California Independent System Operator Corporation



Hon. Magalie Roman Salas, Secretary Federal Energy Regulatory Commission 888 First Street, NE Washington, DC 20426

RE: California Independent System Operator Corporation Docket No. ER06-615-

Dear Secretary Salas:

Pursuant to the Order issued by the Federal Energy Regulatory Commission ("Commission") in the above-captioned dockets on September 21, 2006 ("September 21 Order"), 116 FERC ¶ 61,274 (2006), the California Independent System Operator Corporation ("CAISO") hereby submits an original and five copies of its filing in compliance with the September 21 Order. Specifically, this filing consists of the items that the Commission required the CAISO to file within 60 days of the date of the September 21 Order. The CAISO is also tendering two copies of this filing to be time and date stamped and returned to our courier.

## I. BACKGROUND

The CAISO's market redesign efforts can be traced back to a series of Commission orders, commencing in the year 2000, directing the CAISO first to overhaul its approach to managing transmission congestion and then to engage in a more comprehensive redesign of its market structure, including the creation of a Day-Ahead Energy market to replace the defunct markets of the California Power Exchange. Based on those directives, the CAISO developed a series of conceptual market design proposals that were filed for Commission review. Since 2002, the Commission has issued a series of orders on those conceptual filings that provided direction on the further development of the Market Redesign and Technology Upgrade ("MRTU") market design. These orders shaped the development of the MRTU Tariff.

The development of MRTU has been supported by a robust stakeholder process. In fact, from January 2002 to July 2003, the CAISO devoted hundreds of hours to stakeholder activities, including but not limited to: (1) conducting meetings and conference calls with both individual and larger groups of stakeholders, as well as with Commission staff; (2) participating in Commission-sponsored technical conferences; (3) hosting multiple-day forums; and (4) maintaining an updated CAISO website containing current information and relevant documents for stakeholder review and consideration.

Capitalized terms not otherwise defined herein have the meaning set forth in the Master Definitions Supplement, Appendix A to the MRTU Tariff.

From July 2003 to January 2006, the already-extensive CAISO stakeholder process intensified, including twelve days of "page turn" meeting during which the CAISO reviewed drafts of the MRTU Tariff with stakeholders.

The culmination of these efforts was realized on February 9, 2006, when the CAISO filed with the Commission its complete MRTU Tariff proposal ("MRTU Tariff Filing"). This filing consisted of all of the proposed modifications to the CAISO Tariff reflecting the numerous changes to the CAISO's market structure included in the MRTU proposal, as well as hundreds of pages of testimony from numerous witnesses explaining these changes, and a comprehensive transmittal letter and attachments describing the changes and the MRTU process in detail.

Because of the size and complexity of this filing, the Commission provided parties with 60 days to file comments on the MRTU Tariff Filing, and an additional five weeks to file reply comments. A number of parties filed both initial and reply comments and protests concerning the MRTU Tariff Filing. On September 21, 2006, the Commission accepted for filing the MRTU Tariff to become effective November 1, 2007, subject to a number of modifications, as detailed in the September 21 Order. In addition to tariff changes, the Commission also directed the CAISO to take various other actions, including providing additional details concerning several of its proposals, filing with the Commission status reports on specific issues, and making certain information available to Market Participants. The Commission provided several timeframes for the CAISO to comply with these various requirements.

The instant filing represents the first of the compliance filings directed by the Commission, consisting of the items that the Commission required the CAISO to file within 60 days of the date of the September 21 Order.

#### II. CONTENTS OF FILING

This filing comprises:

This Transmittal Letter,

Attachment A Chart of all Tariff Changes Submitted in This filing To

Comply with the September 21 Order

Attachment B MRTU Tariff Sheets Blacklined Against MRTU Tariff

Sheets Filed on February 9, 2006

Attachment C MRTU Tariff Sheets Clean

Attachment D "Notice of Clarification of MRTU Design Features," dated

January 13, 2006

Attachment E

Table Indicating Intertie Set-Aside Quantities for the

Annual CRR Auction

#### III. **COMMUNICATIONS**

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#### DESCRIPTION OF MODIFICATIONS TO THE MRTU TARIFF IN IV. **COMPLIANCE WITH SEPTEMBER 21 ORDER**

A complete list of the changes to the MRTU Tariff made in compliance with the September 21 Order in the 60-day timeframe is set forth in the table included with this filing as Attachment A.<sup>2</sup> For each change to the MRTU Tariff that the Commission mandated be made in 60 days after the issuance of the September 21 Order (and for which the CAISO has not requested an extension of the compliance deadline), Attachment A lists the relevant ordering paragraph from the September 21 Order, a description of the required change, and either a blackline showing the CAISO's proposed modification to the MRTU Tariff to effect the required change or a cross-reference to the affected provisions. Many of these modifications are straightforward in nature, and therefore need no additional explanation by the CAISO. For instance, included in this filing are numerous "clean up" type changes to the MRTU Tariff that involve correcting typos, harmonizing internal Tariff references, and other such administrative items. In addition, many of the substantive changes directed by the Commission are uncomplicated

<sup>\*</sup> Individual designated for service.

The definitive version of all the modifications included in this filing is, of course, set forth in the blacklines included in Attachment B.

and did not involve any exercise of discretion by the CAISO. These items are included in Attachment A, but are not individually discussed in this transmittal letter.

A number of the 60-day Tariff modifications required by the September 21 Order do, however, benefit from additional explanation. Moreover, the Commission directed the CAISO to submit additional explanation or justification regarding several issues within the 60-day timeframe. A discussion of these items is set forth below, organized using the subject headings adopted by the Commission in the September 21 Order. These items are also identified in Attachment A.

Also, the CAISO is requesting an extension of time to comply with respect to several items that the Commission directed the CAISO to file within the 60-day timeframe. The CAISO is making these requests in a separate motion filed with the Commission concurrently with the instant filing. Specifically, the CAISO is requesting the following extensions:

- A 30 day extension of time to comply with the Commission's directive in Paragraph 389 of the September 21 Order that the CAISO explain how it will handle sales of interruptible imports in the Day-Ahead Market.
- A 90 day extension of time in order to comply with the Commission's directive in Paragraph 530 of the September 21 Order to revise definitions in MRTU Tariff Section 11 for clarity and accurate descriptions, including the definitions for Bid Cost, Unrecovered Bid Cost Uplift, Minimum Up Time, Commitment Intervals, and Final Real-Time Market Self-Commitment Period.
- A 120 day extension of time in order to comply with the Commission's directive in Paragraph 854 of the September 21 Order to explain how it will "forgive" outstanding debt in the yearly balancing account.
- A 30 day extension of time to comply with the Commission's directive in Paragraph 1059 of the September 21 Order to clarify the procedures that a Market Participant must follow in order to exercise the negotiated option for Default Energy Bids, and the types of information that they must provide.
- A 30 day extension of time to comply with Paragraph 1063 of the September 21 Order, which requires the CAISO to consider whether the 80% mitigation frequency is appropriate, and whether units mitigated less than 80% of the time should also receive a bid adder, and to report its conclusions and submit tariff revisions.

- A 90 day extension of time to comply with the Commission's requirement, as set forth in Paragraph 1330 of the September 21 Order, that the CAISO provide definitions for all capitalized terms and acronyms used in the MRTU Tariff.
- A 90 day extension of time to comply with the Commission's directive in Paragraph 1345 of the September 21 Order to include a definition for IFM Congestion Charge, to be provided in conjunction with the comprehensive set of definitions in compliance with Paragraph 1330.
- A 90 day extension of time to comply with the Commission's directive in Paragraph 1167 of the September 21 Order that the MRTU Tariff distinguish between the reliability needs addressed by the Reliability-Must-Run technical process and the local capacity study process

As explained in greater detail in its motion for extension, the CAISO is requesting these extensions in order to allow for time to discuss with its stakeholders how to best resolve these issues, and incorporate stakeholder feedback into its compliance proposals. Because the CAISO requires additional time to address these issues with its stakeholders, these items are not included in this compliance filing.<sup>3</sup>

Finally, the CAISO is also including in this filing several modifications to the MRTU Tariff that it committed to make in its response to comments and protests on the February 9, 2006 MRTU Tariff Filing. The CAISO requested that the Commission clarify that it should make these modifications in its Request for Clarification/Rehearing of the September 21 Order.

#### A. Full Network Model

In the September 21 Order, the Commission directed the CAISO to include in the MRTU Tariff a description of the process it intends to use when addressing changes to the topology of the grid in terms of the specifics on how this new information will be incorporated into the Full Network Model. In order to implement this change, the CAISO is proposing to add a new section to the MRTU Tariff, Section 27.5.4. This section specifies that the CAISO will incorporate into the Full Network Model

In its October 3, 2006, Request for Clarification/Rehearing of the September 21 Order, the CAISO also requested an extension of time to comply with the Commission's directive that the CAISO provide additional details concerning its proposal to allocate CRRs to sponsors of merchant transmission projects. September 21 Order at PP 873, 1357. As explained in its Request for Clarification/Rehearing, the CAISO believes it is more appropriate to file these details in a time frame consistent with the compliance filing required by the Commission's Final Rule on Long Term Firm Transmission Rights. In that pleading, the CAISO also requested an extension of time to complete its evaluation of whether it was necessary to modify the proposal to set aside 50 percent of the intertie capacity for the CRR auction until the end of the CRR dry run. See id. at P 830.

September 21 Order at P 46.

information received with respect to transmission expansions and generation interconnections, modifications to transmission facilities or Generating Facilities, as well as topology changes reported pursuant to Section 9 of the MRTU Tariff, or those detected by the State Estimator. Section 27.5.4 provides that this information will be incorporated into the data base in which the power system electrical network model is maintained for use by the grid operations reliability model State Estimator and which forms the basis for the Full Network Model. Section 27.5.4 further provides that the updated power system network model will be transferred at periodic model update cycle intervals established by the CAISO and incorporated into the FNM for use in the CAISO Markets. This section also makes clear that details of the information to be provided by Market Participants and the process by which the CAISO incorporates this information into the FNM will be set forth in the Business Practice Manual ("BPM") for Managing the Full Network Model.

In this same Paragraph, the Commission also directed the CAISO to include in the MRTU Tariff language that indicates that the Full Network Model is available to Market Participants who sign a non-disclosure agreement.<sup>5</sup> In compliance with this directive, the CAISO has modified MRTU Tariff Section 6.5.1.1 to make clear that the Full Network Model is available to all Market Participants with non-disclosure agreements, rather than just CRR Participants.

## B. Day-Ahead Market

The Commission, in the September 21 Order, determined that the CAISO had not adequately addressed concerns with respect to how the CAISO will determine the commitment of Extremely Long Start Resources ("ELS Resources"), and ordered the CAISO, in the 60-day compliance filing, to explain how it will commit ELS Resources, and how such commitment will be integrated with the normal Day-Ahead commitment process.<sup>6</sup> The CAISO has proposed a number of modifications to the MRTU Tariff in order to provide greater details concerning ELS Resources. In particular, the CAISO is proposing to add to the MRTU Tariff a new Section 31.7, which describes in detail the process by which the CAISO will commit ELS Resources (the "ELC Process"). Section 31.7.1 describes the execution of the ELC Process. Specifically, the ELC Process will be conducted after the results of the Day-Ahead Market are posted in order to determine the commitment of ELS Resources to be available two days out. The ELC Process will not dispatch Energy from ELS Resources; Energy and Ancillary Service requirements will be re-evaluated by the IFM executed the day after the applicable ELC Process is run. The commitment statuses of the ELS Resources will be passed to the Bid validation process for use in the DAM for the Trading Day two days after the current day when the ELC Process is executed.

Section 31.7.2 describes the inputs that will be used in the ELC Process, including Energy and Ancillary Services Bids for the two days of the ELC Process, outage

<sup>5</sup> *Id.* 

<sup>6</sup> Id. at P 125.

considerations, and Constraints. Finally, Section 31.7.3 describes the outputs of the ELC Process. This section provides that the commitment decisions for ELS Resources that results from the ELC Process are binding and that the Day-Ahead Market applications will model the committed ELS Resources as "must-run" resources.

#### C. Residual Unit Commitment

In Paragraph 143 of the September 21 Order, the Commission directed the CAISO to examine whether software changes to honor multi-block constraint bids as a bidding parameter from System Resources under the CAISO's Residual Unit Commitment Process ("RUC") could be implemented by Release 1, and if so, report whether the changes are realistic, and if not, when such changes can be implemented. In addition, the Commission stipulated that it found Southern California Edison's argument that the CAISO's proposal should honor multi-block constraint bids as a bidding parameter for System Resources under RUC to be reasonable. In its Request for Clarification and Rehearing of the September 21 Order, the CAISO requested rehearing of the Commission's conclusion on this issue and asked that the Commission reverse its finding. For the reasons stated in its Request for Clarification and Rehearing, the CAISO still continues to believe that the Commission's conclusion is in error. In order to comply with the Commission's directive in Paragraph 143, however, the CAISO submits the information below to demonstrate that the implementation of honoring multi-block constraint bids for System Resources in RUC is not feasible by Release 1 and that considerable resources would be required to implement such functionality.

Consistent with the Commission's request in Paragraph 143, the CAISO has examined the impact of implementing multi-block constraint bids in Release 1, including the impact on the schedule and cost. Implementing the RUC multi-hour block constraint is estimated to cost approximately \$500,000 including support for additional functional and integration testing. Moreover, such an addition would add an additional 14 weeks to the development and factory testing schedule that must be completed prior to performing additional site acceptance, integration (both application test and functional test), End-to-End testing and market simulation testing of the functionality. The CAISO estimates that it would not be feasible to adopt such functionality until six to nine months after MRTU start-up. Given that the CAISO believes it is not advisable to adopt such functionality in the first place, the CAISO does not believe that it would be appropriate to adopt such changes and incur such additional costs.

The Commission, in the September 21 Order, found it inappropriate for the CAISO to allocate RUC costs to export schedules, and directed the CAISO, in the 60-day compliance filing, to modify Section 11.8 of the MRTU Tariff in order to exclude the allocation of RUC costs to exports. Pursuant to this directive, the CAISO proposes to modify MRTU Tariff Section 11.8.6.5 ("Allocation of Net RUC Bid Cost Uplift") to

<sup>7.</sup> *Id.* at P 171.

provide that RUC uplift charges will be allocated to Scheduling Coordinators in proportion to their "metered CAISO Demand," which consists of "Power delivered to Load internal to CAISO Control Area" instead of "CAISO Measured Demand" which consists of metered CAISO Demand "plus Real-Time Interchange export schedules." The CAISO is also proposing one other small modification to this section to clarify that the first tier of RUC costs (which are allocated based on net negative deviations) are calculated as a rate, rather than a fixed amount.

#### D. Hour-Ahead Scheduling Process and Real-Time Market

In Paragraph 230 of the September 21 Order, the Commission directed the CAISO to amend its definition of "Supply" in the MRTU Tariff to include Participating Load. In compliance with this order, the CAISO has included Participating Load in the definition of Supply. The CAISO notes, however, that the change will require a more comprehensive review of the MRTU Tariff to ensure that the term Supply is used consistent with its new definition. For example, in some instances, the term Supply may have been used when the term Generation should have been used instead to describe the output of a Generating Unit. The CAISO will conduct this review and make the requisite changes in a clean up filing prior to MRTU start-up.

In Paragraph 239 of the September 21 Order, the Commission directed the CAISO to "explain its decision to 'change' from nine to four ramp segments, why the MRTU software cannot accommodate nine and what would be required (in terms of cost and time) to modify." Below, the CAISO provides an explanation of why it did not adopt the ability to support nine ramp rates for all resources in MRTU and what is required in terms of time and cost to modify this aspect of the MRTU design.

In its design of MRTU, the CAISO decided not to implement an ability to support nine ramp rates because of the complexity and performance issues associated with supporting nine ramp rates using the Full Network Model and security constrained unit commitment and dispatch. In conducting security constrained unit commitment and dispatch, having to accommodate nine ramp rates for every resource at the same time, while ensuring that the Day-Ahead Market completes within the three hour timeline and the Real-Time Market solves and completes within five minutes for dispatch and within fifteen minutes for unit commitment decisions, would require significant analysis and potentially re-architecting the Day-Ahead and Real-Time Market applications as well as the underlying infrastructure. When the CAISO transitioned to MRTU Phase 1B, it went from supporting one ramp rate to nine. The current market design, however, is not executed based on a security constrained unit commitment and dispatch utilizing a full network model and as a result does not manage all the constraints in the network model. Furthermore, the CAISO is supporting other resource operational constraints such as forbidden regions of operation, Minimum Run Time and other Energy constraints. Therefore, the CAISO could not guarantee that the required run time under MRTU could

be met if it were forced to support nine ramp-rates for all resources. Such a change would create a significant implementation risk to the project.

The CAISO also determined that restricting the MRTU design to four ramp segments would not have a substantial impact on Market Participants' ability to participate in the market as only a small number of resources in the CAISO Control Area are affected by this change. Out of 361 resources in the Master File with defined ramprates, only 23 resources have more than four ramp-rates. The CAISO would also like to clarify that, in addition to the four operational ramp-rates, the CAISO is supporting as much as four additional ramp-rates for modeling the ramp-rate within each forbidden region a resource may have defined. As a result, of those 23 resources that have defined more than four ramp-rate regions, five of the resources have a forbidden region of operation such that if MRTU's ability to model a separate ramp-rate for the forbidden region is taken into account, MRTU provides sufficient ramp-rates for these resources. Consequently, there are only 18 resources actually affected by the fact that MRTU is only supporting four segments.

Pursuant to discussions with its software vendor, the CAISO has determined that allowing nine ramp rates at this stage would create a very significant risk to the timely implementation of Release 1, due to the direct impact on performance. Incorporating nine segments may require considerable redesign and rework of the database and applications required to accommodate the performance impacts of including 9 ramp rates. More specifically, the CAISO has determined that to open the implementation of nine ramp rates at this stage will as much as \$2M to \$3 million dollars and a year on the project schedule. In addition, the CAISO is concerned that there may be additional risk involved in adopting the nine segments if the system does not provide a desirable performance outcome, which may force a major restructuring of the problem formulation. In light of the implementation risk and the cost and time requirements in order to support the nine segments, the CAISO believes it is not just and reasonable at this time to incorporate in the MRTU design the ability to support the nine segments. A more reasonable approach is to allow the CAISO to start MRTU using four operational ramprates in order establish a baseline performance metric. Then, only after understanding the baseline performance of the applications, under actual operating condition, would the CAISO and its vendor be in a better position to determine to what extent additional operational ramp-rates could be supported such that an implementation plan could be developed.

In Paragraph 269 of the September 21 Order, the Commission directed the CAISO to define "transmission related modeling limitations," as that term is used throughout Section 11.5 of the MRTU Tariff.<sup>8</sup> The CAISO proposes to add a new Section 34.9.3 to the MRTU Tariff, which makes clear that the CAISO has the authority to manually Dispatch resources in order to address transmission-related modeling limitations in the FNM. In that Section, the CAISO defines "transmission-related

<sup>8</sup> September 21 Order at P 269.

modeling limitations" as consisting of "any FNM modeling limitations that arise from transmission maintenance, lack of voltage support at proper levels as well as incomplete or incorrect information about the transmission network, for which the PTOs have primary responsibility."

In Paragraphs 116 and 217 of the September 21 Order, the Commission directed the CAISO to submit tariff sheets containing the detail of the procedure to enable Scheduling Coordinators in both the DAM and the HASP to self-schedule exports that are served by generation from non-RA capacity in the DAM, or by non-RA /non-RUC capacity from resource adequacy Short-Start Units in the HASP. This creates two types of Self-Schedules for exports with different types of priority levels as reflected in the amended Section 31.4, 33.3 and 34.10 of the MRTU Tariff. These priorities will be effectuated through an automated process. The CAISO is automating its software to allow Scheduling Coordinators to identify the non-RA source used to support the export so that the export will receive the same priority as CAISO Demand bid into the IFM and forecasted CAISO Demand in HASP. The only procedural requirement to effectuate this priority is the requirement that the Scheduling Coordinator indicate whether or not the export is supported by Generation from RA or RUC capacity as specified in the revised section 30.5.3.

In Paragraph 217, the Commission also directed the CAISO to confer with commenters concerning this modification. The CAISO has, to date, conferred with representatives from NCPA and Roseville. The CAISO has not had an opportunity to meet with representatives from Six Cities, but is currently trying to find a time to have a meeting. The CAISO will continue to try to confer with these parties on this issue and will inform the Commission of any further meetings.

#### E. Ancillary Services

In the September 21 Order, the Commission ordered the CAISO to revise the MRTU Tariff to clarify whether (and if so, how) the CAISO will consider foregone opportunity costs in establishing Ancillary Services ("AS") schedules and in calculating AS marginal prices. In compliance, the CAISO is proposing to amend MRTU Section 11.10.1.1 to provide that, in awarding AS Bids, economic merit order will be determined as the sum of the Ancillary Service capacity Bid price of the resource and the foregone opportunity cost of Energy in the IFM for that resource, and that ASMPs are set at a price no lower than the sum of (i) their Ancillary Service capacity Bid price submitted for that resource, and (ii) the foregone opportunity cost of Energy in the IFM.

Additionally, in the event the CAISO chose to include foregone opportunity costs, the Commission directed the CAISO to explain how it would determine the foregone opportunity costs of resources that do not include associated Energy Bids in their Bids to

<sup>9</sup> September 21 Order at P 400.

provide AS.<sup>10</sup> The CAISO is therefore also revising Section 11.10.1.1 to provide that if a resource has submitted an AS Bid but no Energy Bid and is under an obligation to offer Energy in the DAM (e.g. a non-hydro RA resource), its Default Energy Bid will be used, and its opportunity cost calculated accordingly. If a resource has submitted an AS Bid but no Energy Bid and is not under an obligation to offer Energy in the DAM, its Energy opportunity cost will be \$0, because it cannot be dispatched for Energy even if the LMP at its location goes to the Bid cap.

#### F. Reliability Must-Run Units

In response to concerns that it is unclear, under the MRTU Tariff, how Energy is counted toward a unit's RMR contract service limits in the pre-IFM runs, the Commission, in Paragraph 423 of the September 21 Order, directed the CAISO to clarify how RMR Energy is counted towards RMR contract service limits.

