Ancillary Services Bid must also contain: (a) MW of additional capability synchronized to the system, immediately responsive to system frequency, and available within ten (10) minutes; (b) Bid price of capacity reservation, and (c) an indication whether the capacity reserved would be available to supply Imbalance Energy only in the event of the occurrence of an unplanned Outage, a Contingency or an imminent or actual System Emergency (Contingency Flag). In the case of Spinning Reserve capacity from System Resources, the Ancillary Services Bid must also contain: (a) Interchange ID code of the selling entity, (b) Schedule ID (NERC ID number, and (c) a Contract Reference Number, if applicable. Ancillary Services Bids and Submissions to Self-Provide an Ancillary Services submitted to the Real-Time Market for Spinning Reserves must also submit an Energy Bid that covers the Ancillary Services capacity being offered into the Real-Time Market.

applicable CAISO Market rules and if applicable, limits based on Master File data. If the Bid fails any level two validation rules, the CAISO shall assign the Bid as invalid and the Scheduling Coordinator must either correct or resubmit the Bid.

Step 3: If the Bid successfully passes validation in Step 2, it will continue through the third level of validation where the Bid will be analyzed based on its contents to identify any missing Bid components that must be either present for the Bid to be valid consistent with the market rules contained in Article III of this CAISO Tariff and as reflected in the Business Practice Manuals. At this stage the Bid will either be automatically modified for correctness and assigned a status of conditionally modified or modified, or if it can be accepted as is, the Bid will be assigned a status of conditionally valid, or valid. A Bid will be automatically modified and assigned a status of modified or conditionally modified Bid, whenever the CAISO inserts or modifies a Bid component. The CAISO will insert or modify a Bid component whenever (1) a Self-Schedule quantity is less than the lowest quantity specified as an Economic Bid for either an Energy Bid or Demand Bid, in which case the CAISO extends the Self-Schedule to cover the gap; (2) for non-Resource Adequacy Resources, the CAISO will extend the Energy Bid Curve using Proxy Costs to cover any capacity in a RUC Bid component, if necessary; and (3) for a Resource Adequacy Resource that is not a Use-Limited Resource, the CAISO will extend the Energy Bid Curve using Proxy Costs to cover any capacity in a RUC Bid component and, if necessary, up to the full registered Resource Adequacy Capacity. The CAISO will generate a Proxy Bid or extend an Energy Bid or Self-Schedule to cover any RUC Award or Day-Ahead Schedule in the absence of any Self-Schedule or Economic Bid components, or to fill in any gaps between any Self-Schedule Bid and any Economic Bid components to cover a RUC Award or Day-Ahead Schedule. To the extent that an Energy Bid to the HASP/RTM is not accompanied by an Ancillary Services Bid, the CAISO will insert a Spinning Reserve and Non-Spinning Reserve Ancillary Services Bid at \$ 0/MW for any certified Operating Reserve capacity. The CAISO will also generate a Self-Schedule

Bid for any Generating Unit that has a Day-Ahead Schedule but has not submitted Bids in HASP/RTM, up to the quantity in the Day-Ahead Schedule. Throughout the Bid evaluation process, the Scheduling Coordinator shall have the ability to view the Bid and may choose to cancel the Bid, modify and re-submit the Bid, or leave the modified, conditionally modified or valid, conditionally valid Bid as is to be processed in the designated CAISO Market. The CAISO will not insert or extend any Bid for a Resource Adequacy Resource that is a Use-Limited Resource.

30.7.3.2 Master File Data Update.

Except as otherwise prescribed in this tariff, once a day the Master File data is updated with changes to the Master File that were submitted between at least five (5) and up to eleven (11) Business Days in advance, after which all conditional Bids must be re-validated prior to the trading period when the Bid will take effect. After this re-validation takes place, the status of all conditionally modified and conditionally valid Bids may be changed to modified or valid, if the Bid period is for the next relevant DAM.

30.7.3.3 Validation Prior to Market Close and After Master File Update.

Prior to the Market Close of the DAM, after the Master File data has been updated, all Bids must be re-validated using the same process as described in Section 30.7.3.1 to produce either valid Bids or modified Bids. Throughout this process the Scheduling Coordinator shall have the ability to view the Bid and may choose to re-submit (at which point the Bid would undergo the Bid validation process described in this Section 30.7 again), cancel, or modify the Bid. Valid or modified Bids that are not re-submitted or cancelled become Clean Bids after the Market Close of the DAM. Modified Bids for Resource Adequacy Resources will reflect the full capability of the resource as defined in the Master File.

