

123 FERC ¶ 61,285  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Joseph T. Kelliher, Chairman;  
Sudeen G. Kelly, Marc Spitzer,  
Philip D. Moeller, and Jon Wellinghoff.

California Independent System Operator Corporation      Docket Nos. ER06-615-006  
ER06-615-011  
ER07-1257-000

ORDER CONDITIONALLY ACCEPTING, SUBJECT TO MODIFICATION,  
MRTU COMPLIANCE FILINGS

(Issued June 20, 2008)

1. In this order, the Commission addresses certain compliance filings regarding the California Independent System Operator Corporation's (CAISO) Market Redesign and Technology Upgrade (MRTU). On March 20, 2007, the CAISO submitted a compliance filing addressing certain directives set forth in the Commission's September 21, 2006 order in this proceeding.<sup>1</sup> Additionally, on August 3, 2007, as supplemented August 10, 2007, the CAISO submitted a compliance filing containing further proposed MRTU tariff revisions in response to the Commission's June 25, 2007 order in this proceeding.<sup>2</sup> The August 3, 2007 filing also included other revisions to the MRTU tariff filed for Commission review pursuant to section 205 of the Federal Power Act (FPA).<sup>3</sup>

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<sup>1</sup> CAISO March 20, 2007 Compliance Filing, Docket No. ER06-615-006 (March 20, 2007 filing).

<sup>2</sup> CAISO August 3, 2007 Modifications to MRTU Tariff and August 10, 2007, Supplemental Information, Docket Nos. ER06-615-011 and ER07-1257-000 (August 3, 2007 filing).

<sup>3</sup> The Commission's focus in reviewing a compliance filing is to ensure that it complies with the Commission's previously stated directives. Compliance filings therefore must be limited to the specific directives previously ordered by the Commission. *See, e.g., Reliant Energy Aurora, LP*, 111 FERC ¶ 61,159, at 61,816 (2005). Because the compliance-related tariff revisions addressed in the August 3, 2007 filing arise from multiple Commission orders and are intertwined with enhancements offered by the CAISO under FPA section 205, 16 U.S.C. § 824d (2000 & Supp. V 2005), we exercise our discretion to consider them together in this order. The August 3, 2007

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2. The Commission has previously addressed those provisions of the August 3, 2007 filing pertaining to resource adequacy and the Business Practice Manuals.<sup>4</sup> In this order, we conditionally accept for filing, subject to modifications, the remaining MRTU tariff revisions proposed in the August 3, 2007 filing.<sup>5</sup> We also direct the CAISO to submit compliance filings as discussed herein.

### **I. Background**

3. On February 9, 2006, the CAISO filed its MRTU tariff for Commission approval. Significant components of the MRTU tariff include: a day-ahead market for trading and scheduling energy; an hour-ahead scheduling process (HASP) allowing for schedule adjustment prior to the real-time market; a more effective congestion management system; improved market power mitigation measures; system improvements to increase operational efficiency and enhance reliability; a more transparent pricing system; the opportunity for demand resources to participate in the CAISO markets under comparable requirements as supply; and, lastly, a process that respects the resource adequacy requirements established by the states or local regulatory authorities (LRAs), with provisions to allow the CAISO to procure additional capacity to meet forecasted needs.

4. On September 21, 2006, the Commission issued an order that conditionally accepted the MRTU tariff.<sup>6</sup> The Commission also ordered significant changes to be made to various aspects of the MRTU tariff and directed that all modifications discussed in the September 2006 Order be included in various compliance filings.

5. In response to the September 2006 Order's directives, the CAISO submitted two compliance filings on November 20, 2006 and December 20, 2006. On March 20, 2007, the CAISO made another compliance filing in an effort to comply with paragraphs 380 and 381 of the September 2006 Order.

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compliance filing was therefore docketed and noticed for comment in Docket Nos. ER06-615-011 and ER07-1257-000.

<sup>4</sup> *Cal. Indep. Sys. Operator Corp.*, 122 FERC ¶ 61,017 (2008); *Cal. Indep. Sys. Operator Corp.*, 122 FERC ¶ 61,271 (2008).

<sup>5</sup> The Commission has previously accepted, subject to modification, those provisions of the MRTU compliance filing which pertained to resource adequacy. *See Cal. Indep. Sys. Operator Corp.*, 122 FERC ¶ 61,017 (2008).

<sup>6</sup> *Cal. Indep. Sys. Operator Corp.*, 116 FERC ¶ 61,274 (2006) (September 2006 Order).

6. On April 20, 2007, the Commission issued an order responding to requests for clarification and rehearing of the September 2006 Order.<sup>7</sup> The Commission upheld most of its findings from the September 2006 Order and emphasized that the Commission continued to find the MRTU tariff to be just and reasonable. However, the Commission also found that several suggested changes would improve the MRTU tariff and directed that those changes be made under several timeframes.

7. On June 25, 2007, the Commission accepted for filing, subject to further modifications, the November 20, 2006 and December 20, 2006 compliance filings submitted by the CAISO.<sup>8</sup> The Commission directed further modifications to the MRTU tariff to be submitted in conjunction with the compliance filing the CAISO was required to make.

8. On August 3, 2007, as supplemented on August 10, 2007, the CAISO filed proposed revisions to its MRTU tariff in compliance with these previous Commission orders.<sup>9</sup> This filing also included other revisions filed for Commission review pursuant to section 205 of the FPA. According to the CAISO, the August 3, 2007 filing included tariff changes to comply with previous Commission orders,<sup>10</sup> as well as a number of changes separate from compliance obligations which are designed as enhancements to the overall MRTU structure already approved by the Commission.<sup>11</sup>

9. On January 9, 2008, we issued an order conditionally approving, with modifications, the resource adequacy provisions of the August 3, 2007 MRTU

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<sup>7</sup> *Cal. Indep. Sys. Operator Corp.*, 119 FERC ¶ 61,076 (2007) (April 2007 Order).

<sup>8</sup> *Cal. Indep. Sys. Operator Corp.*, 119 FERC ¶ 61,313 (2007) (June 2007 Order)

<sup>9</sup> CAISO August 3, 2007 Modifications to MRTU Tariff and August 10, 2007, Supplemental Information, Docket Nos. ER06-615-011 and ER07-1257-000.

<sup>10</sup> CAISO August 3, 2007 Transmittal Letter, Docket Nos. ER06-615-011 and ER07-1257, at 1 (citing *Cal. Indep. Sys. Operator Corp.*, 116 FERC ¶ 61,274 (2006) (September 2006 Order); *Cal. Indep. Sys. Operator Corp.*, 119 FERC ¶ 61,076 (2007) (April 2007 Rehearing Order); and *Cal. Indep. Sys. Operator Corp.*, 119 FERC ¶ 61,313 (2007) (June 2007 Order)).

<sup>11</sup> CAISO August 3, 2007 Transmittal Letter, Docket Nos. ER06-615-011 and ER07-1257 at 3.

compliance filing.<sup>12</sup> On March 24, 2008, we issued an order addressing the Business Practice Manual issues raised in the August 3, 2007 filing.<sup>13</sup>

## **II. Notice, Motions To Intervene and Responsive Pleadings**

10. Notice of the March 20, 2007 compliance filing was published in the *Federal Register*, 72 Fed. Reg. 15,133 (2007), with comments, protests, or interventions due on April 10, 2007.

11. Timely motions to intervene were filed by the Sacramento Municipal Utility District (SMUD) and the Northern California Power Agency (NCPA). Comments were filed by Southern California Edison Company (SoCal Edison), Williams Power Company (Williams), the Bay Area Transmission Group (BAMx), Pacific Gas and Electric Company (PG&E), and the California Public Utilities Commission (CPUC). The California Department of Water Resources State Water Project (State Water Project) filed a protest. On April 25, 2007, the CAISO filed a motion for leave to answer and answer.

12. Notice of the August 3, 2007 compliance filing and the August 10, 2007 supplemental filing were published in the *Federal Register*, 72 Fed. Reg. 46,618 (2007), with comments, protests, or interventions due on August 24, 2007. On August 20, 2007, the Indicated Parties<sup>14</sup> filed a motion for extension of time to submit comments. On August 22, 2007, the Commission granted the requested extension, establishing a filing deadline of September 7, 2007 for initial comments and September 26, 2007 for reply comments.

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<sup>12</sup> *Cal. Indep. Sys. Operator Corp.*, 122 FERC ¶ 61,017 (2008). The Commission addressed the resource adequacy issues subsumed in the MRTU compliance filing in order for load serving entities (LSEs) to know with certainty the necessary resources to procure prior to MRTU implementation.

<sup>13</sup> *Cal. Indep. Sys. Operator Corp.*, 122 FERC ¶ 61,271 (March 2008 Order).

<sup>14</sup> Indicated Parties are the California Municipal Utilities Association (CMUA); the CPUC; the Transmission Agency of Northern California (TANC); the City of Santa Clara, California, doing business as Silicon Valley Power (SVP); the M-S-R Public Power Agency (M-S-R); the City of Redding, California (Redding); the Modesto Irrigation District (MID); the Metropolitan Water District of Southern California (MWD); BAMx; the NCPA; the Western Power Trading Forum (WPTF); SMUD; the Imperial Irrigation District (IID); Alliance for Retail Energy Markets (AREM); and, the Cities of Anaheim, Azusa, Banning, Colton, Pasadena and Riverside, California (Six Cities).

13. Notices of intervention and timely motions to intervene were filed by a number of entities, as listed in Appendix A to this order. On September 18, 2007, Coral Power, L.L.C. (Coral) filed a motion to intervene out-of-time, and on September 19, 2007, EPIC Merchant Energy, LP (EPIC) also filed a motion to intervene out-of-time. Numerous parties submitted comments and/or protests along with their motions to intervene. Four parties submitted reply comments.<sup>15</sup> The CAISO, NCPA and WPTF filed answers to the reply comments.

### **III. Discussion**

#### **A. Procedural Matters**

14. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2007), the notices of intervention and timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding. Pursuant to Rule 214(d) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214(d) (2007), we grant Coral and EPIC's late-filed motions to intervene, given the parties' interest in this proceeding, the early stage of the proceeding, and the absence of any undue prejudice or delay.

15. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2007), prohibits the filing of an answer unless otherwise ordered by the decisional authority. We will accept the answers filed by the CAISO, NCPA and WPTF because they have provided information that assisted us in our decision-making process.

#### **B. The March 20, 2007 Filing**

16. We conditionally accept the CAISO's March 20, 2007 compliance filing for filing, subject to further modifications, as directed in this order. The Commission's discussion and findings below primarily address aspects of the CAISO's compliance filing that were contested by various commenters. Our review of the proposed revisions to the MRTU tariff that are not contested and not specifically discussed herein indicates that they

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<sup>15</sup> The CAISO, CMUA, the Six Cities, and SoCal Edison all filed timely replies.

comply with our prior orders and we hereby accept them for filing to be effective upon implementation of MRTU.<sup>16</sup>

### 1. Ancillary Services Regions

17. In paragraph 380 of the September 2006 Order, the Commission directed the CAISO to procure ancillary services on a more granular basis and required that the criteria for defining granularity be included in the MRTU tariff. Specifically, the Commission ordered the CAISO to revise the MRTU tariff to include the description of: (1) how the full network model optimization will apply to reserves as it does to energy; and (2) if the full network model optimization does not apply to reserves, how the CAISO will determine the definition of an ancillary services region or sub-region. The Commission also directed the CAISO to explain fully the circumstances under which it will become necessary to define more granular zones for ancillary services procurement.<sup>17</sup>

18. In its compliance filing, the CAISO proposes to: (1) sub-divide the existing ancillary services regions (*i.e.*, system region and expanded system region)<sup>18</sup> into eight sub-regions in order to procure ancillary services on a more granular basis; and (2) define the sub-regions in the MRTU tariff.<sup>19</sup> The CAISO explains that the use of an ancillary

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<sup>16</sup> On February 29, 2008, the CAISO filed a motion to move the effective date of the MRTU tariff due to the recent announcement of delay in MRTU implementation. The CAISO asserted that it would not be able to announce a new effective date until such time that the CAISO has successfully achieved several weeks of market simulation. As a result, the CAISO will promptly notify the Commission in writing once the new effective date is determined.

<sup>17</sup> September 2006 Order, 116 FERC ¶ 61,274 at P 380.

<sup>18</sup> According to MRTU section 8.3.3, the CAISO identifies a “system region” as the CAISO Control Area, while the “expanded system region” embodies the system region and intertie scheduling points with adjacent control areas.

<sup>19</sup> The eight additional sub-regions include: (1) the South of Path 15 sub-region, (2) the expanded South of Path 15 sub-region, (3) the South of Path 26 sub-region, (4) the expanded South of Path 26 sub-region, (5) the North of Path 15 sub-region, (6) the expanded North of Path 15 sub-region, (7) the North of Path 26 sub-region, and (8) the expanded North of Path 26 sub-region. Similar to the expanded system regions, each “expanded” sub-region includes intertie scheduling points at the border of the sub-region and external control areas. *See* MRTU tariff Section 8.3.3. The CAISO proposes to

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service sub-region occurs when the CAISO establishes a non-zero minimum and/or maximum limit for that sub-region.<sup>20</sup> The CAISO proposes to use a number of factors to evaluate whether to establish or change the minimum or maximum limits for ancillary sub-regions.<sup>21</sup> It further states that the use of these sub-regions and limits will help to ensure that the CAISO appropriately disperses ancillary services throughout the CAISO control area and accurately reflects the system topology and deliverability needs.<sup>22</sup>

19. The CAISO also indicates that it will publish forecasted ancillary service requirements, regional constraints, and the minimum and/or maximum ancillary service limits for the ancillary service regions and any sub-regions by 6:00 p.m. prior to the day-ahead market.<sup>23</sup>

20. Second, in compliance with the Commission's requirement to provide further detail of how the full network model optimization applies to ancillary services and energy, the CAISO proposed to add a new section 8.3.3.5 to the MRTU tariff. The CAISO explains that the full network model and security constrained unit commitment

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delineate the intertie scheduling points used to define certain sub-regions in the Business Practice Manuals.

<sup>20</sup> CAISO March 20, 2007 Transmittal Letter, Docket No. ER06-615-006 at 4.

<sup>21</sup> *Id.* These factors include, but are not limited to: (a) the CAISO forecasts of CAISO demand, (b) the location of demand within the control area, (c) information regarding network and resource operating constraints that affect the deliverability of ancillary services into or out of a ancillary service region, (d) the locational mix of generating resources, (e) generating resource outages, (f) historical patterns of transmission and generating resource availability, (g) regional transmission limitations and constraints, (h) transmission outages, (i) available transfer capacity, (j) day-ahead schedules or HASP intertie schedules, (k) whether any ancillary services provided from system resources requiring a NERC tag fail to have a NERC tag, and (l) other factors affecting system reliability. *Id.* at 4-5.

<sup>22</sup> *Id.* at 4.

<sup>23</sup> *Id.* After the completion of the day-ahead market for a trading day, the CAISO will publish the limits used in the day-ahead market. If prior to the close of the HASP for a trading hour the CAISO makes a substantial change to a minimum and/or maximum limit for an ancillary service region or sub-region, it will issue a market notice as soon as reasonably practicable after the occurrence of the circumstances that led to the change. After the close of the HASP for a trading hour, the CAISO explains that it will publish the limits used in the HASP. *Id.*

application<sup>24</sup> together co-optimize the provisions of ancillary services and energy in order to meet ancillary service requirements and energy requirements. It further states that the full network model incorporates transmission losses and also models and enforces all network constraints, which are reflected in the ancillary service awards and other market processes. The CAISO also emphasizes the importance of understanding that ancillary service requirements, the definition of ancillary service regions and sub-regions, and any minimum or maximum limits used within an ancillary service region or sub region are all inputs to the full network model and are incorporated into the market clearing optimization process in both the day-ahead and real-time markets.<sup>25</sup>

21. Finally, in response to the Commission's directive to explain the circumstances under which it will become necessary to define more granular zones for ancillary services procurement, the CAISO proposes to add new MRTU tariff section 8.3.3.4 relating to the establishment of new ancillary service regions and sub-regions. Specifically, under section 8.3.3.4, the CAISO will consider adjusting the boundaries of existing ancillary regions or creating new ancillary service regions through a stakeholder process if:

- (a) there is a persistent difficulty in obtaining an appropriate distribution of ancillary services in the CAISO Control Area using existing market procurement mechanisms, and
- (b) adjusting the boundaries of the existing ancillary service regions or creating new regions would reduce the persistent difficulty in obtaining an appropriate distribution of ancillary services in the CAISO control area using market procurement mechanisms.<sup>26</sup>

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<sup>24</sup> The security constrained unit commitment application is an algorithm performed by a computer program over a multi-hour time horizon that determines the commitment status, schedules and dispatch instructions for selected resources. The algorithm also minimizes production costs while respecting the physical operating characteristics of selected resources and transmission constraints.

<sup>25</sup> CAISO March 20, 2007 Transmittal Letter at 5-6.

<sup>26</sup> *Id.* at 7-8. The CAISO indicates that it will use a number of factors in determining whether to consider adjusting the boundaries of the existing ancillary service regions or creating a new ancillary service region. The conditions include, but are not limited to, operational reliability needs, the pattern of the growth of demand in the CAISO control area, the addition of new generating resources, the retirement of existing generating resources, the addition of new transmission facilities, changes in regional transmission limitations, changes in ATC and extended transmission or generating resource outages. *Id.* at 8.

### Comments

22. SoCal Edison objects to the CAISO's proposal to delineate the intertie scheduling points that define the expanded sub-regions in its Business Practice Manuals. SoCal Edison argues that the Commission should require the CAISO to define the sub-regions in the tariff because the regions will have a significant impact on the rates, terms and conditions of ancillary service procurement for load serving entities (LSEs). SoCal Edison also argues that section 8.3.3.2 of the MRTU tariff provides a limited description of criteria that the CAISO will use to determine ancillary service regions and sub-regions. SoCal Edison contends that market participants need sufficient information in the tariff regarding when, and how, the CAISO intends to enforce the various ancillary service and procurement constraints. At a minimum, SoCal Edison asserts that the Commission should require the CAISO to reference the applicable North American Electric Reliability Council (NERC)/Western Electricity Coordinating Council (WECC) or other reliability criteria that it will use to determine regional and sub-regional ancillary service requirements in its MRTU tariff.<sup>27</sup>

23. State Water Project claims that the CAISO will be able to make sudden and frequent changes in zones, which could foster some disorder with contracts that rely on a continuing ability to deliver or receive power or ancillary services at a given location. State Water Project believes the CAISO should be required to give market participants a one-year prior notice of any new ancillary service sub-regions in order to reduce disruption to supply contracts and other market expectations.<sup>28</sup>

24. Both PG&E and State Water Project argue that the CAISO's ancillary service proposal may create market power concerns. PG&E contends that the Commission should not allow the CAISO to implement a more granular procurement of ancillary services under MRTU until the CAISO assesses whether market power abuse exists and provides corrective measures to prevent or remedy the potential abuse.<sup>29</sup> State Water Project contends that, if the CAISO intends to procure ancillary services by sub-regions, it needs to develop an extremely robust market power mitigation scheme. State Water Project claims a generator supplying a given sub-region will have the opportunity to exercise market power because competition among generators, especially in load pockets,

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<sup>27</sup> See SoCal Edison April 10, 2007 Comment at 2.

<sup>28</sup> See State Water Project April 10, 2007 Protest at 5-8.

<sup>29</sup> See PG&E April 10, 2007 Comment at 1-2.

is reduced with a significantly smaller subset of ancillary services providers setting the price.<sup>30</sup>

25. With respect to SoCal Edison's assertion that the CAISO should delineate the intertie scheduling points defining the expanded ancillary service sub-regions in the tariff, the CAISO contends that the list of intertie scheduling points appropriately resides in the Business Practice Manuals because the CAISO would have to file an amendment any time the CAISO has to add a new intertie scheduling point to one of the four expanded sub-regions.<sup>31</sup> The CAISO believes that its commitment to conduct a stakeholder process and file any tariff amendments for new sub-regions or changes to existing sub-regions with the Commission should satisfy SoCal Edison's concerns.<sup>32</sup> Finally, the CAISO points out that section 8.2.3.1 and 8.2.3.2 already reference the NERC and WECC standards, which SoCal Edison seeks to have added for determining regional and sub-regional ancillary services requirements.<sup>33</sup>

26. The CAISO also opposes State Water Project's desire to require that new ancillary service sub-regions be developed one year in advance. The CAISO contends that the process outlined in proposed section 8.3.3.4, which requires a full stakeholder process that would take into consideration any timing effects, will give market participants adequate notice of the creation of a new ancillary service sub-region.<sup>34</sup>

27. With regard to PG&E's concerns regarding market power mitigation for the procurement of ancillary services, the CAISO suggest that this argument is either outside the scope of the compliance filing or more appropriately considered on rehearing of the September 2006 Order.<sup>35</sup>

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<sup>30</sup> State Water Project April 10, 2007 Protest at 3-4.

<sup>31</sup> CAISO April 25, 2007 Answer at 12-13.

<sup>32</sup> *Id.* at 13. The CAISO also believes this commitment should satisfy the concerns raised by BAMx. Specifically, BAMx states that in the event the CAISO determines that new ancillary service regions or sub-regions are necessary, BAMx requests that the CAISO file an analysis and determination with the Commission.

<sup>33</sup> *Id.*

<sup>34</sup> *Id.* at 13-14.

<sup>35</sup> *See* CAISO April 25, 2007 Answer at 8.

### **Commission Determination**

28. We find the CAISO's proposed modification to procure ancillary services on a more granular basis is reasonable. We believe the approach taken will result in effective distribution of reserves and continuous reliability in the event of a contingency on the CAISO system. This method also achieves the objective of making the procurement of ancillary services more reflective of regional location.

29. We disagree with SoCal Edison that the CAISO's delineation of inertia scheduling points within each expanded sub-region will have a significant impact on the rates, terms and conditions of procuring ancillary services for LSEs. SoCal Edison has not demonstrated that adjusting (*i.e.*, adding or removing) an inertia scheduling point will change the boundaries of an ancillary service sub-region identified in the MRTU tariff or that, even if such a boundary were to change, that there would be a meaningful impact on rates given that the CAISO intends to allocate the costs associated with ancillary service procurement on a system-wide basis.<sup>36</sup> Therefore, the CAISO may, as it proposes, delineate the inertia scheduling points within each sub-region in its Business Practice Manuals.<sup>37</sup> We note, moreover, that section 8.3.3.4 of the MRTU tariff specifically requires the CAISO to conduct a stakeholder process if it considers adjusting the boundaries of the existing ancillary service regions or creating a new ancillary service region. We believe this obligation provides market participants with adequate notice and opportunity for review of the CAISO's analysis to determine whether the adjustments being considered for existing or new ancillary service regions create new market design issues. As a result, we will deny SoCal Edison's request for further delineation of the inertia scheduling points.

30. SoCal Edison argues that section 8.3.3.2 provides a limited description of criteria that the CAISO will use to determine ancillary service regions and sub-regions. At a minimum, SoCal Edison asserts that the Commission should require the CAISO to reference the applicable NERC/WECC or other reliability criteria that it will use to determine regional and sub-regional ancillary service requirements in its MRTU tariff. We agree with the CAISO that sections 8.2.3.1 and 8.3.3.2 already reference the NERC

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<sup>36</sup> September 2006 Order, 116 FERC ¶ 61,274 at P 309; *see also* April 2007 Rehearing Order, 119 FERC ¶ 61,076 at P 91.