The MRTU Tariff was designed to preserve the benefits and burdens inherent in the RMR Contracts. Accordingly, the CAISO, the RMR Owner and the Responsible Utility under an RMR Contract will continue to perform their obligations as currently defined and specified in accordance with the RMR Contract and terms such as Requested MW. Requested MWh. Billable MWh and Hybrid MWh will remain meaningful under MRTU. The RMR Contract methodology for calculating Counted Start-ups, Counted MWh and Counted Service Hours for determining when service has reached the Contract Service Limits also remains unchanged. Although the CAISO will continue to have the right to issue manual RMR Dispatch Notices for local reliability, it is anticipated that under MRTU, reliability requirements will be set primarily through the Market Power Mitigation-Reliability Requirements Determination ("MPM-RRD") process set forth in Sections 31 and 33.4, which occurs prior to the issuance of the Day-Ahead Schedule and also in HASP for dispatch in the Real-Time Market. Whether in the Day-Ahead Market or the HASP for the RTM, the first run of the MPM-RRD is the Competitive Constraints Run ("CCR") under which only transmission lines pre-designated as "competitive" are considered. The second run of the MPM-RRD process is the All Constraints Run ("ACR") during which all transmission constraints are enforced. Whenever the dispatch level of an RMR Unit is greater in the ACR than in the CCR, the Day-Ahead Schedule or the Dispatch Instruction will provide a flag indicating that the RMR Unit is providing service under the RMR Contract. In this case, the difference between Day Ahead Schedule and the Day Ahead Market CCR dispatch level and/or the difference between the HASP CCR dispatch level and the real time Dispatch Instruction shall establish the Billable MWh values under the RMR Contract. The dispatch levels established by the Day Ahead Schedule and the real time Dispatch Instruction become the Requested MW values, and the CCR MW dispatch levels established by the Day Ahead Market and HASP MPM-RRD processes become the Hybrid MWh values under the RMR Contract.

Under the current zonal market design, which does not include a Day-Ahead Energy Market, the RMR Owner chooses either RMR Contract compensation (Contract Option) or market payment (Market Option) for the Energy the RMR Owner delivers pursuant to an RMR Dispatch for RMR Units operating under Condition 1. This choice determines the payment source for the Energy delivered and the amount of Billable MWh and Hybrid MWh that accumulate during the year and count toward meeting the Contract Service Limits. When these limits are exceeded, the charges for excess service under Schedule G of the RMR Contract are paid for all such service thereafter during the remainder of the Contract Year. Today, the choice is made day ahead for each hour in which an RMR day ahead dispatch has been requested. In making this election, the RMR Owner commits to receive payment for all RMR Energy delivered in the given hour as either a Market Transaction (Market Option) or a Nonmarket Transaction (Contract Option) under the RMR Contract.

Under MRTU the RMR Owner's right to elect market compensation or compensation under the RMR Contract for Units operating under Condition 1 is exercised through submission of Bids in the CAISO's markets. If RMR Owners desire compensation under the RMR Contract, they can ensure this result by not submitting Bids in the CAISO's Markets. When this occurs, RMR Proxy Bids are used in the ACR and if the RMR Unit is required for local reliability, the entire amount dispatched by the CAISO will be counted as and settled as a Nonmarket Transaction under the RMR Contract. For RMR Units operating under Condition 1, if an RMR Owner desires to compete in the market, the Scheduling Coordinator on behalf of each RMR Owner, submits Bids in the Day-Ahead Market or in the HASP for dispatch in the RTM. The dispatch level determined in the CCR, based on the competitive Bids submitted on behalf of an RMR Unit operating under Condition 1, will be settled as a Market Transaction under the RMR Contract at the relevant LMP (either Day-Ahead or Real-Time). If the dispatch level in the ACR is greater than the dispatch level in the CCR, the Day-Ahead Schedule and/or the Dispatch Instruction will provide a flag indicating that the RMR Unit is providing service under the RMR Contract. In this case, the difference between the dispatch level indicated in the Day Ahead Schedule and the Day Ahead Market CCR dispatch level and/or the difference between the HASP CCR dispatch level and the actual Real-Time Dispatch Instruction will be compensated as a Nonmarket Transaction under the RMR Contract.

#### G. Inter-SC Trades

In Paragraph 472 of the September 21 Order, the Commission noted that:

the CAISO's Inter-SC Trade settlement service provides a settlement service for the contractual delivery of energy, which would appear to eliminate the increased credit risk for Scheduling Coordinators identified by Turlock. However, while MRTU Tariff section 11.9.1 states that 'the respective settlement amounts

between the parties for each market shall net to zero,' the rest of the tariff section appears to indicate that the settlement amounts may not net to zero. Accordingly, we direct the CAISO to submit a compliance filing within 60 days of the date of this order that clarifies this ambiguity in section 11.9.1.

The CAISO offers the following clarification, which it believes obviates any need for any changes in the tariff language of Section 11.9.1. The language quoted above from MRTU Tariff Section 11.9.1 is accurate: Inter-SC Trades involve two parties trading a specific MWh quantity at a specific location, which will always net to zero. The balance of MRTU Tariff Section 11.9.1 describes how Physical Trades are settled depending on whether they are in the Day-Ahead Market or in the HASP and whether any portion of the Physical Trade is unvalidated. Unvalidated portions of Physical Trades are not settled at the PNode specified in the Physical Trade but rather at the relevant Aggregated Pricing Node. In all cases, the Settlement amounts between the two parties to Inter-SC Trade, including Physical Trades net to zero.

The fact that the Settlement amounts for all Inter-SC Trades, including Physical Trades, net to zero does not mean that Inter-SC Trades have no effect on an SCs' credit posting requirements, but there is no aggregate increased credit risk, which was Turlock's concern as noted in Paragraph 471 of the September 21 Order. For example, an SC on behalf of a Load Serving Entity, typically a net buyer, will have its estimated aggregate liability ("EAL") calculated pursuant to Part 12 of the MRTU Tariff reduced by the Settlement amount when taking contractual delivery of Energy through an Inter-SC Trade. The Inter-SC Trade service is used by parties to bilateral energy contracts where the energy buyer pays the energy supplier outside of the CAISO settlement process. Through the Inter-SC Trade settlement service, the CAISO market payment to the supplier and CAISO market charges to the Load-Serving Entity ("LSE") are reversed thereby eliminating double payment to supplier and double charges to the buyer. As a result, the Inter SC Trade will reduce the EAL of the SC on behalf of the LSE in comparison to what the EAL would have been if it had not used the Inter-SC Trade Service. At the same time, the counterparty SC making contractual delivery through the Inter-SC Trade will have, in effect, its EAL increased by the same amount. Since the counterparty SC is likely to be a net seller, the result would be that the amount payable by the CAISO to the counterparty SC would be reduced by the Settlement amount. Given that Inter-SC Trades affect both sides of the ledger, there is no additional credit risk to the market. As stated above, the EAL of the individual parties to the Inter-SC Trade will change, but the net change will be zero. With respect to both parties to the Inter-SC Trade, as with all Market Participants, the CAISO will compare each party's EAL against its Aggregate Credit Limits and request additional collateral as appropriate. 11 The CAISO's credit policy is reflected in Section 12 of the Tariff and is intended to mitigate

Section 12 of the MRTU Tariff will be updated to incorporate tariff amendments accepted by the Commission in Docket No. ER06-700.

credit risk faced by suppliers by ensuring that net debtors in the CAISO's markets are creditworthy or post financial security to cover their EAL.

#### H. Cost Recovery and Allocation Issues

In Paragraph 269 of the September 21 Order, the Commission also directed the CAISO to more clearly define "excess costs" throughout the MRTU Tariff, including all cases where excess costs are incurred, not just from Condition 2 RMR units.<sup>12</sup> In compliance with this directive, the CAISO is proposing to amend the definition of "Excess Cost Payments" to clarify that these are payments made to Scheduling Coordinators and PTOs, in addition to Condition 2 RMR Units, in order to settle Exceptional Dispatches as described in Section 11.5.6.2.5 of the MRTU Tariff. The CAISO has also moved the last sentence of what was previously in Section 11.5 to Section 11.5.4.2. This was necessary because the CAISO needed to reference this language to describe the settlement of costs in Section 11.5.6.3.2 for Section 11.5, and this was difficult to do so without isolating the allocation language referred to in the last sentence only. In addition, the CAISO intends to clarify this sentence in a later filing to stipulate that the amounts allocated as described in this new proposed Section 11.5.4.2 do not include the Real-Time Congestion Offset. The Real-Time Congestion Offset consists of the congestion revenues collected net of any congestion credit provided to ETC and TOR Self-Schedules to reverse their congestion payments consistent with the "perfect hedge" treatment. The Real-Time Congestion Offset is allocated to all Measured Demand except for the Measured Demand associated with the ETC and TOR Self-Schedules. The CAISO has provided two new defined terms: "Real-Time Congestion Fund" and "Real-Time Congestion Offset" to implement these changes. It is necessary to make these changes at this time to ensure that the CAISO clearly defines the allocation methodology for Excess Costs Payments as required by the Commission in Paragraph 269. Finally, the CAISO has made some minor editorial changes to harmonize other MRTU Tariff Sections with this clarification.

In Paragraphs 219-220 of the September 21 Order, the Commission found that the settlement of emergency energy should be addressed in the MRTU Tariff, and directed the CAISO to include a provision addressing the settlement of emergency energy in the MRTU Tariff in the 60-day compliance filing.<sup>13</sup> The Commission also stated that such provision should not supersede any current contractual agreements that may exist.<sup>14</sup> In compliance with this directive, the CAISO proposes to add a new Section 11.5.8 to the MRTU Tariff to set forth the rules for settlement of emergency Energy. Section 11.5.8 will apply only in the absence of an agreement accepted by the Commission governing the terms of emergency assistance. Under Section 11.5.8.1, emergency Energy purchased by the CAISO will be paid either (1) a negotiated price agreed upon by the CAISO and

See also P. 1331, which directed that CAISO to make the proposed clarifications in Appendix A to the CAISO's Reply comments, which included clarifications to tariff sections relating to "Excess Costs."

<sup>3</sup> September 21 Order at P 219.

<sup>14</sup> Id.

the seller or (2) a price established by the seller for such emergency assistance in advance. If no price is established prior to the delivery of the emergency Energy, the default price will be the simple average of the relevant Dispatch Interval LMPs at the applicable Scheduling Point, plus all other charges applicable to imports under the CAISO Tariff (anticipated to be few, if any). If the default Settlement price is determined by the seller not to compensate the seller for the value of the emergency Energy delivered to the CAISO, then the seller will have the opportunity to provide the CAISO with cost support information demonstrating that a higher price is justified. The CAISO will have the discretion to pay that higher price based on the seller's justification of this higher price. Under Section 11.5.8.2, for emergency Energy provided by the CAISO, the CAISO will charge the simple average of the relevant Dispatch Interval LMPs at the applicable Scheduling Point, plus all other charges applicable to exports from the CAISO Control Area. With regard to allocation of the excess costs of any CAISO purchases of emergency Energy, the CAISO will allocate those costs in a manner similar to the allocation of the excess costs of Exceptional Dispatches for emergency conditions, as set forth in the proposed changes to Section 11.5.8.1.1.

In Paragraph 279 of the September 21 Order, the Commission directed the CAISO to clarify export schedules in the context of Section 11.5.3 of the MRTU Tariff. The term "export schedule" pertains to the entire phrase "Real-Time Interchange export schedules," which is one of the elements of Measured Demand. The CAISO proposes to provide a definition for Real-Time Interchange Export Schedules as follows: "An agreement to transfer energy from the CAISO Control Area to a interconnected control area at a Scheduling Point 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 control areas involved in the transaction. The CAISO notes that in Section 11.5.3, Real-Time Interchange Export Schedules for UFE are based on the Real-Time Interchange Export Schedules from the relevant Utility Service Area. Therefore, in allocating Unaccounted For Energy ("UFE"), the Real-Time Interchange Export Schedules are based on which UDC the applicable Scheduling Point is located.

In Paragraph 516 of the September 21 Order, the Commission agreed with commentators that the current bid recovery penalties for deviation outside of the tolerance band are improper. The Commission also found that the CAISO's proposed solution was not sufficient and directed the CAISO to revise the MRTU Tariff to also comply with additional principles related to recovery of such costs. As described further below, the CAISO has provided changes to section 11.8 and applicable subsections to ensure that the bid cost recovery method is consistent with the Commission's directives in Paragraph 516.

The CAISO recognizes that providing this definition requires that the CAISO replaces all instances where "Real-Time Interchange export schedule" appears with "Real-Time Interchange Export Schedules." The CAISO will complete this task at the same time that it provides its revisions to defined terms. As noted above, the CAISO has requested an extension of time to submit these definition revisions.

As a starting point, the CAISO made changes to sections 11.8.2.1, 11.8.2.1.4, 11.8.2.1.5, 11.8.4.1, 11.8.4.1.4, and 11.8.4.1.5 to ensure that it will rescind energy bid cost recovery in the DAM and RTM but not rescind fixed-cost recovery for start-up and minimum load costs in the DAM, RUC and RTM, as it had committed to do in its reply. Consequently, only IFM and RTM, Energy Bid Costs will be set to zero if the supply is less than what was in the Day-Ahead Schedule. This is also consistent with the Commission's requirement that resources that fall short of day-ahead dispatch instructions should only be guaranteed the recovery of costs associated with the energy actually provided, and should not receive payments for deviations from dispatch instructions. This also ensures that a resource that starts up and provides more energy than is instructed by the CAISO retains the original recovery calculated by the CAISO in the day-ahead market, but that resource is not be eligible for any additional bid cost recovery associated with its additional, uninstructed output. To further guarantee this requirement, the CAISO has inserted language in Section 11.8 to indicate in the first instance that if a unit is not on in any given settlement interval it is not eligible for any Bid Cost Recovery.

In Paragraph 539 of the September 21 Order, the Commission found that the CAISO had not justified the "socialized allocation" of Real-Time Uplift costs, and directed the CAISO to modify the MRTU Tariff in order to allocate Real-Time Bid Cost Recovery ("BCR") costs in a two-tier method similar to Day-Ahead BCR costs. <sup>16</sup> In its October 23 Request for Rehearing/Clarification of the September 21 Order, the CAISO requested that the Commission reverse this ruling, explaining that there was simply no feasible method to allocate Real-Time BCR costs in a two-tier method in a manner consistent with principles of cost causation, and therefore, any methodology the CAISO chose to allocate the first tier of such costs would be entirely arbitrary.

Because there is no practical method to allocate these costs consistent with cost causation, the CAISO has not included in this filing tariff modifications allocating Real-Time BCR costs in two-tiers. If for some reason the Commission does not grant the CAISO's request for rehearing on this issue and continues to require the CAISO to allocate Real-Time BCR costs in two tiers, the CAISO requests that the Commission provide clarification to the CAISO in terms of what methodology the CAISO should use to allocate the first tier of such costs, and grant the CAISO an extension of time to make the necessary tariff changes until after the Commission provides such clarification.

#### I. Constrained Output Generators

In P 550 of the September 21 Order, the Commission found that the CAISO needed to modify the title of this provision because COGs are by definition not flexible resources. In addition, the Commission found that since Section 27.7 concerns COGs, it is unclear why Section 27.7.1.3 is included in this section of the Tariff, and directed the CAISO to delete the provision, move it to another section of the tariff, or explain why it

September 21 Order at P 539.

belongs in this section of the tariff. In the present filing the CAISO proposes to change the title and revise the text of Section 27.7.1.3, and explains herein why it is appropriate to have this provision at this location in the tariff.

One consequence of Sections 27.7.1, 27.7.1.1 and 27.7.1.2 is that the Energy Bids of COG resources are fixed for six months and cannot vary on an hourly basis in the CAISO's IFM and RTM, except for any adjustments resulting from indexing to gas prices. As explained in Section 27.7.1.2, a COG's Energy Bid is determined from its Minimum Load Cost. According to Section 27.7.1.1, this Minimum Load Cost is either a cost-based value that can vary only in a formulaic manner with gas prices, or an arbitrary value submitted by the COG and fixed for six months. This is consistent with the rules governing Minimum Load Costs for other Generating Units. The inability of COG resources to submit market-based Energy Bids is thus a consequence of the following realities: (1) the Pmax and Pmin of a COG are the same MW value, so that committing a COG at Minimum Load Cost is the same as the cost of dispatching the COG at its Pmax, (2) the Minimum Load Cost must serve in a consistent manner as both a parameter for unit commitment by the CAISO and as an Energy Bid for dispatch of Energy, and (3) the Minimum Load Cost submission is subject to requirements that apply consistently to all generating units, not just COGs.

Section 27.7.1.3 is included in this part of the tariff based on the rationale that COGs may wish to submit different market-based Energy Bids for different days or hours in the CAISO markets. Based on the realities noted above, the only way to allow this flexibility is to provide the option for COGs to waive COG status in the CAISO markets and be treated as flexible resources (hence the original title, "Flexible COG Dispatch Option"). Based on the confusion created by the original title, the CAISO proposes to change the title of Section 27.7.1.3 from "Flexible COG Dispatch Option" to "Eligibility to submit market-based Energy Bids by waiving COG status," which correctly reflects the purpose of the section.

Under this option, a COG would submit different Pmin and Pmax values,<sup>17</sup> would file Minimum Load Cost that is associated with its Pmin, and would be able to submit Energy Bids for the range between Pmin and Pmax just like a non-COG resource. By waiving COG status in this manner, the resource will be dispatched and settled like a non-COG resource, and as such will be eligible to set prices. If, however, the COG does not really want to operate at operating levels other than zero or its Pmax, it will be subject to Imbalance Energy and uninstructed deviation charges as a non-COG resource.

It should be noted that the "constrained" property of COG is in general an economic constraint related to emissions rather than a physical operating limitation. That is, the emissions characteristics of COGs are such that (1) the major emissions impact of running a COG is realized once the resource is started up, so it is economically inefficient to use up its limited number of start-ups or run hours by operating at anything less than Pmax, and (2) the production of pollutants is generally higher per MWh at operating levels lower than Pmax. This does not mean, however, that it is physically impossible for COG to operate at operating levels lower than Pmax, hence the rationale for the tariff provision discussed here.

One further restriction on COG resources that choose to waive COG status in order to submit market-based Energy Bids is needed for reliability reasons. Given the fact that COG will nearly always operate at Pmax, it could be problematic if the CAISO's Real-Time Economic Dispatch were to issue the COG a Dispatch Instruction for an operating level that was very different from its Pmax, for this would cause a predictable discrepancy between the RTED results and actual RT operating behavior. This concern is alleviated by stipulating that the dispatchable range of a COG who elects this option cannot exceed 3 MW or 5 percent of Pmax, whichever is greater. This range is adequate to allow the COG to submit market-based Energy Bids while maintaining a realistic Pmin and Minimum Load Cost for unit commitment purposes, and preventing any adverse impacts on RT operations. In order to further clarify Section 27.7.1.3, the CAISO proposes to add the following statement in section 27.7.1.3 as the first sentence of that section: "Under this election the COG's PMin must be greater than or equal to its PMax minus the maximum of 3 MW or 5 percent of PMax."

#### J. LAP Load Settlement

In Paragraph 618 of the September 21 Order, the Commission ordered the CAISO to revise MRTU Section 31.3.1.2 to include the parameters that will govern the CAISO's relaxation of constraints if economic bids cannot clear the market. In compliance, the CAISO is proposing to add to Section 31.3.1.2 a number of rules concerning relaxing transmission constraints. First, no constraints on Western Electricity Coordinating Council ("WECC") Rated Paths or interties with adjacent Control Areas will be relaxed and only those transmission constraints that can be managed in the Real-Time Market run or Real-Time operation can be relaxed. Section 31.3.1.2 also sets forth the criteria used to assess whether or not a constraint can be mitigated in Real-Time. The higher of the facility rating or the pre-IFM flows through the facility with relaxed constraints in this will be used as hard limits in IFM. To avoid unwarranted price impact in IFM, a constraint violation penalty equal to three times the prevailing Energy Bid cap will be applied to the constraints relaxed between their operating limit and the relaxed limit determined in this process. Finally, any relaxed constraints will be forwarded to the Real-Time Market together with the necessary mitigating measures.

#### K. Metered Subsystems

In response to concerns expressed by commenters about a Metered Subsystem's ("MSS") ability to follow its load, given MRTU Section 34.12's requirement that MSS Operators are responsible for following Dispatch Instructions, the Commission noted its

Although the need to limit the dispatchable range between PMin and PMax to a few MW was not captured in the MRTU Tariff language filed in the MRTU Tariff Filing, this was an oversight as the matter was discussed with stakeholders in the process leading up to the Tariff filing. See the CAISO's "Notice of Clarification of MRTU Design Features," dated January 13, 2006, which was the basis of a stakeholder conference call on January 20, 2006. This document is attached to the present filing as Attachment D, with the relevant passage highlighted for easy reference. The "few MW" restriction was also discussed in the testimony of Lorenzo Kristov attached to the MRTU Tariff Filing, Exh. ISO-1 at 84.

agreement that Load-following MSSs should not be hindered from following their load. The Commission noted that the CAISO's intent with respect to Section 34.12 was not clear, and ordered the CAISO to clarify Section 34.12 and "clearly set forth the applicability of dispatch instructions to load-following MSSs." In compliance, the CAISO is amending Section 34.12 to provide that "MSS non-Load following resources" rather than "MSS Operators" are responsible for following Dispatch Instructions. Also, the CAISO is proposing to add language to this section to state that "MSS Load-following resources can deviate from Dispatch Instructions in Real-Time to facilitate the following of load without being subject to the Uninstructed Deviation Penalty as further described in Section 11.23 of the CAISO Tariff." This new language will ensure that Load-following MSSs will not be hindered in their ability to follow their load.

The CAISO has amended Section 31.5.2 in its entirety in order to comply with the Commission's directive in paragraph 652 of its September 21 Order, which stated that the CAISO should clarify that "31.5.2.2 is applicable only to a non-load-following MSS." The reference to section 31.5.2.2 in this Paragraph is incorrect and was precipitated by an error in the CAISO's Answer filed on May 16, 2006 which stated the following: "The CAISO clarifies that an MSS entity that elects to be a Load-following MSS is automatically electing to Opt-Out of RUC Procurement. This aspect of the MSS proposal needs to be reflected in the MRTU Tariff. In other words, the CAISO agrees with NCPA and Cities/M-S-R that a Load following MSS is not subject to Section 31.5.2.2; rather, Section 31.5.2.2 of the MRTU Tariff is applicable only to a non Load-following MSS, which retains the choice to Opt-in or Opt-Out of RUC Procurement. The CAISO will provide the conforming tariff changes in a compliance filing." The CAISO had intended to say that 31.5.2.2.2, which is where the penalties for deviating non-Load following MSS Operators reside, does not apply.

In Paragraph 671 of the September 21 Order the Commission directed the CAISO to modify tariff language to not allow an MSS to designate an RMR as a Load-following resource. Pursuant to further discussions with NCPA, the CAISO has determined that the designation of RMR units as Load-following resources may be permissible with certain rules in place to ensure that such designation does not jeopardize the CAISO's ability to dispatch the RMR unit for local reliability. The CAISO is currently working with NCPA to develop such rules and will be conducting a stakeholder process to solicit further comments from all market participants. While the CAISO acknowledges the Commission's directive in the September 21 Order, the CAISO believes it is not appropriate to comply with that directive at this time in light of these developments and asks the Commission to allow the CAISO to complete its stakeholder process and subsequently file tariff sheets to reflect the resolution of this issue.