capacity for Regulation, or Operating Reserves on the Generating Units, System Units, Participating Loads and external imports/exports bid. The Scheduling Coordinator will be notified within a reasonable time of any validation errors. For each error detected, an error message will be generated by the CAISO in the Scheduling Coordinator's notification screen, which will specify the nature of the error. The Scheduling Coordinator can then look at the notification messages to review the detailed list of errors, make changes, and resubmit if it is still within the CAISO's timing requirements. The Scheduling Coordinator is also notified of successful validation. If a resource is awarded or has qualified Self-Provided Ancillary Services in the Day-Ahead Market, if no Energy Bid is submitted to cover the awarded or Self-Provided Ancillary Services by the Market Close of HASP and the RTM, the CAISO will generate or extend an Energy Bid as necessary to cover the awarded or Self-Provided Ancillary Services capacity using the registered values in the Master File and relevant fuel prices as described in the Business Practice Manuals for use in the HASP and IFM. If an AS Bid or Submission to Self-Provide an AS is submitted in the Real-Time for Spinning Reserve or Non-Spinning Reserve without an accompanying Energy Bid at all, the AS Bid or Submission to Self-Provide an Ancillary Service will be erased. If an AS Bid or Submission to Self-Provide an AS is submitted in the Real-Time Market for Spinning Reserve and Non-Spinning Reserve with only a partial Energy Bid for the AS capacity, the CAISO will generate an Energy Bid for the uncovered portions. For Generating Units with certified Regulation capacity, if there no Bid for Regulation in the Real-Time Market, but there is a Day-Ahead award for Regulation Up or Regulation Down or a submission to self-provide Regulation Up or Regulation Down, respectively, the CAISO will generate a Regulation Up or Regulation Down Bid at the default Ancillary Service Bid price of \$0 up to the certified Regulation capacity for the Generating Unit minus any Regulation awarded or self-provided in the Day-Ahead. If there is a Bid for Regulation Up or Regulation Down in the Real-Time Market, the CAISO will increase the respective Bid up to the certified Regulation capacity for the Generating Unit minus any Regulation awarded or self-provided in the Day-Ahead. If a Self-Schedule amount is greater than the Regulation Limit for Regulation Up, the Regulation Up Bid will be erased. Notwithstanding any of the provisions of Section 30.7.6.1 set forth above, the CAISO will not insert or extend any Bid for a Resource Adequacy Resource that is a Use-Limited Resource.

- (9) The RTM optimization may result in resources being shut down consistent with their Bids and operating characteristics provided that: (1) the resource does not need to be on-line to provide Energy, (2) the resource is able to start up within the RTM optimization Time Horizon, (3) the Generating Unit is not providing Regulation or Spinning Reserve, and (4) Generating Units online providing Non-Spinning Reserve may be shut down if they can be brought up within ten (10) minutes as such resources are needed to be online to provide Non-Spinning Reserves; and
- (10) For resources that are both providing Regulation and have submitted Energy Bids for the RTM, Dispatch Instructions will be based on the Regulation Ramp Rate of the resource rather than the Operational Ramp Rate if the Dispatch Operating Point remains within the Regulating Range. The Regulating Range will limit the Ramping of Dispatch Instructions issued to resources that are providing Regulation.

- (c) Operational Ramp Rates and Start-Up Times. The submitted Operational Ramp Rate for resources shall be used as the basis for all Dispatch Instructions, provided that the Dispatch Operating Point for resources that are providing Regulation remains within their applicable Regulating Range. The Regulating Range will limit the Ramping of Dispatch Instructions issued to resources that are providing Regulation. The Ramp Rate for Non-Dynamic System Resources cleared in the HASP will not be observed. Rather, the ramp of the Non-Dynamic System Resource will respect inter-Balancing Authority Area Ramping conventions established by WECC. Ramp Rates for Dynamic System Resources will be observed like Participating Generators in the RTD. Each Energy Bid shall be Dispatched only up to the amount of Imbalance Energy that can be provided within the Dispatch Interval based on the applicable Operational Ramp Rate. The Dispatch Instruction shall consider the relevant Start-Up Time as, if the resource is off-line, the relevant Operational Ramp Rate function, and any other resource constraints or prior commitments such as Schedule changes across hours and previous Dispatch Instructions. The Start-Up Time shall be determined from the Start-Up Time function and when the resource was last shut down. The Start-Up Time shall not apply if the corresponding resource is on-line or expected to start.

of CAISO Dispatch of a resource's Energy Bid in one Operating Hour to a Dispatch Operating Point such that the resource cannot return to its successive Operating Hour Schedule or to an infra-marginal operating point by the beginning of the next Operating Hour is Residual Imbalance Energy and shall be settled as Instructed Imbalance Energy as provided for in Section 11.5.1 and also may be eligible for recovery of its applicable Energy Bid Costs in accordance with Section 11.8. Similarly, Energy delivered or consumed as a result of CAISO Dispatch of a resource's Energy Bid in a future Operating Hour to a Dispatch Operating Point different from its current Operating Point prior to the end of the current Operating Hour is also considered Residual Imbalance Energy and shall be settled as Instructed Imbalance Energy as provided for in Section 11.5.1 and also may be eligible for recovery of its applicable Energy Bid Costs in accordance with Section 11.8. When Ramping Energy Deviation and Residual Imbalance Energy coexist within a given Dispatch Interval, the Ramping Energy Deviation shall be the portion of Instructed Imbalance Energy that is produced or consumed within the Schedule-change band defined by the accepted HASP Bids of the two consecutive Settlement Periods; the Residual Imbalance Energy shall be the portion of Instructed Imbalance Energy that is produced or consumed outside the Schedule-change band.

34.15.5 Inter-hour Dispatch of Resources Without Real-Time Energy Bids.

Dispatch Instructions shall be issued for each Dispatch Interval as needed to prescribe the ramp between a resource's accepted Self-Schedule in one Trading Hour and its accepted Self-Schedule in the immediately succeeding Trading Hour. Such Dispatch Instructions shall be based on the lesser of: (1) the applicable Operational Ramp Rate as provided for in Section 30.7.7 and (2) the Ramp Rate associated with the Standard Ramp. The Dispatch Instructions for Ramping of Generating Units without Real-Time Energy Bids in both Operating Hours shall ramp the resource between hourly Schedules symmetrically to the extent possible subject to the Regulation Ramping limitations across hourly boundaries in twenty (20) to sixty (60) minutes assuming Congestion can be resolved utilizing Economic Bids. The minimum twenty (20)-minute ramp is required for smooth hourly Schedule changes and is consistent with Inertia.

scheduling agreements between Balancing Authority Areas. Energy resulting from the Standard Ramp shall be deemed Standard Ramping Energy and will be settled in accordance with Section 11.5.1.