<sup>37</sup> *See City of Cleveland v. FERC*, 773 F.2d 1368, 1376 (D.C. Cir. 1985) (utilities must file "only those practices that affect rates and service significantly, that are reasonably susceptible of specification, and that are not so generally understood in any contractual arrangement as to render recitation superfluous").

and WECC standards at issue. Therefore, we will not require any further modifications to section 8.3.3.2.

31. We also consider the proposition that the CAISO develop additional market power mitigation provisions for the procurement of ancillary services to be a collateral attack of the Commission's previous orders. We continue to believe that the use of a \$250 bid cap is reasonable, as it avoids creating incentives for sellers' to withhold ancillary service capacity from the CAISO markets. We note that the appropriate forum to raise these concerns should have been on rehearing of the September 2006 Order where the Commission found the use of a \$250/MWh bid cap and the reliance on RMR resources to be a reasonable mitigation measure.<sup>38</sup> Therefore, we reject PG&E and State Water Project's request on this issue. Notwithstanding, we expect the CAISO's Department of Market Monitoring to monitor for market power problems involving ancillary services, and to notify the Commission promptly if such problems arise.

32. Finally, we reject State Water Project's proposal to receive a one-year advance notice for new ancillary service sub-regions. Because the CAISO commits to conduct a stakeholder process for any adjustments to existing boundaries or the creation of new ancillary service regions, the CAISO already is obligated to give stakeholders a reasonable amount of time to analyze, discuss and vet any concerns that market participants may have with the CAISO's proposal before being reviewed by the Commission. The CAISO must have the flexibility to change an ancillary service region when necessary in order to provide greater reliability of the system and, therefore, adoption of a rigid notice period would not be appropriate.

## 2. Procurement of Ancillary Services from RMR and Market Resources

33. In the September 2006 Order, the Commission found the CAISO's proposal to use a combination of reliability must-run (RMR) and market resources to manage ancillary services procurement reasonable. Nonetheless, the Commission expressed concern that the use of RMR resources can mask market price signals for ancillary services. Accordingly, the Commission directed the CAISO to: (1) include in its tariff the procedures for the use of RMR and market procurement for ancillary services; and (2) clearly describe the allocation of ancillary services costs with the use of RMR and market resources in the CAISO's procurement of ancillary services.<sup>39</sup>

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<sup>38</sup> September 2006 Order, 116 FERC ¶ 61,274 at P 381.

<sup>39</sup> September 2006 Order, 116 FERC ¶ 61,274 at P 381.

a. **Use of RMR and Market Procurement**

34. In its compliance filing, the CAISO indicates that existing tariff provisions under section 41.5.3 and the RMR contract distinguish the use of RMR and market resources in procuring ancillary services.<sup>40</sup> The CAISO explains that these provisions allow an RMR owner to select from one of two conditions (*i.e.*, Condition 1 or Condition 2) to govern how its unit will operate when dispatched by the CAISO to meet local reliability. RMR Condition 1 units and non-RMR units compete in the day-ahead market to supply energy and ancillary services through the submission of economic bids or self-schedules.<sup>41</sup> In addition, RMR Condition 1 and Condition 2 units can be dispatched for energy, but not ancillary services, under the RMR contract pursuant to the Market Power Mitigation-Reliability Requirements Determination (MPM-RRD) process.<sup>42</sup> The CAISO states that if a Condition 1 or Condition 2 RMR unit is providing ancillary services in the day-ahead market, it is pursuant to competitive bids for ancillary services submitted by Condition 1 units or contractually generated market bids submitted by Condition 2 units that were issued a manually CAISO RMR dispatch notice for energy prior to the day-ahead market.<sup>43</sup>

35. The CAISO indicates that it will use these same procedures to dispatch RMR energy in the HASP/real-time market (*i.e.*, through the MPM-RRD process).<sup>44</sup> The

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<sup>40</sup> CAISO March 20, 2007 Transmittal Letter at 8.

<sup>41</sup> *Id.* at 9.

<sup>42</sup> The purpose of the MPM-RRD (also known as the pre-IFM run) is to determine the CAISO's needs for RMR generation and the appropriate mitigation for those bids that may reflect local market power in the day-ahead market. The CAISO will perform two passes, or pre-IFM runs, under this process. In the first pass, the full network model determines optimal dispatching by enforcing transmission limits only on lines pre-designated as competitive constraints. In the second pass, the thermal limits of all transmission lines are enforced. Once the pre-IFM process is completed, the CAISO will pass on the mitigated bids and RMR dispatch schedules for use in the day-ahead market and residual unit commitment.

<sup>43</sup> Condition 2 units are prohibited from submitting market bids unless and until the CAISO issues an RMR dispatch notice.

<sup>44</sup> CAISO March 20, 2007 Transmittal Letter at 10. Under this circumstance, the CAISO can issue an RMR dispatch notice for ancillary services (as opposed to energy) after the close of the HASP/real-time market and is narrowly limited to ancillary services bid insufficiency. *See* MRTU tariff section 41.5.3.

CAISO also propose to revise section 41.5.3 to provide that the CAISO may call upon RMR units in any amount that the CAISO determines is necessary at any time after the issuance of the day-ahead schedules for the trading day if: (i) the CAISO determines that it needs more ancillary services than were procured in the day-ahead market and (ii) the CAISO has issued a market notice to Scheduling Coordinators that a bid insufficiency exist in the HASP. The CAISO notes that since any unused ancillary service bids from the day-head market do not carry over into HASP, it proposes to delete the pre-existing requirement to procure any unused ancillary service bids from the day-ahead market as an anachronistic feature of the pre-MRTU design.

### **Comments**

36. Williams argues that the CAISO's proposal to revise section 41.5.3 of the MRTU tariff to not carry over unused ancillary services bids from the day-ahead market is inconsistent with the CAISO's previous MRTU filing and the September 2006 Order.<sup>45</sup> Williams asserts that the September 2006 Order approved the process to use all unused day-ahead ancillary services bids prior to using RMR units.<sup>46</sup> Williams supports the existing language in section 41.5.3 provided that, before the CAISO can call upon RMR units to provide ancillary service after the issuance of day-ahead schedules, the CAISO must have determined that "all additional day-ahead ancillary services bids (including any unused bids that can be used to satisfy that particular ancillary services requirement) have been selected . . .".<sup>47</sup>

37. Williams argues that the CAISO's proposal to revise section 41.5.3 is inconsistent with section 4.1(c)(ii) of the RMR contract, which states, in part:

If, after the close of the day-ahead market for a Trading Day, but before ISO issues final hour-ahead schedules for the first hour of the Trading Day, ISO determines it needs additional Ancillary Services for the Trading Day,

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<sup>45</sup> See Williams April 10, 2007 Comments at 3-4, citing CAISO Tariff Filing to Reflect MRTU, Docket No. ER06-615-000 (Feb. 9, 2006) at proposed tariff section 41.5.3 and September 2006 Order, 116 FERC ¶ 61,274 at P 426. Williams also argues that the proposed revision to section 41.5.3 is beyond the scope of the CAISO's compliance filing. As we explain in footnote 3, *supra*, we are exercising our discretion to consider tariff revisions that both comply with our prior orders and address related issues raised by the CAISO.

<sup>46</sup> *Id.* See September 2006 Order, 116 FERC ¶ 61,274 at P 426.

<sup>47</sup> *Id.* at 4.

ISO shall use unused, available day-ahead market bids for Ancillary Services for the Trading Day in merit order (and in the appropriate zone, if ISO is procuring Ancillary Services on a zonal basis) to fill its Ancillary Services needs before issuing a Dispatch Notice for Ancillary Services.<sup>48</sup>

38. Williams asserts that these provisions compel the CAISO to use unused, available day-ahead ancillary services bids if it requires additional ancillary services after the day-ahead market.<sup>49</sup> Williams argues that the CAISO provides no valid reason why it cannot use unused ancillary services bids if it determines it needs additional ancillary services after the day-ahead market. For these reasons, Williams contends that the Commission should reject the CAISO's proposal to strike the phrase from section 41.5.3.<sup>50</sup>

39. The CAISO contends that the language it proposes to eliminate in section 41.5.3 is anachronistic under the new market design and that the intended purpose of the eliminated language – dispatch of RMR units under the RMR contract for ancillary services after all market bids are exhausted – is preserved.<sup>51</sup> For example, the CAISO states that unlike the current CAISO market, which has a day-ahead and hour-ahead ancillary services market, the new MRTU market design does not include an hour-ahead ancillary services market. The CAISO will procure 100 percent of its forecasted ancillary services requirements in the day-ahead market. If the CAISO fails to procure 100 percent of its ancillary services in the day-ahead market, or if system conditions change in real-time, it will procure any additional or incremental ancillary services in the real-time market.<sup>52</sup> As a result, the CAISO contends that no unused ancillary services bids will carry over to a subsequent market.

40. The CAISO also disagrees with Williams' assertion that eliminating the language in section 41.5.3 is inconsistent with section 4.1(c)(ii) of the RMR contract. The CAISO argues that there are no "final hour-ahead schedules" under the MRTU tariff. The CAISO further notes that the "market first" aspect of procuring ancillary services is

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<sup>48</sup> *Id.* at 5.

<sup>49</sup> *Id.* at 4-6, citing September 2006 Order, 116 FERC ¶ 61,274 at P 426.

<sup>50</sup> *Id.* at 6-7.

<sup>51</sup> CAISO April 25, 2007 Answer at 10.

<sup>52</sup> *Id.* at 10-11. The CAISO states that it is not committed under the current market design to procure 100 percent of the ancillary service requirement in the day-ahead market because it can split its procurement between the day-ahead and hour-ahead markets.

precisely what section 41.5.3 contains and, therefore, this section preserves the balance of benefits and burdens in the RMR contract.<sup>53</sup> For these reasons, the CAISO contends that Williams' attempt to reinsert the eliminated language should be rejected.

### **Commission Determination**

41. The Commission agrees that the new MRTU market design does not include an hour-ahead ancillary services market. The CAISO will procure 100 percent of its forecasted ancillary services requirements in the day-ahead market. If the CAISO fails to procure 100 percent of its ancillary services in the day-ahead market, or if system conditions change in real-time, it will procure any additional or incremental ancillary services in the real-time market. The new MRTU market design does not include an hour-ahead market, as the CAISO proposes to implement the HASP procedures.<sup>54</sup> Unlike in the current market, under the MRTU bids for energy or capacity that are submitted, but are not accepted at the close of that market, are free to rebid their product at a different price in a subsequent market.<sup>55</sup> This process does not support the concept of carrying over unused ancillary services bids. In the event that the CAISO does not procure 100 percent of its ancillary needs in the day-ahead market, the CAISO will procure any additional ancillary service in the real-time market through a combination of new ancillary service bids and RMR resources. We believe this procurement process represents a "market first" approach that allows the CAISO to fully meet its anticipated need and, therefore, is consistent with section 4.1(c)(ii) of the *pro forma* RMR contract.<sup>56</sup> As the CAISO notes, after implementation of MRTU there will be no unused day-ahead market bids for ancillary services available to the CAISO for use pursuant to section 4.1(c)(ii) of the RMR contract. Accordingly, we find reasonable the CAISO's proposal

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<sup>53</sup> *Id.* at 12.

<sup>54</sup> The purpose of the HASP is to provide an opportunity for the CAISO and Scheduling Coordinators to adjust the day-ahead schedule to reflect changes in expected supply and load conditions. However, there will be no hour-ahead financial settlements, except for imports and exports. All other transactions in the HASP will settle at the real-time price.

<sup>55</sup> *See* MRTU tariff section 30.5.1(d).

<sup>56</sup> We note that the CAISO recently proposed modifications to the *pro forma* RMR contract to address the perceived inconsistency between section 4.1(c)(ii) of that contract and section 41.5.3 of the MRTU tariff. *See* CAISO October 26, 2007 Modifications to MRTU Tariff, Docket No. ER06-615-015. The Commission will address the merits of that proposal in that proceeding.

to strike the language regarding unused ancillary service bids, as this market process is outdated.

**b. Ancillary Service Cost Allocation**

42. The CAISO states in its compliance filing that it will charge market procurement costs of ancillary services to all loads in the CAISO control area as approved by the Commission. The CAISO also explains that, in the rare instance when the CAISO would issue an RMR dispatch notice for ancillary services, the responsible utility, as set forth in the RMR contract, will pay for those costs.<sup>57</sup>

**Comments**

43. State Water Project opposes the allocation of ancillary service costs to all demand in the CAISO control area.<sup>58</sup> State Water Project argues that the CAISO should allocate such costs to those sub-regions that require ancillary service procurement. State Water Project argues that the proposed allocation method will cause certain ancillary service sub-regions to subsidize other regions. It also complains that cost socialization can hide or mask excessive costs and inhibit the most effective market monitor, which is the consumers' response to pricing.

44. The CAISO disagrees with State Water Project's assertion that it should allocate ancillary service costs on a sub-regional basis. The CAISO argues that the State Water Project's suggestion directly conflicts with the Commission's previously stated view on this issue. According to the CAISO, the Commission agreed that the procurement of ancillary services support the use of the entire CAISO control area and therefore justifies the allocation of such costs to all load within its control area. The CAISO also contends that State Water Project misunderstands the purpose and use of the ancillary service sub-regions. The CAISO explains that the sub-regions are used to meet existing WECC reliability requirements to achieve an appropriate dispersion of ancillary services throughout the control area.<sup>59</sup> The CAISO argues that it is appropriate to allocate these costs to control area demand under MRTU because the WECC and NERC ancillary

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<sup>57</sup> See CAISO March 20, 2007 Transmittal Letter at 11.

<sup>58</sup> Williams also opposes the allocation of ancillary service costs to control area demand. However, Williams' notes that it sought rehearing of this issue and therefore, would not belabor the argument in this proceeding. See Williams April 10, 2007 Comment at 8-9.

<sup>59</sup> See CAISO March 20, 2007 Transmittal Letter at 4; and proposed section 8.3.2.2 under Attachment A.

service requirements are demand-based requirements. For example, the CAISO notes that automatic generation control is required to provide regulation up and regulation down capacity and the WECC criteria states that:

Each control area shall operate sufficient generating capacity under automatic control to meet its obligation to continuously balance its generation and interchange schedules to its load. It shall also provide its proper contribution to interconnection frequency regulation.<sup>60</sup>

45. The CAISO thus contends that WECC and NERC's ancillary service requirements are control area wide and do not vary as they relate to demand, which justifies the allocation to all CAISO demand. The CAISO further argues that sub-regional allocation would be unreasonable because it would result in inappropriate cost shifting and raise the cost of procuring ancillary services within the CAISO control area.<sup>61</sup>

### **Commission Determination**

46. We deny State Water Project's request to allocate the procurement of ancillary services on a sub-regional basis, as the Commission has already addressed this concern in our prior orders in this proceeding.<sup>62</sup> We reiterate here that the CAISO's procurement of ancillary services supports the use of the entire CAISO control area and, therefore, it is appropriate to allocate the costs associated with this procurement to all load in the CAISO control area. We note that regional limits on ancillary service self-provision will be enforced to prevent possible cost allocation distortions.<sup>63</sup> This means that lower cost regions will not be subsidizing higher cost regions by allowing transactions that are not physically possible, given the transmission constraint.

### **3. Other Ancillary Service Issues**

47. Although the CPUC generally supports the CAISO's proposed tariff language regarding the procurement of ancillary services, the CPUC states that the CAISO should recognize the impact of system and local resources provided by the CPUC's resource adequacy program. Therefore, the CPUC urges the Commission and the CAISO to

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<sup>60</sup> *Id.* at 5, citing WECC Minimum Operating Reliability Criteria (April 2005) at 4.

<sup>61</sup> *See* CAISO April 25, 2007 Answer at 6-7.

<sup>62</sup> April 2007 Rehearing Order, 119 FERC ¶ 61,076 at P 91; *see also* September 2006 Order, 116 FERC ¶ 61,274 at P 325.

<sup>63</sup> September 2006 Order, 116 FERC ¶ 61,274 at P 325.

maximize the procurement of ancillary services through the resource adequacy program or other market forces rather than automatically deferring to RMR contracting for procurement of necessary resources.<sup>64</sup> Specifically, the CPUC requests that the Commission require the CAISO to explain: (1) whether and how its ancillary services procurement process reflects the availability of system and local resources available through the resource adequacy program and other market mechanisms; and (2) how the potential changes to the resource adequacy program or other market options could reduce the CAISO's reliance upon RMR contracting for ancillary services.<sup>65</sup>

48. The CAISO agrees with the CPUC that the resource adequacy program will help to ensure that there are adequate resources in California to satisfy the NERC and WECC reliability requirements.<sup>66</sup> The CAISO states that the central change in the MRTU market with regard to the procurement of ancillary service is that the bids to supply ancillary services will be co-optimized with the bids to supply energy. However, the CAISO states that the resource adequacy obligation under the MRTU tariff will require a resource to make 100 percent of the resource adequacy capacity available as either energy or ancillary service bids, or a combination. If a resource adequacy resource fails to make 100 percent of its resource adequacy capacity available in the day-ahead market, the MRTU software will insert energy bids for the remaining capacity, but does not insert ancillary service bids for any remaining ancillary service certified resource adequacy capacity. As a result, there is no requirement on the suppliers of resource adequacy capacity to bid ancillary service supply under the MRTU market design.

49. The CAISO states that one feature that would help ensure that the CAISO will be able to procure 100 percent of its ancillary service requirement in the day-ahead market would be to modify the resource adequacy capacity obligation to require that resource adequacy capacity submit ancillary service bids for all ancillary service certified capacity. The CAISO contends that this feature would allow the CAISO to co-optimize 100 percent of the resource adequacy capacity for either energy or ancillary service.<sup>67</sup> The CAISO states, however, that this feature would require software changes that cannot be implemented under MRTU Release 1. The CAISO therefore suggests that it continue to discuss this feature with the CPUC and other stakeholders in order to develop a proposal for implementation within 12-months of MRTU start-up.<sup>68</sup>

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<sup>64</sup> CPUC April 10, 2007 Comments at 6.

<sup>65</sup> *Id.* at 6-7.

<sup>66</sup> CAISO April 25, 2007 Answer at 14.

<sup>67</sup> *Id.* at 15.

<sup>68</sup> *Id.* at 15.

### **Commission Determination**

50. We accept the CAISO's commitment to work with the CPUC and other stakeholders to address further modifications to the MRTU tariff to improve the ancillary service procurement process. We decline to require any particular actions by the CAISO at this time, but encourage the CAISO to collaborate with the CPUC and other local regulatory authorities to discuss the need for any further refinements to the ancillary services procurement process.

#### **C. The August 3, 2007 Filing**

51. We conditionally accept the CAISO's August 3, 2007 compliance filing for filing, subject to further modifications, as directed in this order. The Commission's discussion and findings below primarily address aspects of the CAISO's compliance filing that were contested by various commenters. Our review of the proposed revisions to the MRTU tariff that are not contested and not specifically discussed herein indicates that they comply with our prior orders and we hereby accept them for filing to be effective upon implementation of MRTU.

##### **1. Market Power Mitigation**

###### **a. Section 39.7.1.5 – Temporary Default Energy Bid**

52. In the June 2007 Order, the Commission addressed the CAISO's authority to establish temporary default energy bid prices in situations where a generator provides inadequate information or does not elect to use any other option beyond the negotiated rate. The Commission emphasized that the CAISO must ensure, prior to calculating any temporary default energy bid, that all resources have been exhausted under section 39.7.1.<sup>69</sup> The Commission also stated that the CAISO must attempt in good faith to obtain the necessary data from generators prior to calculating temporary default energy bids.<sup>70</sup>

53. The CAISO, in its compliance filing, modified section 39.7.1.5 to make clear that "if a scheduling coordinator does not elect to use any of the other new options available pursuant to section 39.7.1, or if sufficient data do not exist to calculate a default energy bid using any of the available options," the CAISO will first seek to obtain from the

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<sup>69</sup> See June 2007 Order, 119 FERC ¶ 61,313 at P 345.

<sup>70</sup> *Id.* at 346.

scheduling coordinator any additional data required for calculating the default energy bid options available pursuant to section 39.7.1.<sup>71</sup>

### **Comments**

54. PG&E claims the phrase “other new” in section 39.7.1.5 is confusing. PG&E argues that the reference is to the options available pursuant to section 39.7.1, not some subset of those options that are described by the phrase “other new.” Thus, PG&E requests that the Commission require the CAISO to delete the phrase from section 39.7.1.5.<sup>72</sup>

55. The CAISO agrees that the word “new” is confusing and commits to remove the word “new” from this section.<sup>73</sup>

### **Commission Determination**

56. We agree with PG&E and CAISO that use of the phrase in section 39.7.1.5 of the MRTU tariff is confusing. While the CAISO commits to remove the word “new” from this section, we support PG&E’s proposed modification because it seems to eliminate any implication the scheduling coordinator have options beyond those listed under section 39.7.1. We direct the CAISO to delete the phrase “other new” and submit the tariff sheet containing this change in a compliance filing within 30 days of the date of this order.

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<sup>71</sup> CAISO August 3, 2007 Modifications to MRTU, Docket No. ER07-1257-000 *et al.*, Volume 1A at 60 and Volume 2 at 425-426.

<sup>72</sup> PG&E September 7, 2007 Comments at 7.

<sup>73</sup> CAISO October 5, 2007 Reply Comments at 98.

b. **Section 39.3.1 – Categories of Conduct that May Warrant Mitigation**

57. In the June 2007 Order, the Commission directed the CAISO to modify section 39.3.1 to provide further detail regarding the types of bidding practices that may distort prices or uplift charges away from those expected in a competitive market.<sup>74</sup>

58. On compliance, the CAISO amended section 39.3.1(4) to set forth in two subsections the types of practices that can result in prices inconsistent with competitive market outcomes: (i) submitting demand bids at prices that are unjustifiably low relative to the expected marginal cost of meeting total expected demand resulting in day-ahead market prices that are significantly below competitive levels and day-ahead market clearing demand that is significantly below total expected demand; and (ii) registering start-up cost and minimum load cost data or submitting bid costs on behalf of an electric facility that are unjustifiably high (relative to known operational characteristics and/or the known operating cost of the resource) or misrepresenting the physical operating capabilities of an electric facility in uplift payments or prices significantly in excess of actual costs.<sup>75</sup>

**Comments**

59. Both PG&E and SoCal Edison argue that subsection (i) of section 39.3.1(4) should be deleted. PG&E contends that this provision is too imprecise because: the terms “unjustifiably low” and “significantly below” are subjective and provide no clear guidance to either market participants or the CAISO; the day-ahead market is a market in which pricing flexibilities should exist; and, demand bids submitted in the integrated forward market (IFM) should not necessarily be compared against the day-ahead market prices or “competitive levels” in the day-ahead market since it is possible that less expensive resources are available in HASP, in which case this tariff driven comparison is misguided.<sup>76</sup>

60. SoCal Edison also argues that subsection (i) is unnecessary because the Commission has ordered the CAISO to implement convergence bidding within one year

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<sup>74</sup> June 2007 Order, 119 FERC ¶ 61,313 at P 418. We note that the other categories of conduct that may warrant market power mitigation under section 39.3.1 include: (1) physical withholding; (2) economic withholding; and (3) uneconomic production.

<sup>75</sup> CAISO August 3, 2007 Modifications to MRTU, Docket No. ER07-1257-000 *et al.*, Volume 1A at 60 and Volume 2 at 424.