In Paragraph 673 of the September 21 Order the Commission directed the CAISO to either submit tariff language that allows an MSS to change designation of resources as Load-following on a more frequent basis or in the alternative to explain why the CAISO

September 21 Order at P 662.

believes that more frequent modifications are infeasible. As the Commission also noted in the September 21 Order, it is the CAISO's intent to provide maximum flexibility in attempting to integrate MSSs into the MRTU framework.<sup>20</sup> As specified in Section 4.19.13 of the MRTU Tariff, the CAISO will only allow parties to designate once a year as to whether they will or will not Load-follow with their generating resources and also whether their MSS settlements will be subject to gross or net settlement. Once this designation is made the CAISO intends to provide the MSS Operator with as much flexibility as possible in modifying which of its resources within the MSS are designated as the Load-following resources. These designations are stored in the Master File and this information is used by the CAISO's market systems. Changes submitted by parties to the Master File data require processing by the CAISO, which results in a certain lead time between the submission of the changes and when they can take effect. Currently, three to five days are required to make such changes effective. The CAISO therefore has included a provision in Section 4.9.13.2 that parties may make such modifications consistent with the timing requirements for making such Master File changes

The CAISO believes these proposed changes are appropriate and comply with Paragraph 673 of the September 21 Order. First, more frequent changes to Master File are not feasible because of the need for CAISO staff to review and implement such changes. This review and implementation process requires three to five days. Second, while it is true that the Master File database is not intended to be changed frequently, this does not unduly limit the flexibility of Load-following MSSs. Once an MSS designates the pool of resources that it intends to draw from for Load-following purposes, it has the ability to designate - on an hourly basis in the DAM and in the RTM - the amount of capacity of each Load-following resource that will be used for Load Following. Unless the Resource has some other encumbrance on its capacity, such as an RMR contract or a day-ahead Ancillary Services award, this amount of the resource's capacity designated for Load-following in any given hour can be anywhere from zero MW to the full range of the resource's capacity.

#### L. Demand Response and Participating Load

In Paragraph 690 of the September 21 Order, the Commission directed parties interested in further developing demand resources in the CAISO markets to provide proposals to the Commission within 60 days of the date of the order that detail new avenues for incorporating price-responsive demand in MRTU. The Commission further directed the CAISO to collaborate with the interested parties and assist them in developing such proposals.

The CAISO is submitting a separate filing to the Commission today to report on the CAISO's efforts to date in working with interested parties on the development of demand response proposals and to provide initial comments on the integration of demand response into the MRTU market design. Specifically, the CAISO reports on a CAISO

sponsored and facilitated November 2, 2006 MRTU workshop on demand response. The CAISO also reports on the benefits to California of demand response, the CAISO's plan to investigate the idea of forming a California Demand Response Initiative, its plan for supporting Dispatchable Demand Response in MRTU (including enhancing demand response functionality in later releases of the MRTU software), and future opportunities for the greater participation and integration of demand response.

## M. Congestion Revenue Rights

In Paragraph 791 of the September 21 Order, the Commission directed the CAISO to clarify in its 60 day compliance filing why the payment to LSEs acquiring load is based on the current CRR holdings of the LSE losing load, and not the quantity of CRRs awarded to this LSE in the annual allocation process. The CAISO had intended to implement the latter approach and believes that the language in MRTU Tariff Section 36.8.5.1.1 would result in such an outcome. Nevertheless, in order to eliminate any confusion, the CAISO has included in this Section language specifically stating that the value transferred shall be based on the quantity of CRRs awarded to the Load-losing LSE.

In Paragraph 854 of the September 21 Order, the Commission found that the CAISO had not sufficiently explained its proposal to "forgive" outstanding debt in the CRR Balancing Account and directed the CAISO, in the 60-day compliance filing, to further explain its reasoning for forgiving outstanding debt in the annual CRR Balancing Account, and what, if any, subsequent restrictions will be imposed on entities that fail to pay their debt.<sup>21</sup> The CAISO clarifies that there is only one situation in which the CAISO would forgive the debt of a counterflow CRR holder: when the CRR Balancing Account is short at the end of the year and, as a result, all payments and charges to CRR holders are prorated.<sup>22</sup> The Commission expressly found this approach reasonable in Paragraph 853 of the September 21 Order. The CAISO notes however, that in order to complete the task of explaining how the CAISO will forgive outstanding debt the CAISO must clarify for the Commission how the default procedures in Section 11.29 of the MRTU CAISO Tariff would work in relation to the yearly balancing account. In addition, the CAISO believes it would be appropriate to provide stakeholders an opportunity to comment prior to filing on any proposed changes to the default provisions of the tariff as these provisions have been carefully drafted to ensure creditor and debtor rights are adequately balanced. Therefore, the CAISO has concurrent with this filing submitted a motion requesting a 120-day extension of time in order to fully comply with the Commission's directive in Paragraph 854.23

September 21 Order at P 854.

MRTU Tariff, Section 11.2.4.4.2.

See Motion for Extension of Time of California Independent System Operator to Submit Compliance Filings ("Motion for Extension").

Also in Paragraph 854 of the September 21 Order, the Commission directed the CAISO to clarify the term "fixed CRRs." The CAISO is therefore modifying MRTU Tariff Section 36.4.1 to state that CRRs awarded to sponsors of merchant transmission projects in accordance with Section 36.11 will be modeled as fixed injections and withdrawals on the DC FNM to be used in the allocation and auction of CRRs, and that these fixed injections and withdrawals are not modified by the simultaneous feasibility test. This is what the CAISO intended to communicate in this section, and need not have used the potentially confusing term "fixed CRRs" to do so. Moreover, since the term "fixed CRRs" is not used anywhere else in the tariff, in light of the above change the CAISO fails to see the usefulness of making this a defined term.

In P 830 of the September 21 Order the Commission directed the CAISO "to further evaluate whether its proposal to set aside 50 percent of the intertie capacity needs to be modified and to make a compliance filing within 60 days of the take of this order, if necessary." As proposed in the CAISO's Request for Clarification and Rehearing of the September 21 Order, the CAISO provides herein a summary and discussion of the data bearing on this matter that has been obtained to date via the CRR Dry Run. As the CRR Dry Run proceeds and the CAISO conducts discussions with stakeholders regarding the results, the CAISO will place the issue of the intertie set-aside on the agenda for further discussion. Finally, the CAISO will provide an assessment of this matter in its final report on the CRR Dry Run, and at that time will propose any modifications to the filed MRTU Tariff on this matter that are deemed appropriate.

Section 36.8.4.1 of the MRTU Tariff describes the calculation of the set-aside of intertie import capacity for the Annual CRR Auction in CRR Year One. Starting with the total capacity at each Scheduling Point that was available in the DC FNM for the Annual CRR Allocation and Auction process, the CAISO will calculate the amount that remains at each Scheduling Point after subtracting the capacity accounted for by those Scheduling Point CRR Sources submitted by LSEs for verification that have been verified. The CAISO will then set aside 50 percent of this amount at each Scheduling Point for the Annual CRR Auction, and will allow LSEs to nominate pro rata shares of the other 50 percent in proportion to their Seasonal CRR Eligible Quantities.

The same section of the Tariff goes on to describe the calculation of the set-aside of intertie import capacity for the Monthly CRR Auctions in CRR Year One, and for the Annual and Monthly CRR Auctions in CRR Year Two and subsequent years. The data reported herein addresses only the calculation described in the cited Tariff language for the CRR Year One Annual CRR Auction, because that is all that is available at this time. Once the CRR Dry Run is completed the CAISO will also be able to report on the set-aside quantities for the Monthly CRR Auction for those months included in the CRR Dry Run.

The CAISO has included in Attachment E a table that indicates the MW intertie set aside quantities for the Annual CRR Auction for each Scheduling Point modeled in

the DC FNM that is used for the CRR Allocation and Auction processes. The following points are important to keep in mind in considering these numbers:

- For purposes of the Annual CRR Auction and Allocation, the rated capacities of all network facilities are reduced to 75 percent of their full value. The analogous setaside calculation for the Monthly CRR Auction is expected to make significant additional capacity available because it is performed using a FNM whose ratings have been restored to their full value, and then modified to account for expected outages. These additional CRR Dry Run results will be reported in the CAISO's complete dry run report.
- The values in the table in Attachment E represent lower bounds to the amount of import capacity that will be available in the Annual CRR Auction for each Scheduling Point. That is, the MW quantities not set aside for the auction are the upper bounds to the amounts LSEs may be allocated in the three tiers of the Annual CRR Allocation process, but are not necessarily the amounts LSEs will actually receive in the allocation. Smaller quantities could result from the allocation process due, for example, to LSE preferences for other sources. Again, the CRR Dry Run will shed some empirical light on this question.

#### N. Existing Transmission Contracts

In the September 21 Order, the Commission directed the CAISO to submit in its 60 day compliance filing a revision to the MRTU Tariff to: (1) provide for timely notification to Scheduling Coordinators whether an ETC schedule is valid or invalid and (2) provide Scheduling Coordinators a reasonable opportunity to correct identified errors prior to the close of the day-ahead market.<sup>24</sup> The CAISO's scheduling system will provide automated notice to Scheduling Coordinators submitting ETC Self-Schedules whether the ETC Self-Schedule is valid, which notice should be provided to the Scheduling Coordinator very shortly after the submittal of the ETC Self-Schedule. The amount of time for the CAISO's systems to provide this automated response will be specified in the BPMs. This very quick response will provide the Scheduling Coordinator as much time as reasonably possible to correct any errors in its submittal – with opportunity to make such corrections limited primarily by the amount of time prior to the close of the Day-Ahead Market the Scheduling Coordinator submitted the invalid ETC Self-Schedule. To confirm this opportunity, the CAISO is proposing to add a new Section 16.6.4 to the MRTU Tariff clarifying that the CAISO's scheduling system will notify a Scheduling Coordinator whether its ETC Self-Schedule is valid or invalid to the extent practicable after the validation, thereby leaving the Scheduling Coordinator the opportunity to correct any errors.

In Paragraph 971 of the September 21 Order, the Commission, agreeing with commenters that MRTU Tariff Section 30.1 conflates "Bids" with Self-Schedules, ETC

September 21 Order at P 920.

Schedules and self-provision of AS, ordered the CAISO to change the name of Section 30 of the MRTU Tariff to "Bid and Schedule Submissions for all CAISO Markets." The Commission also directed the CAISO to change the name of Section 30.1 to "Bids and Schedules." The CAISO has changed the titles to these two sections. However, instead of referring to "Bids and Schedules," the CAISO is proposing to use the language "Bids, Including Self-Schedules," because the MRTU Tariff defines Bids as including Self-Schedules. These modifications are consistent with the rationale behind the Commission's decision as well as the terminology of the MRTU Tariff.

## O. Transmission Ownership Rights

In the September 21 Order, the Commission found the parameters set forth in MRTU Tariff Section 17 concerning the treatment of TORs were generally reasonable, but incomplete and did not fully assure parties that their bilateral contracts will be honored.<sup>26</sup> Therefore, the Commission directed the CAISO to clarify Section 17 in several respects.

First, the Commission found that the MRTU Tariff needs to specify the "generic" treatment of TORs under MRTU, for instance, that TORs will continue to be exempt from UFE, minimum load compensation, and neutrality charges.<sup>27</sup> The CAISO proposed in its Reply Comments on the MRTU Tariff Filing to modify the MRTU Tariff to include these exemptions, and the Commission ordered the CAISO to do so in the 60 day compliance filing.<sup>28</sup> The CAISO has greatly expanded Section 17 to provide additional details concerning the treatment of TORs. For instance, the CAISO has included settlement rules for TORs in Section 17.3.3. This section also clarifies, as required by the Commission in Paragraph 1003 of the September 21 Order, that absent a specified loss percentage in a bilateral agreement that it must honor, the CAISO will assess Marginal Losses to the Scheduling Coordinators for TOR transactions.

The Commission also directed the CAISO to describe how TORs will be scheduled in the CAISO markets and to identify what information is required for "balanced" and "valid" TOR self-schedules, which are necessary to reverse congestion charges.<sup>29</sup> The CAISO has therefore added Section 17.3, which states that: (1) the CAISO will accept a valid TOR Self-Schedule from a Scheduling Coordinator, (2) a Scheduling Coordinator shall be either the holder of the TOR or its designee, and (3) TOR Self-Schedules submitted by Scheduling Coordinators to the CAISO must be submitted in accordance with this CAISO Tariff. These new provisions are modeled on and very similar to the comparable provisions of Section 16.6 of the MRTU Tariff specifying the scheduling and validation process applicable to ETC Self-Schedules.

<sup>25</sup> *Id.* 

<sup>26</sup> *Id.* at P 987.

<sup>27</sup> Id. at P. 988.

<sup>28</sup> *Id.* 

<sup>&</sup>lt;sup>29</sup> *Id.* at P 990.

The Commission also ordered the CAISO to provide further explanation regarding whether it intends to (1) use or sell unscheduled TOR capacity<sup>30</sup>, or (2) honor all schedule changes by providing scheduling priority and using its Exceptional Dispatch authority. As the CAISO explained in its answer to requests for clarification or rehearing filed with the Commission on November 7, 2006, the CAISO does not intend to use or sell unscheduled TOR capacity. In further compliance with this directive, the CAISO has added Section 17.2 to the MRTU Tariff. This Section provides that the CAISO will accommodate TORs, so that the holders of TORs will receive the same priorities (in scheduling, curtailment, assignment and other aspects of transmission system usage) to which they are entitled under any applicable Existing Contracts or other agreements pertaining to the operation of their TORs. In addition, this Section provides that scheduling deadlines and operational procedures associated with TORs will be honored by the CAISO, provided such information is explicitly included in the Transmission Rights and Transmission Curtailment Instructions ("TRTC"). These new provisions are modeled on the comparable provisions of Section 16.5 of the MRTU Tariff specifying a similar accommodation applicable to ETC Self-Schedules – with the significant enhancement that the CAISO will make a more absolute accommodation for TORs within the CAISO Control Area than for ETCs by reserving TOR transmission capacity through an adjustment to the applicable ATC even within the CAISO Control Area, and by providing higher priority for TOR Self-Schedules than for ETC Self-Schedules in the event of non-economic adjustment. In this regard, the CAISO has further clarified in new Section 17.2 that the CAISO will accommodate valid TOR Self-Schedule changes and any associated parallel flows to the extent feasible through re-dispatch, but that the CAISO will not compensate, and will not seek compensation from, a Non-Participating TO to the extent there are unscheduled parallel flows over TOR facilities or the CAISO Controlled Grid. The CAISO notes that in most instances it expects that such accommodation of valid TOR Self-Schedule changes will be accomplished through the normal Real Time Economic Dispatch and will not require the use of Exceptional Dispatch.

The CAISO also is adding language to the MRTU Tariff to make clear that, when a System Emergency is imminent or threatened, holders of TORs must follow CAISO operating orders even if those operating orders directly conflict with the terms of applicable Existing Contracts or any other contracts pertaining to the TORs. This new provision is very similar to the comparable provision of Section 16.5.1 of the MRTU Tariff specifying the requirement of compliance with CAISO operating orders in System Emergencies applicable to ETC holders.

Finally, the Commission found that Section 17 is silent with respect to TRTC for TOR schedules, and directed the CAISO, in the 60 day compliance filing, to clarify whether TRTC will be required with respect to TORs and, if so, to modify Section 17

accordingly.<sup>31</sup> The CAISO clarifies that TRTC will be required for TOR because these are the means by which the CAISO is able to ensure that submitted TOR Self-Schedules are valid. In compliance with the Commission's direction, the CAISO has set forth in Section 17.1 explicit details concerning TRTC for TOR, including the creation, submission, and content of TRTC. These new provisions are modeled on and similar to the comparable provisions of Section 16.4 of the MRTU Tariff specifying the process for TRTC creation, submission, and implementation applicable to ETC Self-Schedules.

## P. Market Power Mitigation

In the September 21 Order, the Commission directed the CAISO to modify Section 39.6.1.4 of the MRTU Tariff to clarify that bids below negative \$30/MWh are subject to cost verification.<sup>32</sup> In compliance with this directive, the CAISO is adding language to this Section to make clear that if a CAISO dispatches a bid below negative \$30/MWh, the supplier must submit detailed information to the CAISO and the Commission justifying the cost components of the bid no later than seven (7) days after the end of the of the month in which the Bid was submitted. The CAISO will treat such information as confidential. The CAISO proposes to pay suppliers for amounts in excess of the negative \$30/MWh minimum bid price upon Commission acceptance of the information justifying the cost components.

In Paragraph 1057 of the September 21 Order, the Commission directed the CAISO to file negotiated Default Energy Bids with the Commission. In its Request for Rehearing/Clarification, the CAISO requested that the Commission clarify that this obligation would be fulfilled by the CAISO's filing negotiated Default Energy Bids once per month with the Commission on an informational basis. The CAISO's proposed tariff language on this issue, as included in this filing, is consistent with the CAISO's requested clarification.

Also, in Paragraph 1059 of the September 21 Order, the Commission directed the CAISO to provide procedures for dispute resolution in the event that a Market Participant and the CAISO cannot agree on a negotiated price, and to clarify the procures that a Market Participant must follow in order to exercise the negotiated option and the types of information that it must provide. In its Request for Extension filed concurrently with this compliance filing, the CAISO is requesting a 30-day extension of time to comply with these mandates. As the CAISO explains therein, such an extension is necessary in order to provide the CAISO with sufficient time to conduct a stakeholder process to develop appropriate tariff modifications. Therefore, the CAISO is not including proposed tariff language in this filing addressing this issue.

<sup>31</sup> *Id.* at P 1000.

<sup>32</sup> *Id.* at P 1021.

## Q. Resource Adequacy

#### 1. Applicability

The September 21 Order recognized the importance of clearly defining "Load Serving Entity" for purposes of administering MRTU's Resource Adequacy ("RA") provisions and directed the CAISO to "ensure that all entities ... are appropriately included and defined." The CAISO has complied with this directive by not only clarifying the tariff definition of Load Serving Entity in Appendix A to the MRTU Tariff, but also by establishing an exemption in Section 40.1 for Load Serving Entities serving de minimis load. De minimis load is defined as actual metered peak Demand during the preceding twelve (12) months of less than one (1) megawatt. This exemption is consistent with the Commission's order on the CAISO's Interim Reliability Requirements Program ("IRRP") that required accommodation for Load Serving Entities that represent de minimus Demand by allowing "flexibility in reporting requirements." The CAISO's experience with the IRRP indicates that the administrative burdens on the CAISO and Load Serving Entity significantly outweighs the limited benefits to reliability that may accrue from imposing "flexible" reporting requirements on such Load Serving Entities.

The September 21 Order found that the CAISO should "treat the Bureau of Reclamation in the same manner as it treats the State Water Project" given that "the issues that require it to work with the State Water Project ... are also present with the Bureau of Reclamation." However, the September 21 Order rejected exempting the State Water Project from the RA requirements of MRTU and directed the CAISO to delete the sentence requiring the development of a comparable RA program for the State Water Project. Based on the foregoing, the CAISO has not modified the MRTU tariff to include special provisions to address either the State Water Project or the Bureau of Reclamation.

<sup>33</sup> Id. at P 1138.

California Independent System Operator Corporation, 115 FERC ¶ 61,172 (2006) at P 56.

The CAISO added Section 40.1.1 to distinguish the requirement that Load Serving Entities make an election regarding Reserve Sharing or Modified Reserve Sharing status from the "applicability" provision in Section 40.1. In addition, the CAISO has clarified in Section 40.1.1 that if a Scheduling Coordinator fails to make the election, the LSE will be deemed to be a Reserve Sharing LSE. Permitting this default classification is necessary to comply with the Commission's requirement that the CAISO may establish a default Reserve Margin should the regulatory body for the Load Serving Entity not voluntarily select a desired status. Absent this provision, the CAISO would have no structured mechanism to evaluate compliance with the default Reserve Margin.

September 21 Order at P 1141.

<sup>37</sup> Id. at P 1139.

#### 2. Reserve Margin

The September 21 Order directed the CAISO to modify its RA proposal to create a 15 percent default reserve margin rather than a 15 percent reserve requirement.<sup>38</sup> The discussion leading to this conclusion only refers to the reserve margin of LSEs not subject to the jurisdiction of the California Public Utilities Commission ("CPUC"). The Commission's focus on non-CPUC jurisdictional LSEs is understandable given that the CAISO's MRTU proposal dictated a reserve margin obligation only for non-CPUC jurisdictional LSEs. However, the CAISO has interpreted the requirement to establish a default reserve margin as applicable to all LSEs regardless of jurisdiction. This interpretation is consistent with the September 21 Order's statement, in the context of the Commission's "authority to approve" discussion, that "the default MRTU Tariff *system* requirements are triggered only when state and Local Regulatory Authorities have failed to act in order to ensure resource adequacy."<sup>39</sup> The CAISO has, therefore, modified Section 40.2 et seq. to: (1) defer to Reserve Margin requirements adopted by state, Local Regulatory Authorities, and federal agencies and (2) include default requirements for all LSEs, including CPUC jurisdictional LSEs.

The imposition of a default Reserve Margin requirement, without more, fails to provide the CAISO with the tools sufficient to ensure resource adequacy. As the CAISO stated in its supporting testimony, an RA program, in order to protect system reliability, should include certain basic elements.<sup>40</sup> The Reserve Margin is one element. Other elements include Demand forecasts, resource counting criteria, resource reporting requirements, locational capacity requirements, availability obligations, and compliance provisions. The MRTU proposal originally contained generally applicable or default provisions covering locational capacity requirements, availability obligations, and resource counting criteria. The CAISO did not comprehensively include in the MRTU Tariff default provisions for CPUC jurisdictional LSEs should the CPUC fail to act. Consistent with the Commission's directive to establish uniformly applicable default Reserve Margin obligations, the CAISO has modified the informational requirements to include default provisions covering CPUC jurisdictional LSEs for both Reserve Sharing LSEs and Modified Reserve Sharing LSEs (See Section 40.2 et seq.) in order to assure all program elements are covered, if necessary, if Local Regulatory Authorities, including the CPUC, fail to act.

<sup>38</sup> Id. at P 1155.

Id. at P 1118. It should also be noted that the imposition of a default Reserve Margin requirement on CPUC jurisdictional LSEs is consistent with the Commission's decision not to exempt Golden State Water despite the absence of adoption by the CPUC of an RA program for "small" LSEs under its jurisdiction.

Docket ER06-615-000 (Feb. 9, 2006), Attachment J, Testimony of Mark Rothleder at 29:9-30-6.

## 3. Local Capacity

The September 21 Order directed the CAISO to include in the MRTU Tariff, rather than in a Business Practice Manual, the safeguards it intends to utilize to mitigate concerns regarding unnecessary CAISO local backstop procurement. The CAISO has included these safeguards in Section 40.3.4 as well as new Sections 40.3.4.1 and 40.3.4.2 of the MRTU Tariff. With regard to these safeguards, two aspects should be emphasized.