Energy resulting from any ramp extending beyond the Standard Ramp will be deemed Ramping Energy Deviation and will be settled in accordance with Section 11.5.1.

34.15.6 Intra-Hour Exceptional Dispatches.

For the special case where an Exceptional Dispatch begins in the new hour and the rules above would result in the violation of the resource's inter-temporal constraint(s), the following rules are applied and the Energy is settled as Exceptional Dispatch Energy as described in Section 11.5.6.

- (a) If the ramp time is greater than one hour or greater than what can be achieved when RTM receives the Constraint, RTM starts the ramp at the earliest possible time and continues Ramping the resource in the new Trading Hour.
- (b) If the ramp time results in starting the ramp less than ten (10) minutes before the start of the hour, RTM instead starts the ramp at ten (10) minutes before the start of the hour and ramps the resource at a uniform rate so that it meets the Constraint by the start time of the Exceptional Dispatch.
- (c) If the new hour's Day-Ahead Schedule is beyond the Exceptional Dispatch Constraint, RTM resumes the basic Ramping rules after the Exceptional Dispatch Constraint is met, but limits the Ramp Rate as necessary to ensure that the resource does not complete its ramp before ten (10) minutes after the hour.

34.16 Ancillary Services in the Real-Time Market.

34.16.1 [NOT USED]

Adequacy Capacity must remain available to the CAISO through Real-Time for the full value of their Resource Adequacy Capacity.

40.6.8 Use of Generated Bids.

Prior to completion of the Day-Ahead Market, the CAISO will determine if dispatchable Resource Adequacy Capacity from Resource Adequacy Resources has not been reflected in a Bid and will insert a Generated Bid for any dispatchable Resource Adequacy Capacity that is not reflected in a Bid into the CAISO Day-Ahead Market and for which the CAISO has not received notification of an Outage. In addition, the CAISO will determine if all dispatchable Resource Adequacy Capacity from Short Start Units, not otherwise selected in the IFM or RUC, is reflected in a Bid into the HASP and will insert a Generated Bid for any remaining dispatchable Resource Adequacy Capacity for which the CAISO has not received notification of an Outage. Notwithstanding any of the provisions of Section 40.6.8 set forth above, the CAISO will not insert any Bid for a Resource Adequacy Resource that is a Use-Limited Resource.

40.6.9 Availability Requirements for Grandfathered Firm Liquidated Damages Contracts.

Resource Adequacy Capacity represented by a Firm Liquidated Damages Contract and relied upon by a Scheduling Coordinator in a monthly or annual Resource Adequacy Plan shall be submitted as a Self-Schedule or Bid in the Day-Ahead IFM to the extent such scheduling right exists under the Firm Liquidated Damages Contract.

40.6.10 Exports of Energy from Resource Adequacy Capacity.

Resource Adequacy Capacity may be utilized to serve an Export Bid. An Export Bid may be submitted into the CAISO Markets and be cleared by the Energy being provided by Resource Adequacy Capacity.

40.6.11 Curtailment of Exports in Emergency Situations.

At its sole discretion, the CAISO may curtail exports from Resource Adequacy Capacity to prevent or alleviate a System Emergency. An Export Bid or a Self-Schedule to provide exports included in a binding Schedule accepted in the IFM or HASP will not be distinguished from a Demand Bid or Self-Schedule to serve Load within the CAISO Balancing Authority Area included in a binding Schedule accepted in the IFM or HASP for purposes of curtailment under this Section, except as consistent with Good Utility Practice.

Congestion Revenue Right (CRR)	A CRR Obligation or CRR Option.
Connected Entity	A Participating TO or any party that owns or operates facilities that are electrically interconnected with the CAISO Controlled Grid.
Constrained Output Generator (COG)	A Generating Unit with an operating range (PMax - PMin) that is no greater than the higher of three (3) MW or five percent (5%) of its PMax that elects, on an annual basis, to utilize a Calculated Energy Bid in the IFM and RTM as described in Section 27.7.
Constraints	Physical and operational limitations on the transfer of electrical power through transmission facilities.
Construction Activities	Actions by a Participating TO that result in irrevocable financial commitments for the purchase of major electrical equipment or land for Participating TO's Interconnection Facilities or Network Upgrades assigned to the Interconnection Customer that occur after receipt of all appropriate governmental approvals needed for the Participating TO's Interconnection Facilities or Network Upgrades.
Contingency	A potential Outage that is unplanned, viewed as possible or eventually probable, which is taken into account when considering approval of other requested Outages or while operating the CAISO Balancing Authority Area.
Contingency Flag	The daily Bid component that indicates that the Spinning Reserves and Non-Spinning Reserves being offered in the CAISO Market are Contingency Only reserves.
Contingency Only	A resource providing Operating Reserve capacity that may be Dispatched by the CAISO only in the event of a Contingency or an imminent or actual System Emergency.
Contract Reference Number (CRN)	The Bid component that indicates the specific contract identification number issued by the CAISO to Scheduling Coordinators transactions under Existing Contracts or TORs.