<sup>76</sup> PG&E September 7, 2007 Comments at 10.

of MRTU start-up.<sup>77</sup> In the interim period, SoCal Edison notes that the Commission ordered the CAISO to implement measures to address “persistent underscheduling” in which energy prices “suggest that it would be economic to buy in the day-ahead market.” If the CAISO is not required to delete this provision now, SoCal Edison asks that the Commission at least require the CAISO to delete this provision once the Commission approves the interim measure.

61. SoCal Edison also contends that the proposed language in section 39.3.1(4)(ii) has an error in the last sentence.<sup>78</sup> Specifically, it claims the word “resulting” is missing between “Electric Facility” and “in uplift payments”. SoCal Edison argues the CAISO should modify the sentence to read as follows:

“...misrepresenting the physical operating capabilities of an Electric Facility *resulting* in uplift payments or prices significantly in excess of actual costs.”<sup>79</sup>

62. The CAISO opposes the deletion of subsection (i) of section 39.3.1(4). The CAISO states that the terms are simply guidelines for defining behavior that might warrant mitigation and helps define the scope of the market monitoring activities of the CAISO’s Department of Market Monitoring. It asserts that any mitigation actions (i.e., a market rule change) would still have to be justified by the CAISO, approved by the CAISO Board of Governors and subsequently filed with the Commission. The CAISO disagrees that the underscheduling tariff provisions would adequately address these concerns. The CAISO asserts that its preference would be to retain this language to ensure that any measures that are employed to prevent underscheduling (such as convergence bidding) do not “distort prices or uplifts away from what would be expected under a competitive market.”<sup>80</sup>

63. With respect to PG&E’s contention that demand bids submitted in the IFM should not necessarily be compared against day-ahead market prices or “competitive levels” in the day-ahead market, the CAISO states that the language proposed by the CAISO considers whether bids are “below the marginal cost of meeting expected demand,”

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<sup>77</sup> SoCal Edison September 7, 2007 Protest at 6-7, *citing* September 2006 Order at P 452.

<sup>78</sup> SoCal Edison September 7, 2007 Protest at 6.

<sup>79</sup> *Id.*

<sup>80</sup> *Id.* at 97-98.

which should address PG&E's concern because bids available in HASP will be considered in determining the marginal cost of meeting demand.<sup>81</sup>

64. In response to SoCal Edison, the CAISO agrees that subsection (ii) of section 39.3.1(4) should be revised to add the word "*resulting*" as suggested.<sup>82</sup>

### **Commission Determination**

65. The Commission agrees with PG&E and SoCal Edison that subsection (i) of section 39.3.1(4) should be deleted. The CAISO states that these terms are simply a guideline for defining the scope of market monitoring activities and that any mitigation actions (*i.e.*, a market rule change) would still have to be approved by the CAISO Board of Governors and the Commission. Section 39.3.1, however, provides that the CAISO "shall impose appropriate Mitigation Measures" if the conduct identified in 39.3.1(4)(i) is detected. We therefore direct the CAISO to remove subsection (i) of section 39.3.1(4) from the MRTU tariff and direct the CAISO to reflect this change in a compliance filing within 30 days of the date of this order.

66. We also direct the CAISO to revise section 39.3.1(4)(ii) to add the word "resulting," as suggested by SoCal Edison, in a compliance filing within 30 days of the date of this order.

## **2. Residual Unit Commitment (RUC) Process**

### **a. Rescission of Payments for Undispatchable RUC Capacity**

67. The CAISO reorganized the settlement provisions for undispatchable RUC capacity in order to provide further clarity and consolidation of previously accepted tariff language under section 8.10.8 of the MRTU tariff. Currently, section 8.10.8 provides for the rescission of payments for undispatchable, unavailable and undeliverable ancillary services and RUC capacity. The CAISO is proposing to extract the rules for rescission of RUC availability payments in the event that RUC capacity is undeliverable or undispatchable from section 8.10.8 to 31.5.7.1. The CAISO also proposes to extract the settlement of RUC availability payments rescinded for undispatchable and undeliverable RUC capacity for 8.10.8 to 11.2.2.2.<sup>83</sup>

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<sup>81</sup> *Id.*

<sup>82</sup> CAISO October 5, 2007 Reply Comments at 98.

<sup>83</sup> CAISO August 3, 2007 Transmittal Letter at 16.

### **Comments**

68. PG&E asserts that the sentence in section 31.5.7.1, which states “[i]f the Undispatchable Capacity is capacity committed in RUC and is from a Generating Unit, System Unit or System Resource that is a Resource Adequacy Resource, there is no payment obligation to the CAISO for the Undispatchable RUC Capacity” is unnecessary, and potentially confusing.<sup>84</sup> PG&E claims the previous sentence already indicates how the CAISO will settle undispatchable capacity under section 11.2.2.2.1 and therefore requires no additional language relating to resource adequacy resources. Moreover, PG&E asserts that the sentence is potentially confusing because a generator could interpret this to mean that the unit would not be liable for uninstructed energy payments and any uninstructed deviation penalties. Thus, PG&E requests that the CAISO delete the sentence to simplify and clarify section 31.5.7.1.<sup>85</sup>

69. In its reply, the CAISO argues that the sentence provides useful clarification to a section that the Commission has already accepted in the current version of the MRTU tariff. In addition, the CAISO indicates that it simply transferred the sentence from the former provisions of section 8.10.8.1 and, therefore, submits that there is no basis for revising this provision in conjunction with this filing.<sup>86</sup>

### **Commission Determination**

70. We accept the proposed tariff language in section 31.5.7.1. Contrary to PG&E’s assertion, we find the additional language provides further clarification of how the CAISO will settle undispatchable capacity for both non-resource adequacy resources and resource adequacy resources. Prior to the inclusion of this language, there was no discussion relating to the CAISO’s method for settling resource adequacy resources other than the reference to section 11.2.2.2.1. PG&E contends that section 11.2.2.2.1 adequately explains the settlement process. We disagree. While section 11.2.2.2.1 discusses, in part, how the CAISO will treat undispatchable capacity of a partial resource adequacy resource providing RUC capacity from non-resource adequacy and resource adequacy capacity, we find this section does not specifically address the reporting procedures that the CAISO must follow when a resource adequacy resource has undispatchable RUC capacity. For example, the CAISO is required to report instances of non-compliance by the resource adequacy resource to its local regulatory authority.

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<sup>84</sup> PG&E September 7, 2007 Comments at 7.

<sup>85</sup> *Id.*

<sup>86</sup> CAISO October 5, 2007 Reply at 11.

71. We disagree that a generator could interpret the sentence in 31.5.7.1 to mean the unit would not be liable for uninstructed energy payments and any uninstructed deviation penalties. Section 34.11.2 specifically states that, “[i]f the resource is considered to be non-conforming . . . the Scheduling Coordinator for the resource concerned shall be subject to uninstructed imbalance energy as specified in section 11.5.2 and uninstructed deviation penalties as specified in section 11.23.” For these reasons, we accept section 31.5.7.1 with no further modifications.

**b. RUC Zones**

**i. Designations of RUC Zones**

72. In the September 2006 Order, the Commission directed the CAISO, no later than 180 days prior to the effective date of MRTU Release 1, to submit revised tariff sheets to include the definition of RUC zones and the methodology used to define a RUC zone.<sup>87</sup>

73. In its compliance filing, the CAISO proposes to define “RUC Zone” in the MRTU tariff as follows: “A forecast region representing a UDC or MSS Service Area, Local Capacity Area, or other collection of nodes for which the CAISO has developed sufficient historical CAISO Demand and relevant weather data to perform a Demand Forecast for such area, for which as further provided in Section 31.5.3.7 the CAISO may adjust the CAISO Forecast of CAISO Demand to ensure that the RUC process produces adequate local capacity procurement.”<sup>88</sup> The CAISO explains that section 31.5.3.7 will not only allow the CAISO to adjust its forecast by RUC zones, but also pool together RUC costs from all RUC zones in order to settle these costs. The CAISO states that the designation of RUC zones will not impact the allocation of RUC costs, because those costs will be pooled together prior to being allocated to market participants.<sup>89</sup>

74. The CAISO also proposes new section 31.5.3.7.2 setting forth the methodology to be used to define and designate RUC zones. The CAISO states that it will designate RUC zones as necessary and to the extent that the CAISO has developed sufficient data on historical CAISO demand and weather conditions to allow it to perform demand forecasts. The status of each RUC zone shall remain active for as long as the CAISO maintains regional forecasting capabilities. The CAISO indicates that it will post all

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<sup>87</sup> *Id.*

<sup>88</sup> CAISO August 3, 2007 Modifications to MRTU, Docket No. ER07-1257-00 *et al.*, Volume 1A at 46 and Volume 2 at 106.

<sup>89</sup> *Id.* Volume 1A at 47 and Volume 2 at 371.

RUC zone designations on the CAISO's website as well as list them in the Business Practice Manuals.<sup>90</sup>

### **Comments**

75. SoCal Edison contends that the designation of RUC zones must be part of the tariff because the zones may have a substantial impact on rates, terms and conditions of service.<sup>91</sup> SoCal Edison also argues that some of the proposed language defining RUC zones is overly vague and ambiguous. Specifically, SoCal Edison points out that section 31.5.3.7.2 contains proposed language that allows the CAISO to form RUC zones based on areas that represent UDC or MSS Service Areas, Local Capacity Areas, or "other collection of Nodes." SoCal Edison claims the language provides no indication to market participants as to what criteria the CAISO will use to form new RUC zones and, therefore, the CAISO should be required to provide information that is more specific.<sup>92</sup> SoCal Edison also argues that the CAISO failed to define what constitutes "sufficient" demand and weather data. SoCal Edison states that it is unclear whether the CAISO intends to require two months or 20 years of demand and weather data. SoCal Edison contends the Commission must require the CAISO to define "sufficient" in this context and demonstrate that it can forecast load for the RUC zone with reasonable accuracy.<sup>93</sup>

76. SoCal Edison also argues that, at the very least, prior to activating any new RUC zone, the CAISO should be required to notify market participants and the Commission and perform a comprehensive market power analysis to determine if additional mitigation is needed given conditions within the RUC zone.<sup>94</sup>

77. SoCal Edison contends that the Commission should impose market power mitigation measures when there is the potential for market power within a RUC zone. SoCal Edison alleges that if the CAISO attempts to procure RUC capacity from a specific non-resource adequacy unit by zone, that unit will be able to demand and consistently receive the availability bid cap of \$250/MW for its RUC capacity. Further, SoCal Edison argues that a generator will have the incentive to distort the bidding behavior of its

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<sup>90</sup> *Id.*

<sup>91</sup> SoCal Edison September 7, 2007 Protest at 2.

<sup>92</sup> *Id.* at 4.

<sup>93</sup> *Id.* at 4-5.

<sup>94</sup> SoCal Edison September 7, 2007 Protest at 3.

available capacity to ensure it is not dispatched in the IFM. Because of the potential exercise of market power, SoCal Edison contends that any RUC zone proposed by the CAISO should be reviewed by its Department of Market Monitoring to determine if there is potential market power within the proposed zone(s).<sup>95</sup>

78. WPTF states that under section 31.5.3.7.2 that CAISO proposes to add the following sentence: “The mapping of RUC Zones to Nodes shall be static data and shall be maintained in the Master File.” WPTF objects the use of the term “*static*” as ambiguous and unnecessary, particularly since the specific purpose of this section is to discuss how the CAISO will designate and change RUC zones. WPTF asks the Commission to direct the CAISO to revise this sentence to read, “The mapping of RUC Zones to Nodes shall be maintained in the Master File.”<sup>96</sup>

79. In response to SoCal Edison’s contention that the proposed language is overly vague and ambiguous, the CAISO states the provisions of section 31.5.3.7 provides sufficient detail for tariff implementation and therefore satisfies the Commission’s rule of reason.<sup>97</sup> The CAISO contends that it is appropriate to include further details on the process for developing RUC zones and the actual designation of RUC zones in the Business Practice Manuals. To clarify any ambiguity, the CAISO proposes to further modify the last sentence of section 31.5.3.7.2 to state: “The actual RUC Zones used by the CAISO in its operation of RUC are listed in the Business Practice Manual.”<sup>98</sup>

80. The CAISO further argues that it is not necessary to conduct market power analyses prior to defining new RUC zones because the Commission has already found that no market power mitigation is necessary for RUC.<sup>99</sup> The CAISO contends that there should be sufficient capacity to meet the RUC requirements without raising local market power concerns because: (1) the existence of local capacity area requirements; (2) any resource adequacy resource is required to bid in their RUC capacity at a RUC availability bid of zero dollars per megawatt; and (3) local capacity area requirements are set so that

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<sup>95</sup> *Id.* at 3. SoCal Edison contends that the CAISO has no market power mitigation on RUC except for resource adequacy bidding and payment rules and a \$250/MW availability cap. *Id.*

<sup>96</sup> WPTF September 7, 2007 Protest at 15.

<sup>97</sup> CAISO October 5, 2007 Reply at 70-71.

<sup>98</sup> *Id.* at 71.

<sup>99</sup> CAISO October 5, 2007 Reply at 68, *citing* September 2006 Order, 116 FERC ¶ 61,274 at P 137.

under a very high percentage of conditions there would be enough resource adequacy capacity to meet local RUC requirements. The CAISO avers that these procedures should mitigate any local market power that may exist in any RUC local areas.<sup>100</sup>

81. The CAISO believes the term *static* is necessary to include the concept that, once the RUC zones are established as listed in the Business Practice Manuals, the mapping of the RUC zones to nodes will not change and will be maintained in the Master File. Rather than remove that concept, the CAISO proposes to clarify that sentence as follows: “The CAISO shall define RUC Zones as areas that represent UDC or MSS Service Areas, Local Capacity Areas, or any other collection of Nodes. RUC zones will be designated by the CAISO as necessary and to the extent that the CAISO has developed sufficient data on historical CAISO Demand and weather conditions to allow it to perform Demand Forecasts. Once the CAISO has established RUC zones, the mapping of RUC zones to Nodes shall be static data and shall be maintained in the Master File.”<sup>101</sup>

### **Commission Determination**

82. The Commission disagrees with SoCal Edison that the designation of RUC zones will have a significant impact on rates, terms and conditions of service, as the CAISO will be able to procure additional capacity with greater accuracy and thus reduce any RUC related costs that are socialized to all metered demand. The CAISO will only use the designations to make its overall RUC procurement target more accurate. The proposed language of section 31.5.3.7.2, amended as suggested by the CAISO to provide that further details will be stated in the Business Practice Manual, is adequate to satisfy the Commission’s “rule of reason.” We therefore do not require the CAISO to define in the tariff what constitutes “sufficient” demand and weather data used to forecast load for each RUC zone. The CAISO should have the flexibility to analyze a wide range of information in order to develop a fairly accurate RUC procurement target.

83. We disagree with SoCal Edison that the CAISO must conduct a market analysis prior to defining a RUC zone. It is our understanding that the CAISO will not procure RUC capacity based on a resource’s RUC zone location. Instead, the CAISO will use a collection of historical demand and weather related data for each designated zone to establish an overall CAISO demand forecast for the entire system. In the event that the day-ahead market does not commit sufficient resources to meet the CAISO demand forecast, the CAISO will economically select additional resources under RUC to meet this demand. These resources are not committed by location as the CAISO procures this

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<sup>100</sup> *Id.* at 68.

<sup>101</sup> CAISO October 5, 2007 Reply at 73.

capacity from competitive bids submitted in the day-ahead market.<sup>102</sup> As a result, RUC zone designations will not allow resources within a particular zone to exercise market power and consistently receive the availability bid cap of \$250/MW for their RUC capacity, as alleged by SoCal Edison.

84. In addition, we note that the Commission has already addressed market power mitigation concerns for RUC availability bids in our September 2006 Order.<sup>103</sup> Specifically, the Commission concluded that, because the CAISO will not procure RUC capacity on a regular basis and because resource adequacy units would be the first to be committed in the RUC process,<sup>104</sup> it would seldom be necessary to procure RUC capacity from non-resource adequacy resources. Thus, the Commission found that resources would have a greater incentive to enter into resource adequacy contracts that guarantee a capacity payment as opposed to relying on the unlikely scenario that the CAISO might exhaust the available resource adequacy resources in its RUC process and therefore need to procure non-resource adequacy resources. The Commission therefore concluded that a \$250/MWh bid cap on RUC availability bids provides sufficient mitigation of any potential for market power. For these reasons, we deny SoCal Edison's request because the allegations fail to convince the Commission that market power mitigation is necessary for RUC availability bids.

85. We will not require the CAISO to remove the term "static" data, as requested by WPTF. The CAISO clarifies that the term "static" is necessary to include the concept that, once the RUC zones are established and listed in the Business Practice Manuals, the mapping of the RUC zones to nodes will not change and will be maintained in the Master File. We find the use of the term "static" is reasonable as the term and tariff language implies that RUC zones will go unchanged for as long as the CAISO maintains regional forecasting capabilities. We note, however, that the CAISO proposes to modify the sentence and clarify that "*Once the CAISO has established RUC zones, the mapping of RUC zones to Nodes shall be static data and shall be maintained in the Master File.*" We find the CAISO's proposed modification to section 31.5.7.3.2 acceptable and direct the

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<sup>102</sup> The RUC process identifies residual capacity needs on a locational basis, in the sense that it identifies specific capacity through a feasible dispatch of available capacity and the CAISO's demand forecast. The RUC optimization selects RUC capacity and produces nodal prices by minimizing total bid cost based on the RUC availability bids and start-up and minimum load bids.

<sup>103</sup> September 2006 Order, 116 FERC ¶ 61,274 at P 137.

<sup>104</sup> See MRTU tariff sections 31.5.6 and 40.5.2(1) iii-iv.

CAISO to provide this modification in a subsequent compliance filing within 30 days of the date of this order.

86. Finally, we recognize that the CAISO proposes to modify the last sentence of section 31.5.3.7.2 to state the following: “The actual RUC Zones used by the CAISO in its operation ~~or posted on the CAISO Website~~ of RUC are listed in the Business Practice Manual.” We deny the CAISO’s proposed modification to delete the posting of RUC zones on its website because this posting allows for transparency of the procurement process that the CAISO will use to reliably maintain its grid. Thus, we direct the CAISO to reflect this change in a subsequent compliance filing within 30 days of the date of this order.

**ii. Allocation of RUC Compensation Cost**

87. In the April 2007 Order and June 2007 Order,<sup>105</sup> the Commission directed the CAISO to work with State Water Project to resolve the treatment and allocation of RUC costs to participating load. In its compliance filing, the CAISO indicates that it held numerous discussions with representatives in an attempt to resolve State Water Project’s concerns regarding the treatment of participating load in RUC.<sup>106</sup> To reflect these discussions, the CAISO is proposing to modify section 11.8.6.5.3 in order to clarify that participating load will not be subject to Tier 1 allocation of RUC compensation costs.<sup>107</sup>

**Comments**

88. The State Water Project suggests that the CAISO modify section 11.8.6.5.3 to provide that aggregated participating load will not be subject to Tier 1 RUC costs.<sup>108</sup> SoCal Edison, however, objects to any exclusion of participating load from Tier 1 RUC costs. SoCal Edison contends that there is the possibility that participating load may underschedule in the day-ahead market because it failed to bid or follow CAISO instructions. Under these circumstances, SoCal Edison asserts the CAISO will have to procure RUC resources on their behalf and subsequently exempt them from RUC charges

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<sup>105</sup> See April 2007 Order, 119 FERC ¶ 61,076 at P 62; June 2007 Order, 119 FERC ¶ 61,313 at P 68.

<sup>106</sup> CAISO August 3, 2007 Modification to MRTU, Docket No. ER07-1257-000 *et al.*, Volume 1A at 47.

<sup>107</sup> *Id.* In the first tier, the CAISO proposes to allocate RUC costs to Scheduling Coordinators that under-schedule their load in the day-ahead market. *Id.*

<sup>108</sup> State Water Project September 7, 2007 Comments at 13-14.

even though the charges were a direct result of the participating load's actions. SoCal Edison believes these cost should be borne by the participating load that underschedules in the day-ahead market. Therefore, SoCal Edison requests that the Commission require the CAISO to modify section 11.8.6.5.3 to indicate that participating load will only be exempt from Tier 1 RUC charges to the extent that participating load is bidding and following the CAISO dispatch instructions.<sup>109</sup>

89. SoCal Edison also argues that any allocation of RUC costs should reflect the purpose of the RUC performed. If the CAISO performs RUC to resolve a local constraint, SoCal Edison argues that it should allocate the costs differently than if the RUC is needed for a system constraint. SoCal Edison requests that the Commission require the CAISO to address the potential for zonal allocation of RUC costs.<sup>110</sup>

90. The CAISO states that State Water Project's suggestion to amend section 11.8.6.5.3 to provide that aggregated participating load is not subject to Tier 1 RUC costs is unnecessary given that the CAISO proposes to revise the definition of participating load to include aggregated participating load.<sup>111</sup> The CAISO disagrees with SoCal Edison's contention that RUC costs should be allocated on a local and system wide basis. Because an LSE does not schedule load in a local area, the CAISO notes that it is unable to guarantee that it will not procure RUC for that area based on its load forecast. Nevertheless, the CAISO asserts that, if LSEs fully schedule their load, they will not be liable for Tier 1 RUC uplift costs. However, the CAISO states that because Tier 2 uplift costs are not attributable to any particular entities or specific locational needs, but rather benefit the grid as a whole, it is reasonable that all market participants bear a share of these costs. It further states that the adoption of a different allocation method would offer no added benefits since the parties could mitigate their exposure to RUC uplift costs by scheduling in the day-ahead market. In addition, the CAISO contends that such a settlement design change would be complicated and costly to develop and implement.<sup>112</sup>

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<sup>109</sup> *Id.* at 5.

<sup>110</sup> SoCal Edison September 7, 2007 Protest at 4.

<sup>111</sup> *Id.* at 79.

<sup>112</sup> CAISO October 5, 2007 Reply at 70.

### **Commission Determination**

91. In the April 2007 Order,<sup>113</sup> the Commission addressed requests for clarification or rehearing regarding the allocation of RUC costs to certain load. Specifically, State Water Project indicated that the CAISO uses State Water Project schedules in its demand forecast for purposes of RUC. As a result, it claimed that the CAISO does not acquire RUC generation to meet State Water Project's load because there can never be a difference between the CAISO's demand forecast and State Water Project's load. The Commission directed the CAISO to work with State Water Project to resolve the treatment and allocation of RUC costs to participating load.

92. After several meetings with the State Water Project, the CAISO found it reasonable to exclude participating load from Tier 1 RUC costs and therefore modified its tariff to clarify this point in section 11.8.6.5.3. While the Commission accepts the proposed tariff language, we believe SoCal Edison raises a legitimate concern regarding the possible underscheduling of participating load in the day-ahead market. We find it inappropriate for RUC costs resulting from such behavior to be borne by other market participants. Thus, we direct the CAISO to modify this section to make clear that participating load will only be exempt from the RUC Tier 1 charges to the extent that participating load does not underschedule in the day-ahead market. We direct the CAISO to reflect this change in a subsequent compliance filing within 30 days of the date of this order.

93. With regard to State Water Project's concern about aggregated participating load being exempt from Tier 1 RUC costs, the Commission agrees that including aggregated participating load in the definition of participating load adequately addresses State Water Project's concern. Thus, we direct the CAISO to reflect this change in a subsequent compliance filing within 30 days of the date of this order.