First, the CAISO has explicitly committed, among other things, to refrain from engaging in backstop procurement activity, notwithstanding any particular LSE's failure to satisfy its Local Capacity Area Resource obligation, unless confronted with an inability to comply with Applicable Reliability Criteria even after considering all Resource Adequacy Capacity Resources wherever located. This issue was raised by Six Cities, and while the Commission did not require the CAISO to make this change, it did ask the CAISO to consider the merits of the proposal.<sup>41</sup> The CAISO has done so and believes it will prevent over-procurement of backstop Local Capacity Resources.

Given this safeguard, the CAISO believes it is imprudent to "require" an additional opportunity for LSEs to procure resources to resolve the shortfall prior to the CAISO engaging in backstop procurement activity. In the CAISO's view, this applies to both the circumstances where an LSE fails to meet its obligation or where, although each LSE has procured sufficient Local Capacity Area Resources to meet its obligation, the collective portfolio cannot meet all Applicable Reliability Criteria. While this latter "collective shortfall" is likely to be rare, it may occur if a particular Generating Unit needed to resolve a particular constraint or contingency is not among the procured resources or if the effectiveness of the collective resources is insufficient. In the first scenario, providing a second procurement opportunity where an LSE is found to be deficient creates an improper incentive by allowing an LSE to potentially wait to procure in the hopes of "piggybacking" on the procurement of other LSEs.

With respect to the second "collective shortfall" scenario, the CAISO acknowledges that the CPUC's recent decision on local resource adequacy requirements provides that the "the CAISO will work with the [CPUC] to provide the LSEs with an opportunity to procure the deficiency before the CAISO engages in backstop procurement." The CAISO's tariff does not preclude such opportunity, but does not require it. Moreover, the CAISO believes that procurement of such "collective shortfall" by a particular LSE is impractical and contrary to cost-causation principles. Where all LSEs have meet their initial burden, but additional Local Capacity Area Resources are needed, the needed capacity and the resulting reliability benefits accrue to the entire market and its costs should be allocated accordingly.

September 21 Order at P 1198.

<sup>42</sup> Opinion on Local Resource Adequacy Requirements, CPUC D.06-06-064 (June 2006) at pg. 61.

Second, the CAISO has included language in Section 40.3.4.1 that permits the CAISO to procure a Generating Unit or Participating Load even where only a portion of the resource is needed to cover the megawatt deficiency in the Local Capacity Area. This provision accommodates the "lumpiness" of resource procurement as well as acknowledging that a needed resource must generally recover costs associated with the entire facility. However, to the extent the CAISO procures capacity in excess of a particular LSE's deficiency, the costs of the excess capacity will be allocated to all Scheduling Coordinators on a pro rata basis in accordance with the represented LSE's proportionate coincident share, on a gross Load basis, of the previous annual peak Demand in the TAC Area.<sup>43</sup>

The September 21 Order further requires the CAISO to clarify (1) why sections 40.3.4 and 42.1.8 both address allocation of local capacity area resource procurement; and (2) why Section 40.3.4(ii) permits allocation of local capacity area resource procurement in accordance with Section 41 on procurement of RMR. With respect to the first question, the CAISO clarifies that the intent is for Section 40.3.4 to address "when" the CAISO can engage in procurement of Local Capacity Area Resources and Section 42.1.8 to address how the costs of such procurement will be allocated. Section 40.3.4(i) addresses where one or more LSEs fail to procure sufficient Local Capacity Area resources and an overall deficiency exists. In that circumstance, the cost of the backstop procurement is allocated pursuant to Section 42.1.8(a) to the Scheduling Coordinators representing the deficient LSEs. However, if, because of the potential "lumpiness" of procurement, the CAISO procures a quantity of capacity that exceeds the aggregate deficiency, the cost of the excess capacity will be allocated under Section 42.1.8(b) and (c) on a pro rata basis to each Scheduling Coordinator that serves Load in the TAC Area in accordance with the Load Serving Entity's proportionate coincident share, on a gross Load basis, of the previous annual peak Demand in the TAC Area. Section 42.1 is utilized because it permits CAISO procurement in a manner that allows assignment of costs to those entities responsible for the costs. This is in contrast to Section 41 regarding RMR procurement. The costs of RMR procurement are allocated to market participants through the relevant PTOs reliability services tariff. Accordingly, it would be inappropriate to procure pursuant to RMR authority where the deficiency can be traced to particular market participants.

Section 40.3.4(ii) addresses the circumstance where despite each LSE meeting its allocated responsibility of Local Capacity Area Resources, an aggregate deficiency still exists in that the CAISO cannot satisfy Applicable Reliability Criteria. As described above, this "collective shortfall" may occur because the individual Local Capacity Area Resources procured by LSEs may total the necessary MWs, but fail to address all reliability requirements due to relative effectiveness factors or the omission of particular required resources for specific constrained locations.

The State Water Project questioned the merits of utilizing the previous year's annual peak Demand. The CAISO addresses the State Water Project's concern below.

The cost allocation under a collective shortfall implicates the second question included in the September 21 Order. Under collective shortfall circumstances, the CAISO proposes to utilize its procurement authority under both Section 41, related to RMR contracts, and Section 42.1. The difference being that the CAISO will utilize its authority to enter into RMR contracts to resolve reliability needs currently studied under the Local Area Reliability process, and Section 42.1 to obtain capacity needed to resolve reliability needs exclusively identified in the Local Capacity Area study under Section 40.3. For this latter circumstance, the CAISO will utilize Section 42.1.8 because it authorizes procurement of capacity for which the costs may also be spread based on relative load in the TAC Area.

The September 21 Order indicated that the CAISO should clarify that entities that pay for the CAISO's backstop procurement will receive credit for both local and system RA requirements. <sup>44</sup> The CAISO has clarified in Section 40.3.4 that LSEs will receive a credit toward their Local Capacity Area Resource responsibility to the extent the LSE was allocated the cost of the procurement. However, the CAISO believes it is inappropriate for it to unilaterally allocate credit for capacity procured by the CAISO, whether for local or system purposes, towards meeting a Reserve Margin requirement adopted by the CPUC or other Local Regulatory Authority. In other words, the CAISO does not believe it has the authority to determine what resources should "count" toward compliance with the Reserve Margin unless that Reserve Margin is applied to the LSE through the default mechanism. Section 42.1.8 also reflects this concept with respect to procurement to capacity to satisfy system RA requirements.

#### 4. Availability Requirements

The September 21 Order directed the CAISO modify the MRTU Tariff with regard to Powerex's request that Scheduling Coordinators for RA system resource units be able to submit revised energy bids in the HASP if their bids are not selected in the day-ahead market.<sup>45</sup> The CAISO notes that the MRTU Tariff already reflects this right in Section 30.5.1. Accordingly, the CAISO believes that it has already complied with the Commission's directive, and that further modification to the MRTU Tariff is therefore unnecessary.

## 5. Response to the State Water Project

The September 21 Order directed the CAISO "to address the merits of the State Water Project's proposed modification to section 42.1.8 which the State Water Project believes will allow load to respond to price."<sup>46</sup> The State Water Project claimed that Section 42.1.8's allocation of backstop procurement based on the previous annual peak demand may dampen efforts to alter loads to respond to a price signal and suggests that a

September 21 Order at P 1196.

<sup>45</sup> *Id.* at P 1286.

<sup>46</sup> *Id.* at P. 1198.

one-year transitional approach be employed that would utilize the participating load's projections of contributions to coincident peak and qualifying capacity, with a true-up to correct any projection inaccuracies.

The CAISO believes that the changes to Section 42.1.8 otherwise provided by the CAISO will largely address the State Water Project's concern, and that any additional implementation of the proposal would add an unwarranted complication to the allocation of any residual costs for backstop procurement beyond those directly assigned to the Scheduling Coordinators who are short in their Resource Adequacy Plans. As described above. Section 42.1.8 provides for two tiers of cost allocation with the first tier assigning costs only to those Scheduling Coordinators who failed in their annual or monthly Resource Adequacy Plan to demonstrate that they had procured sufficient Local Capacity Area Resource or other Resource Adequacy Capacity to satisfy their Reserve Margin plus peak Demand. The CAISO must use the criteria provided by the Local Regulatory Authority for determining Qualifying Capacity. There is no prohibition on new resources, including new Participating Loads, from counting as qualifying capacity, even if there is no historical performance data. Accordingly, the fact that the prior year's coincident peak is used to determine relative cost responsibility for tier 2 costs does not prevent an LSE from obtaining full value from new demand-side products. Thus, the State Water Project's proposal for a true up based on actual reductions adds an unwarranted complication and is unnecessary.

## R. Settlements Process Changes

In Paragraph 1347 of the September 21 Order, the Commission found that it did not have sufficient information to determine whether changes to Section 11.29.7 are necessary in order to address the issue raised by PG&E regarding the Settlements Cycle provisions contained in the MRTU Tariff and also more specifically the details in Section 11.29.7.1.1, which states that the components of the charges will be provided in the Settlement Period but does not provide the components necessary to validate LMP prices. The Commission directed the CAISO to make a compliance filing to respond to these issues raised by PG&E. As a preliminary matter, the CAISO agrees that revisions are required to Section 11.29 to ensure that the language in the Tariff consistently reflects the settlement statements content and procedure under the new settlement and market clearing ("SaMC") software to be implemented at the start of MRTU. In compliance with the Commission's request for additional information on the settlement process, the CAISO provides the following explanation regarding the changes it proposes to make in order to explain why the CAISO believes it is necessary to make some changes to Section 11.29. The CAISO will provide further details in support of its changes when it makes its tariff filing including such changes in early 2007.

In terms of process regarding this issue, the CAISO notes that the details of the new SaMC procedures have been fully detailed and shared with stakeholders through the

stakeholder process on review of the Business Practice Manuals this past summer.<sup>47</sup> The CAISO is currently preparing to submit a filing with the Commission to reflect the new processes and details for settlement statements as necessary in the MRTU Tariff, and intends to make such filing early in 2007. In addition, the CAISO also notes that in response to Paragraph 854 of the September 21 Order, the CAISO will be providing changes to the default provisions in section 11.29 to address defaults by CRR Holders.<sup>48</sup> The CAISO believes that it would be appropriate to combine all changes to Section 11.29 at the same time, which will allow the Commission to consider changes to that Section as a whole. Therefore, the CAISO believes that the Commission should reserve judgment on the sufficiency of the details in Section 11.29 until the CAISO has made such filing.

At the start of MRTU, the CAISO is planning to implement the settlements and market clearing ("SaMC") software changes it is currently developing. SaMC is the new integrated set of settlement systems that allows for the processing of settlements, billing, invoicing, and the financial (cash) clearing business functions for CAISO. This will result in changes to the settlement statements terminology, but because payment acceleration will not be implemented at the start of MRTU, this will not initially result in any changes to the timing of the issuance of settlement statements, even though as explained below additional information statements will be issued by the CAISO over time, and the timing for appeal of information provided in the statements. Further, in adopting these new processes, the CAISO endeavored to ensure that the timing requirements for issuance of statements and the process for resolving disputes associated with such statements did not change. Therefore, the CAISO does not anticipate there will be significant substantive changes, and that the Tariff changes for the most part will be for the purpose of adopting the new terminology.

The most significant change to prepare for at the start of MRTU as a result of the new SaMC software is that the Settlement Statements today referred to as Preliminary and Final Statements will become a combination of Initial Settlement Statements and Recalculation Settlement Statements, plus the fact that the majority of the settlement amounts will appear on a single net Invoice or Payment Advice. The Initial Settlement Statement will be the first statement published by CAISO, and will contain the calculation of Settlements and allocation of the charges for a given Trading Day that is generated prior to Invoice or Payment Advices for the relevant Bill Period. A Recalculation Settlement Statement will constitute a restatement, revision, or true-up against a version of the Initial Settlement Statement that is published after the Initial Invoice or Payment Advice for the relevant Bill Period. These two types of Settlement Statements are distinguished by: 1) the names of the statements, including version reference; 2) the timing of publication in relation to the Invoicing process, meaning the

See <a href="http://www.caiso.com/1872/1872e51451200.html">http://www.caiso.com/1872/1872e51451200.html</a> (materials provided at September 19, 2006, stakeholder meeting for BPM review); and <a href="http://www.caiso.com/17e9/17e97b196bd30.html">http://www.caiso.com/17e9/17e97b196bd30.html</a> (latest BPM for Settlements and Billing as posted on the CAISO website).

See Motion for Extension at 6.

calendar day on which it publishes; and 3) the inclusion of previous and net settlement amounts.

The CAISO will publish the Initial Settlement Statement to each Business Associate for each Trading Day (T) on T + 38 Business Days (B) from the relevant Trading Day covering all Settlement Periods in that Trading Day or Bill Period. On T + 51 B from the relevant Trading Day, CAISO will then either publish a second version of the Initial Settlement Statement (called an Initial Settlement Statement Reissue) or a first version Recalculation Settlement Statement (called a First Recalculation Settlement Statement). The Recalculation Settlement Statement can only be generated and published once a version of an Initial Settlement Statement for the associated Trading Day has been published and included on an Invoice or Payment Advice. Therefore, the type of statement that publishes on T + 51B depends on the calendar day on which the statement is scheduled to publish in relation to the Invoicing process.

Given the versioning and recalculation capabilities of the SaMC system, the CAISO will publish two additional Settlement Statements on T + 59B and T + 76B to provide additional data transparency to Business Associates. The Settlement Statements published on T + 59B are First Recalculation Settlement Statements for those Trading Days that were previously published as Initial Settlement Statement Reissues on T + 51B. These Recalculation Settlement Statements are calculated using the same input data used in the Initial Settlement Statement Reissue published on T + 51B. Because the same data is used, the disputes period is not re-opened as detailed in Section 11.27.7.1 of the MRTU CAISO Tariff. In summary, the timeline for the issuance of settlement statements under MRTU will be as follows:

Statement Type	<u>Date</u>
Initial Settlement Statement	T + 38B
Initial Settlement Statement Reissue or First Recalculation Settlement Statement	T + 51B
First Recalculation Settlement Statement if Initial Settlement Statement Reissue at T + 51B	T + 59B
Second Recalculation Settlement Statement	T + 76B

With regard to the Invoicing process, Invoices or Payment Advices will continue to be published on T+38B and T+51B on the calendar day that the Settlement Statement for the last Trading Day in a Bill Period is scheduled for publication. These Invoices/Payment Advices will contain the net Settlement Amounts for all market related transactions as well as GMC, FERC Fees, and CRR amounts.

In response to PG&E's concern regarding the sufficiency of detail in the Settlement Statements, the CAISO notes that each Settlement Statement will contain sufficient detail for Market Participants to validate their calculations for each Trading Day. In addition to the Settlement Statement output, a configuration XML file will be provided that contains the configuration formulas and bill determinants used in all calculations. This file will be regenerated and published any time there is a change to a configured equation and will be available for download via a secure web interface. Like the Settlement Statements, the CAISO will also make available via a secure web interface Invoices and Payment Advices in a defined XML file format that contains full supporting detail needed for validation. The CAISO proposes to provide the Commission with any necessary proposed tariff sheet changes to reflect these features of statements when it submits its changes to section 11.29, as proposed above.

#### S. Other Tariff Changes

In Appendix A to its Reply Comments, the CAISO addressed a number of "cleanup" changes to the MRTU Tariff suggested by parties. The CAISO agreed to make a number of these proposed changes, and the Commission approved these changes in Paragraph 1331 of the September 21 Order. With respect to these items, there are two matters requiring further explanation at this time.

First, in response to comments from Pacific Gas & Electric concerning Section 10 of the MRTU Tariff, the CAISO noted that, unrelated to MRTU, in the process of creating the Simplified and Reorganized Tariff and MRTU Tariff, the distinction between CAISO Metered Entities and SC Metered Entities had been inadvertently blurred. The CAISO also stated that it was in the process of reviewing the relevant tariff provisions and would make a separate filing with the Commission to address these concerns. The CAISO wishes to inform the Commission that it plans to make this filing in conjunction with finalizing the BPM addressing Metering, which will entail removing some material from the MRTU Tariff. This filing will be made at least 180 days prior to Release 1.

Second, in Appendix A to its Reply Comments, the CAISO also agreed that there was some inconsistency with the use of the term "Bid" in the MRTU Tariff, and agreed to make appropriate corrections to the MRTU Tariff. The CAISO plans to conduct a global review of the MRTU Tariff and make a cleanup filing with the Commission in the June-August 2007 timeframe. As part of this process, the CAISO will review the use of the term "Bid" in the MRTU Tariff, and make any corrections necessary so that that term is used consistently.

# T. MRTU Implementation Schedule, Readiness and Post-Implementation Review

The CAISO appreciates the Commission's support of the November 2007 implementation date for MRTU Release 1 as expressed specifically in P 1379. The

CAISO also appreciates the fact that the Commission was careful not to impose significant additional software design requirements over an above the Release 1 elements in the February 9, 2006 MRTU Tariff proposal as supplemented by changes the CAISO agreed to make in its reply comments and answer to reply comments.

The CAISO is on track for a November 2007 implementation date for the Release 1 design set forth in the February 9, 2006 filing. In its Reply Comments and Answer to Reply Comments in this proceeding, the CAISO agreed to make certain incremental design changes in response to commenter concerns, and the CAISO's initial analysis showed that these changes can be accommodated as part of MRTU Release 1. The CAISO has not, however, completed its more comprehensive assessment as to whether the incremental design elements agreed upon in the Reply Comments and Answer to Reply Comments, and any additional requirements resulting from other Commission directives, can be incorporated into Release 1 consistent with the MRTU budget and in time for November 2007 implementation. The CAISO will continue to apprise the Commission and parties through its monthly MRTU reports of its progress toward implementation of MRTU Release 1 design.

In Paragraph 1390 of the September 21 Order, the Commission directed the CAISO to develop processes for responding quickly and efficiently to Market Participants' questions about critical MRTU information and to file a report with the Commission detailing how it is making this information available. The CAISO has always endeavored to provide timely, transparent information to stakeholders to answer their questions and to assist them with MRTU implementation. The CAISO has many ongoing current information-sharing activities and will be also building on and improve existing activities to answer stakeholders' questions regarding MRTU implementation.

Currently the CAISO has implemented six primary communication channels focused entirely on MRTU implementation-related questions:

- 1. The MRTU Implementation Mailbox is the main vehicle for receiving stakeholders' questions. Once submitted to this mailbox, the CAISO posts the submitted questions and, when available, their answers.
- 2. In response to stakeholders' requests, the CAISO implemented the MRTU Implementation Bulletin Board ("MIBB") to provide an easier-to-use and more transparent interface for submitting questions. MRTU Implementation questions are immediately available for viewing by all who have access to the Internet as soon as the stakeholder submits them. In addition, stakeholders can build discussion "threads" to facilitate greater clarity. When answers to the questions are available, the CAISO posts them with the original questions.
- 3. The CAISO created an MRTU Tariff mailbox to which stakeholders could submit questions related to its Tariff filing in February 2006.

- 4. As stakeholders reviewed the 12 BPMs, first in May of 2006 and then again in August of 2006, stakeholders raised literally hundreds of questions regarding the extensive BPM documentation. The CAISO has captured their questions and is currently working its way through the many issues raised to provide answers to stakeholders' questions.
- 5. As the CAISO has conducted training sessions for participants across the country, it has posted questions raised during the training sessions along with their answers on the CAISO web site.
- 6. Finally, the CAISO has created a dedicated mailbox to receive and address stakeholders' questions regarding MRTU Market Simulation, begun in October 2006.

Creating interfaces to receive questions was only the first part of the CAISO's effort to provide timely information. The CAISO has also created several information stores to make the information available transparently to stakeholders.

- 1. "MRTU Implementation Questions and Answers," posted on the CAISO web site at <a href="http://www.caiso.com/docs/2005/06/21/2005062113583824742.html">http://www.caiso.com/docs/2005/06/21/2005062113583824742.html</a>, includes over 400 MRTU implementation questions raised over the past year and the answers to all but 13.
- 2. "Technical Interface Documentation Questions and Answers," posted on the CAISO web site at <a href="http://www.caiso.com/17ba/17baa96f22110.html">http://www.caiso.com/17ba/17baa96f22110.html</a>, includes over 150 technical questions, focusing on the data exchange interfaces between the CAISO and its clients, all but 18 of which have been answered.
- 3. The CAISO has posted over 2,000 questions received from stakeholders on the 12 posted BPMs at http://www.caiso.com/186a/186ae8622e6f0.htm. To date, approximately 40% of them have been answered.
- 4. The CAISO has posted 36 questions received in response to the Tariff posting at <a href="http://www.caiso.com/17ba/17ba873e19350.html">http://www.caiso.com/17ba/17ba873e19350.html</a> and has responded to 33 of them.
- 5. "RVCS Frequently Asked Questions and Troubleshooting Guide" contains Frequently-asked questions from Market Simulation activities and is posted at http://www.caiso.com/186a/186acfa7453a0.html.
- 6. "Questions and Answers from MRTU Level 200 Courses" is posted at <a href="http://www.caiso.com/docs/2005/10/07/200510071157559066.html">http://www.caiso.com/docs/2005/10/07/200510071157559066.html</a>.

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Lastly, the CAISO has engaged stakeholders in face-to-face meetings, conference calls and web conferences to receive and address their questions. Since October of 2005, the CAISO has sponsored a three-day workshop on MRTU business requirements and rules, a full-day workshop on MRTU technical interface documentation, 10 full days of workshops on BPMs, monthly implementation workshops and biweekly Systems Interface User Group discussions.

In addition to these current efforts, the CAISO has began implementation of a new process to improve on these efforts and provide more timely responses to market participants as everyone begins to prepare for MRTU start-up. Between now and the end of the first quarter of 2007, the CAISO will be implementing the following improvements to its processes for making critical information available to Market Participants:

- 1. <u>Single point of contact.</u> Currently, Market Participants must choose among several mailboxes and web sites to identify an appropriate location to submit an information request. The CAISO will identify and communicate to stakeholders a single interface for receiving market participants' information requests. The CAISO will distribute requests internally to ensure that the appropriate persons can provide the desired information.
- 2. <u>Improved Service Levels</u>. The CAISO seeks to respond to stakeholders' questions more timely than in the past and will work to reduce delays. In cases where a complete answer is not readily available, the CAISO will provide periodic status updates.
- 3. <u>Process Automation.</u> Much of the CAISO's existing process for responding to Market Participants' information request is manual. The CAISO has begun a transition to an automated tool, similar to the one it currently uses to manage settlement disputes, to manage market participants' requests for MRTU-related information. In the longer term, the automated tool will identify more quickly any delays in providing information.
- 4. Access to Current Information. The CAISO has developed many documents that contain information useful to Market Participants in preparing to implement MRTU. These documents are available on the CAISO web site, although in many different locations. By the end of the first quarter of 2007, the CAISO plans to implement a search tool that will simplify the process to market participants to access this existing information. The CAISO will build upon the existing information base as it addresses new questions raised by stakeholders.
- 5. <u>Settlements User Group.</u> In response to stakeholders' requests, the CAISO plans to reinstate a Settlements-oriented User Group to facilitate discussion

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and understanding of questions concerning market settlements and market clearing.