RAS	Remedial Action Schemes
Rated Governmental Entity	A municipal utility or state or federal agency that holds an issuer, counterparty, or underlying credit rating by a Nationally Recognized Statistical Rating Organization.
Rated Public/Private Corporation	An investor-owned or privately held entity that holds an issuer, counterparty, or underlying credit rating by a Nationally Recognized Statistical Rating Organization.
Real-Time	The period of time during the Operating Hour. Any time period during the twenty-four Operating Hours of any given day.
Real-Time Congestion Fund	For each Settlement Period of the HASP and RTM, the CAISO shall calculate the Real-Time Congestion Fund as the difference of 1) the sum of the products of the RTM or HASP MCC for Demand and the Demand Imbalance Energy at the relevant Location; and 2) the sum of the products of RTM or HASP MCC for Supply and the Supply Imbalance Energy at the relevant Location; including also the sum of RTM and HASP Congestion Charges for Intertie Ancillary Services Awards.
Real-Time Congestion Offset	A component of the neutrality adjustments as provided in Section 11.5.4.2 to account for the distribution of excess Real-Time Congestion revenue and for the non-assessment of the Marginal Cost of Congestion to Measured Demand for ETCs and TOR Self-Schedules in the Real-Time as provided in Section 11.5.7.
Real-Time Contingency Dispatch (RTCD)	The mode of the Real-Time Dispatch that will be invoked when a transmission or generation Contingency occurs and will include all Contingency Only Operating Reserves in the optimization.
Real-Time Dispatch (RTD)	The SCED and SCUC software used by the CAISO to determine which Ancillary Service and Imbalance Energy resources to Dispatch and to calculate LMPs.

Real-Time Economic Dispatch (RTED)	The mode of the Real-Time Dispatch that will optimally dispatch resources based on their Energy Bids, excluding Contingency Only Operating Reserves except when needed to avoid an imminent System Emergency.
Real-Time Interchange Export Schedule	A final agreed-upon schedule of Energy to be transferred from the CAISO Balancing Authority Area to another Balancing Authority Area based on agreed-upon size (megawatts), start and end time, beginning and ending ramp times and rate, and type required for delivery and receipt of power and Energy between the source and sink Balancing Authority Areas involved in the transaction.
Real-Time Manual Dispatch (RTMD)	The mode of the Real-Time Dispatch that will be invoked as a fall-back mechanism only when the RTED or RTCD fails to provide a feasible Dispatch.
Real-Time Marginal Cost of Losses Offset	A component of the neutrality adjustments as provided in Section 11.5.4.2 to account for the distribution of excess Real-Time Marginal Cost of Losses and the non-assessment of Marginal Cost of Losses charges to Measured Demand for TOR Self-Schedules eligible for the RTM Marginal Cost of Losses Credit for Eligible TOR Self-Schedules as provided in Section 11.5.7.2.
Real-Time Market (RTM)	The spot market conducted by the CAISO using SCUC and SCED in the Real-Time, after the HASP is completed, which includes the RTUC, STUC and the RTD for the purpose of Unit Commitment, Ancillary Service procurement, Congestion Management and Energy procurement based on Supply Bids and CAISO Forecast of CAISO Demand.
Real-Time Market Pumping Bid Cost	For the applicable Settlement Interval, the Pumping Cost submitted to the CAISO in the HASP or RTM divided by the number of Settlement Intervals in a Trading Hour, as further provided in Section 11.8.4.1.4.

Attachment B – Blackline Sheets
Miscellaneous Tariff Clarifications Compliance Filing
4th Replacement CAISO Tariff (MRTU)

ER09-556-000

March 30, 2009

* * *

11.5.4.2 Allocations of Non-Zero Amounts of the Sum of IIE, UIE, UFE, and the Real-Time Ancillary Services Congestion Revenues.

The CAISO will first compute (1) the Real-Time Congestion Offset and allocate it to all Scheduling Coordinators, based on Measured Demand, excluding Demand associated with ETC or TOR Self-Schedules for which a HASP and RTM Congestion Credit was provided as specified in Section 11.5.7, and excluding Demand associated with ETC, Converted Right, or TOR Self-Schedules for which an IFM Congestion Credit was provided as specified in Section 11.2.1.5; and (2) the Real-Time Marginal Cost of Losses Offset and allocate it to all Scheduling Coordinators based on Measured Demand, excluding Demand associated with TOR Self-Schedules for which a RTM Marginal Cost of Losses Credit for Eligible TOR Self-Schedules was provided as specified in Section 11.5.7.2, and excluding Demand associated with ~~ETC, Converted Right or TOR Self-Schedules~~ for which an IFM Marginal Cost of Losses Credit for Eligible TOR Self-Schedules was provided as specified in Section 11.2.1.7. For Scheduling Coordinators for MSS Operators regardless of whether the MSS Operator has elected gross or net Settlement, the CAISO will allocate the Real-Time Congestion Offset based on the MSS Aggregation Net Non-ETC/TOR Measured Demand. To the extent that the sum of the Settlement amounts for IIE, UIE, UFE and the Real-Time Ancillary Services Congestion revenues, less Real-Time Congestion Offset, and less the Real-Time Marginal Cost of Losses Offset, does not equal zero, the CAISO will assess charges or make payments for the resulting differences to all Scheduling Coordinators, including Scheduling Coordinators for MSS Operators that are not Load following MSSs and have elected gross Settlement, based on a pro rata share of their Measured Demand for the relevant Settlement Interval. For Scheduling Coordinators for MSS Operators that have elected Load following or net Settlement, or both, the CAISO will assess charges or make payments for the resulting non-zero differences of the sum of the Settlement amounts for IIE, UIE, and UFE and the Real-Time Ancillary Services Congestion Revenues, less Real-Time Congestion Offset and less the Real-Time Marginal Cost of Losses Offset, based on their MSS Aggregation Net Measured Demand.