#### **c. Miscellaneous RUC Issues**

##### **i. Section 31.5.3.7.1 – Use of RUC Zones**

### **Comments**

94. WPTF argues that the meaning of "pooling" costs in the context of RUC compensation in section 31.5.3.7.1 is unclear. WPTF requests that the Commission

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<sup>113</sup> April 2007 Rehearing Order, 119 FERC ¶ 61,076 at P 57-63.

direct the CAISO to describe the concept of pooling costs and to provide any other details that may be required to understand how RUC compensation costs are calculated.<sup>114</sup>

95. WPTF also suggests that the CAISO remove or clarify the last sentence of section 31.5.3.7.1, which states: “As described in section 11.8.3, Settlement of RUC Compensation Costs will not be on a RUC Zone basis.” WPTF claims that although section 11.8.3 and its component subsections explain many details of RUC settlement, none of the component subsections support this sentence. If the sentence is supposed to provide further clarification, WPTF argues that the CAISO should be required to either explain the point of this statement in section 31.5.3.7.2 or explain which subsection of 11.8.3 it is referencing.<sup>115</sup>

96. In its reply comments, the CAISO explains the term “pooling” refers to the allocation of RUC procurement cost on a system-wide, rather than zonal basis. The CAISO explains that it included this tariff language to provide that the CAISO will not allocate RUC costs on a zonal basis. Thus, the CAISO contends that no further clarification is necessary.<sup>116</sup>

97. With respect to the last sentence in section 31.5.3.7.1, the CAISO states that the sentence was added to reflect its practice to settle RUC compensation costs across the Control Area and not by RUC zone. The CAISO agrees with WPTF’s assertion that the reference to section 11.8.3 incorrect and therefore commits to modify that sentence as follows: “As described in Sections 11.8.6.1, Settlement of RUC Compensation Costs will not be on a RUC Zone basis.” The CAISO notes that section 11.8.6.1 specifies that “[t]he RUC Bid Cost Uplift shall be the net of the RUC Bid Cost Shortfalls and RUC Bid Cost Surpluses for a Settlement Interval of all Bid Cost Recovery Eligible Resources with Unrecovered Bid Cost Uplift.” The CAISO also proposes to clarify this concept further by adding the phrase “in the CAISO Control Area” after “all Bid Cost Recovery Eligible Resources” in section 11.8.6.1 and agrees to make this change in a compliance filing.<sup>117</sup>

### **Commission Determination**

98. We find that the CAISO has adequately addressed WPTF’s concern by clarifying that the term “pooling” refers to the allocation of RUC procurement cost on a system-

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<sup>114</sup> WPTF September 7, 2007 Protest at 15.

<sup>115</sup> *Id.*

<sup>116</sup> CAISO October 5, 2007 Reply at 71.

<sup>117</sup> *Id.* at 72-73.

wide, rather than zonal basis. We also accept the CAISO's commitment to modify the last sentence of section 31.5.3.7.1 to acknowledge that section 11.8.6.1 is the correct settlement provision for RUC compensation costs. In addition, we find the CAISO's proposal to add the phrase "in the CAISO Control Area" to section 11.8.6.1 is reasonable as the modification seems to clarify the provision and does not change the determination of RUC Bid Cost Uplift for purposes of allocating these payments. We direct the CAISO to reference the correct settlement provision for RUC compensation and add the phrase "in the CAISO Control Area" to section 31.5.3.7.1 of the MRTU tariff as proposed above in a subsequent compliance filing within 30 days of the date of this order.

ii. **Section 31.5.1.1 – Capacity Eligible for RUC Participation**

99. Section 31.5.1.1, as revised by the CAISO in its compliance filing, provides in pertinent part that:

RUC participation is voluntary for capacity that has not been designated Resource Adequacy Capacity. Scheduling Coordinators may make such capacity available for participating in RUC by submitting a RUC Availability Bid, provided the Scheduling Coordinator has also submitted an Energy Bid for such Capacity in the IFM. . . . Capacity from resources including System Resources that has been designated as qualified Resource Adequacy Capacity must participate in RUC. RUC Participation is required for Resource Adequacy Capacity to the extent that Resource Adequacy Capacity is not committed following the IFM. . . . <sup>118</sup>

**Comments**

100. WPTF argues that the sentence "RUC Participation is required for Resource Adequacy Capacity to the extent that Resource Adequacy Capacity is not committed following the IFM" should be removed. WPTF contends the sentence has no practical impact because there is nothing a scheduling coordinator can do after the integrated forward model is run to participate in RUC if its unit is not committed in the integrated forward model. It states that scheduling coordinators submit all RUC-related bids or proxy bids before the integrated forward model is run. Thus, WPTF contends that the Commission should direct the CAISO to remove this sentence in order to avoid confusion.<sup>119</sup>

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<sup>118</sup> CAISO August 3, 2007 Modification to MRTU, Docket No. ER07-1257-000 *et al.*, Volume 2 at 368.

<sup>119</sup> WPTF September 7, 2007 Protest at 15.

101. In its reply, the CAISO explains that it added the sentence to clarify that resource adequacy capacity is required to participate in the RUC process only to the extent it is not committed in the IFM. The CAISO indicates that it added the proposed tariff language in response to market participants desire to clearly state the RUC participation requirements of resource adequacy capacity in the tariff. As a result, the CAISO believes the sentence in section 31.5.1.1 is an accurate statement, which requires no further modification.<sup>120</sup>

### **Commission Determination**

102. We agree with the CAISO that there is no need to remove the proposed sentence as it clarifies the expectation of resource adequacy resources under the RUC participation requirements. Therefore, we accept section 31.5.1.1 as proposed.

### **iii. Section 11.8.3.1.3 - RUC Availability Bid Cost**

#### **Comments**

103. WPTF notes what appears to be an incomplete sentence at the beginning of section 11.8.3.1.1, which states, in relevant part: “The product of the RUC Award with the relevant RUC Availability Bid price, divided by the number of Settlement Intervals in a Trading Hour.”<sup>121</sup>

### **Commission Determination**

104. We agree with WPTF’s assertion that section 11.8.3.1.3 is incomplete and direct the CAISO to correct this sentence in a compliance filing within 30 days of the date of this order.

## **3. Full Network Model**

### **a. Section 6.5.1.4 – Requirements to Obtain Full Network Model**

105. In the June 2007 Order, the Commission directed the CAISO to modify the proposed security check procedures to provide that it is the CAISO, not the Investor Owned Utilities (IOUs), that is to conduct the security check process for consultants of market participants that wish to obtain the congestion revenue rights (CRRs) full network

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<sup>120</sup> CAISO October 5, 2007 Reply at 71-72.

<sup>121</sup> WPTF September 7, 2007 Protest at 7.

model data.<sup>122</sup> The Commission concluded that allowing the IOUs to conduct the security check was inappropriate because the procedure may provide IOUs and unfair advantage to control or otherwise delay a party's access to information.<sup>123</sup> Thus, the Commission directed the CAISO to file revised MRTU tariff sheets to reflect the change in security check procedures.<sup>124</sup> The Commission also directed the CAISO to revise its non-disclosure agreement to reflect the fact that the CAISO receives litigation costs only if it prevails in litigation and to allow market participants to use the full network model and related studies in pleadings before the Commission, treated as privileged information if necessary.<sup>125</sup>

106. In its compliance filing, the CAISO states that it did not modify section 6.5.1.4 to reflect the security check procedure as directed by the Commission because it recently sought clarification and rehearing of this issue.<sup>126</sup> On rehearing, the CAISO proposed to eliminate the security check requirements for consultants of market participants that wish to use the full network model data outside market participants' locations. The CAISO claimed that this proposal is appropriate because: (1) the CAISO proposed the procedure based on the understanding that the IOUs, rather than the CAISO, would be conducting the security checks; (2) the CAISO lacks sufficient resources to administer this process; (3) the Commission's prior directives concerning release of the full network model only required the execution of a non-disclosure agreement; and (4) no other independent system operators or regional transmission organizations appear to require security checks to obtain their network models.<sup>127</sup>

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<sup>122</sup> June 2007 Order, 119 FERC ¶ 61,313 at P 37. Previously, the CAISO required its consultants to complete a security check process with the three IOUs before gaining access to the full network model. The IOUs reviewed each request and forwarded documentation of each approval to the CAISO, which subsequently provided a copy of the full network model to the consultant. *Id.*

<sup>123</sup> *Id.*

<sup>124</sup> *Id.*

<sup>125</sup> *Id.* P 40.

<sup>126</sup> CAISO August 3, 2007 Modifications to MRTU, Docket No. ER07-1257-000 *et al.*, Volume 1A at 44-45.

<sup>127</sup> CAISO July 25, 2007 Request for Clarification or, in the Alternative, Request for Rehearing, Docket No. ER06-615-009, at 9.

### Comments

107. PG&E argues that it is inappropriate for the CAISO to submit tariff language in section 6.5.1.4 that assumes the Commission has already accepted its request for clarification. PG&E contends that the tariff language in the compliance filing should be consistent with the Commission's directive and not the proposed modifications the CAISO is seeking on rehearing. Therefore, PG&E urges the Commission to direct the CAISO to comply with the June 2007 Order by filing the appropriate tariff language relating to the security check process.<sup>128</sup>

108. The CPUC states that government entities must have access to the full network models used to operate the grid and calculate CRRs under the MRTU tariff. The CPUC claims the proposed tariff language in section 6.5.1.4 may preclude it or other government entities from obtaining the full network model. As currently phrased, the CPUC states the CAISO will only distribute the full network model to non-market participants who "reasonably demonstrate a legitimate business interest in the CAISO markets."<sup>129</sup> The CPUC argues that it may be impossible to characterize its governmental interest as a "business interest." The CPUC contends that the full network model should be accessible to regulators with a legitimate governmental interest. Thus, the CPUC requests the Commission require the CAISO to clarify in its tariff language that the full network model will be available to the CPUC and other regulators.<sup>130</sup>

109. SMUD supports the proposed revisions to sections 6.5.1.4 and 6.5.1.5, but argues they should not be part of the CAISO's general request for a waiver of section 35.3 of the Commission's regulations to permit an effective date for its entire filing as of implementation of MRTU. SMUD believes that there is no need to delay the effective date of changes to sections 6.5.1.4 and 6.5.1.5. It states that the CAISO has recently proposed that other CRR-related tariff changes take effect prior to implementation of MRTU and the Commission agreed. SMUD contends the Commission should grant similar consideration in this case.<sup>131</sup>

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<sup>128</sup> PG&E September 7, 2007 Comments at 2.

<sup>129</sup> CPUC September 7, 2007 Comments and Limited Protest at 5, *citing* CAISO August 3, 2007 Modifications to MRTU, Docket No. ER07-1257-000 *et al.*, Volume 1A at 45.

<sup>130</sup> *Id.* at 5-6.

<sup>131</sup> SMUD September 7, 2007 Protest and Request for Clarification at 5.

110. NCPA and CMUA state that it has not been able to find, on the CAISO's website, a revised non-disclosure agreement incorporating the provisions ordered by the Commission's June 2007 Order.<sup>132</sup>

111. In its reply, the CAISO contends that PG&E's argument regarding its compliance with the June 2007 Order does not consider that the Commission's directives were premised on the CAISO's original proposal to require a security check process to be conducted by the IOUs prior to distributing to other interested parties.<sup>133</sup> The CAISO interprets the June 2007 Order as a conditional directive. The CAISO contends that the Commission did not state or in any way suggest that a security check was a necessary pre-requisite to obtaining the full network model. Therefore, the CAISO concludes that the proposal to remove the security check requirement from the full network model tariff language is not in conflict with the June 2007 Order.<sup>134</sup>

112. The CAISO agrees with the CPUC's assertion that governmental entities should have access to the full network model data. Accordingly, the CAISO commits to modifying the phrase "legitimate business interest" in Section 6.5.1.4(d) to read "legitimate business *or governmental* interest."<sup>135</sup> With respect to NCPA and CMUA's allegations that the revised non-disclosure agreement was not posted on the CAISO's website, the CAISO commits to posting and incorporating the new procedures on its website within two weeks of the next version of the full network model scheduled for October 2007.<sup>136</sup>

113. Finally, the CAISO disagrees with SMUD's requests to grant an early effective date for sections 6.5.1.4 and 6.5.1.5. The CAISO states, in the interest of administrative efficiency, that it would prefer to limit requests for early effectiveness of tariff sections to those that impose requirements on market participants. Even if it does not implement these sections prior to MRTU startup, CAISO contends that SMUD and other market participants will continue to have access to the CRRs full network model.<sup>137</sup>

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<sup>132</sup> See NCPA September 7, 2007 Protest at 20 and CMUA September 7, 2007 Protest at 12.

<sup>133</sup> CAISO October 5, 2007 Reply at 63.

<sup>134</sup> *Id.* at 63-64.

<sup>135</sup> *Id.* at 63.

<sup>136</sup> *Id.* at 64.

<sup>137</sup> *Id.* at 64-65.

### **Commission Determination**

114. The CAISO has clarified for NCPA and CMUA that it will post the revised non-disclosure agreement on its website within two weeks of the next version of the full network model scheduled for October 2007. The CAISO also states that it agrees with the CPUC's suggestion that section 6.5.1.4 should grant governmental entities, such as the CPUC, access to the full network model data. As a result, the CAISO proposes to modify the tariff language to clearly indicate that the full network model will be available to entities that have a "legitimate business or governmental interest." Because the CAISO has clarified the comments raised by NCPA, CMUA and the CPUC, we find that no further discussion is needed and we direct the CAISO to make these tariff revisions in a compliance filing within 30 days of the date of this order.

115. PG&E argues that it is inappropriate for the CAISO to submit tariff language that assumes the Commission will grant clarification and allow the CAISO to remove the security check process. In light of the fact that the Commission issued an order granting the CAISO's request for rehearing on this issue,<sup>138</sup> we find PG&E's concern has been rendered moot. On rehearing, the Commission found it reasonable for the CAISO to eliminate the security check procedure based on the circumstances presented and the fact that the non-disclosure agreement adequately protects the confidentiality of the full network model data.<sup>139</sup> Thus, no further discussion is required.

116. With respect to SMUD's argument regarding an earlier effective date for sections 6.5.1.4 and 6.5.1.5, we agree that an earlier date is unnecessary. Market participants will continue to receive the full network model data without the imposition of an earlier effective date. The CAISO has made the full network model available, subject to a non-disclosure agreement, to market participants for use in reviewing and analyzing the CAISO's CRRs dry run simulation and the CRRs markets. The CAISO's provision of the full network model data appropriately serves as a tool to allow market participants to make informed decisions regarding the available capacity for CRRs allocation purposes. Thus, we will not direct the CAISO to establish an earlier effective date for these sections.

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<sup>138</sup> *Cal. Indep. Sys. Operator Corp.*, 121 FERC ¶ 61,030 (2007).

<sup>139</sup> *Id.* P 13.

b. **Section 27.5.1 - Description of Full Network Model for CAISO Markets**

**Comments**

117. WPTF contends that the CAISO appears to be making substantial changes to its policy in section 27.5.1 regarding the representation of external control areas in its full network model. Specifically, WPTF notes that the CAISO modified the second sentence of section 27.5.1 as follows:

External Control Areas and external transmission systems are ~~not~~ modeled, ~~except for transmission facilities for which Participating TOs have converted their scheduling rights to the extent necessary to~~ support the commercial requirements of the CAISO Markets.<sup>140</sup>

118. Because the modeling of the electrical network beyond the interties has a significant impact on prices under MRTU, WPTF asserts that the CAISO must disclose to market participants which systems are modeled in more detail in order to understand and have confidence in locational marginal prices (LMP) based on the full network model.<sup>141</sup>

119. WPTF argues that the CAISO should be directed to include language in this section that obligates the CAISO to: (1) provide at least 30 days notice of any modeling changes incorporated into the full network model that are not required for emergency purposes; (2) when changes are made to the full network model, hold a workshop or other stakeholder meeting, either in person or by telephone in which it describes the changes in detail and offers stakeholders an opportunity to ask clarifying questions; (3) capture qualitatively in its Business Practice Manuals the full network model approach used to represent each adjacent control area that is not modeled a radial interconnection; and (4) provide under its confidentiality arrangements updated technical network model representations.<sup>142</sup>

120. In its reply, the CAISO notes that WPTF's comment relates to the full network model being used to operate the CAISO's market, and have nothing to do with access to the CRRs full network model. The CAISO states that it does not make the entire full network model available to market participants and that it should not be compelled to

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<sup>140</sup> WPTF September 7, 2007 Protest at 11, *citing* CAISO August 3, 2007 Modifications to MRTU, Docket No. ER07-1257-000 *et al.*, Volume 2 at 354-355.

<sup>141</sup> *Id.* at 11-12.

<sup>142</sup> *Id.* at 12.

conduct a stakeholder process in order to update the entire full network model. The CAISO claims that such a requirement would seriously impair the efficient functioning of the CAISO markets because of the frequent updating that the full network model requires, even under non-emergency conditions. The CAISO further explains that these updates often cannot be anticipated far in advance of being required, and certainly not with 30 days lead-time, as WPTF requests. The CAISO urges the Commission to reject WPTF's suggestions. Nevertheless, the CAISO agrees to provide market participants with more high-level information concerning how the CAISO models external control areas.<sup>143</sup>

### **Commission Determination**

121. In the September 2006 Order, the Commission supported the CAISO's commitment to include more information concerning adjacent and embedded control areas in the full network model as soon as possible.<sup>144</sup> In addition, the Commission agreed that the CAISO should operate the California grid using the most accurate model of internal and external areas that it can and directed the CAISO to work with external controls areas to develop the model more fully in the future.<sup>145</sup> We find the modification to section 27.5.1 allows the CAISO to further develop the model to the extent it has the information to do so. Therefore, we accept the proposed modification by the CAISO to include external transmission systems in the collection of full network model data.

122. We recognize WPTF's concern that changes to the full network model should be transparent to market participants, as this data supports the determination and mitigation of transmission congestion and the calculation of LMP. However, we agree with the CAISO that the frequency at which the CAISO must update the information makes the obligations proposed by WPTF unduly burdensome. We believe the benefits of providing market participants with an accurate model of the physical power system network, IFM and real-time market data outweigh the inefficiencies created from numerous stakeholder meetings each time the CAISO incorporates a change into the full network model. Accordingly, we deny WPTF's requests and require no further modifications to this provision.

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<sup>143</sup> CAISO October 5, 2007 Reply at 66.

<sup>144</sup> September 2006 Order, 116 FERC ¶ 61,274 at P 45.

<sup>145</sup> *Id.*

#### 4. Congestion Revenue Rights (CRRs)

##### a. Section 36 - Congestion Revenue Rights Provisions

123. The CAISO states that the CRRs provisions under section 36 of the MRTU tariff include: (1) clarifying tariff language; (2) provisions recently approved by the Commission in its July 6, 2007 Order;<sup>146</sup> and (3) tariff modifications proposed in a July 20, 2007 compliance filing submitted in response to the July 2007 Order, which are pending before the Commission in other dockets.<sup>147</sup>

#### Comments

124. Imperial contends that it is unduly discriminatory to require external LSEs under sections 36.8.3.4, 36.8.4.2 and 36.8.4.3 to verify their supply source for proposed CRRs nominations.<sup>148</sup> Imperial notes that it protested this issue in response to the CAISO's July 20 compliance filing, raising the same claim of undue discrimination against external LSEs.<sup>149</sup>

125. Imperial also argues that the Commission should require the CAISO to clarify, under section 36.8.3.5.1, why it will not allow both internal and external LSEs to nominate trading hubs in the priority nomination process after CRRs Year One. Imperial contends that the CAISO failed to address this issue in its previous CRRs related filings and therefore seeks an explanation in this proceeding.<sup>150</sup>

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<sup>146</sup> *Cal. Indep. Sys. Operator Corp.*, 120 FERC ¶ 61,023 (2007) (July 2007 Order).

<sup>147</sup> The CAISO filed these modifications in Docket Nos. ER06-615-008, ER07-475-002 and ER07-869-001.

<sup>148</sup> Imperial September 7, 2007 Comment and Protest at 6.

<sup>149</sup> *Id.* See Imperial August 10, 2007 Comment and Protest, Docket Nos. ER06-615-008 *et al.*, protesting CAISO July 20, 2007 Proposed Tariff Revisions, Docket Nos. ER06-615-008 *et al.* Imperial argued that an additional source verification requirement for external LSEs is not necessary because: (1) safeguards already exist within the MRTU tariff to prevent external LSEs from obtaining CRRs for purposes other than for serving their load; (2) external LSEs CRRs nominations can create counterflow CRRs which could benefit all LSEs including the internal LSEs; and (3) unnecessary source verification requirements on external LSEs could raise costs for end-use consumers. *Id.* at 2.

<sup>150</sup> *Id.* at 7-8.

126. Six Cities notes that sections 36.8.2 and 36.8.3.4.1 provide that the CAISO will make available a list of allowable CRRs sinks and a list of allowable CRRs sources prior to the beginning of the allocation process for CRRs. Six Cities requests that the Commission require the CAISO to also post allowable CRRs sources and sinks no less than 30 days prior to the date that LSEs are required to submit their nominations. Six Cities argues that adequate notice is necessary to ensure that LSEs have sufficient time to evaluate and prepare their nominations for CRRs in the allocation process.<sup>151</sup>

127. PG&E also raises concern with sections 36.8.2 and 36.8.3.4.1. PG&E contends that, in order for CRRs to be treated properly, it is essential that the CRRs source and sink nodes be up to date. As a result, PG&E proposes to add language to these sections requiring the list of allowable CRRs sinks and sources referenced in the sections to be consistent with the current full network model.<sup>152</sup>

128. PG&E contests the CAISO's proposal to delete a sentence in section 36.7.2 that requires the CAISO's Secondary Registration System to automatically post on the CAISO Website the bilateral CRRs transactions entered into by Market Participants. PG&E argues that the better approach is to post the bilateral transactions. Therefore, PG&E recommends that the Commission reject the CAISO's proposal to delete the sentence of section 36.7.2 that contains the posting requirement.<sup>153</sup>

129. WPTF objects to the proposed language added to section 35.5.2 providing that, "[u]nless granted a waiver by the CAISO, Candidate CRRs Holders and CRRs Holders shall at all times have in their employment a person that has attended the CAISO's CRRs training class and shall notify the CAISO as soon as practicable of a change in such status." WPTF claims that the CAISO offers no rationale for this provision and has no basis for requiring a market participant to meet its obligations with respect to CRRs by using employees instead of contract staff or consultants. To the extent that the Commission allows the certification requirement, WPTF argues that the CAISO should allow market participants to authorize third parties to act on their behalf so long as the third party in question has obtained the necessary certification. WPTF also objects to the CAISO's proposed requirements for waivers under this provision as burdensome, costly and unnecessary. WPTF suggests that the Commission require the CAISO to reasonably accommodate all market participants who need CRRs training so they can meet the

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<sup>151</sup> Six Cities September 7, 2007 Comments at 11. WPTF provided similar comments. WPTF September 7, 2007 Protest at 18.

<sup>152</sup> PG&E September 7, 2007 Comments at 9.

<sup>153</sup> *Id.* at 8-9.