- 6. Results of Technical Discussions. The CAISO sponsors a bi-weekly web conference, the "Systems Interface User Group," ("SIUG") to discuss technical interface implementation issues. The CAISO will be posting summaries of SIUG discussions so that Market Participants who are unable to participate in a conference still can have access to information presented and discussed at the meeting.
- 7. **Knowledge Transfer.** The CAISO recognizes that detailed knowledge about the MRTU design and implementation details has been concentrated among a fairly small number of Subject Matter Experts. For the past several months, the CAISO has been involving additional persons in developing responses to stakeholders' questions and preparing implementation details so that it has a broader base of persons well-versed in the details on the market design. The CAISO recognizes that after implementation, MRTU will be transformed from a new project into the way the CAISO conducts its business and is developing the business, technical and communication resources it will need to effectively support stakeholders, as well as to meet its own needs, in the foreseeable future.

## V. REQUEST FOR WAIVER OF ORDER NO. 614 REQUIREMENTS

Although the clean MRTU Tariff sheets provided in Attachment A to this filing letter do contain header and footer information, the CAISO requests waiver of the requirements of Order No. 614<sup>49</sup> to the extent this information does not fully comport with these requirements. As the CAISO explained in the February 8 MRTU Tariff Filing, this waiver is justified because the portions of the S & R Tariff that serve as the basis of the MRTU Tariff are likely to be amended in the normal course of business between the filing date and the proposed November 2007 MRTU Implementation Date. Prior to the MRTU Implementation Date, the CAISO will submit tariff sheets containing the MRTU Tariff provisions approved by the Commission that fully comply with Order No. 614.

Designation of Electric Rate Schedule Sheets, FERC Stats. & Regs., Regs. Preambles ¶ 31,096 (2000).

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## VI. CONCLUSION

For the reasons set forth above, the CAISO respectfully requests that the Commission accept its proposed modifications to the MRTU Tariff, in compliance with the Commission's September 21 Order.

Respectfully submitted,

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Dated: November 20, 2006

ATTACHMENT A

## 60-DAY MRTU TARIFF MODIFICATIONS MADE IN COMPLIANCE WITH SEPTEMBER 21, 2006 ORDER (116 FERC ¶ 61,274)

Ordering Paragraph	Tariff Section(s) Affected	Description of Change Required	Compliance Changes Made to MRTU Tariff
P 46	27.5.4	Include an outline of the general process the CAISO intends to use to account for changes in the topology of the grid.	The CAISO will incorporate into the FNM information received pursuant to Section 24 for transmission expansion and Section 25 for generation interconnection to account for changes to the CAISO Controlled Grid and other facilities located within the CAISO Control Area. This information will be incorporated into the network model data base in which the electrical network model is maintained for use by the State Estimator and which forms the basis for the FNM used by the CAISO Markets. The updated power system network model will be transferred at periodic model update cycle intervals established by the CAISO and incorporated into the FNM for use in the CAISO Markets. The Business Practice Manual for Managing Full Network Model will describe the information to be provided by Market Participants and the process by which the CAISO incorporates this information in the FNM.
P 46	6.5.1 6.5.1.1 6.5.1.1.1 6.5.1.1.2	Provide tariff language that indicates that the FNM is available to market participants if they sign a non-disclosure agreement.	6.5.1 Communication With Market Participants, Congestion Revenue Rights Participants, and the Public.  6.5.1.1 CRRMarket Participants With Non-Disclosure Agreements.  6.5.1.1.1 Yearly, the CAISO shall provide information that will include, but is not limited to, the following:  (a) CRR Full Network Model;  * * *

Ordering Paragraph	Tariff Section(s) Affected	Description of Change Required	Compliance Changes Made to MRTU Tariff
	Miletted		<b>6.5.1.1.2</b> Monthly, the CAISO shall provide information that will include, but is not limited to, the following:
			(a) <u>CRR</u> Full Network Model;
PP 116, 217	30.5.3 31.4 31.5 33.3 34.10.1	Allow, in the IFM optimization process, self-scheduled CAISO demand to have higher scheduling priority for RA resources than self-scheduled exports.	Involves changes to several MRTU Tariff sections, see Attachment B, MRTU Tariff Blacklines.
P 119	31.3.1.1	Replace reference to "production costs" with "total bid costs" in Section 31.3.1.1.	31.3.1.1 The IFM produces: (1) a set of hourly Day-Ahead Schedules, AS Awards, and AS Schedules for all participating Scheduling Coordinators that cover each Trading Hour of the next Trading Day; and (2) the hourly LMPs for Energy and the ASMPs for Ancillary Services to be used for settlement of the IFM. The CAISO will publish the LMPs at each PNode as calculated in the IFM. In determining Day-Ahead Schedules, AS Awards, and AS Schedules the IFM optimization will minimize total bid-production costs based on submitted and mitigated Bids while respecting the operating characteristics of resources, the operating limits of transmission facilities, and a set of scheduling priorities that are described in Section 31.4. In performing its optimization, the IFM first tries to complete its required functions utilizing Economic Bids without adjusting Self-Schedules, and adjusts Self-Schedules only if it is not possible to balance Supply and Demand and manage Congestion with available Economic Bids.
P 125	11.8.1 27.4.1 30.5.2.4 31.3 31.5.1.1 31.7	Explain how the commitment of Extremely Long Start Resources will be determined and how such commitment will be integrated with the normal Day-Ahead commitment process	Involves changes to several MRTU Tariff sections, see MRTU Tariff blacklines included as Attachment B to this filing.
PP 126, 180 1331	30.2	Add the following italicized language to Section 30.2 for clarification "Each Bid type	30.2 Bid Types.  There are three types of Bids: Energy Bids, Ancillary Services

Ordering	Tariff	Description of Change Required	Compliance Changes Made to MRTU Tariff
Paragraph	Section(s) Affected		
		can be submitted as either an Economic Bid or a Self-Schedule (except for RUC Availability Bids, which cannot be self-scheduled)"	Bids, and RUC Availability Bids. Each Bid type can be submitted as either an Economic Bid or a Self-Schedule (except for RUC Availability Bids, which cannot be self-scheduled). Economic Bids specify prices for MW amounts of capacity or MWh amounts of Energy. Self-Schedules do not have any prices associated for MW or MWh. Energy Bids, including both Economic Bids and Self-Schedules, may be either Supply Bids or Demand Bids. Ancillary Services Bids and RUC Availability Bids are Supply Bids only. Ancillary Services may be self-provided by providing a Submission to Self-Provide an Ancillary Service and having that submission accepted by the CAISO. Rules for submitting the three types of Bids vary by the type of resource to which the Bid applies as described in Section 30.5 and as further required in each CAISO Markets process as specified in Sections 31, 33, and 34.
PP 126, 128, 1331	30.5.1(b)	Insert the following language into Section 30.5.1(b): "Energy associated with awarded Ancillary Services Capacity cannot be re-bid in the HASP or Real-time market."	30.5.1 General Bidding Rules.  * * *  (b) Bid prices submitted by Scheduling Coordinator for Energy accepted and cleared in the IFM and scheduled in the Day-Ahead Schedule cannot be decreased. 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 PTO in accordance with Section 16 of this CAISO Tariff. Scheduling Coordinators may revise TOR Self-Schedules for Supply only in the HASP to the extent such a change is consistent with TRTC 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;
P 167	8.10.8.3	Reinstate RUC availability payments for	Involves changes to several MRTU Tariff sections, see MRTU

Ordering Paragraph	Tariff Section(s)	Description of Change Required	Compliance Changes Made to MRTU Tariff
	Affected		
	11.8.3.1	resources operating above the tolerance band.	Tariff blacklines included as Attachment B to this filing.
	11.8.3.1.1	1 0	
	11.8.3.1.3		
	31.5.6		
P 171	11.8.6.5	Exclude allocation of RUC costs to exports.	11.8.6.5 Allocation of Net RUC Bid Cost Uplift.  For each Trading Hour of the IFM the, Hourly Net RUC Bid Cost Uplift is determined as the sum over the Settlement Intervals in that Trading Hour of the product of any positive Net RUC Bid Cost Uplift remaining in the Settlement Interval after the sequential netting in Section 11.8.6.2 and the application of the uplift ratio as determined in 11.8.6.3. As specified in 31.5.2.2, MSS Operators that have opted out of RUC participation are exempt from allocation or RUC BCR allocation. The Hourly Net RUC Bid Cost Uplift is allocated in two tiers as follows:
			(i) In the first tier, the Hourly Net RUC Bid Cost Uplift is allocated to Scheduling Coordinators based on their Net Negative <u>Deviation</u> CAISO Demand <u>Deviation</u> in that Trading Hour. The Scheduling Coordinator shall be charged at a rate which is the <u>lower of 1)an amount equal to</u> the Hourly Net RUC Bid Cost Uplift divided by the Net Negative <u>Deviation</u> CAISO Demand <u>Deviation</u> in that Trading Hour; <u>or 2</u> ) the Hourly Net RUC Bid Cost Uplift divided by the RUC Capacity, <u>for all Scheduling Coordinators</u> in that Trading Hour.
			(ii) In the second tier, the Scheduling Coordinator shall be charged an amount equal to any remaining Hourly Net RUC Bid Cost Uplift in proportion to the
			Scheduling Coordinator's Measuredmetered CAISO  Demand in any Trading Hour.
PP 219-220	11.5.8 (and	Address the settlement of emergency energy in	

Ordering	Tariff	Description of Change Required	Compliance Changes Made to MRTU Tariff
Paragraph	Section(s)		
	Affected		
	subsections)	the MRTU Tariff.	Tariff blacklines included as Attachment B to this filing.
P 230, 697	Appendix A	The definition of "Supply" must be amended	Definition of "Supply"
		to include Participating Load.	The French delivered from a Congreting Unit System Unit
			The Energy delivered from a Generating Unit, System Unit, Physical Scheduling Plant, System Resource or the Curtailable
			Demand provided by a Participating Load.
DD 005 1001	20501		30.5.2.1 Common Elements for Supply Bids.
PP 235, 1331	30.5.2.1	Clarify the manner in which submitted energy	30.5.2.1 Common Elements for Supply Blus.
		bid curves must be continuously increasing.	In addition to the recourse appoints Did requirements of this
			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
l			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
			monontonically increasing.
P 268	11.5.6.2.5.1	Provide that if the costs of transmission	11.5.6.2.5.1 Allocation of Exceptional Dispatch Excess
1 200	11.3.0.2.3.1	modeling limitation-related Exception	Cost Payments to PTOs.
		Dispatches are to be allocated to PTOs, clarify	***
		that such costs constitute "Reliability Service	If the modeling limitation affects more than one Participating TO,
		Costs" so that PTOs can recover them through	the Excess Cost Payments shall be pro-rata allocated in proportion
		their Reliability Service Cost rates.	to the Participating TO's Transmission Revenue Requirement.
			These allocations to Participating TO's Transmission Revenue
			Requirement shall constitute Reliability Services Costs.
P 269	11.5	Define "transmission related modeling	Involves changes to several MRTU Tariff sections, see
	11.5.6.2.5.1	limitations" as discussed in Section 11.5.	Attachment B, MRTU Tariff Blacklines.
	11.5.6.2.5.2		
	34.9.3		
P 269	11.1.2	More clearly define excess costs throughout	Involves changes to several MRTU Tariff sections, see Attachment
	11.5.4	the body of the MRTU Tariff.	B, MRTU Tariff Blacklines.
	11.5.4.2		
	11.5.6.1		

Ordering	Tariff	Description of Change Required	Compliance Changes Made to MRTU Tariff
Paragraph	Section(s)		
	Affected		
	11.5.6.1.1		
	11.5.6.2.1		
	11.5.6.2.2		
	11.5.6.2.3		
	11.5.6.2.4		
D 250	11.5.6.3.2		D C 11 C C D 1 C 1 D 1 D 1 C 1 D 1 D
P 279	Appendix A	Clarify "export schedules" in the context of Section 11.5.3.	Definition of "Real-Time Interchange Export Schedule"
			An agreement to transfer energy from the CAISO Control Area to
			a interconnected control area at a Scheduling Point 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 control
D 202	24.10.1	Remove the term "slack" from Section	areas involved in the transaction.
P 282	34.10.1	34.10.1.	34.10.1 Increasing Supply.
		34.10.1.	The scheduling priorities as defined in the RTM optimization to
			meet the need for increasing Supply as reflected from higher to lower priority are as follows:
			a) Non-Participating Load reduction (slack) or Self-
			Schedules for exports at Scheduling Points in HASP served by Generation from non-Resource Adequacy
			Capacity or from non-RUC Capacity;
			b) Self-Schedules for exports at Scheduling Points in HASP
			not served by Generation from non-Resource Adequacy
			Capacity or not served by Generation from non-RUC
			Capacity;
			<u>b)c)</u> Contingency-Only Operating Reserve if activated by
			Operator to provide Energy (as indicated by the
			Contingency flag and the Contingency condition);
			d) Economic Bids submitted in the HASP or RTM.
P 282	34.10.2	Remove language from Section 34.10.2 that	34.10.2 Decreasing Supply.
		states that dispatch priorities will be	

Ordering Paragraph	Tariff Section(s) Affected	Description of Change Required	Compliance Changes Made to MRTU Tariff
		incorporated into a BPM.	* * *  These dispatch priorities as defined in the RTM optimization may be superseded by operator actions and procedures. The Dispatch priorities listed in Sections 34.10.1 and 34.10.2 shall be incorporated into a Business Practice Manual (BPM) and to the extent it is determined necessary to modify the order of dispatch priority the CAISO may do so via an update to the BPM.
P 321	8.2.3.2	Include a statement in Section 8.2.3.2 that additional Operating Reserves can be Spinning Reserves.	8.2.3.2 Spinning And Non-Spinning Reserves.  * * * *  The specific resource self providing the additional Operating Reserve must have sufficient unloaded capacity available based on Energy and Ancillary Schedules in HASP. When the on-demand obligation is called upon to deliver Energy, the CAISO will schedule such Energy and also simultaneously Dispatch the identified resource supporting the on-demand obligation for the same quantity of Energy. Operating Reserves includes both Spinning and Non-Spinning Reserves.
P 330	8.6.1	Insert cross reference in Section 8.6.1 to the AS obligations of Scheduling Coordinators set forth in sections 11.10.2, 11.10.3, and 11.10.4.	8.6.1 Ancillary Service Obligations.  Each Scheduling Coordinator shall be assigned a share of the total Regulation Down, Regulation Up, Spinning Reserve, and Non-Spinning requirements by the CAISO, as set forth in Sections 11.10.2, 11.10.3 and 11.10.4 of the MRTU Tariff, (i.e., a share of the total requirements for each ancillary service in the Day-Ahead Market, HASP, and the Real-Time Market). Any references in this CAISO Tariff to the Ancillary Service "Regulation" shall be read as referring to "Regulation Up" or "Regulation Down".
P 334	8.9.7(a) 8.9.15	Insert language indicating that failures to pass compliance tests by non-CPUC resource adequacy resources should be submitted to the relevant LRA and not the CPUC, and that FERC should be notified of any failure of any RA resource failing a compliance test or	8.9.7 Consequences of Failure to Pass Compliance Testing.  * * *  The CAISO shall at the same time send a copy of the notice to the provider or owner or operator of the Generating Unit, Load, or System Resource providing Ancillary Services or RUC Capacity.

Ordering Paragraph	Tariff Section(s) Affected	Description of Change Required	Compliance Changes Made to MRTU Tariff
		failing to pass a performance audit.	For any Resource Adequacy <u>FResource</u> failing a compliance test, the CAISO also will <u>provide</u> notification of the failure to notify the California Public Utilities Commission, <u>Local Regulatory</u> Authority, or federal agency with jurisdiction over the <u>Load Serving Entity</u> that listed the Resource Adequacy Resource on its <u>Resource Adequacy Plan</u> , and <u>FERC</u> of the failure.
			8.9.15 Consequences of Failure to Pass Performance Audits.  * * *  For any Resource Adequacy resource failing to pass a performance
			audit, the CAISO also will provide notify-notification of the failure to the California Public Utilities Commission, or the relevant-Local Regulatory Authority, or federal agency with jurisdiction over the Load Serving Entity that listed the Resource Adequacy Resource on its Resource Adequacy Plan, and the FERC of the failure.
P 347	8.10.8.1	Modification to reflect that if a Day-Ahead import of AS becomes undispatchable due to a transmission derate and it frees up transmission capacity on the intertie, the CAISO will pay the Scheduling Coordinator the lower of the Day-Ahead and HASP congestion shadow price on the intertie.	8.10.8.1 Rescission of Payments for Undispatchable Ancillary Service Capacity or RUC Capacity.  ***  If a Scheduling Coordinator has Undispatchable Capacity that it is obligated to supply to the CAISO during a Settlement Interval, the Ancillary Service capacity payment or RUC Availability Payment for the amount of Energy that cannot be delivered from the Generating Unit, Participating Load, System Unit or System Resource for the Settlement Interval shall be rescinded; provided, however, that to the extent an Ancillary Service procured in the IFM from a System Resource becomes undispatchable due to an intertie transmission derate before the operating hour for which it was procured, in rescinding the Ancillary Service capacity payment, the CAISO shall credit back to the Scheduling Coordinator any congestion charge assessed pursuant to Section 11.10.1.1.1 of the CAISO Tariff, but at the lower of the Day-Ahead and HASP Shadow Price on the corresponding intertie.

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Ordering Paragraph	Tariff Section(s) Affected	Description of Change Required	Compliance Changes Made to MRTU Tariff
P 358	8.3.4	Revise tariff language to prohibit the eligibility of interruptible exports to provide Non-Spinning Reserves	8.3.4 Certification and Testing Requirements.  ***  Non-Spinning Reserve may be provided from Loads, Demand which can be reduced by Dispatch, interruptible exports, ondemand rights from other entities or Control Areas, Generating Units, System Resources that submit Bids to provide Non-Spinning Reserve from imports, or System Units, which have been certified and tested by the CAISO using the process defined in — Parts C of Appendix K, respectively.
P 364	8.4.5	Revise Section 8.4.5 to read "A Scheduling Coordinator that has provided a Submission to Self Provide an Ancillary Service, has submitted a Bid in or contracted for Ancillary Services shall ensure that the Generating Unit, System Unit, Load or System Resource concerned is able to receive and implement Dispatch Instructions."	8.4.5 Communication Equipment.  * * *  If any communication system becomes unavailable, the relevant Participating Generators, operators of System Units, Loads and System Resources and the CAISO shall take immediate action to identify the cause of the interruption and to restore the communication system. A Scheduling Coordinator that has provided a Submission to Self-Provide an Ancillary Service, has submitted a Bid in or contracted for Ancillary Services shall ensure that the Generating Unit, System Unit, Load or System Resource concerned is able to receive and implement Dispatch Instructions.
P 370	11.10.2.1.3 11.10.2.2.2 11.10.3.2 11.10.4.2	Change title of several MRTU Tariff Sections to include the term "net."	Involves changes to several MRTU Tariff sections, see Attachment B, MRTU Tariff Blacklines.
P 370	11.10.4.2	Incorporate proposal to modify formula for Spinning Reserves in Section 11.10.4.2.	11.10.4.2 Hourly Net Obligation for Non-Spinning Reserves.  Each Scheduling Coordinator's hourly net obligation for Non-Spinning Reserves is determined as follows: (a) the product of the Scheduling Coordinator's total Operating Reserve Ancillary Services Obligation for Operating Reserve for the hour (and if

Ordering Paragraph	Tariff Section(s) Affected	Description of Change Required	Compliance Changes Made to MRTU Tariff
P 400	8.6.2 11.10.1.1 30.5.2.6	Clarify whether (and if so, how) foregone energy opportunity costs are considered in establishing AS Schedules and in calculating ASMPs. If the CAISO intends that foregone	negative, multiplied by NOROCAF-if negative) multiplied by and (b) the ratio of the CAISO's total Non-Spinning ReserveAncillary Services eObligations for Non-Spinning Reserves in the hour to the CAISO's total Operating Reserve obligations in the hour, reduced by the accepted Self-Provided Ancillary Services for Non-Spinning Reserves, (plus or minus any Non-Spinning Reserve Obligations for the hour acquired or sold through Inter-SC Trades of Ancillary Services).  The Scheduling Coordinator's total Operating Reserve Obligation for the hour is the sum of 5% of its Real-Time Demand (except the Demand covered by firm purchases from outside the CAISO Control Area) met by Generation from hydroelectric resources plus 7% of its Demand (except the Demand covered by firm purchases from outside the CAISO Control Area) met by Generation from non-hydroelectric resources, plus 100% of any Interruptible Imports, plus 5% (if hydro) or 7% (if thermal) of any unit-contingent or dynamic imports which it schedules.  Involves changes to several MRTU Tariff sections, see MRTU Tariff blacklines included as Attachment B to this filing.
PP 401, 405,	Appendix K	energy opportunity costs not be considered, the CAISO must provide a rationale.  "ASRP" expanded to read "Ancillary Services	CAISO TARIFF APPENDIX K
1331	Appendix K	Requirements Protocol (ASRP)"	Ancillary Service Requirements Protocol (ASRP)
P 406	8.3.1	Strike last sentence of the second paragraph of Section 8.3.1.	8.3.1 Procurement of Ancillary Services.  ***  The CAISO procurement of Ancillary Services from imports or System Resources in the HASP is for the entire Operating Hour.  The procurement of Ancillary Services from generation internal to the CAISO Control Area for the Real-Time Market is for a fifteen (15) minute time period. The CAISO's procurement of Ancillary Services from imports or System Resources in the HASP and from

Ordering Paragraph	Tariff Section(s) Affected	Description of Change Required	Compliance Changes Made to MRTU Tariff
			Generating Units for the Real-Time Market is based on the Ancillary Service Bids submitted in the HASP.—The CAISO will procure Regulation Up and Regulation Down in the Real-Time Market.
P 463	Appendix A	Modify the definition of Trading Hub in order to address concerns of CERS and Sempra.	Definition of "Trading Hub"  An aggregation of network Pricing Nodes, such as Existing Zone Generation Trading Hubs, maintained and calculated by the CAISO for settlement and trading purposes posted by the CAISO on its CAISO Website.
P 509	11.8	Modify Tariff to reflect CAISO's proposal to require external resources to provide revenue-quality meter data to the CAISO in order to be eligible for Bid Cost Recovery.	In any Settlement Interval a resource is eligible for Bid Cost Recovery payments only if it is On. All Bid Costs shall be based on mitigated Bids as specified in Section 39.7. In order to be eligible for Bid Cost Recovery, Non-Dynamic Resource-Specific System Resources must provide to the CAISO Revenue-Quality Meter Data demonstrating that they have performed in accordance with their CAISO commitments.
P 510	30.5.2.4 30.5.2.6.1 30.5.2.6.2 30.5.2.6.3	Revise to reflect proposed changes regarding NERC tagging in section 30.	Involves changes to several MRTU Tariff sections, see Attachment B, MRTU Tariff Blacklines.
P 516	11.8 11.8.2.1.4 11.8.2.1.5 11.8.2.1.6 11.8.2.2 11.8.4.1 11.8.4.1.4 11.8.4.1.5 11.8.4.2.1	Revise the BCR penalties for deviations outside the tolerance band.	Involves changes to several MRTU Tariff sections, see Attachment B, MRTU Tariff Blacklines.