* * *

11.8.1.2 Real-Time Self-Commitment Period.

A Real-Time Market Self-Commitment Period for a Bid Cost Recovery Eligible Resource shall consist of all consecutive Dispatch Intervals not in an IFM Commitment Period or a RUC Commitment Period where the Bid Cost Recovery Eligible Resource has a Self-Schedule or, except for Self-Provided Ancillary Services for Non-Spinning Reserve by a Fast Start Unit, has a non-zero amount of Self-Provided Ancillary Services. A Real-Time Market Self-Commitment Period for a Bid Cost Recovery Eligible Resource may not be less than the relevant MUT (rounded up to the next 15-minute Commitment Interval) when considered jointly with any adjacent IFM Self-Commitment Period. For example, if a Bid Cost Recovery Eligible Resource self-commits at time h , the self-commitment will be extended to Commitment Interval $h + \text{MUT}$, unless an IFM or RUC Commitment Period exists starting after hour h , in which case the self-commitment will be extended to Commitment Interval $h + \min(\text{MUT}, t)$, where t represents the time interval between the Real-Time Market Self-Commitment Period and the IFM or RUC Commitment Period. A Real-Time Market Self-Commitment Period for a Bid Cost Recovery Eligible Resource may not be apart from an IFM or RUC Commitment Period by less than the relevant MDT (rounded up to the next 15-minute Commitment Interval). For example, if a Bid Cost Recovery Eligible Resource self-commits at time $T1$ and has a RUC Schedule at time $T2 < T1$, the Real-Time Market Self-Commitment Period will be extended to the interim Commitment Intervals if $T1 - T2 < \text{MDT}$. The number of Real-Time Market Self-Commitment Periods for a Bid Cost Recovery Eligible Resource within a Trading Day, when considered jointly with any adjacent IFM Self-Commitment Period, may not exceed the relevant MDS (or $\text{MDS} + 1$ if the first Real-Time Market Self-Commitment Period is the continuation of a Real-Time Market Commitment Period from the previous Trading Day). For example, if a Bid Cost Recovery Eligible Resource self-commits at time $T1$ and has a RUC Schedule at time $T2 > T1$, the Real-Time Market Self-Commitment Period will be extended to the interim Commitment Intervals if an additional Real-Time Market Start-Up at $T1$ would violate the MDS constraint.

* * *

11.10.8 Black Start.

The Black Start Energy payment user rate for any Settlement Period will be calculated based on the sum of Black Start Energy payments to Scheduling Coordinators paid in accordance with Section 11.10.1.5, including any Exceptional Dispatch Instructed Imbalance Energy payments for Black Start, in the

applicable Settlement Period divided by Measured Demand, excluding exports to neighboring Balancing Authority Areas and excluding Demand within an MSS except as provided by Section 4.9.4.5.

The Black Start Energy user charge for any Settlement Period for a Scheduling Coordinator will be the Black Start Energy payment user rate multiplied by the quantity of Measured Demand, excluding exports to neighboring Balancing Authority Areas and excluding Demand within an MSS except as provided by Section 4.9.4.4, for which that Scheduling Coordinator is responsible in that Settlement Period.

* * *

28.1.6.3 Physical Trade Post-Market Confirmation.

The CAISO conducts post-market confirmation of Physical Trades that pass pre-market validation in Section 28.1.6.2 after the Market Clearing and the market results are posted to ensure that the Generating Unit or Physical Scheduling Plant has a Schedule that can support all of the Physical Trades. During the post-market confirmation process, the MWh quantity of Physical Trades that passed the CAISO's pre-market validation process may be reduced if the resource supporting the Physical Trades has a Day-Ahead Schedule or HASP Advisory Schedule that is, on average, below the quantity of Physical Trades at that Location. The MWh quantities of Physical Trades that are reduced during the post-market confirmation process are settled at the Existing Zone Generation Trading Hub price for the Existing Zone associated with the resource identified in the Inter-SC Trade of Energy. The portion of Physical Trades that remains intact will be settled at the relevant LMP for the identified PNode for the Generating Unit or Aggregated Pricing Node for the Physical Scheduling Plant.