CAISO's certification requirement in time to participate in the first CRRs auction or CRRs allocation.<sup>154</sup>

130. In reply to Imperial, the CAISO notes that Imperial has not only protested the issue related to supply source verification requirements of external LSEs in response to the CAISO's July 20 compliance filing, but has also sought rehearing of the July 2007 Order on this issue.<sup>155</sup> The CAISO repeats arguments previously made in response to Imperial's earlier protest that the source verification requirements provisions are consistent with the Commission's determination in the July 2007 Order and, therefore, Imperials concerns are better addressed on rehearing of the July 2007 Order.<sup>156</sup>

131. With respect to Imperial's request for clarification of section 36.8.3.5.1, the CAISO states that it provided the explanation of why it will not allow both internal and external LSEs to nominate trading hubs in the priority nomination process in its May 7, 2007 MRTU tariff amendment filing.<sup>157</sup> In that filing, the CAISO stated:

In the Tier LT process for CRR Year Two and beyond, the principle that only the CRRs awarded in Tiers 1 and 2 can be nominated in Tier LT is restored. In other words, in the Priority Nomination Process ("PNP") that takes place each year after CRR Year One, LSEs can nominate only CRRs they were awarded in the previous year's annual allocation process. *Since the allocated or awarded CRRs are Point-to-Point CRRs (not Trading Hub CRRs), LSEs are not able to submit CRR nominations with sources at Trading Hubs in the PNP.* However, LSEs would be able to make new Trading Hub nominations in Tiers 2 and 3 of the annual allocation process and Tiers 1 and 2 of the monthly allocation process for CRR Year Two and beyond, because these are free choice tiers and are not limited to previous CRR awards.<sup>158</sup>

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<sup>154</sup> WPTF September 7, 2007 Protest at 17-18.

<sup>155</sup> CAISO October 5, 2007 Reply at 80-81.

<sup>156</sup> *Id.*, citing CAISO August 27, 2007 Answer, Docket Nos. ER07-869-000, *et al.*, at 26-27.

<sup>157</sup> CAISO May 7, 2007 MRTU Tariff Amendment Filing, Docket Nos. ER07-475-000, *et al.*

<sup>158</sup> *Id.* at 9. (emphasis added).

The CAISO asserts that the lack of discussion of this explanation in the July 2007 Order indicates that the Commission considered it sufficient to approve the CAISO's proposal.<sup>159</sup>

132. The CAISO agrees with PG&E's proposal to add language to sections 36.8.2 and 36.8.3.4.1 so that the current list of allowable CRRs sources and sinks is consistent with the current full network model.<sup>160</sup> The CAISO disagrees, however, with PG&E's request to insert the deleted sentence in section 36.7.2 regarding the posting of bilateral CRRs transactions. The CAISO states that, upon proposing this deletion in the May 7, 2007 MRTU tariff amendment filing,<sup>161</sup> the Commission did not reject or require modifications to the proposed change in its July 2007 Order. The CAISO also notes that PG&E failed to raise any issue concerning section 36.7.2 in its August 2 request for rehearing of the July 2007 Order and, therefore, PG&E's argument is a collateral attack on the July 2007 Order.<sup>162</sup>

### **Commission Determination**

133. We agree with the CAISO that Imperial's concerns regarding supply source verification for external LSEs are more appropriately addressed on rehearing of the July 2007 Order. As a result, the Commission will not rule on the issue in this compliance proceeding.

134. We also agree with the CAISO that it has adequately justified prohibiting internal and external LSEs from nominating trading hubs for CRRs allocation. As the CAISO points out, LSEs are unable to nominate trading hubs in the priority nomination process because the CRRs are allocated and awarded in that process based on the point-to-point CRRs rather than trading hub CRRs. Among other things, the disaggregation of trading hub CRRs nominations into point-to-point CRRs nominations, rather than placing trading hub CRRs into the simultaneous feasibility test, has the important advantage of treating nominations from generation sources and trading hubs equivalently if nominations need to be reduced to maintain simultaneous feasibility.<sup>163</sup> Therefore, contrary to Imperial's

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<sup>159</sup> CAISO October 5, 2007 Reply at 81-82.

<sup>160</sup> *Id.*

<sup>161</sup> See CAISO May 7, 2007 MRTU Tariff Amendment Filing, Docket Nos. ER07-475-000, *et al.*, Attachment C.

<sup>162</sup> *Id.* at 82.

<sup>163</sup> See Attachment D, Testimony of Dr. Lorenzo Kristov, Exhibit No. ISO-1 at 22.

assertion, the Commission did not discuss the CAISO's explanation because we believed the CAISO's response adequately addressed the concern. For this reason, we deny Imperial's request.

135. We deny PG&E's request to require the CAISO to reinsert the deleted sentence in section 36.7.2 regarding the posting of bilateral CRRs transactions. As the CAISO explains, it proposed to delete this sentence in its May 7, 2007 tariff filing and that proposal was accepted in the July 2007 Order without objection by PG&E. We therefore deny PG&E's request to reinsert this language as a collateral attack on the July 2007 Order and beyond the scope of this compliance proceeding.

136. We agree with WPTF that market participants should be permitted to rely on consultants or third parties to manage their involvement with acquiring or auctioning CRRs. This modification will prove beneficial to all market participants as they evaluate the need for outside consultants to review how CRRs may provide financial protection from the risk of congestion charges. We direct the CAISO to revise section 36.5.2 accordingly in a compliance filing to be submitted within 30 days of the date of this order. In light of this modification, we deny WPTF's claim that the waiver requirements under section 36.5.2 are unduly burdensome.

137. We also agree with Six Cities that section 36.8.2 and 36.8.3.4.1 should require that the list of allowable CRRs sources and sinks be posted no less than 30 days prior to the date LSEs submit their nominations. We find this modification reasonable, as market participants need time to prepare and communicate with the CAISO so that they can prepare nominations for CRRs in the allocation process. We direct the CAISO to submit the applicable tariff sheets in a compliance filing within 30 days of the date of this order.

138. Finally, we direct the CAISO to add language to section 36.8.2 and 36.8.3.4.1 to ensure that the CRRs sources and sinks are consistent with the full network model. The CAISO should submit this change in a compliance filing within 30 days of the date of this order.

## **5. Metered Subsystems**

### **a. Allocation of Bid Cost Recovery to MSS entities**

139. The September 2006 Order recognized that additional time was needed for the CAISO to fully address how day-ahead market and Bid Cost Recovery (BCR)<sup>164</sup> costs

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<sup>164</sup> Appendix A defines Bid Cost Recovery as the settlement process through which eligible resources are able to recover their bid costs. *See* CAISO August 3, 2007 Modifications to MRTU, Docket Nos. ER07-1257-000 *et al.*, Volume 2 at 10. Eligible  
(continued...)

should be allocated to Metered Subsystems (MSS) based on different elections.<sup>165</sup> The Commission directed the CAISO to make a compliance filing finalizing its proposal concerning how to allocate day-ahead market and BCR costs to MSSs no later than 180 days prior to the effective date of MRTU Release 1. In the interim, the CAISO committed to work with stakeholders to update existing MSS agreements in an attempt to minimize inconsistencies between these agreements and the MRTU tariff.<sup>166</sup>

140. In compliance with this directive, the CAISO proposes modifications to sections 11.8.6.4, 11.8.6.5, and 11.8.6.6 to address the allocation of BCR costs to MSSs.<sup>167</sup> Under this proposal, the allocation of BCR costs will vary in each of the three markets (*i.e.*, day-ahead market, RUC and real-time market) depending on whether a MSS elects to:

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resources include generating units, system units, system resources and participating loads. *Id.* Bid costs include start-up costs, minimum load costs, energy cost, ancillary services cost and RUC availability payment. *Id.* at 11.

<sup>165</sup> September 2006 Order, 116 FERC ¶ 61,274 at P 646. Appendix A of the MRTU Tariff defines an MSS as “[a] geographically contiguous system located within a single Zone which has been operating as an electric utility for a number of years prior to the ISO Operations Date as a municipal utility, water district, irrigation district, State agency or Federal power administration subsumed within the ISO Control Area and encompassed by ISO certified revenue quality meters at each interface point with the ISO Controlled Grid and ISO certified revenue quality meters on all Generating Units or, if aggregated, each individual resource and Participating Load internal to the system, which is operated in accordance with a MSS Agreement.” CAISO August 3, 2007 Modifications to MRTU, Docket Nos. ER07-1257-000 *et al.*, Volume 2 at 66.

<sup>166</sup> September 2006 Order, 116 FERC ¶ 61,274 at P 646.

<sup>167</sup> CAISO August 3, 2007 Modifications to MRTU, Docket Nos. ER07-1257-000 *et al.*, Volume 1A at 48.

(1) load follow;<sup>168</sup> (2) settle on a gross or net basis;<sup>169</sup> or (3) opt into or out of the RUC procurement process.<sup>170</sup>

141. The CAISO proposes to calculate the MSS bid costs and market revenues to determine the payment for unrecovered bid costs and uplift charges under each market process.<sup>171</sup> For example, the CAISO proposes to allocate IFM uplift charges to scheduling coordinators of MSS entities under a two-tier process.<sup>172</sup> In the first tier, regardless of their election, the CAISO proposes that all MSS entities be subject to the IFM load uplift obligation based on the difference between the total demand scheduled in the day-ahead schedule for the individual scheduling coordinator, plus imports scheduled for that scheduling coordinator in the day-ahead schedule, adjusted for any applicable trades of IFM load uplift obligations among scheduling coordinators. In the second tier, MSS operators that have elected both to not follow their load and settle on a gross basis will be allocated the IFM uplift amounts based on their measured demand. On the other

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<sup>168</sup> Load following, while not defined in the MRTU tariff, typically is defined as the use of generation to meet the hour-to-hour and daily variations in system load.

<sup>169</sup> Under gross settlement, the CAISO will pay the MSS for its generation and bill the MSS's load for its demand. Under net settlement, the CAISO will net the MSS's generation against its demand prior to billing the MSS's load for excess demand or paying for excess generation, as appropriate. CAISO August 3, 2007 Modifications to MRTU, Docket Nos. ER07-1257-000 *et al.*, Volume 1A at 49-50.

<sup>170</sup> CAISO August 3, 2007 Modifications to MRTU, Docket Nos. ER07-1257-000 *et al.*, Volume 1A at 49.

<sup>171</sup> If the difference is positive, then the amount represents a shortfall for the specific CAISO market. If the difference is negative, then the amount represents a surplus. The CAISO will net the resource's shortfall and surpluses over each trading hour. If the resulting amount is positive, then the unit will receive an unrecovered BCR uplift payment in this amount for that trading day. *See* CAISO August 3, 2007 Modifications to MRTU, Docket Nos. ER07-1257, *et al.*, Volume 2, section 11.8.5 at 287.

<sup>172</sup> Sections 11.8.6.5 and 11.8.6.6 provide similar uplift allocations for the RUC and the real-time market based on whether the MSS entity selects net or gross settlement.

hand, for entities that have elected to either follow their load, settle on a net basis, or both, the uplift will be allocated based on the MSS aggregation net measured demand.<sup>173</sup>

142. The CAISO notes that a stakeholder requested recently that, under the MSS BCR construct, MSS entities be given the ability to choose to not be compensated for BCR for its generating units and, similarly, be given differential treatment in the allocation of the CAISO's BCR uplifts. The CAISO states that initially it did not find this request appropriate and, thus, did not include this option in the MSS White Paper discussed with stakeholders. However, the CAISO commits to continue discussions on this discrete aspect of MSS BCR, which the CAISO states does not affect the methodology proposed in this filing.<sup>174</sup>

### **Comments**

143. NCPA does not dispute the generalized treatment proposed for gross or net settling non-load following MSS entities, but does protest the proposed revisions that would allocate BCR uplift to MSS entities that have elected the load-following option.<sup>175</sup> NCPA argues that the CAISO proposes to change the rules for allocating BCR cost in both the IFM and real-time market.<sup>176</sup> NCPA argues that this change is contrary to the existing principles and treatment for load-following MSS under the MSS agreement.

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<sup>173</sup> CAISO August 3, 2007 Modifications to MRTU, Docket Nos. ER07-1257-000 *et al.*, Volume 1A at 49-50. The CAISO states that the MSS aggregation net measured demand consists of the sum of all of the net-metered CAISO demand from all the net-load MSSs in the MSS aggregation plus any exports out of the CAISO control area from the MSS aggregation. *Id.* at 49.

<sup>174</sup> CAISO August 3, 2007 Modifications to MRTU, Docket Nos. ER07-1257-000 *et al.*, Volume 1A at 51. First, the CAISO proposes to hold discussions with the stakeholder who tendered the proposal to better understand the request. Then, the CAISO intends to engage all stakeholders in discussion of this proposal, after which the CAISO will report to the Commission whether additional tariff changes are required no later than mid-September 2008. *Id.*

<sup>175</sup> NCPA September 7, 2007 Protest at 6-7. CMUA and Santa Clara both adopt NCPA's Protest by reference. *See* CMUA September 7, 2007 Protest at 10 and Santa Clara September 7, 2007 Protest at 7.

<sup>176</sup> NCPA September 7, 2007 Protest at 7. Because the costs at issue under Tier 1 appear to be avoidable, NCPA states that it will not contest the allocation of IFM BCR uplift costs to load-following MSS entities through the Tier 1 mechanism. *Id.* at 8-9.

144. NCPA argues that, since 2002, it has elected to be a load-following MSS pursuant to section 13.10.2 of its MSS agreement with the CAISO,<sup>177</sup> which states:

NCPA may elect not to be eligible for recovery of Minimum Load Costs and not to charge the ISO for the Emissions Costs and Start-Up Costs of the Generating Units serving the Load of NCPA's System. If NCPA makes such election, then the Scheduling Coordinator for NCPA as MSS Aggregator shall bear its proportionate share of the total amount of those costs incurred by the ISO based on NCPA as MSS Aggregator's Net Negative Uninstructed Deviations.

NCPA maintains that, to the extent it elects not to seek recovery of BCR costs and has sufficiently met its load obligations, it is not relying on CAISO resources to cover its needs. NCPA argues that penalties are charged under the MSS agreement only when NCPA incurs net negative uninstructed deviations on the CAISO's system. NCPA contends that it has a strong monetary incentive to avoid such deviations and has rarely incurred penalties in the past.<sup>178</sup>

145. NCPA states that the ability of a load-following MSS to manage and control its own costs by managing and planning for its service obligations would be undermined if it must also bear allocated shares of costs generated by other market participants. NCPA argues that it does not possess sufficient data to forecast the level of BCR uplift costs that might be allocated to it under MRTU, but the costs in question could well be sufficient to undermine the value of the load-following MSS option as a vehicle for successful CAISO participation for governmentally-owned utilities.<sup>179</sup>

146. NCPA is concerned with the application to a load-following MSS of second tier BCR Uplift costs from the IFM, which will socialize costs to all users of the CAISO grid. NCPA argues that load-following is an expensive activity, yet NCPA takes responsibility for paying costs associated with its own load-following activities rather than pushing those costs to the market. NCPA contends that a fundamental principle of load-following MSS operation is to limit reliance on the market by making use of its own resources, internal or external, and in turn to limit its exposure to generalized market costs that are not related to its operations. NCPA argues that the socialization of these costs under the

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<sup>177</sup> See Service Agreement No. 457 under the ISO First Replacement Tariff Vol. No. 1.

<sup>178</sup> *Id.* at 6-7.

<sup>179</sup> NCPA September 7, 2007 Protest at 7.

proposed tariff provisions is antithetical to this principle. NCPA contends that BCR uplift should only be allocated to a load-following MSS to the extent the MSS has net negative uninstructed deviations.<sup>180</sup>

147. In its reply, the CAISO objects to NCPA translating a requirement under the current ISO Tariff section 4.9.14.3, where a MSS entity can be exempt from BCR uplift in its entirety, as a requirement under the MRTU tariff.<sup>181</sup> CAISO concedes that this section under the current ISO Tariff provides MSSs an option to pay their own Start-Up and Minimum Load costs and, if so, to be subject to uplift associated with these requirements for the whole system on a net MSS Demand basis. However, the CAISO notes that BCR under MRTU is substantially different. Even with these differences, the CAISO notes that the flexibility to opt-in or opt-out of BCR is embedded within the design of the IFM tier 1 uplift allocation.<sup>182</sup> The CAISO states that this allocation methodology is consistent with cost causation principles because self-scheduled supply will not receive bid cost recovery and MSS demand served by that self-scheduled supply will not be allocated. The CAISO also notes that this flexibility is afforded to all scheduling coordinators under the MRTU tariff.<sup>183</sup>

148. In response to NCPA's objection to allocation of second tier IFM BCR costs to a load-following MSS, the CAISO argues that MSSs should not be exempt from costs associated with their ability to use a CAISO controlled grid that is operated reliably.<sup>184</sup> The CAISO explains that the two-tiered allocation of IFM uplift will first allocate IFM uplift costs to entities that do not schedule sufficient generation and, therefore, "lean" on the system. The second tier, according to the CAISO, allocates those uplift costs associated with CAISO actions such as committing generating resources to resolve congestion and ensure the reliability of the entire CAISO grid, which benefit all users of the CAISO controlled grid. Because the costs allocated in the second tier are incurred on a system-wide basis, the CAISO claims that these costs cannot be clearly attributed to any particular entity or entities' behavior. Therefore, the CAISO argues that it is

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<sup>180</sup> *Id.* at 8-9.

<sup>181</sup> CAISO October 5, 2007 Reply Comments at 74.

<sup>182</sup> According to the CAISO's example, if an MSS entity meets its scheduled demand through its self-scheduled generation and scheduled imports, the MSS entity will not be allocated IFM tier 1 uplift charges. Only the portion of MSS Demand served by bid-in generation receiving BCR would also be allocated IFM tier 1 uplift costs.

<sup>183</sup> *Id.*

<sup>184</sup> CAISO October 5, 2007 Reply at 75.

appropriate and necessary to allocate such costs to all users of the grid on a system-wide basis.<sup>185</sup>

149. The CAISO agrees, however, to modify its proposal to allocate BCR uplift costs associated with the real-time market to load-following MSSs based on net measured demand, as these costs will be allocated on a single tiered basis.<sup>186</sup> Should the CAISO in the future be able to develop a two-tier methodology for allocating real-time market uplifts, the CAISO commits to proposing to allocate such costs to all users of the grid.<sup>187</sup>

150. In its answer to the CAISO's reply, NCPA reiterates that it does not challenge the allocation of tier 2 BCR costs from the day-ahead market as a general principle, as these costs reflect NCPA's actual reliance on the CAISO system. However, NCPA takes issue with the inclusion of minimum load or start-up costs in that allocation. NCPA argues that including such costs in the tier 2 BCR allocation would fundamentally alter the terms and conditions set forth in section 13.10 of the MSA agreement.<sup>188</sup>

151. NCPA reiterates that it has historically elected to be a load-following entity pursuant to section 13.10.2 of the MSS agreement, meaning that it does not receive BCR costs for its units used to serve NCPA's system and is allocated CAISO uplift charges for such costs only to the extent that it actually uses resources from the CAISO system.<sup>189</sup> NCPA argues that the CAISO attempts to renege on their agreement through proposed tariff revisions in this proceeding is specifically prohibited by section 3.3.1 of the MSS agreement, which provides:

If and to the extent a matter is specifically addressed by a provision of this Agreement (including any schedules or other attachments to this Agreement), the provision of this Agreement shall govern notwithstanding any inconsistent provision of the ISO Tariff and, except as provided in Section 3.3.2, any ISO Tariff provision that is referenced in this Agreement.

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<sup>185</sup> *Id.* at 76.

<sup>186</sup> *Id.*

<sup>187</sup> *Id.*

<sup>188</sup> NCPA's October 11, 2007 Answer to the CAISO's October 5, 2007 Reply at 3-4.

<sup>189</sup> NCPA October 11, 2007 Answer to the CAISO October 5, 2007 Reply at 4.

NCPA requests that the Commission direct CAISO to adhere to the MSS agreement and modify the MRTU tariff accordingly.<sup>190</sup>

### **Commission Determination**

152. We accept the CAISO's proposal to apply certain provisions of section 11.8 concerning BCR uplift costs to MSS entities, with certain modifications, as discussed herein.<sup>191</sup> We also accept the CAISO's commitment to modify section 11.8.6.6 to allocate the real-time market uplift to load-following MSSs on the basis of net negative uninstructed deviation with load-following energy included in the netting. This modification will effectively resolve NCPA's objection to the application of real-time BCR uplift costs being socialized to all users of the grid.

153. With respect to NCPA's protest concerning the tier 2 allocation of cost in the IFM, we agree with NCPA that its MSS agreement with the CAISO provides for a load-following option that exempts NCPA from recovery of minimum load and start-up. When NCPA underschedules, this agreement provides that NCPA shall bear its proportionate share of the total amount of those costs incurred by the CAISO based on NCPA's net negative uninstructed deviations. We therefore reject the CAISO's proposal to allocate tier 2 IFM BCR uplift costs to load-following MSS entities that elected under their MSS agreement not to be eligible for recovery of certain costs in return for being required to pay imbalance charges only to the extent that they "lean" on the CAISO grid. We direct the CAISO to honor the terms and conditions of the MSS agreement tariff as approved by the Commission and to modify the MRTU tariff accordingly in a compliance filing to be submitted within 30 days of the date of this order.

### **Other MSS Bid Cost Recovery Issues**

154. WPTF argues that several terms under section 11.8 are either incorrect, undefined or require further clarification. For instance, WPTF contends that the proposed modifications to section 11.8.2.1.2 regarding the third condition under which a resource would be ineligible for IFM minimum load costs is confusing.<sup>192</sup> That provision states:

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<sup>190</sup> *Id.* at 5.

<sup>191</sup> Specifically, we accept without discussion: section 11.8.2.3.1, providing that the IFM bid cost and market revenue are calculated similarly to non-MSS resources regardless of other MSS optional elections (*i.e.*, load following or RUC opt-in or opt-out); section 11.8.3.3, as modified elsewhere in this order; and section 11.8.4.3. We also accept section 11.8.6.2 as it pertains to the allocation of BCR uplift in the first tier for MSS entities.

<sup>192</sup> WPTF September 7, 2007 Protest at 6.

For the purposes of IFM Minimum Load Cost, a Bid Cost Recovery Eligible Resource is determined to not actually be on if the metered Energy in that Settlement Interval is less than the Tolerance Band referenced by the relevant Minimum Load Energy.

WPTF contends that “Tolerance Band” is defined in Appendix A as the greater of 5 MW or 3 percent of a resource’s Pmax, which means it is unrelated to minimum load energy. WPTF therefore contends that the phrase “referenced by the Minimum Load Energy” with respect to the tolerance band is unclear. WPTF requests the Commission to direct the CAISO to revise section 11.8.2.1.2 to state:

For the purposes of determining IFM Minimum Load Cost, a Bid Cost Recovery Eligible Resource is assumed to be On if its metered Energy in a Settlement Interval is equal to or greater than the difference between its Minimum Load Energy and the Tolerance Band. Otherwise, it is determined to be Off.<sup>193</sup>

WPTF raises a similar argument regarding proposed section 11.8.3.1.2 as it pertains to a resource ineligible for RUC minimum load costs.<sup>194</sup>

155. WPTF also objects to the CAISO’s inclusion of the following language in section 11.8.4:

The Energy subject to RTM Bid Cost Recovery is the actual Energy delivered in the Real-Time associated with Instructed Imbalance Energy, excluding Standard Ramping Energy, Residual Imbalance Energy, Exceptional Dispatch Energy, Rerate Energy, Ramping Energy, Ramping Energy Deviation, Regulation Energy and MSS Load following Energy.