Ordering	Tariff	Description of Change Required	Compliance Changes Made to MRTU Tariff
Paragraph	Section(s)		
	Affected		
	11.8.4.2.2		
PP 521, 1331	11.8.6.4	Correct the calculation for uplift costs to	11.8.6.4 Allocation of Net IFM Bid Cost Uplift.
		Scheduling Coordinators in Section 11.8.6.4(i).	* * *
			(i) In the first tier, the Hourly Net IFM Bid Cost Uplift is
			allocated to Scheduling Coordinators in proportion to their non-
			negative IFM Load Uplift Obligation, but with an IFM Bid Cost
			Uplift rate not exceeding the ratio of the Hourly Net IFM Bid Cost
			Uplift for the Trading Hour divided by the sum of all hourly
			Generation scheduled in the Day-Ahead Schedule and IFM AS
			Awards for all Scheduling Coordinators from CAISO-Committed
			Bid Cost Recovery Eligible Resources in that Trading Hour. The
			Scheduling Coordinator shall be charged an amount equal to the
			Hourly Net IFM Bid Cost Uplift divided by the IFM Load Uplift
			Obligation. The IFM Load Uplift Obligation for each Scheduling
			Coordinator is the difference between the total Demand scheduled
		1	in the Day-Ahead Schedule of that Scheduling Coordinator and the
			scheduled Generation from the Self-Schedules in the Day-Ahead
		!	Schedule of that Scheduling Coordinator, plus imports scheduled
			by that Scheduling Coordinator in itsthe Day-Ahead Schedule,
		ļ	adjusted by any applicable-Inter-SC Trades of IFM Load Uplift
			Obligations., but with an IFM Bid Cost Uplift rate not exceeding
			the ratio of the Hourly Net IFM Bid Cost Uplift divided by the sum
			of all hourly Generation scheduled in the Day-Ahead Schedule and
			IFM AS Awards for all Scheduling Coordinators from CAISO-
			Committed Bid Cost Recovery Eligible Resources in that Trading
			Hour.
P 527	4.9.13.2	Incorporate into MRTU Tariff clarification that	4.9.13.2 Load-Following or Non Load-Following Election.
		BCR for a Load-following MSS is only for	* * *
		generation provided to the CAISO markets.	If the MSS Operator has elected gross settlement and is a Load-
			following MSS: (i) it must designate in its generation master file
			which of its generating resources are Load-following resources, (ii)
			it must complying with the additional bidding requirements in
			Section 30.5.2.5, and (iii) the generation resources designated as

Ordering Paragraph	Tariff Section(s) Affected	Description of Change Required	Compliance Changes Made to MRTU Tariff
			Load-following resources cannot set Real-Time prices. However, Load-following resources will be eligible to receive bid cost recovery to ensure that the price paid for energy dispatched by CAISO is not less than the MSS Operator's accepted bid price.  Bid Cost Recovery for a Load-following MSS resource is only applicable to generation capacity provided to the CAISO Markets by that MSS resource and is not applicable for the generation capacity that is designated or used by an MSS Operator to follow its own Load.
P 527	30.4	Incorporate clarification that unless a Scheduling Coordinator has submitted bidbased Start-Up and Minimum Load Costs, they are subject to the cost-based option.	Generating Units, Non-Dynamic and Dynamic System Resources may elect on a semi-annual basis either of the two options provided below for specifying their Start-Up and Minimum Load Costs to be used in the CAISO Markets Processes.: Unless the Scheduling Coordinator has submitted Bid-based Start-Up and Minimum Load costs, the CAISO will assume the cost-based option as the default option.  (1) Cost-based. This option uses fuel-cost adjusted formulas for Start-Up and Minimum Load Costs based on the resource's actual performance parameters. The Start-Up and Minimum Load Costs values contained in the resource's Bids as utilized in the CAISO Markets Processes will be these formulaic values adjusted for fuel-cost variation on a daily basis. Resources will not be able to Bid
D 550			alternative values for Start-Up and Minimum Load Costs. In the event that a unit does not provide sufficient data for the CAISO to determine its costs, the CAISO will assume that the unit's Start-Up and Minimum Load Costs are zero.
P 550	27.7.1.3	The CAISO must modify the title of Section 27.7.1.3 and provide further explanation or delete or move the section.	27.7.1.3 Flexible COG Dispatch Option Eligibility to Submit Market-Based Energy Bids by Waiving COG Status.

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			For the purposes of specifying an Energy Bid that is not based on its Minimum Load Cost, a COG may elect to be modeled with different PMin and PMax values if the physical characteristics of the resource support such differences. <u>Under this election the COG's PMin must be greater than or equal to its PMax minus the maximum of 3 MW of 5 percent of its PMax.</u> Under this option the resource is capable of being Dispatched at an operating point other than zero or its PMax, the resource does not meet the definition of COG and the resource. Such a resource may submit a market Energy Bid for the MW difference between its PMin and PMax, and if scheduled or issued a CAISO Schedule or Dispatch Instruction in this range it would be subject to Local Market Power Mitigation, eligible to set the LMP and would receive any appropriate BCR like any other resource.
P 558	34.19.2.5	With respect to the PIRP settlement price, the CAISO must use the monthly weighted average with weights equal to total Real-Time generation for calculating the monthly netting amount.	A4.19.2.5 Price for Uninstructed Deviations for Participating Intermittent Resources.  Deviations associated with each Participating Intermittent Resource in a Scheduling Coordinator's portfolio shall be settled as provided in Section 11.12 at the monthly weighted average Dispatch Interval LMP, as calculated in accordance with Section 11.5.4.1 at each Phode associated with the Participating Intermittent Resource, and using the monthly weighted average with weights equal to total Real-Time Generation. where the weights are the quantities of Instructed Imbalance Energy associated with each Dispatch Interval LMP.
P 566	31.5.3 (including subsections)	Incorporate any significant changes regarding the issues surrounding the potential over procurement of RUC into Section 31.5.3 of the MRTU Tariff.	Involves changes to several MRTU Tariff sections, see Attachment B, MRTU Tariff Blacklines.
P 593	11.23	Rejects the proposed multiplier for the UDP under MRTU as unnecessary, noting the	Chart detailing UDP multipliers removed from Section 11.23(j).  See MRTU Tariff blacklines included with this filing as

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		Commission's previous commitment to adjust the penalty level if market conditions improve.	Attachment B.
P 618	31.3.1.2	Revise to include the parameters that would govern the CAISO's relaxation of constraints if economic bids cannot clear the market.	31.3.1.2 Reduction of LAP Demand.  * * *  2) Step 2: In case the measure in Step 1 is insufficient to avoid adjustment of Load at the LAP level, the CAISO will evaluate the validity of the binding transmission constraint and if it is determined that the constraint can be relaxed based on the operating practices, will relax the constraint consistent with operating practices. The CAISO will use the following rules in relaxing the transmission constraints in this step 2:  (a) No constraints on WECC Rated Paths or interties with adjacent Control Areas would be relaxed.  (b) Only the transmission constraints that can be mitigated in the Real-Time Market or Real-Time operation are candidates for constraint relaxation. The criteria used to assess whether or not the constraint can be mitigated in Real-Time can include, but are not limited to, the following: (1) there is a Submission to Self-Provide an Ancillary Service for Operating Reserves from non-RA Resources or non-RMR Units within the transmission constrained load pocket constrained by the transmission path in question; provided, however, such Submissions to Self-Provide an Ancillary Service cannot be used in Step 1, but is available in Real-Time; (2) Scheduling Coordinators have submitted Self-Schedules for Participating Load in the constrained Load pocket; or (3) there are non-RA Resources and non-RMR Units within the

Ordering Paragraph	Tariff Section(s) Affected	Description of Change Required	Compliance Changes Made to MRTU Tariff
			constrained Load pocket that did not participate in the Day-Ahead Market, but can be called upon under their Participating Generator Agreement before CAISO curtails firm Load.  (c) Candidate constraints will be relaxed by assigning a high penalty for constraint violation (as opposed to enforcing them as hard constraints) in this Step 2. Such penalty will be lower than the penalty for curtailing firm (Price Taker) Load.  (d) The higher of the facility rating or the pre-IFM flows through the facility with relaxed constraints in this Step 2 will be used as hard limits in IFM.  (e) To avoid unwarranted price impact in IFM, a constraint violation penalty equal to three times the prevailing Energy Bid cap as specified in Section 39.6 will be applied to the constraints relaxed in Step 2 between their operating limit and the relaxed limit determined.  (f) The information relating to the relaxed constraints will be forwarded to CAISO Operator together with the necessary mitigating measures.
P 630	27.2.1	Explain in MRTU Tariff the process by which the MSS LAP will be developed.  Note that rather than making this change in Section 4.9.13.1 (which addresses gross or net settlement options for MSSs), the CAISO is proposing to make this change in Section 27.2.1, at that is the Section in which LAPs are	The CAISO shall define specific MSS-LAPs for each MSS. The MSS LAP shall be made up the PNodes within the MSS that have Load served off of those Nodes. The MSS-LAPs have unique Load Distribution Factors that reflect the distribution of the MSS Demand to the network nodes within the MSS. A specific LAP with its own LDFs will be created for each Metered Subsystem.

Ordering Paragraph	Tariff Section(s) Affected	Description of Change Required	Compliance Changes Made to MRTU Tariff
		defined for MSSs.	These MSS LAPs are separate from the Default LAPs, and the load distribution factors of the Default LAP do not reflect any MSS Load.
P 647	31.4	Modify Section 31.4 to clarify that this subsection applies only to the extent that it does not conflict with any MSS Agreement.	31.4 Uneconomic Adjustments in the IFM.  ***  Any schedules below the Minimum Load level are treated as fixed schedules and are not subject to uneconomic adjustments for Congestion management. The provisions of this section shall apply only to the extent they do not conflict with any MSS Agreement.
P 648	4.9.14.2	Replace "generating capacity" with "generating reserves" in MRTU Tariff Section 4.9.14.2.	4.9.14.2 If the CAISO is charging Scheduling Coordinators for summer reliability or demand programs, the MSS Operator may petition the CAISO for an exemption of these charges. If the MSS Operator provides documentation to the CAISO by November 1 of any year demonstrating that the MSS Operator has secured generating capacity capacity reserves for the following calendar year at least equal to one hundred and fifteen percent (115%), on an annual basis, of the peak Demand responsibility of the MSS Operator, the CAISO shall grant the exemption. Eligible generating capacitycapacity reserves for such a demonstration may include on-demand rights to Energy, peaking resources, and Demand reduction programs. The peak Demand responsibility of the MSS Operator shall be equal to the annual peak Demand Forecast of the MSS Load plus any firm power sales by the MSS Operator, less interruptible Loads, and less any firm power purchases. Firm power for the purposes of this Section 4.9.14.2 shall be Energy that is intended to be available to the purchaser without being subject to interruption or curtailment by the supplier except for Uncontrollable Forces or emergency. To the extent that the MSS Operator demonstrates that it has secured generating capacitycapacity reserves in accordance with this Section 4.9.14.2-, the Scheduling Coordinator for the MSS Operator shall not be obligated to bear any share of the CAISO's costs for any summer

Ordering Paragraph	Tariff Section(s) Affected	Description of Change Required	Compliance Changes Made to MRTU Tariff
			Demand reduction program or for any summer reliability Generation procurement program pursuant to CAISO Tariff Section 42.1.8 for the calendar year for which the demonstration is made.
P 652	31.5.2	Clarify Section 31.5.2.2 regarding a load following MSS opting out of RUC	31.5.2 Metered Subsystem RUC Obligation.  MSS Operators are permitted to make an annual election to opt-in or opt-out of RUC participation. MSS Operators that elect to Load-follow are automatically considered to opt-out of the RUC participation. Prior to the deadline for the annual CRR Allocation and Auction process, as specified in Section 36, an MSS Operator that has elected not to follow Load shall notify the CAISO of its RUC participation option for the following CRR cycle.
P 661	11.23	Clarify that a load following MSS is not subject to penalties under section 11.23.	f) All MSS resources designated as Load-following resources pursuant to Section 4.9.13.2 (regardless of gross or net settlement election) are exempt from Uninstructed Deviation Penalties in this Section 11.23. All MSS resources not designated as Load-following resources pursuant to Section 4.9.13.2 (regardless of gross or net settlement election) are subject to Uninstructed Deviation Penalties in this Section 11.23. With regard to the Load-following Deviation penalty in Section 4.9.9.1 and Section 4.9.9.2 of the CAISO Tariff, all MSS resources that have elected Load-following (regardless of gross or net settlement selection) are subject to those provisions; all MSS resources not designated as Load-following (regardless of gross or net settlement) are not subject to those provisions. For the Scheduling Coordinator of an MSS that has not elected to follow the MSS Load, the Uninstructed Deviation Penalties in accordance with Section 11.23. For the Scheduling Coordinator of an MSS that has elected to follow the MSS Load pursuant to Section 4.9.9, the deviation penalties in Sections 4.9.9.2.1 and 4.9.9.2.2 will apply as follows. For the Scheduling Coordinator of an MSS that has not elected to

Ordering Paragraph	Tariff Section(s) Affected	Description of Change Required	Compliance Changes Made to MRTU Tariff
			follow the MSS Load, the Uninstructed Deviation Penalties in this Section 11.23 will apply;
P 662	34.12	Clarify intent regarding a load following MSS being able to follow its load and clearly set forth applicability of dispatch instructions to load following MSSs.	Scheduling Coordinators that represent MSSs may submit Bids for Supply of Energy to the RTM, irrespective of whether the MSS is a Load following MSS. All Bids submitted for MSS generating resources within a MSS in the HASP for the RTM and all Dispatch Instructions shall be generating resource-specific. MSS non-Load following resources Operators are responsible for following Dispatch Instructions. Load following MSS Operators shall provide the CAISO with an estimate of the number of MWs the applicable generating resource(s) will be generating over the next two-hours in 5-minute interval resolution. The Dispatch Instructions for Load-following resources are incorporated with generation estimates provided by MSS Operators. Such MSS Load-following resources can deviate from the Dispatch Instructions in Real-Time to facilitate the following of load without being subject to the Uninstructed Deviation Penalty as further described in Section 11.23 of the CAISO Tariff. For Load following MSSs, the MSS Operator will provide the CAISO with telemetry of the MSS response to the Load following instructions and the expected output for these resources in five minute intervals for the upcoming 120 minutes. The State Estimator will estimate all MSS Load in Real-Time and will incorporate the information provided by the Load following MSS Operator in clearing the RTM and its Dispatch Instructions.
P 664	4.9.13	Clarify the CRR allocation timeline, and the MSS elections, in the Business Practice Manuals, and reference this timeline in MRTU Section 4.9.13.	4.9.13 MSS Elections and Participation in CAISO Markets.  MSS entities must make an election or choice on three issues that

Ordering Paragraph	Tariff Section(s) Affected	Description of Change Required	Compliance Changes Made to MRTU Tariff
			govern the manner in which the MSS participates in the CAISO Markets. The MSS entity must choose either: (i) net settlements or gross settlements, (ii) to Load-follow or not Load-follow with its generation resources, and (iii) to have its Load participate in the RUC procurement process or not have its Load participate in the RUC procurement process. The MSS Operator shall make annual elections regarding these three sets of options pursuant to the timeline specified for such elections in the Business Practices Manualsnet or gross settlement, Load-following, and participation in (opt-in) or non participation in (opt-out) of the RUC procurement process for the next annual period consistent with long-term CRRs and subject to CAISO approval. After the first annual period, the MSS Operator may default to its previous set of annual elections.  The election regarding net or gross settlements and the election regarding participation in RUC procurement must be made at least 60 days prior to the deadline for the annual CRR allocation process described in Section 36.8.3. The election regarding whether to Load-follow or not Load-follow with the MSS Operator's generating resources must be made at least 60 days prior to the beginning of the operating year.
P 671	30.5.2.5	Modify Section 30.5.2.5 to reflect CAISO's commitment not to dispatch a resource within the declared range.	30.5.2.5 Supply Bids for Metered Subsystems.  ***  For an MSS that elects Load following consistent with Section 4.9.9, 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 Loadfollowing capacity, leaving that capacity entirely available for the

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			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.
P 671	30.7.3.4	Modify Section 30.7.3.4 to state that a Load-following MSS is not subject to Section 30.7.3.4.	To the extent that Scheduling Coordinators fail to enter a Bid for resource that is required to bid in the full range of available Capacity consistent with the Resource Adequacy provisions of Section 40, the CAISO will create a Bid for the Scheduling Coordinator, which is referred to as the Generated Bid. This does not apply to Load-following MSSs. The Generated Bid will be created only after the Market Close for the DAM and will be based entirely on data in the Master File. The Scheduling Coordinator may view Generated Bids, but may not modify such Bids. The CAISO will provide notice to the Scheduling Coordinator of the use of a Generated Bid prior to Market Clearing of the IFM.
P 673	4.9.13.2	Submit a tariff modification allowing more frequent changes to MSS elections or explain why more frequent modifications are infeasible.	4.9.13.2 Load-Following or Non Load Following Election.  The MSS Operator has the option to operate its generating resources to follow its Load. If an MSS Operator elects Load-following and net settlements, all generating resources within the MSS must be designated as Load-following resources. If an MSS Operator elects Load-following and gross settlements, generating resources within the MSS can be designated as either load-following or non load-following resources. Consistent with these requirements, the MSS Operator may also modify the designation of generating resources within the MSS within the timing requirements specified for such Master File changes as described in the Business Practice Manuals.
P 675	31.3.3	Remove duplicative language from Section 31.3.3.	31.3.3 Metered Subsystems.  ***  The CAISO and MSS Operator shall develop specific procedures

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			for each MSS to determine how network constraints will be handled. Costs associates with internal Congestion and Transmission Losses in the MSS will be the responsibility of the MSS Operator. Costs associated with Congestion and Transmission Losses internal to the MSS are the responsibility of the MSS Operator.
P 679	4.9.14.3	Include modifying phrase "Unless specified otherwise in the MSS or MSS Agreement(s)" in MRTU Tariff Section 4.9.14.3.	4.9.14.3 Unless specified otherwise in the MSS agreement(s), iIf the CAISO is compensating Generating Units for Emissions Costs, Start-Up Fuel Costs and Minimum Load Costs, and if MSS Operator charges the CAISO for the Emissions Costs, Start-Up Fuel Costs and Minimum Load Costs, of the Generating Units serving the Load of the MSS, then the Scheduling Coordinator for the MSS shall bear its proportionate share of the total amount of those costs incurred by the CAISO based on the MSS gross Metered Demand and exports and the Generating Units shall be made available to the CAISO through the submittal of Energy Bids.
P 684	7.7.2.2	Modify Section 7.7.2.2 to use the term "MSS Agreement" in place of other language.	7.7.2.2 Responsibilities of UDCs and MSSs During a System Emergency.  * * *  During a System Emergency, the CAISO and UDCs shall communicate through their respective control centers and in accordance with procedures established in individual UDC operating agreements, and the CAISO and the MSS Operator shall communicate through their respective control centers and in accordance with procedures established in the MSS operator undertakes to the CAISO to comply with the provisions of the CAISO Tariff.
P 684	Appendix A	Include definitions for "MSS Demand" and "MSS Supply"	Definition of "MSS Demand"  CAISO Demand specified in an MSS Agreement as being within the MSS.

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			Definition of "MSS Supply"  Supply specified in an MSS Agreement as supplying an MSS
P 684	11.8.6.5	More clearly define in Section 11.8 the RUC BCR exemption for MSSs as set forth in Section 31.5.2.2.	11.8.6.5 Allocation of Net RUC Bid Cost Uplift.  For each Trading Hour of the IFM the, Hourly Net RUC Bid Cost Uplift is determined as the sum over the Settlement Intervals in that Trading Hour of the product of any positive Net RUC Bid Cost Uplift remaining in the Settlement Interval after the sequential netting in Section 11.8.6.2 and the application of the uplift ratio as determined in 11.8.6.3. As specified in 31.5.2.2, MSS Operators that have opted out of RUC participation are exempt from allocation or RUC BCR allocation.
P 697	30.5.3.2	Add tariff language clarifying that the CAISO will dispatch participating load in accordance with bids or in accordance with applicable tariff provisions for an exceptional dispatch.  Clarify Section 30.5.3.2 to indicate that participating load will be scheduled and settled at the nodal level.	30.5.3.2 Exceptions to Requirement for Submission of Demand Bids and Settlement at the LAP.  The following are exceptions to the requirement that Demand Bids be submitted and settled at the LAPScheduling Coordinators shall not submit Demand Bids and the CAISO shall not settle such Bids at the LAP in the following circumstances:  (a) ETC or TOR Self-Schedules submitted consistent with the submitted TRTC Instructions;  (b) Participating Load Bids for Supply and Demand may be submitted and settled at a PNodeDemand Bids for Participating Loads; and  (c) Export Bids are submitted and settled at Scheduling Points, which do not constitute a LAP.
P 777	36.8 Appendix A	Clarify tariff language regarding the participation of State Water Project in the CRR allocation.	Involves changes to several MRTU Tariff sections, see Attachment B, MRTU Tariff Blacklines.
P 791	36.8.5 36.8.5.1.1	Include in Tariff proposed clarification to Section 36.8.5 regarding cash payments in lieu	Involves changes to several MRTU Tariff sections, see Attachment B, MRTU Tariff Blacklines.