* * *

30.5.1 General Bidding Rules.

- (a) All Energy and Ancillary Services Bids of each Scheduling Coordinator submitted to the DAM for the following Trading Day shall be submitted at or prior to 10:00 a.m. on the day preceding the Trading Day, but no sooner than seven (7) days prior to the Trading Day. All Energy and Ancillary Services Bids of each Scheduling Coordinator submitted to the HASP for the following Trading Day

shall be submitted starting from the time of publication, at 1:00 p.m. on the day preceding the Trading Day, of DAM results for the Trading Day, and ending seventy-five (75) minutes prior to each applicable Trading Hour in the RTM. The CAISO will not accept any Energy or Ancillary Services Bids for the following Trading Day between 10:00 a.m. on the day preceding the Trading Day and the publication, at 1:00 p.m. on the day preceding the Trading Day, of DAM results for the Trading Day;

- (b) Bid prices submitted by a Scheduling Coordinator for Energy accepted and cleared in the IFM and scheduled in the Day-Ahead Schedule may be increased or decreased in the HASP. Bid prices for Energy submitted but not scheduled in the Day-Ahead Schedule may be increased or decreased in the HASP. Incremental Bid prices for Energy associated with Day-Ahead AS or RUC Awards in Bids submitted to the HASP may be revised. Scheduling Coordinators may revise ETC Self-Schedules for Supply only in the HASP to the extent such a change is consistent with TRTC Instructions provided to the CAISO by the Participating TO in accordance with Section 16. Scheduling Coordinators may revise TOR Self-Schedules for Supply only in the HASP to the extent such a change is consistent with TRTC Instructions provided to the CAISO by the Non-Participating TO in accordance with Section 17. Energy associated with awarded Ancillary Services capacity cannot be offered in the HASP or Real-Time Market separate and apart from the awarded Ancillary Services capacity;
- (c) Scheduling Coordinators may submit Energy, AS and RUC Bids in the DAM that are different for each Trading Hour of the Trading Day;
- (d) Bids for Energy or capacity that are submitted to one CAISO Market, but are not accepted in that market are no longer a binding commitment and Scheduling Coordinators may submit Bids in a subsequent CAISO Market at a different price;
and

- (e) The CAISO shall be entitled to take all reasonable measures to verify that Scheduling Coordinators meet the technical and financial criteria set forth in Section 4.5.1 and the accuracy of information submitted to the CAISO pursuant to this Section 30.5.1 and
- (f) In order to retain the priorities specified in Section 31.4 and 34.10 for scheduled amounts in the Day-Ahead Schedule associated with ETC and TOR Self-Schedules or Self-Schedules associated with Regulatory Must-Take Generation, a Scheduling Coordinator must submit to the HASP and Real-Time Market ETC or TOR Self-Schedules, or Self-Schedules associated with Regulatory Must-Take Generation, at or below the Day-Ahead Schedule quantities associated with the scheduled ETC, TOR or Regulatory Must-Take Generation Self-Schedules. If the Scheduling Coordinator fails to submit such HASP or Real-Time Market ETC, TOR or Regulatory Must-Take Generation Self-Schedules, the defined scheduling priorities of the ETC, TOR, or Regulatory Must-Take Generation Day-Ahead Schedule quantities may be subject to adjustment in the HASP and the Real-Time Market as further provided in Section 31.4 and 34.10 in order to meet operating conditions.

* * *

30.5.2.6 Ancillary Services Bids.

There are four distinct Ancillary Services: Regulation Up, Regulation Down, Spinning Reserve and Non-Spinning Reserve. Participating Generators are eligible to provide all Ancillary Services. Dynamic System Resources are eligible to provide Operating Reserves and Regulation. Non-Dynamic System Resources are eligible to provide Operating Reserves only. No System Resource, ~~(including Dynamic Resource-Specific System Resources and Non-Dynamic Resource-Specific System Resources),~~ can be used for self-provision of Ancillary Services, except for Dynamic System Resources which can be used for self-provision of Ancillary Services as specified in Section 8. All System Resources, including Dynamic Resource-Specific System Resources and Non-Dynamic Resource-Specific System Resources, will be charged the Shadow Price as prescribed in Section 11.10. Participating Loads are eligible to

provide Non-Spinning Reserve only. A Scheduling Coordinator may submit Ancillary Services Bids for Regulation Up, Regulation Down, Spinning Reserve, and Non-Spinning Reserve for the same capacity by providing a separate price in \$/MW per hour as desired for each Ancillary Service. The Bid for each Ancillary Services is a single Bid segment. Only resources certified by the CAISO as capable of providing Ancillary Services are eligible to provide Ancillary Services. In addition to the common elements listed in Section 30.5.2.1, all Ancillary Services Bid components of a Supply Bid must contain the following: (1) the type of Ancillary Service for which a Bid is being submitted; (2) Ramp Rate (Operating Reserve Ramp Rate and Regulation Ramp Rate, if applicable); and (3) Distribution Curve for Physical Scheduling Plant or System Unit; ~~and (4) Maximum Operating Limit (MOLmax) and Minimum Operating Limit (MOLmin).~~

An Ancillary Services Bid submitted to the Day-Ahead Market when submitted to the Day-Ahead Market may be, but is not required to be, accompanied by an Energy Bid that covers the capacity offered for the Ancillary Service. Submissions to Self-Provide an Ancillary Services submitted to the Day-Ahead Market when submitted to the Day-Ahead Market may be, but are not required to be, accompanied by an Energy Bid that covers the capacity to be self-provided; provided, however, that such an Energy Bid shall be submitted prior to the close of the Real-Time Market for the day immediately following the Day-Ahead Market in which the Ancillary Service Bid was submitted if the Submission to Self-Provide an Ancillary Service is qualified as specified in Section 8.6. Submissions to Self-Provide an Ancillary Services submitted in the Day-Ahead Market must be accompanied by a Self-Schedule to which the Submission to Self-Provide an Ancillary Service is related. Except as provided below, the Self-Schedule need not include a Self-Schedule from the resource that will be self-providing the Ancillary Service. If a Scheduling Coordinator is self-providing an Ancillary Service from a Fast Start Unit, no Self-Schedule for that resource is required. If a Scheduling Coordinator proposes to self-provide Spinning Reserve, the Scheduling Coordinator is obligated to submit a Self-Schedule for particular resource, unless as discussed above the particular resource is a Fast Start Unit. When submitting Ancillary Service Bids in the Real-Time, Scheduling Coordinators for resources that either have been awarded or self-provide Spinning Reserve or Non-Spinning Reserve capacity in the Day-Ahead Market must submit an Energy Bid for at least the awarded or self-provided Spinning Reserve or Non-Spinning Reserve capacity, otherwise the CAISO will apply the Bid validation rules described in Section 30.7.6.1. As provided in