WPTF argues that the CAISO has provided no basis for the disallowance of bid cost recovery for exceptional dispatch energy. WPTF asks the Commission to direct the CAISO to remove this disallowance, as well as justify the other disallowances for standard ramping energy and residual imbalance energy.<sup>195</sup>

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<sup>193</sup> *Id.* at 6. WPTF also alleges some ambiguity in the use of the capitalized term “On” in this section. WPTF notes Appendix A provides that “[a] unit is On when it is online, synchronized with the grid, and available for Dispatch,” which conflicts with the way it is used in section 11.8.2.1.2. WPTF asks the Commission to direct the CAISO to resolve this discrepancy. *Id.*

<sup>194</sup> *Id.* at 6-7.

<sup>195</sup> *Id.* at 7.

156. WPTF raises other concerns regarding an incomplete sentence in section 11.8.3.1.3 and the use of the terms “Bid Cost Shortfall” and “Surplus” in section 11.8.5, both of which WPTF states are undefined. Additionally, WPTF states that the third sentence in section 11.8.6.6, which reads in part “. . . MSS Operators that have elected not to follow their load and gross Settlement . . .,” is confusing and should be changed to “. . . MSS Operators that have elected a) not to follow their load, and b) Gross Settlement, in proportion . . .”<sup>196</sup>

157. In its reply, the CAISO agrees to modify the language in sections 11.8.2.1.2 and 11.8.3.1.2 regarding the determination of IFM minimum load cost and RUC minimum load cost, respectively, as proposed by WPTF.<sup>197</sup> The CAISO also agrees to adopt WPTF’s suggested language to the third sentence of section 11.8.6.6.<sup>198</sup> However, the CAISO disagrees with WPTF’s proposal regarding the disallowance of bid cost recovery for exceptional dispatch energy, standard ramping energy and residual imbalance energy under section 11.8.4. The CAISO notes that these disallowances were part of the BCR tariff language that the CAISO filed in its February 2006 filing that the Commission found to be just and reasonable, except for certain modifications specifically required in subsequent orders. The CAISO argues that WPTF’s late filed protest on this issue is beyond the scope of this compliance proceeding and should be rejected.<sup>199</sup>

158. The CAISO nonetheless responds to WPTF’s concerns and explains that, due to the manner in which exceptional dispatch energy, standard ramping and residual imbalance energy are settled under the MRTU tariff, it would not be appropriate to apply BCR to these types of energy.<sup>200</sup> The CAISO states that exceptional dispatch energy is settled pursuant to the MRTU tariff in a manner that ensures that the resource providing the exceptional dispatch energy receives its bid cost, default bid cost, or a rate agreed to by the resource and the CAISO. Similarly, residual imbalance energy is settled on the basis of the resource’s bid price during the hour in which the resource is dispatched. Because resources producing these two types of energy are already assured of recovering their costs, the CAISO disagrees that these two types of energy should be subject to BCR. With regard to standard ramping energy, the CAISO explains that standard ramping energy is settled at a zero dollar price under section 11.5.1 of the MRTU tariff. The

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<sup>196</sup> *Id.*

<sup>197</sup> CAISO October 5, 2007 Reply at 3.

<sup>198</sup> *Id.* at 4.

<sup>199</sup> *Id.* at 5.

<sup>200</sup> *Id.*

CAISO states that it would therefore be equally inappropriate to apply BCR rules to this type of energy.<sup>201</sup>

### **Commission Determination**

159. The Commission agrees with the CAISO and WPTF that it is appropriate to modify sections 11.8.2.1.2, 11.8.3.1.2 and 11.8.6.6 by adopting the language proposed by WPTF. We also agree with WPTF's assertion that section 11.8.3.1.3 is incomplete and the terms "Bid Cost Shortfall" and "Surplus" in section 11.8.5 should be defined in Appendix A to the MRTU tariff. We direct the CAISO to submit the modifications discussed above in a compliance filing to be submitted within 30 days of the date of this order.

160. We disagree with WPTF regarding the disallowance of BCR for exceptional dispatch energy, standard ramping energy, and residual imbalance energy. As the CAISO notes, these tariff provisions were previously accepted by the Commission and, therefore, WPTF's protest on this issue is beyond the scope of this compliance proceeding.

### **6. Locational Marginal Pricing (LMP)**

161. In the September 2006 Order, the Commission conditionally accepted the CAISO's adoption of LMP for managing congestion in its markets, but directed the CAISO to revise its tariff sheets to provide a detailed description of the calculation of LMP and its component marginal losses based on stakeholder input obtained in the Business Practice Manuals development process.<sup>202</sup> The Commission also directed the CAISO to consider the concerns of SMUD that the LMP methodology might be incorrect due to marginal loss calculations.<sup>203</sup>

162. In the August 3, 2007 compliance filing, the CAISO proposes to add a new Appendix C containing the details relating to the calculation of LMPs.<sup>204</sup> The CAISO

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<sup>201</sup> *Id.* at 5 and 6.

<sup>202</sup> See September 2006 Order, 116 FERC ¶ 61,274 at P 64 and P97.

<sup>203</sup> April 2007 Rehearing Order, 119 FERC ¶ 61,076 at P 40.

<sup>204</sup> CAISO August 3, 2007 Modifications to MRTU, Docket Nos. ER07-1257, *et al.*, Volume 1A at 43 and Volume 2 at 159. The CAISO states that Appendix C generally discusses LMP composition, while also detailing the calculation of the various LMP components that include the system marginal energy cost, marginal cost of

(continued...)

states the level of detail expressed in Appendix C is sufficient to allow market participants to know precisely how the CAISO will calculate energy prices at generation pricing nodes, scheduling points, and aggregated pricing nodes.<sup>205</sup>

### Comments

163. Although it concedes that Appendix C represents an improvement over information previously available on how the CAISO intends to calculate LMP, Powerex argues that certain aspects of the calculation remain ambiguous and the CAISO should be required to clarify these aspects further. First, Powerex argues that the opening sentence of Appendix C, Section A appears to combine the components of the LMP calculation and the resulting day-ahead schedule by including the language “and specified in the Day-Ahead schedule.” Powerex contends that the day-ahead schedule is not a component of the LMP calculation, as it is prepared at the conclusion of the IFM. Powerex asks the Commission to direct the CAISO to remove that language in order to avoid any ambiguity.<sup>206</sup>

164. Second, Powerex argues that Appendix C, Section G appears to give the CAISO discretion to determine how to place injections and withdrawals within embedded and adjacent control areas. Powerex states that it is unclear how and when the CAISO would “place” the injections and withdrawals since the sentence fails to convey whether this would be a one-time or ongoing event.<sup>207</sup> Moreover, Powerex argues that the proposed language is inconsistent with how the CAISO is to account for embedded and adjacent control areas, as set forth in section 27.5.3, which Powerex contends does not provide the CAISO unfettered discretion to model injections and withdrawals for embedded and adjacent control areas.<sup>208</sup> Powerex asks the Commission to require the CAISO to clarify

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congestion calculation, the marginal losses calculation, trading hub price calculation, load zone price calculation, and scheduling point price calculation. *Id.* at 43.

<sup>205</sup> *Id.*

<sup>206</sup> Powerex September 7, 2007 Comments at 4.

<sup>207</sup> *Id.* at 5-6.

<sup>208</sup> *Id.* at 6, *citing* section 27.5.3, which states in pertinent part:

To the extent sufficient data [are] available or adequate estimates can be made for the embedded Control Areas and adjacent Control Areas, the FNM will include a full model of embedded Control Areas and adjacent Control Areas used for power flow calculations and congestion management in CAISO Markets Processes.

how it proposes to place injections and withdrawals, including the standards that would govern its decisions, the frequency of those actions, and information provided to market participants. Powerex also seeks clarification of whether the CAISO intends to notify and consult with market participants when engaged in this process.<sup>209</sup>

165. Third, Powerex takes issue with the last two sentences of Appendix C, Section G providing that “CAISO will use intertie scheduling constraints to limit the quantity of scheduled energy and ancillary service on a specified intertie” and defining an intertie constraint as “scheduled quantity limit as opposed to flow based limit.” Powerex states that it is unclear why the CAISO makes this distinction regarding constraints at the interties and, therefore, the CAISO should clarify how it evaluates constraints at the interties, including with respect to any potential downstream transmission paths within the CAISO control area.<sup>210</sup>

166. Finally, Powerex proposes the following minor changes to Appendix C to correct apparent errors: (1) in section F, removal of the word “one” from the sentence, “Each LAP *one* includes only the buses of Market Participants . . .;” (2) in section G, revision of the first sentence to indicate that, in addition to sometimes being external to the CAISO control area, scheduling points may be at the juncture of the CAISO control area and adjacent control areas;<sup>211</sup> and (3) modification of the fourth sentence of section G, stating in part that “the CAISO places injections and withdrawals at the Scheduling Points, which represents Bids and Schedules whose physical location is unknown,” to read “whose physical location *may* be unknown” because the CAISO, in many cases, will know the physical locations involved.<sup>212</sup>

167. Six Cities, NCPA and CMUA argue that the CAISO should be required to supplement Appendix C to describe with specificity the process and the criteria for determining the reference bus.<sup>213</sup> NCPA and CMUA contend that the reference bus is critical in the determination of LMP values, since the choice of one location over another will affect LMP components such as energy, congestion and losses across the entire

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<sup>209</sup> *Id.* at 6.

<sup>210</sup> *Id.* at 7.

<sup>211</sup> *Id.* at 4.

<sup>212</sup> *Id.* at 5.

<sup>213</sup> *See* Six Cities September 7, 2007 Protest at 16; NCPA September 7, 2007 Protest at 12; CMUA September 7, 2007 Protest at 11.

CAISO system.<sup>214</sup> They note, for example, that the studies performed by the CAISO and other market participants have assumed a reference bus at the Moss Landing plant or DUKMOSS1. If the CAISO intends to designate DUKMOSS1 as the reference bus, these parties argue that the CAISO should be required to make this intention clear in the tariff. They also contend that the tariff should clearly provide that any changes to the reference bus be justified.<sup>215</sup>

168. In its reply, the CAISO agrees in part with the suggestions made by Powerex. Specifically, the CAISO commits to remove the word “one” from the last paragraph of Appendix C, Section F and revise the phrase “whose physical location is unknown” in Appendix C, Section G to read “whose physical location may be unknown.”<sup>216</sup>

169. With respect to Powerex’s concern regarding Appendix C, Section A, the CAISO maintains that the reference to the Day-Ahead Schedule is appropriate. The CAISO states that the reference was intended to indicate that LMPs are based on the bids of sellers and buyers selected in the day-ahead market as specified in the specific day-ahead schedule. To avoid ambiguity, the CAISO suggests clarifying this sentence by replacing the phrase with “as specified in the Day-Ahead Schedule” in a compliance filing.<sup>217</sup>

170. The CAISO disagrees with Powerex’s assertion that Appendix C, Section G is inconsistent with section 27.5.3. The CAISO argues that accounting for embedded and adjacent control areas will depend, in part, on the CAISO’s discussions with each control area when they are established. The CAISO notes that it is currently modeling injections and withdrawals in such control areas with SMUD and Turlock Irrigation District and, thus, plans to provide stakeholders with the opportunity to comment on this process.<sup>218</sup>

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<sup>214</sup> CMUA September 7, 2007 Protest at 11; NCPA September 7, 2007 Protest at 12.

<sup>215</sup> CMUA September 7, 2007 Protest at 11-12; NCPA September 7, 2007 Protest at 12 -13.

<sup>216</sup> CAISO October 5, 2007 Reply at 60.

<sup>217</sup> CAISO October 5, 2007 Reply at 62. In addition, the CAISO states that Appendix C, Section A should be clarified further to indicate that the marginal prices are limited by resources that are not eligible to set the price or have constraints such that they cannot be marginal and, therefore, it is not the case that the highest price resource bid in at a particular node would set the price. CAISO proposes to make this clarification in a future compliance filing. *Id.*

<sup>218</sup> *Id.* at 61.

171. With regard to constraints at interties, the CAISO states that section 3.1.4 of the business practice manual for full network model provides a full description of the process for evaluating such constraints. In the IFM and real-time market, the CAISO explains that all schedules on each intertie are optimized together to compete for capacity subject to its operating transfer capability limit and that unscheduled flow at the interties is managed by enforcing both flow limits and scheduling limits. The CAISO argues that the downstream path therefore has no effect on the scheduled limits at the interties.<sup>219</sup>

172. With respect to claims that the CAISO must designate a specific reference bus in order to calculate LMPs, the CAISO argues that the parties' concerns are misplaced. The CAISO notes that the reference bus at DUKMOSS1 was selected as an angle reference bus, which is used to measure the distribution of flows throughout the network based on the calculation of a single reference location for the entire system.<sup>220</sup> The CAISO explains that selection of this reference bus does not affect the LMPs that result from the clearing of the CAISO market, as the location will only be used to define the energy and losses components of LMPs.<sup>221</sup> The CAISO states that it is currently testing to determine exactly what inputs (load, generation or designated weights) will be used to initially determine the distributed reference bus.<sup>222</sup> When this determination is reached, the CAISO states that it will be reflected in the business practice manual for market operations and, therefore, any changes to the distributed reference bus will be subject to the business practice manual change management process.<sup>223</sup>

### **Commission Determination**

173. We accept the CAISO's commitment to modify Appendix C to reflect the following changes: (1) remove the word "one" from the last paragraph of Section F; (2) revise the phrase "whose physical location is unknown" to read "whose physical

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<sup>219</sup> *Id.* at 61-62.

<sup>220</sup> CAISO October 5, 2007 Reply at 59.

<sup>221</sup> *Id.* The CAISO notes that the loss and congestion components will vary based on the location relative to the reference bus.

<sup>222</sup> *Id.* at 60. The CAISO states that the distributed reference bus will be based on constituent PNodes that are weighted in pre-specified proportions referred to as reference bus distribution factors.

<sup>223</sup> *Id.* CAISO also states that, at such time, it will evaluate whether additional detail should be included in the tariff based on the information it has obtained from its testing.

location may be unknown” under Section G; and (3) clarify Section A by replacing the phrase “and specified in the Day-Ahead Schedule” with “as specified in the Day-Ahead Schedule”. We direct the CAISO to submit the revised tariff sheets reflecting these modifications in a compliance filing within 30 days of the date of this order.

174. We disagree with Powerex’s contention that the Appendix C, Section G provides the CAISO with unfettered discretion to model injections and withdrawals for embedded and adjacent control areas. As the CAISO points out, the accounting for embedded and adjacent control areas will depend, in part, on the CAISO’s discussions with each control area when they are established. The CAISO notes it is currently working to establish such control areas with SMUD and Turlock Irrigation District and, therefore, we encourage Powerex to work with the CAISO during this process to resolve any concerns it may have. Powerex may then revisit with the Commission any concerns it believes were not adequately addressed when the CAISO files the specific tariff modifications necessary to establish an embedded or adjacent control area.

175. We also find that the CAISO has adequately addressed Powerex’s concern regarding how it evaluates constraints at the interties by clarifying that all schedules on each intertie are optimized together to compete for capacity subject to its operating transfer capability limit. We further accept the clarification of how the CAISO will use the distributed reference bus to calculate LMPs. Because the distributed reference bus does not affect the LMPs that result from the clearing of the CAISO market, we find it reasonable for the CAISO to identify the location of the reference bus in the Business Practice Manual for Market Operations. We believe this designation provides market participants with the requisite transparency on how the CAISO will price energy, losses and congestion in the markets, while also offering market participants an opportunity to review any changes to the distributed reference bus under the business practice manual change management process.

176. We accept the CAISO’s commitment to clarify that marginal prices are limited by resources that are not eligible to set the price or have constraints that would prevent them from being marginal. We direct the CAISO to make the clarification within 30 days of the date of the order.

## **7. Transmission Ownership Rights (TORS)**

### **a. Bilateral Agreements Addressing TORS**

177. In the June 2007 Order, the Commission found that the CAISO’s proposed modification to section 17 of the MRTU tariff did not fully comply with our directive in the September 2006 Order because, although the proposed modification preserved

TOR<sup>224</sup> provisions in bilateral contracts to which the CAISO is a party, it did not preserve those existing agreements between a Participating Transmission Owner (Participating TO) and a TOR holder.<sup>225</sup> The Commission directed the CAISO to further modify section 17 to provide that, in the event of conflict between the MRTU tariff and a bilateral agreement governing TORs between a Participating TO and TOR holder, the agreement prevails.

178. The CAISO has further modified section 17 to state that the provisions of any agreement between a Participating TO and a Non-Participating TO regarding TORs that has been accepted by the Commission will prevail over the provisions of section 17, in addition to the provisions of any agreement between the CAISO and the Non-Participating TO.

### **Comments**

179. Metropolitan argues that a non-jurisdictional TOR holder should not be required to submit to the Commission an otherwise non-jurisdictional bilateral agreement between a Participating TO and a Non-Participating TO, or add the CAISO as a party to the agreement, in order for the agreement's provisions to have precedence under section 17.<sup>226</sup> Metropolitan asks the Commission to direct the CAISO to modify section 17 as follows:

In any case in which (i) the CAISO has entered into a bilateral agreement with a Non-Participating TO regarding its TORs ~~or (ii) a Participating TO has entered into a bilateral agreement with a Non-Participating TO regarding its TORs~~, which agreement has been accepted by FERC, or (ii) the Non Participating TO has entered into a bilateral agreement with another party regarding TORs, the provisions of the agreement shall prevail over any conflicting provisions of this Section 17. Where the provisions of this Section 17 do not conflict with the provisions of the ~~FERC accepted~~

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<sup>224</sup> TORs refer to existing contracts that establish joint ownership or direct ownership of transmission facilities that are within the CAISO control area but have not been turned over to the CAISO's operational control.

<sup>225</sup> June 2007 Order, 119 FERC ¶ 61,313 at P 272.

<sup>226</sup> For example, Metropolitan states that a TOR holder may allow its facilities or land to be used by a Participating TO without the Participating TO providing any jurisdictional services that would require Commission acceptance.

bilateral agreement, the provisions of this Section 17 shall apply to the subject TORs.

180. The CAISO disagrees in its reply, noting that the specific set of agreements the Commission directed the CAISO to honor are between a TOR holder and a Participating TO. The CAISO also argues that the only agreements that should prevail over the Commission-accepted CAISO tariff are those agreements that the Commission has previously found just and reasonable. Consequently, the CAISO included the express requirement that any provision in an agreement between a TOR holder and a Participating TO that may prevail over the tariff must have been previously accepted by the Commission as just and reasonable. The CAISO states that the Commission would cede an aspect of its own jurisdiction if it were to accept Metropolitan's proposed revision.

### **Commission Determination**

181. In the June 2007 Order, the Commission concluded that, although section 17 of the MRTU tariff preserved TOR provisions for those bilateral contracts to which the CAISO is a party, it did not preserve those existing TOR provisions in bilateral agreements between a Participating TO and a TOR holder and further directed the CAISO to modify section 17 accordingly.<sup>227</sup> Although the CAISO has amended section 17 to refer to agreements between a Participating TO and a TOR holder, it has qualified the reference to include only those agreements accepted by the Commission. This effectively requires an otherwise non-jurisdictional contract to be filed with the Commission in order for a provision in an agreement governing a TOR to prevail over the CAISO tariff. We agree with Metropolitan that such a requirement is inappropriate and direct the CAISO to delete the phrase "which agreement has been accepted by FERC" from section 17 in a compliance filing to be submitted within 30 days of the date of this order.

182. We disagree, however, that section 17 should be further amended to refer to all agreements between a Non-Participating TO and any other party regarding TORs. Metropolitan does not justify such an expansive modification to section 17, particularly in light of the CAISO's requirement for non-Participating TOs to submit transmission right and transmission curtailment instructions (TRTC Instructions).<sup>228</sup> Under

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<sup>227</sup> June 2007 Order, 119 FERC ¶ 61,313 at P 272.

<sup>228</sup> See MRTU Tariff section 17.1.3. TRTC Instructions are operational directives developed and submitted to the CAISO in order to accommodate these existing rights in the CAISO markets. See MRTU Tariff, Appendix A, Master Definition Supplement.

section 17.1.1, each non-Participating TO must work with the CAISO to develop TRTC Instructions that allow the TOR to be accommodated in a way that maintains the existing scheduling and curtailment priorities of the TOR holder and allows the CAISO to ensure that submitted TOR self-schedules are valid. These instructions should accurately reflect any operational rights and obligations affecting transmission service over such TORs in order for the CAISO to preserve these rights under its market design. Non-Participating TOs may address any obligations arising under agreements not referenced in section 17 through the submission of TRTC Instructions.

**b. Transmission Losses**

183. In the June 2007 Order, the Commission required the CAISO to modify section 17.3.3 to reflect its commitment to honor loss provisions in bilateral agreements concerning TORs. The Commission also accepted the CAISO's proposal to revise section 17.3.3(4) to reflect allocation of the marginal loss surplus credit to the scheduling coordinator for the TOR holder.<sup>229</sup>

184. Pursuant to this directive, the CAISO proposes to modify section 17.3.3(2), to clarify that the CAISO will honor loss provisions in bilateral agreements concerning TORs. The CAISO also amends section 17.3.3(4) to state that the scheduling coordinator for the TOR holder shall be allocated the applicable amount of the IFM marginal losses surplus credit in accordance with the provisions of section 11.2.1.6, except for any TOR self-schedule that is receiving the IFM marginal cost of losses credit.

**Comments**

185. San Francisco argues that Non-Participating TOs should be expressly permitted under section 17.3.3(2) to set the price of losses when using their own facilities that are interconnected but not part of the CAISO controlled grid. Metropolitan objects to the CAISO's limitation of section 17.3.3(2) to agreements between the TOR holder and the CAISO. Metropolitan contends that nothing in the discussion of loss provisions in the June 2007 Order defined the term "bilateral agreement" to mean a "bilateral agreement between the TOR holder and the CAISO." Metropolitan asks the Commission to direct the CAISO to modify section 17.3.3 as follows:

The CAISO shall base the Marginal Cost of Losses on LMP differentials at the Points of Receipt and Points of Delivery identified in the valid TOR Self-Schedule; provided, however, that if a specific loss percentage exists in applicable (i) a bilateral agreement between the TOR holder and the

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<sup>229</sup> June 2007 Order, 119 FERC ¶ 61,313 at P 314-15.

CAISO, or (ii) a bilateral agreement to which the TOR holder is party, the CAISO will apply the IFM and RTM Marginal Cost of Losses Credit as provided in Sections 11.2.1.7 and 11.5.7.2.

186. Imperial does not object to any specific language in section 17.3.3(2), but asks the Commission to require the CAISO to provide further details regarding how and at what price the CAISO will settle losses when there is a bilateral agreement between the CAISO and the TOR holder, particularly if there is a fixed transmission loss percentage indicated in the agreement.

187. In its reply, the CAISO argues that San Francisco's request to allow Non-Participating TOs to set the price of losses is a collateral attack on the Commission's September 2006 Order. There the Commission found that marginal losses should be assessed to TORs in the absence of a specified loss percentage in a pre-existing contract that the CAISO must honor.<sup>230</sup> The CAISO contends that it has simply added provisions to section 17.3.3 explicitly acknowledging that the CAISO will credit back marginal losses in the event a specific loss percentage is set forth in an agreement between a TOR holder and the CAISO.

188. The CAISO disagrees with Metropolitan's assertion that the Commission intended to honor bilateral agreements to which the TOR holder is a party beyond those to which the CAISO is a party. The CAISO states that it need only defer to those provisions in agreements to which the CAISO agreed. The CAISO argues that it would be unreasonable for the Commission to direct the CAISO to honor specified loss provisions in any bilateral agreement that a TOR holder might be able to create.