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		of CRR transfers for load shifts.	
P 844	36.4.1	Clarify the term "fixed CRRs"	36.4.1 Transmission Capacity Available for CRR Allocation and CRR Auction.
			The CAISO makes available seventy-five percent (75%) of Seasonal Available CRR Capacity for the annual CRR Allocation and CRR Auction processes, and one hundred percent (100%) of Monthly Available CRR Capacity for the monthly CRR Allocation and CRR Auction processes. Available Capacity at Scheduling Points shall be determined in accordance with Section 36.8.4.1 for the purposes of CRR Allocation and CRR Auction of CRRs that have a CRR Source identified at a Scheduling Point. Before commencing with the annual or monthly CRR Allocation and Auction processes, the CAISO may distribute any CRRs to sponsors of merchant transmission projects in accordance with Section 36.11 and will model those as fixed injections and withdrawals CRRs on the DC FNM to be used in the allocation and auction. These fixed injections and withdrawals are not modified by the simultaneous feasibility test.
P 854	11.2.4.5	Explain reasoning for forgiving outstanding debt in the annual balancing account and what if any subsequent restrictions will be imposed on entities that fail to pay their debt and include in Section 11.2.4.5 the concept of revenue shortfalls.	The CRR Balancing Account shall accumulate: (1) any surplus revenue or shortfall generated from Hourly CRR Settlements as described in Section 11.2.4.4, and (2) any surplus revenue or shortfall that remains from the monthly clearing of the CRR Balancing Account as described in Section 11.2.4.4.1, and (3) any surplus revenue that remains from yearly clearing of the CRR Balancing Account as described in Section 11.2.4.4.2. Interest accruing due to the CRR Balancing Account shall be at the CAISO's received interest rate and shall be credited to the CRR Balancing Account.
P 920	16.6.4	Revise the tariff to timely notify SCs whether the ETC schedule is valid or invalid; and	16.6.4 Notification to Scheduling Coordinators of CAISO  Determination

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		provide the SC a reasonable opportunity to correct identified errors prior to the close of the day-ahead market.	To the extent practicable, after performing validation of the ETC Self-Schedule, and prior to taking any action pursuant to Section 16.6.2, the CAISO will notify the Scheduling Coordinator indicating whether the ETC Self-Schedule is valid or invalid.
P 952	4.3.1.2	Modify MRTU Tariff Section 4.3.1.2 to ensure that the CAISO should only provide the perfect hedge to new PTOs commensurate with the amount of transmission that they had upon becoming PTOs and that future transmission capacity additions by new PTOs should not receive the perfect hedge.	* * * *  For the period between the effective date of this provision and ending December 31, 2010, the Transition Date pursuant to Section 4.2 of Appendix F, Schedule 3, New Participating TOs that have joined the CAISO and turned over Operational Control of their facilities and Entitlements shall receive the IFM Congestion Credit in accordance with Section 11.2.1.5, which IFM Congestion Credit shall only be applicable to those facilities and Entitlements in existence on the effective date of the CAISO's initial assumption of Operational Control over the facilities and Entitlements of a New Participating TO.
P 967-69	11.23	Amend Section 11.13 to clarify that valid ETC Self-Schedule changes submitted after the close of the HASP and the Real-Time Market will not be exposed to uninstructed deviation charges.	q) Adjustments to any Generating Unit, Curtailable Demand and System Resource Day-Ahead Schedules or HASP Intertie Schedules made in accordance with the terms of TRTC for Existing Contracts or TORs shall not be subject to Uninstructed Deviation Penalties. Valid changes to ETC Self-Schedules or TOR Self-Schedules submitted after the close of the HASP or the RTM shall not be subject to Uninstructed Deviation Penalties.
P 971	30 30.1	Change the name of Section 30 to "Bid and Schedule Submissions for all CAISO Markets".  Change the name of Section 30.1 to "Bids and Schedules."	30. BIDS, AND INCLUDING BIDSELF- SCHEDULES, SUBMISSIONS FOR ALL CAISO MARKETS  30.1 Bids, and Including Self-Schedules.  Scheduling Coordinators shall submit Bids to participate in the CAISO Markets, including as well as any Self-Schedules, ETC

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		Change the first sentence of Section 30.1 to "Scheduling Coordinators shall submit Bids to participate in the CAISO Markets, as well as any Self-Schedules, ETC Self-Schedules or Self-Provision of Ancillary Services."	Self-Schedules, TOR Self-Schedules, or Self-Provision of Ancillary Services.
P 988	17 17.1 (including subsections) 17.2 (including subsections)	Modify the MRTU Tariff to specify that balanced TOR Self-Schedules will continue to be exempt from access, UFE, Minimum Load compensation and neutrality charges, and modify Section 17 to specify that all such "generic" treatment of TORs.	Involves changes to several MRTU Tariff sections, see Attachment B, MRTU Tariff Blacklines.
P 990	17.3 17.3.1	Address in the MRTU Tariff the fact that Section 17 makes no reference to how TORs will be scheduled through the CAISO markets and fails to identify what information is required for "balanced" and "valid" TOR Self-Schedules which are necessary under sections 11.2.1.5 and 11.5.7 to reverse Congestion charges.	The CAISO will accept a valid TOR Self-Schedule from a Scheduling Coordinator. That Scheduling Coordinator shall be either the holder of the TOR or its designee. TOR Self-Schedules submitted by Scheduling Coordinators to the CAISO must be submitted in accordance with this CAISO Tariff.  17.3.1 Validation of TOR Self-Schedules.  A TOR Self-Schedule is a valid TOR Self-Schedule when the CAISO has determined that the TOR Self-Schedule, submitted to the CAISO pursuant to the requirements for Bids in Section 30, properly reflects TORs consistent with the TRTC, is labeled with a unique TOR identifier, and includes balanced sources and sinks, within the TOR capacity limits.
P 994	17.2	Explain whether CAISO intends to use or sell unscheduled TOR capacity or honor all schedule changes by providing scheduling priority and using its Exceptional Dispatch authority under Section 39.4.2. If CAISO intends to use the unscheduled capacity, then	17.2 Treatment of TORs.  * * *  (1) The CAISO will reserve transmission capacity equal to the TOR transmission capacity and make a corresponding adjustment in its determination of ATC. The CAISO will not limit parallel flow from flowing on TOR transmission capacity

Ordering	Tariff	Description of Change Required	Compliance Changes Made to MRTU Tariff
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		CAISO must negotiate with the TOR concerning compensation and further details for such use.	consistent with the redispatch provisions of Section 17.2(3), just as the CAISO does not limit TOR Self-Schedules from flowing on non-TOR transmission. There shall be no compensation for parallel flow for either the CAISO or the TOR holder.
P 1000	17.1 (including subsections)	Clarify whether TRTC instructions will be required with respect to TORs and if so, modify Section 17 accordingly.	Involves changes to several MRTU Tariff sections, see Attachment B, MRTU Tariff Blacklines.
P 1003	17.3.3	Represent in the MRTU Tariff that the CAISO, absent a specified loss percentage in a bilateral agreement that it must honor, will assess marginal losses to Scheduling Coordinators for TOR transactions.	(5) Parties with TORs shall continue to pay for Transmission Losses or Ancillary Services requirements in accordance with any Existing Contracts applicable to those TORs as they may be modified or changed in accordance with the terms of the Existing Contract. Any affected Participating TOs shall continue to provide Transmission Losses and any other Ancillary Services to the holder of a TOR subject to an Existing Contract as may be required by the Existing Contract. As described in Section 17.3.3(3) above, the CAISO will charge Scheduling Coordinators submitting the TOR Self-Schedule the charges applicable to Transmission Losses, Ancillary Services, Imbalance Energy, and Grid Management Charges in accordance with the CAISO Tariff (e.g., the Transmission Losses Charge based on the Marginal Cost of Losses), and any shortfall or surplus between the CAISO charges and the provisions of any applicable Existing Contract shall be settled bilaterally between the Existing Contract parties or through the relevant TO Tariff. To enable holders of TORs to determine whether the CAISO's calculations result in any associated shortfall or surplus and to enable the parties to the Existing Contracts to settle the differences bilaterally or through the relevant TO Tariff, the CAISO shall calculate and provide the Scheduling Coordinator's Settlements the amounts paid for the MCL for the amounts MWh submitted with a valid TOR Self-Schedule. Each Participating TO will be responsible for

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			recovering any deficits or crediting any surpluses associated with
			differences in Transmission Losses and Transmission Loss
			Requirements and/or Ancillary Services requirements, through its
			bilateral arrangements or its Transmission Owner Tariff.
P 1021	39.6.1.4	Modify Section 39.6.1.4 to require cost justification for bids below the negative	39.6.1.4 Minimum Bid Price for Energy Bids.
		\$30/MWh floor.	Energy Bids into the CAISO Markets less than -\$30/MWh are not
			eligible to set any LMP. If the CAISO dispatches a resource with
			an Energy Bid less than -\$30/MWh, the Scheduling Coordinator
			on behalf of the resource will be eligible to be paid the Bid price
			upon the submission of detailed information justifying the cost
			components of the Bid to the CAISO and FERC no later than
:			seven (7) days after the end of the month in which the Bid was
			submitted. The CAISO will treat such information as confidential
			and will apply the procedure in Section 20.4 of this CAISO Tariff
			with regard to requests for disclosure of such information. The
			CAISO shall pay Scheduling Coordinators for amounts in excess
			of -\$30/MWh minimum Bid price upon FERC acceptance of the
			information justifying the cost components.
P 1051-52	39.7.1.2	Modify the competitive screening analysis	39.7.1.2 LMP Option.
		requirement by removing the 50% limitation	The CAISO will calculate the LMP Option for the Default Energy
		applicable to the LMP Option for Default	Bid as a weighted average of the lowest quartile of LMPs at the
		Energy Bid.	Generating Unit PNode in periods when the unit was Dispatched
1:			during the preceding ninety (90) days. The weighted average will
			be calculated based on the quantities Dispatched within each
			segment of the Default Energy Bid curve. To qualify for the LMP
			Option, at least fifty percent (50%) of the MWh Dispatched over
			the prior ninety (90) day time period must have been unmitigated.
P 1057	39.7.1.3	Modify the tariff to indicate that at the time the	39.7.1.3 Negotiated Option.
		CAISO and market participants negotiate a bid	
		price, the CAISO must file the negotiated	The Negotiated Option is a Default Energy Bid that is derived
		default energy bid with the Commission.	through consultation between the Scheduling Coordinator for a
			Generating Unit and the CAISO or an alternative independent

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			entity selected by the CAISO to determine an amount for its Default Energy Bid. The CAISO shall make an informational filing with FERC of any Default Energy Bids negotiated pursuant to this section of the CAISO Tariff, no later than seven (7) days after the end of the month in which the Default Energy Bids were established.
P 1138	Appendix A 40.1 40.1.1 40.4.1 40.4.3	Review the definition of LSE to ensure that all entities covered by the MRTU RA provisions are appropriately included and defined.	Involves changes to several MRTU Tariff sections, see Attachment B, MRTU Tariff Blacklines.
P 1139	40.1.1	Delete the last sentence of Section 40.1, because it creates ambiguity regarding the applicability of MRTU's resource adequacy provisions to the State Water Project.	On an annual basis, in the manner and schedule set forth in the Business Practice Manual, the Scheduling Coordinator for a Load Serving Entity, not exempt under Section 40.1, Each Scheduling Coordinator must inform the CAISO on an annual basis, in the manner and on the schedule set forth in the Business Practices Manual, whether each Load Serving Entity (LSE) for whom the Scheduling Coordinator submits Demand Bids and settles such transactions including Demand Charges associated with the RTM shall inform the CAISO whether each such LSE elects to be either:  (i) a Reserve Sharing LSE or a (ii) Modified Reserve Sharing LSE. A Scheduling Coordinator for a Load-following MSS is not required to make an election under this Section. Scheduling Coordinators for Load-following MSSs are subject solely to Sections 40.2.4 and 40.3.  The CAISO may confirm with the CPUC, or other Local Regulatory Authority, or federal agency, as applicable, the accuracy of the election by the Scheduling Coordinator for any LSE under its respective jurisdiction, or, in the absence of any election by the Scheduling Coordinator, the desired election for

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			any LSE under its jurisdiction. for the LSEs under its jurisdiction. The determination of the CPUC, or Local Regulatory Authority, or federal agency will be deemed binding by the CAISO on the Scheduling Coordinator and the LSE. If the Scheduling Coordinator and CPUC, Local Regulatory Authority, or federal agency, as appropriate, fail to make the election on behalf of an LSE in accordance with the Business Practice Manual, the LSE
			shall be deemed a Reserve Sharing LSE.  A Scheduling Coordinator for a Load following MSS is not required to make an election under this Section 40. Scheduling Coordinators for Load-following MSSs are subject solely to Sections 40.2.3 and 40.3. The State Water Resources  Development System commonly know as the State Water Project of the California Department of Water Resources shall be required to develop, in cooperation with the CAISO, a program that ensures the Load Serving Entity will not unduly rely on the resource
			procurement practices of other Load Serving Entities.
P 1155	40.2 (including subsections) 40.5.1	Modify the MRTU RA proposal to specify that if a LRA fails to implement a reserve margin, then the CAISO should continue to implement the 15 percent reserve margin.	Involves changes to several MRTU Tariff sections, see Attachment B, MRTU Tariff Blacklines.
P 1169	40.3.1	Clarify MRTU Tariff such that the CAISO does not use standards more stringent than an N-1-1 reliability criterion unless required to do so through the PTO agreements and that the CAISO should use the N-2 local reliability criteria only in certain areas that used this standard prior to the formation of the CAISO.	The CAISO will, on an annual basis, perform and publish on the CAISO Website a technical study that determines the minimum amount of Local Capacity Area Resources that must be available to the CAISO within each Local Capacity Area identified in the technical study. The CAISO shall collaborate with the CPUC, Local Regulatory Authorities within the CAISO Control Area, and other market participants to establish the parameters, assumptions, and other criteria to be used and described in the technical study that permit compliance with Applicable Reliability Criteria.
P 1170	40.3.1	Correct incomplete sentence at the end of	40.3.1 CAISO Technical Study.

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	Affected	0 4: 40.2.1	
		Section 40.3.1.	The CAISO will, on an annual basis, perform and publish on the CAISO Website a technical study that determines the minimum amount of Local Capacity Area Resources that must be available to the CAISO within each Local Capacity Area identified in the technical study. The CAISO shall collaborate with the CPUC, Local Regulatory Authorities within the CAISO Control Area, and other market participants to establish the parameters, assumptions, and other criteria to be used and described in the technical study that permit compliance with Applicable Reliability Criteria.
P 1192	40.3.4 40.3.4.1 40.3.4.2	Include proposed process of safeguards in the MRTU tariff.	Involves changes to several MRTU Tariff sections, see Attachment B, MRTU Tariff Blacklines.
P 1194	40.3.4 40.3.4.1 40.3.4.2 42.1.8	Clarify why Sections 40.3.4 and 42.1.8 both address allocation of local capacity area resource procurement; and why section 40.3.4(ii) permits allocation of Local Capacity Area resource procurement in accordance with section 41 on procurement of RMR, despite the CAISO's statement to the contrary.	Involves changes to several MRTU Tariff sections, see Attachment B, MRTU Tariff Blacklines.
P 1196	40.3.4 40.3.4.1 40.3.4.2	Clarify that Sections 40.3.4, 42.1.8, and 42.1.9 credit both local and system resource adequacy requirements for entities that pay for backstop procurement.	Involves changes to several MRTU Tariff sections, see Attachment B, MRTU Tariff Blacklines.
P 1198	40.3.4 40.3.4.1 40.3.4.2	Address the merits of the State Water Project's proposed modification to Section 42.1.8 which the State Water Project believe will allow load to respond to price.	Involves changes to several MRTU Tariff sections, see Attachment B, MRTU Tariff Blacklines.
P 1214	40.4.6.1	Remove language from Section 40.4.6.1 that allows the CAISO to update its deliverability study "more frequently [than annually] in accordance with Good Utility Practice" and to explicitly provide in this Section that the	40.4.6.1 Deliverability Within the CAISO Control Area.  In order to determine Net Qualifying Capacity from Resource Adequacy Resources subject to this Section 40.4, the CAISO will

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		results of the deliverability study will only impact net qualifying capacity during the subsequent compliance year.	determine that a Resource Adequacy Resource is available to serve the aggregate of Load by means of a deliverability study.  Documentation explaining the CAISO's deliverability analysis will be posted on the CAISO Website. The deliverability study will be performed annually and shall focus on peak Demand conditions.  The results of the deliverability study shall be effective for a period no shorter than a compliance year. The CAISO will update the deliverability baseline study on an annual basis, or more frequently in accordance with Good Utility Practice.
P 1215	40.4.6.1	Eliminate the apparent duty in Section 40.4.6.1 to prevent degradation of an existing unit's deliverability.	40.4.6.1 Deliverability Within the CAISO Control Area.  * * *  To the extent the deliverability study shows that the Qualifying Capacity is not deliverable to the aggregate of Demand under the conditions studied, the Qualifying Capacity of the Resource Adequacy Resource will be reduced on a MW basis for the capacity that is undeliverable. The CAISO will utilize its interconnection process and procedures under Section 25 of the CAISO Tariff to prevent degradation of the deliverability of an existing Generating Unit that could result from the interconnection of additional Generation.
P 1236	40.8.1.12.2	Modify Sections 40.8.1.12.1 and 40.8.1.12.2 such that Dynamic and Non-Dynamic System Resources have the same RA standards for external transmission requirements and curtailment.	40.8.1.12.2 Non-Dynamic System Resources.  For Non-Dynamic System Resources, the Scheduling Coordinator must demonstrate that the Load Serving Entity upon which the Scheduling Coordinator is scheduling Demand has an allocation of import capacity allocation at the import Scheduling Point under Section 40.4.6.2 of the CAISO Tariff that is not less than the Resource Adequacy Capacity from the Non-Dynamic System Resource. The Scheduling Coordinator must also demonstrate that the Non-Dynamic System Resource is covered by Operating Reserves, unless, unit contingent, in the sending Control Areaand cannot be curtailed for economic reasons. Eligibility as Resource

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			Adequacy Capacity would be contingent upon a showing by the Scheduling Coordinator of the System Resource that it has secured transmission through any intervening of securing in any intervening Control Areas transmission-for the operating hours that cannot be curtailed for economic reasons or bumped by higher priority transmissionmaking use of highest priority transmission offered by the intervening Transmission Operator that cannot be curtailed for economic reasons. With respect to Non-Dynamic System Resources, any inter-temporal constraints such as multi-hour run blocks, must be explicitly identified in the monthly Resource Adequacy plan, and no constraints may be imposed beyond those explicitly stated in the plan.
P 1255	40.5.5	Modify Section 40.5.5 with respect to the two issues on which CAISO agrees with Six Cities and CMUA.	40.5.45 Consequence of Failure to Meet Scheduling Obligation.  * * *  (2) If the Scheduling Coordinator for the Modified Reserve Sharing LSE cannot fulfill its obligations under Section 40.5.12(3) of this CAISO Tariff, the Scheduling Coordinator for the Modified Reserve Sharing LSE will be charged a capacity surcharge of two times the average of the six (6) Settlement Interval LAP prices for the hour in the amount of the shortfall. Energy scheduled in the HASP will not net against, or be used as a credit to correct, any failure to fulfill the Day-Ahead IFM hourly scheduling and RUC obligation in Section 40.5.2(1)3.
P 1286	40.6.7.1	Modify Section 40.6.7.1 to delete the phrase "or other restriction" from section 40.6.7.1 on long-start units.	40.6.7.1 Release of Long-Start Units.  Long-Start Units not committed in the Day-Ahead Market will be released from any further obligation to submit Self-Schedules or Bids for the relevant Operating Day. Scheduling Coordinators for Long-Start Units are not precluded from self-committing the unit after the Day-Ahead Market and submit a Self-Schedule a Wheel-Out in the HASP, unless precluded by terms of its contract-or-other restrictions.
P 1308	40.6.4.3.4	Modify the MRTU Tariff to permit but not	40.6.4.3.4 Availability of Intermittent Resources

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		require Intermittent Resources to submit Bids in the Day-Ahead Market.	Any Eligible Intermittent Resource that provides Resource Adequacy Capacity may, but is not required to, submit Bids in the Day-Ahead Market.
P 1325	40.2.2.3	Modify Section 40.2.1(3) such that all non-CPUC LSEs have the ability to use coincident peak demand for their monthly and annual demand forecasts.	3. The Scheduling Coordinator for a Non-CPUC Load Serving Entity or CPUC Load Serving Entity subject to Section 40.2.1.1(b) electing Reserve Sharing LSE status An must provide annual and monthly Demand Forecasts on the schedule set forth in the Business Practices Manual. The annual and monthly Demand Forecasts shall set forth the Non-CPUC Load Serving Entity's respective annual and monthly non-coincident peak Demand for its Service Area, MSS area, or TAC Area in which the Non-CPUC Load Serving Entity serves Load, unless either (i) the Non-CPUC Load Serving Entity agrees to utilize the annual and monthly coincident peak Demand determinations provided by the California Energy Commission for such Non-CPUC Load Serving Entity; or (ii) if the California Energy Commission does not produce coincident peak Demand forecasts for the Load Serving Entity, the annual and monthly coincident peak Demand forecasts produced by the CAISO in accordance with its Business Practice Manual. The monthly Demand Forecast shall set forth the Non-CPUC Load Serving Entity's monthly non-coincident peak Demand for its Service Area, MSS area, or the TAC Area in which the Non-CPUC Load Serving Entity agrees to utilize coincident peak Demand determinations provided by the California Energy Commission for such Non-CPUC Load Serving Entity agrees to utilize coincident peak Demand Serving Entity agrees to utilize coincident peak Demand for such Non-CPUC Load Serving Entities electing Reserve Sharing LSE status must provide data and/or supporting information, as requested by the CAISO, for the Demand Forecasts required by this Section for each Non-CPUC-Load Serving Entity and a

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			description of the criteria upon which the Demand Forecasts were developed, <u>if applicable</u> , and any modifications thereto as they are implemented from time to time.; and
P 1326	40.2.4	Make modifications to the MRTU Tariff that address NCPA's concerns with respect to MSS reporting requirements.	40.2.43 Load-Following MSS.  A Scheduling Coordinator for a Load-following MSS must provide an annual Resource Adequacy Plan that sets forth the Local Capacity Area Resources, if any, procured by the Load-following MSS as described in Section 40.3.
P 1326	8.9.7	Modify MRTU Tariff to require the CAISO to report a RA resource's failure to pass a compliance test to the applicable Local Regulatory Authority and not just the CPUC.	Resource providing Ancillary Services of the test, the CAISO shall provide the test, the CAISO shall provide the Scheduling Coordinator whose resource providing Ancillary Services or RUC Capacity of the test, the CAISO shall notify the Scheduling Load, or System Resource was the subject of the test and the provider or owner or operator of the Generating Unit, Participating Load, or System Resource providing Ancillary Services or RUC Capacity of such failure by any means as soon as reasonably practicable after the completion of the test. In addition, regardless of the outcome of the test, the CAISO shall provide the Scheduling Coordinator whose resource was subject to a compliance test written notice of the results of such test. The CAISO shall at the same time send a copy of the notice to the provider or owner or operator of the Generating Unit, Load, or System Resource providing Ancillary Services or RUC Capacity. For any Resource Adequacy resource failing a compliance test, the CAISO also will provide notification of the failure to notify the California Public Utilities Commission, Local Regulatory Authority, or federal agency with jurisdiction over the Load Serving Entity that listed the Resource Adequacy Resource on its Resource Adequacy Plan, and FERC-of the failure.
P 1326	20.2	Modify MRTU Tariff to treat data submission including annual and monthly plans and	20.2 Confidential Information.