Section 30.5.2.6.4, a Submission to Self-Provide an Ancillary Service shall contain all of the requirements of a Bid for Ancillary Services with the exception of Ancillary Service Bid price information. In addition, Scheduling Coordinators must comply with the Ancillary Services requirements of Section 8.

30.5.2.6.1 Regulation Up or Regulation Down Bid Information.

In the case of Regulation Up or Regulation Down, the Ancillary Services Bid must also contain: (a) the upward and downward range of generating capacity over which the resource is willing to provide Regulation within a range from a minimum of ten (10) minutes to a maximum of thirty (30) minutes; and (b) the Bid price of the capacity reservation, stated separately for Regulation Up and Regulation Down (\$/MW). In the case of Regulation Up or Regulation Down from Dynamic System Resources, the Ancillary Services Bid must also contain: ~~(a) the Scheduling Point (the name), (b) Interchange ID code of the selling entity, (c) external Balancing Authority Area ID, (d) Schedule ID (NERC ID number), and (e)~~ the Contract Reference Number, if applicable. Ancillary Services Bids submitted to the Real-Time Market for Regulation need not be accompanied by an Energy Bid that covers the Ancillary Services capacity being offered into the Real-Time Market. A Regulation Down Bid will be erased unless there is an Energy Bid or Self-Schedule at a level that would permit the resource to provide Regulation Down to its lower Regulation Limit. The resource's Energy Bid or Self-Schedule must allow for the resource to provide Regulation Down consistent with the capacity offered in the resource's Regulation Down Bid.

* * *

30.7.3.1 Validation Prior to Market Close and Master File Update.

The CAISO conducts Bid validation in three steps:

Step 1: The CAISO will validate all Bids after submission of the Bid for content validation which determines that the Bid adheres to the structural rules required of all Bids as further described in the Business Practices Manuals. If the Bid fails any of the content level rules the CAISO shall assign it a rejected status and the Scheduling Coordinator must correct and resubmit the Bid.

Step 2: After the Bids are successfully validated for content, but prior to the Market Close of the DAM, the Bids will continue through the second level of validation rules to verify that the Bid adheres to the applicable CAISO Market rules and if applicable, limits based on Master File data. If the Bid fails any

level two validation rules, the CAISO shall assign the Bid as invalid and the Scheduling Coordinator must either correct or resubmit the Bid.

Step 3: If the Bid successfully passes validation in Step 2, it will continue through the third level of validation where the Bid will be analyzed based on its contents to identify any missing Bid components that must be either present for the Bid to be valid consistent with the market rules contained in Article III of this CAISO Tariff and as reflected in the Business Practice Manuals. At this stage the Bid will either be automatically modified for correctness and assigned a status of conditionally modified or modified, or if it can be accepted as is, the Bid will be assigned a status of conditionally valid, or valid. A Bid will be automatically modified and assigned a status of modified or conditionally modified Bid, whenever the CAISO inserts or modifies a Bid component. The CAISO will insert or modify a Bid component whenever (1) a Self-Schedule quantity is less than the lowest quantity specified as an Economic Bid for either an Energy Bid or Demand Bid, in which case the CAISO extends the Self-Schedule to cover the gap; (2) for non-Resource Adequacy Resources, the CAISO will extend the Energy Bid Curve using Proxy Costs to cover any capacity in a RUC Bid component, if necessary; and (3) for a Resource Adequacy Resource that is not a Use-Limited Resource, the CAISO will extend the Energy Bid Curve using Proxy Costs to cover any capacity in a RUC Bid component and, if necessary, up to the full registered Resource Adequacy Capacity. The CAISO will generate a Proxy Bid or extend an Energy Bid or Self-Schedule to cover any RUC Award or Day-Ahead Schedule in the absence of any Self-Schedule or Economic Bid components, or to fill in any gaps between any Self-Schedule Bid and any Economic Bid components to cover a RUC Award or Day-Ahead Schedule. To the extent that an Energy Bid to the HASP/RTM is not accompanied by an Ancillary Services Bid, the CAISO will insert a Spinning Reserve and Non-Spinning Reserve Ancillary Services Bid at \$ 0/MW for any certified Operating Reserve capacity. The CAISO will also generate a Self-Schedule Bid for any Generating Unit that has a Day-Ahead Schedule but has not submitted Bids in HASP/RTM, up to the quantity in the Day-Ahead Schedule. Throughout the Bid evaluation process, the Scheduling Coordinator shall have the ability to view the Bid and may choose to cancel the Bid, modify and re-submit the Bid, or leave the modified, conditionally modified or valid, conditionally valid Bid as is to be processed in the designated CAISO Market. The CAISO will not insert or extend any Bid for a Resource Adequacy Resource that is a Use-Limited Resource.