189. The CAISO also disagrees with Imperial's assertion that further details to section 17.3.3(2) are necessary. The CAISO contends that section 17 already states that, where there is a bilateral agreement between the CAISO and a TOR holder, the provisions of the bilateral agreement will govern. If the terms of the agreement specify the manner in which the CAISO will settle losses, including any fixed percentage, the CAISO explains that it will be obligated under section 17 to settle losses in accordance with these terms and that any other terms set forth in the MRTU tariff cannot supersede that obligation.

### **Commission Determination**

190. The Commission denies San Francisco's request to allow Non-Participating TOs to set the price of losses when using their own facilities that are interconnected but not

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<sup>230</sup> September 2006 Order, 116 FERC ¶ 61,274 at P 1003.

part of the CAISO controlled grid. The Commission has already accepted the CAISO's proposal to treat losses on a consistent basis, assigning marginal losses to scheduling coordinators for TOR schedules and providing the direct credit-back of the net revenues collected from marginal losses to the TOR scheduling coordinator unless there is a specified loss percentage in a bilateral agreement.<sup>231</sup> San Francisco's request to alter this methodology is a collateral attack on our prior orders and is therefore rejected.

191. We agree, however, that the scope of section 17.3.3(2) is unduly restrictive. As discussed above, the Commission directed the CAISO to preserve existing agreements between the CAISO and Non-Participating TOs and between Participating TOs and a TOR holder.<sup>232</sup> Sections 17.3.3(2), 11.2.1.7 and 11.5.7.2 fail to reflect the preservation of agreements between Participating TOs and TOR holder. We direct the CAISO to further modify these tariff sections to provide that, in the event of conflict between the MRTU tariff and a bilateral agreement between the CAISO and a Non-Participating TO regarding its TORs or between a Participating TO and a Non-Participating TO regarding its TORs, the agreement prevails. The CAISO is directed to make these changes in a compliance filing within 30 days from the date of this order.

192. Regarding Imperial's concerns, we find that no further explanation is necessary to section 17.3.3(2) regarding marginal loss calculations. This provision makes clear that the CAISO will calculate marginal losses based on the LMP differentials at the points of receipt and points of delivery identified in the TOR contract. To the extent that there is a specific loss percentage in a bilateral agreement, the CAISO will be obligated under the terms of the tariff to settle losses in accordance with that agreement.

## **8. TORs and Existing Transmission Contracts – Common Issues**

### **a. Notification Regarding ETC and TOR Schedule Validation**

193. In the June 2007 Order, the Commission concluded that the CAISO had complied with the Commission's directive to provide timely notification to scheduling coordinators

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<sup>231</sup> The Commission specifically concluded that the assignment of marginal losses to TORs "is reasonable accommodation between honoring TORs holders' rights over non-CAISO-controlled facilities and sending accurate price signals." *See* April 2007 Rehearing Order, 119 FERC ¶ 61,076 at P 458; *see also* September 2006 Order, 116 FERC ¶ 61,202 at P 1003; June 2007 Order, 119 FERC ¶ 61,313 at P 314-15; and October 2007 Order, 121 FERC ¶ 61,030 at P 33-34.

<sup>232</sup> June 2007 Order, 119 FERC ¶ 61,313 at P 272.

whether the ETC<sup>233</sup> schedule is valid or invalid and a reasonable opportunity to correct identified errors prior to the close of the day-ahead market. The Commission also accepted the CAISO's commitment to revise section 16.6.4 and section 17.3.4 regarding TORs to reflect: (1) that the CAISO will make an automated notice available to the scheduling coordinator indicating whether the ETC/TOR self-schedule is valid or invalid; and (2) to remove the phrase "to the extent practicable."<sup>234</sup>

194. The CAISO has modified sections 16.6.4 and 17.3.4 to make clear that, after performing its validation process for an ETC or TOR self-schedule, the CAISO will make an automated notice available to the scheduling coordinator indicating whether the ETC or TOR self-schedule is valid or invalid.<sup>235</sup> The CAISO also removed the phrase "to the extent practicable," as directed by the Commission.

### **Comments**

195. PG&E argues that sections 16.6.4 and 17.3.4 should be modified further to require the automated notice to provide the information necessary for the Scheduling Coordinator to correct any invalid self-schedule.<sup>236</sup>

196. In its reply, the CAISO argues that these sections were revised in accordance with the directives of the June 2007 Order and that PG&E's proposed modification is outside the scope of the compliance requirements.

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<sup>233</sup> ETCs are contracts that "grant transmission service rights in existence on the CAISO Operations Date (including any contracts entered into pursuant to such contracts) as may be amended in accordance with their terms or by agreement between the parties thereto from time to time." MRTU Tariff, Appendix A, Master Definitions Supplement. These ETCs are encumbrances established prior to the CAISO's operation in the form of a CAISO Participating TO's contractual obligation to provide transmission service to another party using the transmission facilities that had been turned over to the CAISO's operational control. *See* September 2006 Order, 116 FERC ¶ 61,274 at n. 374.

<sup>234</sup> June 2007 Order, 119 FERC ¶ 61,313 at P 255-256.

<sup>235</sup> If an ETC or TOR Self-Schedule involves more than one Scheduling Coordinator, the complete validation of the chain of ETC or TOR Self-Schedules will occur when the last Scheduling Coordinator submits its ETC or TOR Self-Schedule.

<sup>236</sup> We note that PG&E proposes specific tariff language in Attachment A of its September 7, 2007 Comments.

### **Commission Determination**

197. We find that the revisions to sections 16.6.4 and 17.3.4 comply with the directives of the June 2007. The additional modification sought by PG&E is beyond the scope of this compliance proceeding and is therefore rejected.

#### **b. Schedule Changes Under ETCs and TORs and Application of the Perfect Hedge**

198. In the April 2007 Rehearing Order and June 2007 Order, the Commission directed the CAISO to reconcile certain sections of the MRTU tariff to ensure that, when ETC and TOR holders submit schedule changes consistent with their existing agreements during the HASP<sup>237</sup> or up to the real-time market, the “perfect hedge” settlements treatment providing for reversal of congestion charges will continue to apply. Specifically, the Commission directed the CAISO to submit a compliance filing to reconcile sections 11.5.7 and 16.9.1 with section 33.3 so that it is clear that the perfect hedge is still available with respect to any contract-permitted schedule changes submitted by the close of the HASP.<sup>238</sup> In the June 2007 Order, the Commission further directed the CAISO to reconcile these sections with section 17.2(3) regarding TORs so that it is also clear that the perfect hedge is available with respect to any TOR scheduling changes submitted by the close of the HASP and through the CAISO’s real-time process.<sup>239</sup>

199. In its compliance filing, the CAISO proposes to revise section 16.9.1 to indicate that submissions of schedule changes beyond the market close for the HASP, permitted by the ETC, will be allowed under section 33.3. The CAISO proposes a corresponding modification to section 33.3 stating that the submission of a change to an ETC self-schedule beyond the deadline specified in section 16.9.1, as permitted under the terms of the applicable ETC, shall not be deemed to be an unbalanced self-schedule for the purposes of the settlement described in section 11.5.7.

200. In order to provide clarity regarding equal treatment of TORs, the CAISO proposes new section 17.2(5) which states:

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<sup>237</sup> As noted above, HASP allows generators to make adjustments to their day-ahead schedules by placing additional energy or ancillary services bids for any capacity that was not committed in the day-ahead market.

<sup>238</sup> See April 2007 Rehearing Order, 119 FERC ¶ 61,076 at P 439.

<sup>239</sup> See June 2007 Order, 119 FERC ¶ 61,313 at P 287.

The submission of a TOR Self-Schedule change that is authorized pursuant to an applicable existing agreement between the CAISO and the TOR holder shall not affect the application of the IFM Congestion Credit or the HASP and RTM Congestion Credit, and the IFM Marginal Cost of Losses Credit for Eligible TOR Self-Schedules or the RTM Marginal Cost of Losses Credit for Eligible TOR Self-Schedules for a TOR Self-Schedule that satisfies the applicable requirements of sections 17.4.1 and 17.5.

### **Comments**

201. PG&E contends that the proposed language in sections 16.9.1 and 33.3 regarding ETCs may not address all relevant circumstances. For example, PG&E states that it is not clear whether demand can be scheduled through the HASP under these provisions. PG&E requests that the Commission require the CAISO to modify the proposed language to be more precise.<sup>240</sup>

202. Metropolitan contends that the CAISO failed to provide the perfect hedge for TOR self-schedule changes as the Commission directed. Metropolitan argues that the newly proposed section 17.2(5) limits the application of the “perfect hedge” to changes to a TOR self-schedule where the self-schedule is the subject of an existing agreement between the CAISO and the TOR holder. Metropolitan contends that the Commission’s directive to provide the perfect hedge was not limited to those circumstances. Metropolitan asks the Commission to direct the CAISO to delete section 17.2(5) and reconcile section 17.2(3) with sections 11.5.7 and 33.3, as the Commission directed.<sup>241</sup>

203. In its reply, the CAISO clarifies in response to PG&E that its proposed modifications to sections 16.9.1 and 33.3 were made to indicate that, in the event of a schedule change after the close of the HASP, the schedule will not be deemed unbalanced if the contract permits the change, as clearly stipulated in section 33.3.

204. In response to Metropolitan, the CAISO clarifies that section 17.2(5) was not intended to alter the rights of TOR holders to schedule changes in real-time. The CAISO disagrees, however, that the particular tariff changes suggested by Metropolitan are necessary. The CAISO commits to propose changes in a future compliance filing in this proceeding to clarify that section 17.2(5) was not intended to limit the rights of TOR holders.

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<sup>240</sup> PG&E September 7, 2007 Comment at 7.

<sup>241</sup> Metropolitan September 7, 2007 Comments at 9. Metropolitan suggests specific modifications to sections 17.2(3) and 33.3 in its comments. *See id.*

### **Commission Determination**

205. Our review indicates that the CAISO has complied with the directive in our April 2007 Rehearing Order to reconcile sections 11.5.7, 16.9.1 with section 33.3 so that it is clear that the perfect hedge is still available for ETCs with respect to any contract-permitted schedule change submitted by the close of the HASP. We disagree with PG&E's contention that further clarification is necessary to address whether demand can be scheduled through the HASP. Section 30.5.1(b) explicitly states that scheduling coordinators may revise ETC self-schedules for *supply only* in the HASP, to the extent such a change is consistent with the TRTC Instruction provided to the CAISO by the PTO. The CAISO's proposed modifications to sections 11.5.7, 16.9.1 and 33.3 make clear that the submission of a schedule change beyond the market close for HASP will not result in an unbalanced schedule and the perfect hedge will apply. We therefore find that the CAISO's proposed modifications to sections 16.9.1 and 33.3 provide sufficient clarity and accept them with no further modification.

206. With regard to reconciling provisions addressing the treatment of TORs, we agree with Metropolitan that the CAISO's newly proposed section 17.2(5) inappropriately limits the application of the perfect hedge to changes to TOR self-schedules that are the subject of an existing agreement between the CAISO and the TOR holder. Our directive in the June 2007 Order contained no such condition. We therefore direct the CAISO to remove from section 17.2(5) the terms, "between the CAISO and the TOR holder" and reflect such change in a compliance filing to be submitted within 30 days from the date of this order. We also direct the CAISO to revisit section 17 to ensure that the limitation does not exist elsewhere.

#### **c. TRTC Instructions**

207. In the June 2007 Order, the Commission concluded that the CAISO's proposed section 17.1 complied with the directive in the September 2006 Order to clarify whether TRTC Instructions are required with respect to TORs.<sup>242</sup> The Commission also generally found that the information requested by the CAISO for the TRTC Instructions is necessary and reasonable to establish the operating parameters by which the CAISO will accommodate the TORs under MRTU. In response to certain errors pointed out by SoCal Edison, the Commission accepted the CAISO's commitment to correct section 17.1.4, which inadvertently required the "Participating TO" to provide TRTC Instructions to the CAISO, rather than the "Non-Participating TO," and to modify the definition of TRTC Instruction to include TORs because, as proposed, the definition of TRTC addressed existing contracts, not TORs. Additionally, in a separate proceeding, the Commission

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<sup>242</sup> June 2007 Order, 119 FERC ¶ 61,313 at P 302.

approved further data collection requirements to catalogue rights for TORs, ETCs and converted rights using the TRTC Instructions and required the CAISO to reflect these further modifications in a compliance filing prior to the implementation of MRTU.<sup>243</sup>

208. In its compliance filing, the CAISO proposes modifications to sections 17.1.1 and 17.1.4 in response to those errors identified by SoCal Edison and further proposes to modify the definition of the TRTC Instructions to state:

Operational directives developed between Existing Rights Holders, TOR holders, and holders of Converted Rights and the Participating TO, submitted to the CAISO by the Participating TO, unless otherwise agreed to by the Participating TO and the Existing Rights Holder, to facilitate the accommodation of Existing Rights in the CAISO Markets.

209. The CAISO also reflects the revised data collection requirements under section 17.1 and section 16.4 accepted by the Commission in Docket No. ER07-613.<sup>244</sup>

### Comments

210. San Francisco contends that proposed section 17.1.4(5)(c), requiring that a TOR holder submit “for each physical source or sink, maximum capacity (MW) that can be scheduled as a TOR under the Existing Contract,” is incorrect. San Francisco argues that the Commission should require the CAISO to remove the words “under the Existing Contract” because the physical capability of San Francisco’s transmission system determines the maximum capacity that can be scheduled.

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<sup>243</sup> In order to establish an effective date prior to MRTU implementation for certain provisions of the MRTU tariff, the CAISO submitted a separate filing in Docket No. ER07-613-000 to incorporate the provisions into the currently effective CAISO tariff. The TRTC Instructions under MRTU sections 16.4 and 17 were among these provisions. In so doing, the CAISO proposed to collect additional information for ETCs, TORs and Converted Rights for TRTC Instructions. In the May 2007 Order, the Commission found, among other things, that the CAISO’s additional collection of data under sections 16.4 and 17.1 was reasonable and not unduly burdensome and accepted those provisions for filing, subject to the outcome of the November 20 compliance filing. *See* 119 FERC ¶ 61,124 at P 24. The Commission further directed the CAISO to include the revised tariff provisions in a compliance filing to be submitted in Docket No. ER06-615 no later than 180 days prior to the implementation of MRTU.

<sup>244</sup> *See* May 2007 Order, 119 FERC ¶ 61,124 (2007); *see also*, *California Independent System Operator Corp.*, 121 FERC ¶ 61,120 (2007).

211. San Francisco also argues that section 17.1.4(12), requiring the TRTC Instruction to include whether or not the TOR provides the right to self-provide ancillary services, should be removed because it is unnecessary and discriminatory. San Francisco contends that the MRTU tariff allows generally for a market participant to self-provide ancillary services without exception and that the CAISO failed to explain why TOR holders should be required to make this showing in a TRTC Instruction. San Francisco also argues that this section conflicts with other provisions of the MRTU tariff that specifically recognize TOR holders' rights to self-provide ancillary services and the CAISO's obligations to honor such self-provision.

212. Metropolitan argues that the CAISO's proposed modification to the definition of TRTC Instructions impermissibly allows other parties that have no legitimate interest in a TOR to develop those instructions. Metropolitan also argues that the revised definition conflicts with section 17.1.1, which states in relevant part: "[t]o enable the CAISO to exercise its responsibilities as Control Area Operator in accordance with Applicable Reliability Criteria, each Non-Participating TO holding a TOR must work with the CAISO to develop the TRTC Instructions that allow the TOR to be accommodated." In order to avoid conflict with section 17.1.1, Metropolitan recommends that the definition for TRTC Instructions be revised as follows:

Operational directives developed (i) by a TOR holder, (ii) between an Existing Rights holders and the Participating TO, ~~TOR holders, and~~ or (iii) between a holders of Converted Rights and the Participating TO, submitted to the CAISO by the TOR holder or the Participating TO, unless otherwise agreed to by the Participating TO and the Existing or Converted Rights holder, to facilitates the accommodation of TORs, and Existing and Converted Rights in the CAISO Markets.

213. Metropolitan also asks the Commission to direct the CAISO to limit the terms "Existing Contracts" and "Existing Rights" to transmission service provided by a Participating TO. Metropolitan states that it raised this argument in response to the CAISO's initial compliance filing, but that the Commission failed to address the issue. Metropolitan asserts that the expansive definition of the term "Existing Contracts" causes confusion because it includes not only contracts featuring transmission service provided by a Participating TO under section 16, but potentially includes transmission service offered by a Non-Participating TO under section 17 as well. Metropolitan suggests that the CAISO intended for section 16 to apply to contracts in which a Participating TO is the transmission service provider and for section 17 to apply to contracts in which the transmission provider is a Non-Participating TO. To avoid potential ambiguity,

Metropolitan urges the Commission to direct the CAISO to limit the terms “Existing Contracts” and “Existing Rights” to transmission service by a Participating TO.<sup>245</sup>

214. In its reply, the CAISO agrees with San Francisco that the phrase “under the Existing Contract” is inappropriate in section 17.1.4(5)(c) and agrees to delete that language in a compliance filing. The CAISO disagrees, however, that section 17.1.4(12) should be removed. The CAISO asserts that this language was filed in response to the Commission’s prior directive.<sup>246</sup>

215. The CAISO states that Metropolitan has correctly identified an inconsistency in its proposed modification to the definition of TRTC Instructions and that it is willing to clarify the definition, consistent with Metropolitan’s proposal, in a further compliance filing.

216. The CAISO states that Metropolitan failed to raise the Existing Contracts/Existing Rights issue in its request for rehearing of the June 2007 Order. Thus, the CAISO argues that Metropolitan’s request represents an impermissible collateral attack on the Commission’s order.<sup>247</sup>

### **Commission Determination**

217. The Commission agrees with CAISO and San Francisco that section 17.1.4(5)(c) should be modified to remove the phrase “under the Existing Contract.” We also accept the CAISO’s commitment to clarify the definition of TRTC Instruction to address the concern raised by Metropolitan. We direct the CAISO to submit these tariff revisions in a compliance filing to be submitted within 30 days of the date of this order.

218. We disagree, however, that section 17.1.4(12) is unnecessary and discriminatory, as argued by San Francisco. In the May 2007 Order, the Commission found that it is appropriate in the context of identifying and cataloging specific rights for holders of TORs to require that the ability to self-provide ancillary services be reflected in TRTC Instructions governing such TORs.<sup>248</sup> TRTC Instructions are the tool the CAISO uses to preserve rights over TOR facilities for use by the TOR holder and, therefore, TRTC Instructions should reflect any rights regarding the self-provision of ancillary services.

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<sup>245</sup> Metropolitan September 7, 2007 Comments at 11.

<sup>246</sup> May 2007 Order, 119 FERC ¶ 61,124 at P 64.

<sup>247</sup> CAISO October 5, 2007 Reply at 95.

<sup>248</sup> May 2007 Order, 119 FERC ¶ 61,124 at 62-64.

219. We also disagree that the CAISO should be directed to limit its use of the terms “Existing Contracts” and “Existing Rights” to transmission service by a Participating TO. Use of the terms “Existing Contracts” and “Existing Rights” in sections 16 and 17 is reasonable because they broadly capture the agreements that the CAISO will honor under MRTU and reflect the variety of rights and obligations (in scheduling, curtailment, assignment and other transmission related usage) captured under those agreements.

**d. System Emergency Exceptions**

220. In the April 2007 Rehearing Order, the Commission directed the CAISO to clarify the MRTU tariff by reuniting section 4.2.1, which governs market participants’ obligation to comply with the CAISO’s operating orders, with section 16.5.1, which describes the CAISO’s treatment of ETCs during system emergency conditions.<sup>249</sup> The Commission further directed the CAISO to clarify section 16.5.1 so that it is unambiguous that control area operators must comply with the CAISO’s dispatch instructions and operating orders during system emergencies unless the CAISO’s orders conflict with the express terms of an agreement between the CAISO and the control area operator or would otherwise impair public health or safety.<sup>250</sup> In the June 2007 Order, the Commission concluded that section 17.2.1 addressing treatment of TORs during system emergencies similarly needed those modifications called for in the April 2007 Rehearing Order addressing the treatment of ETCs during system emergencies.<sup>251</sup>

221. In compliance with the Commission’s directives, the CAISO has reunited sections 4.2.1 and 16.5.1 and sections 4.2.1 and section 17.2.1, respectively. The CAISO also proposes modifications to section 16.5.1 and 17.2.1 to state that, in the event of a conflict between the CAISO tariff and an agreement between the CAISO and a control area operator, the agreement will govern.

**Comments**

222. Metropolitan argues that, where the TOR holder is not also a control area operator, the rights of TOR holders could suffer prejudice. Metropolitan contends that the CAISO could agree to terms with an adjacent control area operator that are unduly harmful to the TOR holder and in conflict with the MRTU tariff, yet the agreement would prevail under section 17.2.1. Metropolitan’s states that its concern is particularly acute because its TOR facilities interconnect with a control area adjacent to the CAISO’s control area. To

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<sup>249</sup> See April 2007 Rehearing Order, 119 FERC ¶ 61,076 at P 464.

<sup>250</sup> See April 2007 Rehearing Order, 119 FERC ¶ 61,076 at P 463-464.

<sup>251</sup> June 2007 Order, 119 FERC ¶ 61,313 at P 288.

preserve the rights of the TOR holder, Metropolitan asks the Commission to direct the CAISO to modify section 17.2.1 as follows:

The CAISO will honor the terms of TORs, provided that in a System Emergency and circumstances in which the CAISO considers that a System Emergency is imminent or threatened, to enable the CAISO to exercise its responsibilities as Control Area Operator in accordance with Applicable Reliability Criteria, 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, unless such operating orders are inconsistent with the terms of an agreement ~~between~~ among the CAISO, the TOR holder, and a Control Area Operator. In the event of a conflict between the CAISO Tariff and an agreement ~~between~~ among the CAISO, the TOR holder, and a Control Area Operator, the agreement will govern.

223. WPTF suggests that the language of sections 16.5.1, 17.2.1 and 4.2.1 be corrected so that the list of entities that are obligated to respond to CAISO dispatch instructions includes only those entities that are directly responsible for and reasonably capable of complying. WPTF contends that market participants that do not have physical assets should not be held accountable for following dispatch instructions.

224. In its reply, CAISO argues that Metropolitan's proposed modification to section 17.2.1 would limit the CAISO's ability to reliably meet its control area obligation. The CAISO also notes that it added this provision in direct response to Commission's directives.<sup>252</sup> The CAISO therefore argues that Metropolitan's request represents an untimely collateral attack on the Commission's previous orders.

225. The CAISO disagrees with WPTF that further revisions are necessary to sections 16.5.1 and 17.2.1, stating that it will only issue dispatch instructions to those market participants that are capable of responding.

### **Commission Determination**

226. We deny Metropolitan's request to direct further modifications to section 17.2.1 of the MRTU tariff. The modifications requested by Metropolitan would limit the CAISO's ability in a system emergency to dispatch resources necessary to reliably operate the transmission system. The Commission has already addressed the merits of this issue in

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<sup>252</sup> CAISO October 5, 2007 Reply at 96 *citing* April 2007 Rehearing Order, 119 FERC ¶ 61,076 at P 464; June 2007 Order, 119 FERC ¶ 61,313 at P 288.

the April 2007 Order and we therefore agree with the CAISO that Metropolitan's argument is an untimely collateral attack on the Commission's April 2007 Order. We find sections 16.5.1 and 17.2.1 as proposed by the CAISO are consistent with the Commission's directives in the April 2007 and June 2007 Orders and accept without further modification.