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		information on system resources as confidential.	The following information provided to the CAISO by Scheduling Coordinators shall be treated by the CAISO as confidential:  (a) individual Bids; (b) CRR bids and other CRR Allocation nomination information; (c) transactions between Scheduling Coordinators, including Inter-SC Trades; (d) individual Generator Outage programs unless a Generator makes a change to its Generator Outage program which causes Congestion in the short term (i.e. one month or less), in which case, the CAISO may publish the identity of that Generator.  (e) The following information related to the resource adequacy program in accordance with Section 40 of this CAISO Tariff:  (i) Annual and monthly Resource Adequacy Plans and Supply Plans; (ii) Demand forecasts; and (iii) Information on existing import contracts and any trades or sales of allocated import capacity.
P 1326	20.4	Modify MRTU Tariff to allow the CAISP to aggregate data for public statements about aggregate adequacy of supply.	20.4 Disclosure.  * * * *  (d) Notwithstanding the provisions of Section 20.2(e), information submitted through Resource Adequacy Plans and Supply Plans in accordance with Section 40 of the CAISO Tariff may be provided to:  (i) the Scheduling Coordinator(s) and/or Market Participant(s) involved in a dispute or discrepancy pursuant as to whether a resource is properly identified in a Resource Adequacy Plan or a Supply Plan only to the limited extent necessary to identify the disputed transaction and the relevant counterparty or counterparties.  (ii) the regulatory entity, whether the CPUC, other Local Regulatory Authority or federal agency, with jurisdiction

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			over a Load Serving Entity involved in a dispute or discrepancy as to whether a resource is properly identified in a Resource Adequacy Plan or the Supply Plan, or otherwise identified by the CAISO as exhibiting a potential deficiency in demonstrating compliance with resource adequacy rules adopted by the CPUC, other Local Regulatory Authority, of
			federal agency, as applicable. The information provided shall be limited to the particular dispute, discrepancy, or deficiency.  Nothing in this Section 20 shall limit the ability of the CAISO to aggregate data for public release about the adequacy of supply.
P 1331	4.5.3.2	Incorporate in the MRTU Tariff the responses to issues outlined in Appendix A of CAISO's Reply Comments.  Clarify Section 4.5.3.2 to avoid confusion.	Submitting Bids for Energy in the Day-Ahead Market and HASP for the HASP and the Real-Time Market in relation CAISO Markets that relate to the Market Participants for which it serves as Scheduling Coordinators, Scheduling Coordinators shall provide the CAISO with Submitting intertie Interconnection schedules, prepared in accordance with all NERC, WECC and CAISO requirements;
P 1331	6.5.6.1.1	Incorporate in the MRTU Tariff the responses to issues outlined in Appendix A of CAISO's Reply Comments.  Modify per the comments of Southern California Edison.	6.5.6.1.1 The following information shall be published on OASIS  180 days following the applicable Trading Day, with the exclusion of after the operating day, the CAISO will publish the following information excluding that is specific to Scheduling Coordinators specific information via OASIS:  (a) AS Market Bids; (b) Energy Market Bids; and (c) RUC Market Bids.
P 1331	11.5.6.3.2	Incorporate in the MRTU Tariff the responses to issues outlined in Appendix A of CAISO's Reply Comments.  Revise this Section to correct inappropriate	11.5.6.3.2 Allocation of Costs from Exceptional Dispatch Calls to Condition 2 RMR Units.  a) All costs associated with Energy provided by a Condition 2 RMR Unit operating other than according to a RMR Dispatch

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		merging of sentences and inaccurate cross-references.	Noticedispatch notice issued under the RMR Contract shall be allocated like other Instructed Imbalance Energy in accordance with Section 11.5.4.2. Until either the RMR Contract Counted MWh, Counted Service Hours or Counted Start Ups exceed the relevant RMR Contract Service Limit, any cost incurred for Energy provided under the RMR Contract above the rate specified in equation 1a or 1b as set forth in Section 11.5.6.3.1 shall be allocated in accordance with Section 11.5.1, not to the Responsible Utility.  b) Start-Up Costs for Condition 2 RMR Units providing service outside the RMR Contract, and any additional start-up Cost associated with a Condition 2 RMR Unit providing service under the RMR Contract when the unit's total service has exceeded an RMR Contract Service Limit but neither the RMR Contract Counted MWh, Counted Service Hours or Counted start-ups under the RMR Contract have exceeded the applicable RMR Contract Service Limit, shall be treated similar to costs under Section 11.5.6.2.5.2.8
P 1331	11.8.6.4	Incorporate in the MRTU Tariff the responses to issues outlined in Appendix A of CAISO's Reply Comments.  Clarify language to reflect that the calculation for the IFM Load Uplift Obligation is calculated based on the actions of individual SCs, not the market at large.	11.8.6.4 Allocation of Net IFM Bid Cost Uplift.  * * *  The IFM Load Uplift Obligation for each Scheduling Coordinator is the difference between the total Demand scheduled in the Day-Ahead Schedule of that Scheduling Coordinator and the scheduled Generation from the Self-Schedules in the Day-Ahead Schedule of that Scheduling Coordinator, plus imports scheduled by that Scheduling Coordinator in itsthe Day-Ahead Schedule, adjusted by any applicable-Inter-SC Trades of IFM Load Uplift Obligations.
P 1331	12.5.2	Incorporate in the MRTU Tariff the responses to issues outlined in Appendix A of CAISO's Reply Comments.  Revise this Tariff section to provide that the net projected obligations determination can	12.5.2 Credit Requirements for CRR Obligations upon Allocation, Auction or Transfer.  ***  The CAISO will determine the value of the net projected obligation of each CRR Obligation using appropriate methods, including proxy values or values based on experience, which shall

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		only be made during the term of the CRR.	be published in a Business Practice Manual. For negatively priced CRR Obligations awarded in an auction, the minimum value of the net projected obligation shall be set at the price determined in the auction. The CAISO may reassess its net projected obligation determinations at any time during the term of the CRR and shall require additional security if the determination results in an increase in a CRR Holder's aggregate estimated liability that is not covered by available security.
P 1331	16.6.4	Incorporate in the MRTU Tariff the responses to issues outlined in Appendix A of CAISO's Reply Comments.	16.6.4 Notification to Scheduling Coordinators of CAISO Determination  To the extent practicable, after performing validation of the ETC
		Add clarification that the CAISO will notify an SC whether an ETC Self-Schedule is valid or not prior to taking any action that would cause the Self-Schedule to lose it's priority.	Self-Schedule, and prior to taking any action pursuant to 16.6.2, the CAISO will notify the Scheduling Coordinator indicating whether the ETC Self-Schedule is valid or invalid.
P 1331	27.1.3	Incorporate in the MRTU Tariff the responses to issues outlined in Appendix A of CAISO's Reply Comments.  Correct typographic error.	27.1.1.3 Marginal Cost of Congestion.  The Marginal Cost of Congestion at a PNode reflects a linear combination of the shadow prices of all binding constraints in the network, each multiplied by the corresponding Power Transfer Distribution Factor (PTDF). The Marginal Cost of Congestion may be positive or negative depending on whether a power einjection (i.e., incremental Load increase) at that Location marginally increases or decreases Congestion.
P 1331	30.5.2.1	Incorporate in the MRTU Tariff the responses to issues outlined in Appendix A of CAISO's Reply Comments.  Clarify that HASP/Real-Time Bids for a Resource must be monotonically increasing.	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;

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			Trading Day to which the Bid applies; Priority Type (if any).
			Supply Bids offered in the CAISO Markets must be
			monontonically increasing.
P 1331	30.5.2.4	Incorporate in the MRTU Tariff the responses to issues outlined in Appendix A of CAISO's	30.5.2.4 Supply Bids for System Resources.
		Reply Comments.	In addition to the common elements listed in Section 30.5.2.1,
			Supply Bids for System Resources shall also contain: a NERC
		Include in MRTU Tariff clarifications with	Tag; the relevant Ramp Rate; Start-Up Bid; and Minimum Load
		respect to the treatment of imports.	Bid. Start-Up Bids and Minimum Load Bids for System
			Resources, except for Dynamic or Non-Dynamic System
			Resources, must be zero. Dynamic or Non-Dynamic Resource-
			Specific System Resources may submit non-zero Start-Up and
			Minimum Loads Bids. Dynamic and Non-Dynamic Resource
	}		Specific System Resources must register resource specific
			information in the Master-File in a similar manner as Generating
			Units and are eligible to participate in the Day-Ahead Market on
1			an equivalent basis as Generating Units and are not obligated to
			participate in RUC or the RTM if the resource did not receive a
			Day Ahead Schedule unless the resource is a Resource Adequacy
			Resource. If the Resource Specific System Resource is a Resource
			Adequacy Resource, the resource is obligated to make itself
			available to the CAISO market as prescribed by Section 40.6.
			Dynamic Resource-Specific System Resources are also eligible to
			participate in the HASP and RTM on an equivalent basis as
			Generating Units. Non-Dynamic Resource-Specific System
			Resources will be treated like other System Resources in the
			HASP and RTM. The quantity (in MWh) of Energy
			categorized as Interruptible Imports must also be included in
			the Bid. Bids submitted to the Day-Ahead Market for ELS
			Resources will be applicable for two days after they have
			been submitted and cannot be changed the day-after they
			have been submitted.
P 1331	31.2	Incorporate in the MRTU Tariff the responses	31.2 Market Power Mitigation and Reliability

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Paragraph	Section(s) Affected		
		to issues outlined in Appendix A of CAISO's Reply Comments.  Clarify Section 31.2 as suggested by Southern California Edison.	Requirement Determination (MPM-RRD).  ***  The MPM-RRD process optimizes resources using the same optimization used in the IFM, but instead of using Demand Bids as in the IFM the MPM-RRD process optimizes resources to meet one hundred percent of the CAISO Demand Forecast and Export Bids to the extent that the Export Bids are economicselected in the MPM-RRD process, and meet one hundred percent of Ancillary Services requirements based on Supply Bids submitted to the DAM. The pool of resources committed in the MPM-RRD process is then passed to the IFM to constitute the pool of resources available for commitment in the IFM. The CAISO performs the MPM-RRD for the DAM for the 24 hours of the next Trading Day.
P 1331	31.2.2.1	Incorporate in the MRTU Tariff the responses to issues outlined in Appendix A of CAISO's Reply Comments.  Fix typographic error.	31.2.2.1 RMR Units.  * * *  If the dispatch level produced through the ACR for a Condition 1 RMR Unit is not greater than the dispatch level produced through CCR, the Unit's original, unmitigated DAM Bid will be retained in its entirety. For a Condition 1 RMR Unit, if the dispatch level produced through the ACR is greater than the dispatch level produced through the CCR, and for a Condition 2 RMR Unit that is dispatched through the GACR, the resource will be flagged as an RMR Dispatch in the Day-Ahead Schedule and shall constitute a Dispatch Notice pursuant to the RMR Contract.
P 1331	33.4	Incorporate in the MRTU Tariff the responses to issues outlined in Appendix A of CAISO's Reply Comments.  Fix typographic error.	33.4 MPM-RRD for the HASP and the RTM.  * * *  The Bids are mitigated only for the Bid quantities that are above the minimum quantity cleared in the CCR across all four 15-minute intervals. For a Condition 1 RMR Unit, if the dispatch level produced through the ACR is greater than the dispatch level produced through the CCR, and for a Condition 2 RMR Unit that is dispatched through the GACR, the resource will be flagged as an

Ordering Paragraph	Tariff Section(s) Affected	Description of Change Required	Compliance Changes Made to MRTU Tariff
			RMR Dispatch in the RTM and shall constitute a Dispatch Notice pursuant to the RMR Contract.
P 1331	34.9.2	Incorporate in the MRTU Tariff the responses to issues outlined in Appendix A of CAISO's Reply Comments.  Clarify Tariff to provide that to the extent RMR units are dispatched to provide Voltage Support that they should be compensated pursuant to the RMR Contracts and not as an Exceptional Dispatch.	The CAISO may also manually dispatch resources in addition to or instead of resources dispatched by the RTM optimization software to: (1) perform Ancillary Services testing; (2) perform precommercial operations testing for Generating Units; (3) mitigate for Overgeneration; (4) provide for Black Start; (5) provide for Voltage Support; (6) accommodate TOR or ETC Self-Schedule changes after the Market Close of the HASP; or (7) to reverse a commitment instruction issued through the IFM that is no longer optimal as determined through RUC. If the CAISO dispatches an RMR Unit for Voltage Support, the RMR Unit will be compensated under its RMR Contract and not as an Exceptional Dispatch under the CAISO Tariff.
P 1331	34.10.2	Incorporate in the MRTU Tariff the responses to issues outlined in Appendix A of CAISO's Reply Comments.  Modify this Section consistent with CAISO's agreement that dispatch priorities should be included in the Tariff.	* * *  These dispatch priorities as defined in the RTM optimization may be superseded by operator actions and procedures. The Dispatch priorities listed in Sections 34.10.1 and 34.10.2 shall be incorporated into a Business Practice Manual (BPM) and to the extent it is determined necessary to modify the order of dispatch priority the CAISO may do so via an update to the BPM.
P 1331	37.7 (including subsections)	Incorporate in the MRTU Tariff the responses to issues outlined in Appendix A of CAISO's Reply Comments.  Update MRTU Tariff to reflect repeal of FERC's Market Behavior Rules and incorporation of these Rules into other FERC Regulations.	Involves changes to several MRTU Tariff sections, see Attachment B, MRTU Tariff Blacklines.
P 1331	39.3	Incorporate in the MRTU Tariff the responses	39.3 Categories of Conduct that May Warrant Mitigation.

Ordering Paragraph	Tariff Section(s) Affected	Description of Change Required	Compliance Changes Made to MRTU Tariff
P 1331	41.5.1	to issues outlined in Appendix A of CAISO's Reply Comments.  Modify Section 39.3 to reflect CAISO's agreement with Southern California Edison's proposed change.  Incorporate in the MRTU Tariff the responses	* * *  (4) Bidding practices that distort prices or uplift charges away from those expected in a competitive market are contrary to the principle of price convergence between Day-Ahead and Real- Time markets.  41.5.1 Day-Ahead and HASP RMR
		to issues outlined in Appendix A of CAISO's Reply Comments.  Modify Section 41.5.1 to reflect CAISO's agreement with Southern California Edison's proposed change.	* * * *  A Bid submitted in the DAM or the HASP for a Condition 1 RMR Unit shall be deemed to be a notice of intent to substitute a Market Transaction for the amount of MWh specified in each Bid for each Trading Hour pursuant to Section 5.2 of the RMR Contract. In the event the CAISO issues an RMR Dispatch Notice or an RMR Dispatch in the IFM or Real-Time Market for any Trading Hour, any MWh quantities cleared through Competitive Constraint Run of the MPM-RRD shall be settled-considered as a Market Transaction under-in accordance with the RMR Contract. RMR Units operating under Condition 2 may not submit Bids until and unless the CAISO issues an RMR Dispatch Notice or issues an RMR Dispatch in the IFM, in which case a Condition 2 RMR Unit shall submit Bids in accordance with the RMR Contract in the next available market for the Trading Hours specified in the RMR Dispatch Notice or Day-Ahead Schedule.
P 1331	Appendices B.6 and B.7 (various subsections)	Incorporate in the MRTU Tariff the responses to issues outlined in Appendix A of CAISO's Reply Comments.  Change "MDAS" to "RMDAPS"	Involves changes to several MRTU Tariff sections, see Attachment B, MRTU Tariff Blacklines.
P 1331	Appendix B.7	Incorporate in the MRTU Tariff the responses to issues outlined in Appendix A of CAISO's Reply Comments.	CAISO TARIFF APPENDIX B.7 Meter Service Agreement for Scheduling Coordinators

Ordering Paragraph	Tariff Section(s) Affected	Description of Change Required	Compliance Changes Made to MRTU Tariff
		Change references from "Section 14" to "Section 4.2" and "Section 15" to "Section 14."	ARTICLE II TERM AND TERMINATION  2.1 Effective Date. This Agreement shall be effective as of the later of the date of execution of this Agreement, or the date it is accepted and made effective by FERC, and shall remain in full force and effect until terminated by operation of law or pursuant to Section 2.2 of this Agreement.
			2.2 Termination  2.2.1 Termination by CAISO. Subject to Section 14-4.2-the
D 1225	0.2.6.2.2	Modific MDTU Tariff Section 0.2.6.2.2 to (1)	CAISO may terminate this Agreement by giving written notice of termination in the event that the Scheduling Coordinator commits any default under this Agreement and/or the CAISO Tariff which, if capable of being remedied, is not remedied within thirty (30) days after the CAISO has given it written notice of the default, unless excused by reason of Uncontrollable Force in accordance with Section 15-14 of the CAISO Tariff. With respect to any notice of termination given pursuant to this Section, the CAISO must file a timely notice of termination with FERC. The filing of the notice of termination by the CAISO will be considered timely if: (1) the request to file a notice of termination is made after the preconditions for termination have been met, and (2) the CAISO files the notice of termination within 30 days of receipt of such request. This Agreement shall terminate upon acceptance by FERC of such notice of termination.
P 1335	9.3.6.3.2	Modify MRTU Tariff Section 9.3.6.3.2 to: (1) specify that advance scheduling is only	9.3.6.3.2 45-Days Ahead fFor Transmission Facilities.
		required for those transmission outages that have a "significant" impact on CRR revenue	Except for Outages that may have a significant effect upon CRR revenue adequacy, aAn Operator may, upon-forty five (45) days
		adequacy, and (2) modify the advance notice requirements from 45 days to 30 days in advance of the first day of the month when the	seventy-two (72) hours advance notice (or within the notice period in the Operating Procedures posted on the CAISO Website), schedule with the CAISO Outage Coordination Office a

Ordering Paragraph	Tariff Section(s) Affected	Description of Change Required	Compliance Changes Made to MRTU Tariff
		outage is scheduled.	Maintenance Outage for transmission facilities on its system, subject to the conditions of Sections 9.3.6.4A, 9.3.6.7 and 9.3.6.8. For Outages that may have a significant effect upon CRR revenue adequacy, an Operator may, upon thirty (30) days notice in advance of the first day of the month the Outage is proposed to be scheduled (or within the notice period in the Operating Procedures posted on the CAISO Website), schedule with the CAISO Outage Coordination Office a Maintenance Outage for transmission facilities on its system, subject to the conditions of Sections 9.3.6.4A, 9.3.6.7 and 9.3.6.8.
P 1336	9.3.6	Modify last paragraph of Section 9.3.6 to make it consistent with P 1335 of the Order.	9.3.6 Maintenance Outage Planning.  * * *  Either the CAISO, pursuant to Section 9.3.7, or an Operator, subject to Section 9.3.6.10, may at any time request a change to an Approved Maintenance Outage. An Operator may, as provided in Section 9.3.6.3, upon seventy-two (72) hours advance notice, schedule with the CAISO Outage Coordination Office a Maintenance Outage on its system, subject to the conditions of Sections 9.3.6.4A, 9.3.6.7, and 9.3.6.8.
P 1353	Appendix A	Define "RMR Owner Facility Trust Account" in the Master Definitions List.	Definition of "RMR Owner Facility Trust Account"  The commercial bank account held in trust by the CAISO for the benefit of the owner of an RMR Unit subject to an RMR Contract as required and specified in Section 9.2 of the pro forma RMR Contract.
NOT IN ORDER	6.5.5.2.4	The CAISO agreed to make this modification in its Reply Comments, but the Commission did not rule on it in the September 21 Order	6.5.5.2.4  Every 5 minutes the CAISO shall post via OASIS information regarding the status of the RTM. This information shall include but is not limited to the following:  (a) Load forecast;  (b) Total Real-Time Dispatched Energy and Demand on a 24-hour delayed basis;

Ordering Paragraph	Tariff Section(s) Affected	Description of Change Required	Compliance Changes Made to MRTU Tariff
			<ul> <li>(c) Real-Time Dispatch Interval LMP;</li> <li>(d) Real-Time marginal loss costs and average system losses;</li> <li>and</li> <li>(e) Actual operating reserve.</li> </ul>
NOT IN ORDER	8.2.3.2	The CAISO agreed to make this modification in its Reply Comments, but the Commission did not rule on it in the September 21 Order.	8.2.3.2 Spinning And Non-Spinning Reserves.  * * *  When the on-demand obligation is called upon to deliver Energy, the CAISO will schedule such Energy and also simultaneously Dispatch the identified resource supporting the on-demand obligation for the same quantity of Energy. Operating Reserves includes both Spinning and Non-Spinning Reserves.
NOT IN ORDER	8.3.2	The CAISO agreed to make this modification in its Reply Comments, but the Commission did not rule on it in the September 21 Order.	The CAISO will procure Spinning Reserves and Non-Spinning Reserves from Generating Units operating within the CAISO Control Area and from imports of System Resources. Scheduling Coordinators are allowed to bid Regulation from resources located outside the CAISO Control Area by dynamically scheduling such resources. Each System Resource used to bid or self-provide Regulation must comply with the Dynamic Scheduling Protocol in Appendix X. When bidding to supply Ancillary Services in the IFM, HASP or RTM, imports compete for use of intertie transmission capacity when the requested use is in the same direction, e.g., imports of Ancillary Services compete with Energy on interties in the import direction and exports of Ancillary Services (i.e., on demand obligations) compete with Energy on interties in the export direction. To the extent there is Congestion, imports of Ancillary Services will pay Congestion costs in the IFM, HASP and RTM markets.
NOT IN ORDER	28.1.6.4	The CAISO agreed to make this modification in its Reply Comments, but the Commission did not rule on it in the September 21 Order.	28.1.6.4 Inter-SC Trades of Energy at Aggregated Pricing Nodes.  Inter-SC Trades of Energy at Aggregated Pricing Nodes that are

Ordering Paragraph	Tariff Section(s)	Description of Change Required	Compliance Changes Made to MRTU Tariff
	Affected		also defined Trading Hubs or 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.
NOT IN ORDER	27.5.2	The CAISO agreed to make this modification in its Reply Comments, but the Commission did not rule on it in the September 21 Order.	If, independent of the CAISO, the Scheduling Coordinator for the MSS is unable to resolve Congestion internal to the MSS or at the MSS boundaries in Real-Time, the CAISO will use Exceptional Dispatch Instructions on Resources that have been Bid into the HASP and RTM to resolve the Congestion. The costs of such Exceptional Dispatch will be allocated pursuant to the provisions specified in Section 11.5.6to the responsible MSS Operator. Consistent with Section 4.9, the CAISO and MSS Operator shall develop specific procedures for each MSS to determine how network constraints will be handled.