* * *

30.7.6.1 Validation of Ancillary Services Bids.

Throughout the validation process described in Section 30.7, the CAISO will verify that each Ancillary Services Bid conforms to the content, format and syntax specified for the relevant Ancillary Service. If the Ancillary Services Bid does not so conform, the CAISO will send a notification to the Scheduling Coordinator notifying the Scheduling Coordinator of the errors in the Bids as described in Section 30.7. When the Bids are submitted, a technical validation will be performed to verify that the bid quantity of Regulation, Spinning Reserve, or Non-Spinning Reserve does not exceed the certified Ancillary Services capacity for Regulation, or Operating Reserves on the Generating Units, System Units, Participating Loads and external imports/exports bid. The Scheduling Coordinator will be notified within a reasonable time of any validation errors. For each error detected, an error message will be generated by the CAISO in the Scheduling Coordinator's notification screen, which will specify the nature of the error. The Scheduling Coordinator can then look at the notification messages to review the detailed list of errors, make changes, and resubmit if it is still within the CAISO's timing requirements. The Scheduling Coordinator is also notified of successful validation. If a resource is awarded or has qualified Self-Provided Ancillary Services in the Day-Ahead Market, if no Energy Bid is submitted to cover the awarded or Self-Provided Ancillary Services by the Market Close of HASP and the RTM, the CAISO will generate or extend an Energy Bid as necessary to cover the awarded or Self-Provided Ancillary Services capacity using the registered values in the Master File and relevant fuel prices as described in the Business Practice Manuals for use in the HASP and IFM. If an AS Bid or Submission to Self-Provide an AS is submitted in the Real-Time for Spinning Reserve or Non-Spinning Reserve without an accompanying Energy Bid at all, the AS Bid or Submission to Self-Provide an Ancillary Service will be erased. If an AS Bid or Submission to Self-Provide an AS is submitted in the Real-Time Market for Spinning Reserve and Non-Spinning Reserve with only a partial Energy Bid for the AS capacity, the CAISO will generate an Energy Bid for the uncovered portions. For Generating Units with certified Regulation capacity, if there no Bid for Regulation in the Real-Time Market, but there is a Day-Ahead award for Regulation Up or Regulation Down or a submission to self-provide Regulation Up or Regulation Down, respectively, the CAISO will generate a Regulation Up or Regulation Down Bid at the default Ancillary Service Bid price of

\$0 up to the certified Regulation capacity for the Generating Unit minus any Regulation awarded or self-provided in the Day-Ahead. If there is a Bid for Regulation Up or Regulation Down in the Real-Time Market, the CAISO will increase the respective Bid up to the certified Regulation capacity for the Generating Unit minus any Regulation awarded or self-provided in the Day-Ahead. If a Self-Schedule amount is greater than the Regulation Limit for Regulation Up, the Regulation Up Bid will be erased. Notwithstanding any of the provisions of Section 30.7.6.1 set forth above, the CAISO will not insert or extend any Bid for a Resource Adequacy Resource that is a Use-Limited Resource.

* * *

40.6.8 Use of Generated Bids.

Prior to completion of the Day-Ahead Market, the CAISO will determine if dispatchable Resource Adequacy Capacity from Resource Adequacy Resources has not been reflected in a Bid and will insert a Generated Bid for any dispatchable Resource Adequacy Capacity that is not reflected in a Bid into the CAISO Day-Ahead Market and for which the CAISO has not received notification of an Outage. In addition, the CAISO will determine if all dispatchable Resource Adequacy Capacity from Short Start Units, not otherwise selected in the IFM or RUC, is reflected in a Bid into the HASP and will insert a Generated Bid for any remaining dispatchable Resource Adequacy Capacity for which the CAISO has not received notification of an Outage. Notwithstanding any of the provisions of Section 40.6.8 set forth above, the CAISO will not insert any Bid for a Resource Adequacy Resource that is a Use-Limited Resource.

* * *

CAISO Tariff Appendix A

Master Definitions Supplement

Contingency Only

A resource providing Operating Reserve capacity that may be Dispatched by the CAISO only in the event of a Contingency or an imminent or actual System Emergency.

* * *

Real-Time Congestion Offset

A component of the neutrality adjustments as provided in Section 11.5.4.2 to account for the distribution of excess Real-Time Congestion

revenue and for the non-assessment of the Marginal Cost of Congestion to Measured Demand for ETCs and TOR Self-Schedules in the Real-Time as provided in Section 11.5.7.

* * *

**Real-Time Marginal Cost
of Losses Offset**

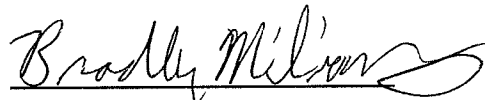
A component of the neutrality adjustments as provided in Section 11.5.4.2 to account for the distribution of excess Real-Time Marginal Cost of Losses and the non-assessment of Marginal Cost of Losses charges to Measured Demand for TOR Self-Schedules eligible for the RTM Marginal Cost of Losses Credit for Eligible TOR Self-Schedules as provided in Section 11.5.7.2.

* * *

CERTIFICATE OF SERVICE

I hereby certify that I have served the foregoing document upon all of the parties listed on the official service lists for the above-referenced 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 at Washington, D.C. this 30th day of March, 2009.

A handwritten signature in cursive script, reading "Bradley R. Miliauskas". The signature is written in black ink and is positioned above a horizontal line.

Bradley R. Miliauskas