227. We also deny WPTF's requests to modify section 16.5.1, 17.2.1 and 4.2.1, as the CAISO points out that it will only issue dispatch instructions to those market participants that are capable of responding.

**e. Definition of Applicable Reliability Criteria**

228. In the June 2007 Order, the Commission directed the CAISO to define the term "Applicable Reliability Criteria" in the MRTU tariff in order to limit the scope of the CAISO's action and discretion during system emergencies.<sup>253</sup>

229. In its compliance filing, the CAISO proposes to define "Applicable Reliability Criteria" as follows:

The Reliability Standards and reliability criteria established by NERC and WECC and Local Reliability Criteria, as amended from time to time, including any requirements of the NRC.

**Comments**

230. San Francisco contends that sections 16.5.1 and 17.2.1 do not comply with Commission Orders requiring the CAISO to explicitly define the term "Applicable Reliability Criteria." San Francisco asks the Commission to require the CAISO to replace the definition for "Applicable Reliability Criteria" with a more comprehensive definition that includes all relevant NERC/WECC standards, as well as any additional, more stringent standards that the CAISO intends to apply. San Francisco also suggests that the CAISO be directed to develop tariff language providing for a public stakeholder process to review and offer feedback regarding any additional reliability criteria the CAISO intends to apply.

231. In its reply, the CAISO contends that the June 2007 Order directed the CAISO to define the term "Applicable Reliability Criteria," but did not direct the CAISO to include reliability standards adopted by NERC and WECC in the MRTU tariff.<sup>254</sup> The CAISO

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<sup>253</sup> June 2007 Order, 119 FERC ¶ 61,313 at P 291.

<sup>254</sup> June 2007 Order, 119 FERC ¶ 61,313 at P 291.

argues that it would be impracticable to include the specific reliability standards in the MRTU tariff because those standards are extensive and are subject to change. With respect to San Francisco's request to adopt a public process to review any additional reliability criteria adopted by the CAISO, the CAISO contends that the provisions of the MRTU tariff and the business practice manual concerning such criteria have already been subject to a stakeholder review process and any future changes to tariff language must be approved by the Commission. For these reasons, the CAISO contends that no further modifications are necessary to the definition of "Applicable Reliability Criteria."

### **Commission Determination**

232. The Commission agrees with the CAISO that the definition of "Applicable Reliability Criteria" need not include reliability standards adopted by NERC and WECC. We find that the MRTU tariff provides an appropriate level of detail regarding the CAISO's obligation to adhere to reliability standards established by NERC/WECC during system emergency conditions. As the CAISO notes, it would be impracticable to include the specific reliability standards in the MRTU tariff because those standards are extensive and subject to change.

233. We decline to require the CAISO to develop tariff language specifically providing for a public process to review any additional reliability criteria the CAISO may wish to follow. To the extent the CAISO amends its tariff or business practices to address such reliability criteria, existing processes provide for adequate stakeholder review and comment.

### **f. Water and Environmental Requirements**

234. State Water Project requests confirmation that sections 16.5.1 and 17.2.1 of the MRTU tariff will not restrict or impair the protections provided under section 22.13 regarding the observation of water and environmental requirements and that CAISO dispatch will not compromise such mandates.

235. In its reply, the CAISO clarifies that the revisions to sections 16.5.1 and 17.2.1 are in no way intended to restrict Participating TOs and market participants from complying with the requirements of environmental legislation under section 22.13.

### **Commission Determination**

236. The CAISO has not proposed to modify sections 16.5.1 or 17.2.1 as they relate to the observation of water and environmental requirements under section 22.13. We agree with the CAISO's response to State Water Project that its tariff is not intended to restrict Participating TO or market participants from complying with environmental laws. However, we see no need to explicitly modify the tariff in this regard.

### **9. Miscellaneous and General Tariff Issues**

237. Both the CAISO and commenters raise a variety of additional concerns and requested modifications to the MRTU tariff not addressed above. The requested changes range from general "clean-up" issues to requests to modify specific sections of the tariff in an effort to further clarify or correct certain provisions. With the exception of those items discussed below, our review of the proposed modifications to the MRTU tariff that are not contested and specifically discussed herein indicates that they are hereby accepted for filing. To the extent that the CAISO's response reflects a commitment by the CAISO to incorporate any changes into the MRTU tariff or definitions in a further compliance filing or deferred maintenance initiative, we find its commitments acceptable. As a result, we direct the CAISO to make a compliance filing within 30 days of the date this order incorporating their commitments to clarify or correct those provisions.<sup>255</sup>

#### **a. Indemnification and Limitations on Liability**

238. The CAISO proposes to revise sections 14.4, 14.5, and 14.6, relating to indemnity and limitations on liability, in order to establish a standard of liability that is consistent with the Commission approved liability standards for ISO New England, PJM, the Midwest ISO, and the Southwest Power Pool.<sup>256</sup> The CAISO states that these proposed revisions are being submitted under FPA section 205, not in compliance with previous Commission orders. The CAISO states that it is proposing to amend these sections to

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<sup>255</sup> We note that the CAISO commits to make a number of modifications to tariff sections that include, but are not limited to: 11.2.4.2.2, 11.4.1, 11.8.2.1.2, 11.8.3.1.2, 11.8.6.6, 11.10.1.3.1, 11.10.2.1.3, 11.29.9.6.2, 30.5.2.2, 31.5.7.1 and 36.4. *See* CAISO October 5, 2007 Reply.

<sup>256</sup> CAISO August 3, 2007 Modifications to MRTU, Docket Nos. ER07-1257, *et al.*, Volume 1a at 12, *citing PJM Interconnection, L.L.C.*, 112 FERC ¶ 61,264, at PP 9-10 (2005); *Southwest Power Pool, Inc.*, 112 FERC ¶ 61,100, at PP 36-44 (2005); *Midwest Indep. Transmission Sys. Operator, Inc.*, 110 FERC ¶ 61,164, at P 29 (2005); *ISO New England Inc., et al.*, 106 FERC ¶ 61,280, at PP 220-231 (2004).

provide that the standard of liability under the MRTU tariff will be limited to gross negligence or intentional wrongdoing.<sup>257</sup>

239. The CAISO argues that the reasons that the Commission relied upon to find the gross negligence standard appropriate for other independent system operators and regional transmission organizations are equally compelling for the CAISO.<sup>258</sup> The CAISO claims that excessive damage awards can lead to higher insurance premiums and cost of capital, which will ultimately be borne by all its customers. The CAISO notes that, in every instance in which a regional transmission organization or independent system operator has proposed limiting its liability to instances of gross negligence, the Commission has approved the limitation. The CAISO argues that this is appropriate because, as a non-profit organization, its concern is protecting customers, not shareholders.<sup>259</sup>

### **Comments**

240. Six Cities argues that the limitations on liability proposed by the CAISO would oblige market participants to indemnify the CAISO for the consequences of actions they have taken in response to CAISO actions, even if the CAISO actions were negligent. Six Cities argue that there is a difference between limiting the CAISO's direct liability, or that of its consultants, to instances of gross negligence or intentional wrongdoing and seeking to require market participants to indemnify the CAISO for the consequences of actions they have taken in reliance on negligent directions by the CAISO.<sup>260</sup>

### **Commission Determination**

241. The Commission accepts the proposed limitations of liability provisions set forth in sections 14.4, 14.5 and 14.6, which are consistent with the liability provisions approved for other regional transmission organizations and independent system operators. The modification of the liability provisions to reflect a gross negligence standard is reasonable, as this change offers an equitable balance between lower rates for all market participants and the burden of limited recovery of liability for some.<sup>261</sup> As the

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<sup>257</sup> *Id.*

<sup>258</sup> *Id.* at 13.

<sup>259</sup> *Id.*

<sup>260</sup> Six Cities September 7, 2007 Protest at 10.

<sup>261</sup> See, e.g., *Midwest Indep. Transmission Sys. Operator, Inc.*, 110 FERC ¶ 61,164, at P 31 (2005).

Commission stated in Order No. 890, similar limitations on liability have been provided to regional transmission organizations and independent system operators because they were created, and are solely regulated, by the Commission.<sup>262</sup> Further, we will not require, per Six Cities requests, that the CAISO list every situation in which the CAISO or its agents act under gross negligence versus standard negligence. Liability disputes between market participants and the CAISO are circumstantial and subjective, and must be handled on a case-by-case basis. We reiterate that while the total liability held by the CAISO decreases, the modified liability provision will lead to decreased litigation, resulting in lower costs for all market participants. We conclude that the liability provisions proposed by the CAISO are in the best interest of all market participants because the complexity of the CAISO's system can lead to excessive damage awards that would ultimately be borne by all market participants.

**b. Participating Load**

242. In the September 2006 Order, the Commission agreed that the MRTU tariff could benefit from further refinement in its treatment of participating load and, therefore, directed the CAISO to work with State Water Project to improve the MRTU tariff's treatment of their unique constraints.<sup>263</sup> In its compliance filing, the CAISO notes that the MRTU tariff currently accommodates individual pumping load resources as participating load but does not allow for pumping load resources to be aggregated and participate as participating load due to software constraints.<sup>264</sup> The CAISO states that it has developed a proposal along with related tariff language to accommodate the aggregation of pumping load as participating load. According to the CAISO, the modification would require the aggregated pumping load resource to participate as a generating unit when offering to curtail demand through submission of demand bids when offering to consume energy.<sup>265</sup>

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<sup>262</sup> *Preventing Undue Discrimination and Preference in Transmission Service*, Order No. 890, 72 Fed. Reg. 12,266 (March 15, 2007), FERC Stats. & Regs. ¶ 31,241 at P 1676 (2007), *order on reh'g*, Order No. 890-A, 73 Fed. Reg. 2984 (Jan. 16, 2008), FERC Stats. & Regs ¶ 31,261 at P 997 (2007).

<sup>263</sup> See September 2006 Order, 116 FERC ¶ 61,274 at P 703.

<sup>264</sup> CAISO August 3, 2007 Modifications to MRTU at 55.

<sup>265</sup> *Id.* These modifications appear in sections 30.5.2.3, 30.5.2.6.3 and 30.5.3. See CAISO August 3, 2007 Modifications to MRTU, Docket Nos. ER07-1257 *et al.*, Volume 2 at 361-363.

### Comments

243. State Water Project proposes further modifications to the definitions of participating load and aggregated participating load to clarify that: (1) aggregated participating load is still participating load for purposes of numerous tariff provisions that reference only participating load; and (2) aggregated participating load treatment is available to more than one pumping load unit at the same location.<sup>266</sup> State Water Project proposes the following specific amendments to these definitions:

**Aggregated Participating Load** -- An aggregation ~~at of two~~ one or more Participating Load Locations, created by the CAISO in consultation with the relevant Participating Load, for the purposes of enabling participation of the Participating Load in the CAISO Markets like Generation when offering Curtailable Demand and as non-Participating Load when offering to consume. Notwithstanding these accommodations, Aggregated Participating Load is treated as Participating Load under the CAISO Tariff.

**Participating Load** - An entity, including an entity with Pumping Load or Aggregated Participating Load, providing Curtailable Demand, which has undertaken in writing by execution of a Participating Load Agreement to comply with all applicable provisions of the CAISO Tariff, ~~as they may be amended from time to time.~~

244. State Water Project also proposes changes to sections 11.2.1.3, 30.5.3.1 and 30.5.3.2 to make clear that the CAISO will settle aggregated participating load, whether or not offering curtailable demand in any given hour, using the custom Load Aggregation Points (LAP) applicable to that aggregated participating load.<sup>267</sup> It further proposes to revise sections 30.5.2.6.3 and 30.5.2.3 to clarify the provisions concerning supply bids for participating loads.<sup>268</sup>

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<sup>266</sup> State Water Project September 7, 2007 Comments at 7-8.

<sup>267</sup> *Id.* 9-10. State Water Project contends that these changes are consistent with Commission precedent. *See* April 2007 Rehearing Order, 119 FERC ¶ 61,076 at P 347

<sup>268</sup> State Water Project September 7, 2007 Comments at 11-12.

245. State Water Project also suggests revisions to the definitions of minimum load and minimum load costs, as these definitions do not comport with the manner in which the terms are used in section 30.13.<sup>269</sup>

246. Finally, State Water Project asserts that participating load should not be charged or paid costs associated with LAP neutrality. Thus, State Water Project proposes to modify section 11.5.2.3 as follows:

Any resulting revenue from changes in the LAP Load Distribution Factors between the Day-ahead Market and the Real-Time Market shall be allocated to CAISO metered demand (excluding Demand not settled at the Default LAP as provided in section 30.5.3.2) in the corresponding Default LAP<sup>270</sup>

247. WPTF asks the Commission to require the CAISO to explain the last sentence of section 30.5.2.3, which states that the CAISO will “use Load Distribution Factors the CAISO has created for the Aggregated Participating Load.” In particular, WPTF questions how the CAISO will create these load distribution factors for aggregated participating load.<sup>271</sup>

248. In its reply, the CAISO states that it does not object to revising the definitions of Aggregated Participating Load and Participating Load and sections 11.2.1.3, 30.5.2.3, 30.5.2.6.3, 30.5.3.1 and 30.5.3.2, as proposed by Salt Water Project.<sup>272</sup> However, the CAISO contends that the Commission should reject State Water Project’s proposed revision to section 11.5.2.3 as outside the scope of this proceeding because the CAISO did not propose any new revisions to that section.<sup>273</sup>

249. With respect to WPTF’s concern regarding section 30.5.2.3, the CAISO explains that section 27.5.5 already states how the CAISO will create load distribution factors for aggregated participating loads.<sup>274</sup>

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<sup>269</sup> *Id.* at 13.

<sup>270</sup> *Id.* at 14-15.

<sup>271</sup> *See* WPTF September 7, 2007 Protest at 13.

<sup>272</sup> CAISO October 5, 2007 Reply at 78-79.

<sup>273</sup> *Id.* at 79.

<sup>274</sup> *Id.* at 80.

### **Commission Determination**

250. The Commission agrees with the CAISO and State Water Project that the definitions of Aggregated Participating Load and Participating Load sections 11.2.1.3, 30.5.2.3, 30.5.2.6.3, 30.5.3.1 and 30.5.3.2 should be modified to more clearly specify the obligations of participating load, as proposed Salt Water Project. We direct the CAISO to make a compliance filing within 30 days of the date of this order reflecting the proposed modifications.

251. With respect to State Water Project's proposed revisions to section 11.5.2.3, the Commission did not require the CAISO to address the allocation of charges or revenues associated with LAP neutrality, nor did the CAISO propose any such provisions in its compliance filing. We therefore reject State Water Project's proposed modification to this section as beyond the scope of this compliance proceeding.

252. We also reject WPTF's request to direct additional modifications to section 30.5.2.3. As the CAISO notes, section 27.5.5 already states how the CAISO will create load distribution factors for aggregated participating loads. Specifically, section 27.5.5 states that "[t]he Load Distribution Factor[s] are also maintained for use for demand scheduled at custom LAPs. These custom Load Distribution Factors are not generated from the State Estimator and are not fixed quantities representing the characteristics of the Custom LAP."

c. **Section 8.10.8 – Rescission of Payments for Undispatchable, Unavailable and Undelivered Ancillary Service Capacity**

253. Due to stakeholder concerns, the CAISO has modified section 8.10.8 to: (1) move provisions from section 8.10.8 to section 31.5.7 pertaining to rules for rescission of RUC availability payments; (2) move from section 8.10.8 to section 11.2.2.2 provisions that pertain to the settlement of RUC availability payments rescinded for undispatchable or undeliverable RUC capacity; (3) place in section 11.10.9 settlement language pertaining to the settlement of rescission of payments for awarded ancillary services that is undispatchable, unavailable and undelivered; (4) revise section 8.10.8 to clarify that self-provided ancillary services capacity that is subject to rescission reduces the relevant scheduling coordinator's effective ancillary services self-provision in the ancillary services cost allocation, effectively charged back at the relevant ancillary services rate; and (5) move from section 8.10.8 to section 11.16 language pertaining to settlement aspects of rescission of RUC and ancillary services payments.<sup>275</sup>

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<sup>275</sup> CAISO August 3, 2007 Modifications to the MRTU, Docket Nos. ER07-1257 *et al.*, at 16.

### Comments

254. WPTF contends that the CAISO has revised the language concerning rescission of payments for ancillary services and RUC capacity originally located in section 8.10.8 in ways that make it difficult to determine if there was a substantive change. WPTF asks the Commission to direct the CAISO to explain the differences and clarify that payments will be reduced in proportion to amounts that would otherwise be payable across the day-ahead, HASP and real-time market absent any undispachable, unavailable or undelivered capacity.<sup>276</sup> WPTF also urges the Commission to require the CAISO to explain why it has removed the first two categories of neutrality charge adjustments in section 11.14. If the CAISO captures the adjustments through other mechanisms, WPTF asks that it note the relevant provision of other tariff.<sup>277</sup>

255. PG&E and TANC raise separate additional concerns relating to the assignment of WECC penalties under section 8.10.8. PG&E contends that assignment of a WECC penalty is too subjective, arguing that the tariff should include some description of how the CAISO will apportion the penalty or, at a minimum, provide that any such determination is subject to the dispute resolution provisions of the tariff.<sup>278</sup> TANC similarly argues that sections 8.10.8 and 31.5.7 contain insufficient information as to how the CAISO will determine which load, unit, or resource “cause[d]” or “exacerbate[d]” conditions for which a WECC penalty is imposed. TANC contends that the lack of any information regarding the process for determining the allocation of such a penalty causes significant concern.<sup>279</sup> In addition, TANC argues that approval of a provision assigning WECC penalties is premature in light of the Commission’s technical conference to explore issues associated with the cost recovery of penalties for reliability standard violations assessed against ISOs and RTOs. TANC argues that the Commission should reserve a decision on the CAISO’s proposal until after the Commission addresses the issues raised in that conference.<sup>280</sup>

256. In its reply, the CAISO states that it simply moved the tariff language relating to the rescission of ancillary service payments to new section 11.10.9 and the rescission of

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<sup>276</sup> WPTF September 7, 2007 Protest at 8-9.

<sup>277</sup> *Id.* at 9.

<sup>278</sup> PG&E September 7, 2007 Comments at 2-3.

<sup>279</sup> TANC September 7, 2007 Protest at 18.

<sup>280</sup> *Id.* at 16-17, citing *Midwest Independent Transmission System Operator, Inc.*, 119 FERC ¶ 61,222 (2007), in Docket Nos. ER07-701-000 and AD07-12-000.

RUC availability payments to new section 31.5.7 and section 11.2.2.2. It further states that two former provisions of section 8.10.8 that apply to rescission of payments for both ancillary service and RUC capacity were moved to new section 11.16. The CAISO clarifies that it made additional, minor “clean-up” changes to separate out the references to ancillary services and RUC capacity as appropriate to the new sections and to add cross-references between the new sections. The CAISO submits that all of these revisions are clarifying in nature and that none of them constitutes substantive changes.<sup>281</sup>

257. The CAISO also explains that it eliminated the two categories of neutrality charge adjustments to reflect the new charge codes for settlement of these two charges as reflected in the Business Practice Manual for Settlements. The CAISO explains that the first category addresses the settlement of charges necessary for any rounding up of invoice amounts expressed in dollars.<sup>282</sup> As reflected in Charge Code 4999 Rounding Adjustment Allocation, this is now accounted for and settled through the same balancing charge code which is reflected in old section 11.14(c), new 11.14(a). The CAISO agrees to include a statement in new 11.14(a) “which includes any amounts required to round up any invoice amount expressed in dollars and cents to the nearest whole dollar amount.” The CAISO explains that the second category in old section 11.14(b) was also removed as a clean up from a business practice manual to tariff reconciliation effort because the CAISO has separate charge codes to settle all penalties imposed by the CAISO under section 37. The CAISO notes that the settlement of these charges is already fully reflected in sections 37.9.3 and 37.9.4 and does not require further supporting tariff language.<sup>283</sup>

258. The CAISO disagrees with PG&E’s assertion that assignment of WECC penalties is too subjective. The CAISO argues that this provision was simply carried forward from the former provisions of section 8.10.8.8, which have already been accepted by the Commission. The CAISO contends that there is no basis for revising this provision.<sup>284</sup>

259. In response to TANC’s concerns, the CAISO recognizes that further revisions to these provisions may be necessary after the reply penalty technical conference. The CAISO commits to make any revisions required to comply with a Commission order on

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<sup>281</sup> CAISO October 5, 2007 Reply at 7-8.

<sup>282</sup> CAISO October 5, 2007 Reply at 12-13.

<sup>283</sup> *Id.* at 13.

<sup>284</sup> *Id.* at 11.

this matter, noting in the interim that these provisions simply reflect the already-approved terms of former section 8.10.8.8.<sup>285</sup>

### **Commission Determination**

260. The Commission's review of the CAISO's proposed revisions to sections 8.10.8, 11.2.2.2, 11.10.9, 11.16 and 31.5.7 of the MRTU tariff indicates that these changes were clarifying in nature and not substantive, as the CAISO states. We find that the proposed revisions align certain market design elements with the appropriate tariff sections of the MRTU tariff. For example, the CAISO moved the terms and conditions relating to the rescission of the RUC availability payment for undispachable and undeliverable RUC capacity from section 8.10.8 to new RUC section 31.5.7. This and the other revisions are ministerial modifications to previously Commission-approved tariff language and, therefore, it is unnecessary to require the CAISO to provide any further clarifications.

261. With regard to WPTF's request to clarify the removal of two categories of the neutrality adjustments under section 11.14, we find that the CAISO's explanation fully addresses WPTF's concern. We agree with the CAISO that it would be appropriate to further modify section 11.14(a) to include the statement "which includes any amounts required to round up any invoice amount expressed in dollars and cents to the nearest whole dollar amount." We direct the CAISO to submit this modification in a compliance filing within 30 days of the date of this order.

262. With respect to arguments that the assignment of WECC penalties is unclear under sections 8.10.8 and 31.5.7, we note that these sections merely reflect provisions that the Commission has previously accepted.<sup>286</sup> Reorganization of this penalty language to a different part of the tariff has not affected the substance of the provisions. We therefore deny the requests of PG&E and TANC to require the CAISO to further modify these provisions. To the extent the provisions may be inconsistent with a future Commission order regarding the allocation of penalties for reliability standard violations, any necessary modifications to the MRTU tariff will be addressed at that time.

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<sup>285</sup> *Id.* at 12.

<sup>286</sup> September 2006 Order, 116 FERC ¶ 61,274 at P 35.

**d. Other Issues**

**i. MRTU Start-Up Contingency Plan**

263. The CPUC states that the CAISO plans to file monthly reports only until the implementation of MRTU. The CPUC opposes ending this filing requirement and requests that the Commission direct the CAISO to continue to file these monthly MRTU reports even after the initial MRTU start-up.<sup>287</sup>

264. The CPUC also requests that the Commission direct the CAISO to work with stakeholders to develop a MRTU start-up contingency plan. The CPUC states that the CAISO has not publicly discussed, released or vetted a plan with stakeholders. The CPUC contends that the absence of a contingency plan increases the potential for market failure and, therefore, the Commission should direct the CAISO to implement such a plan after stakeholder input.<sup>288</sup> The CPUC further requests that the Commission and the CAISO ensure that scheduling coordinators have ample opportunity to perform thorough testing to assure that the MRTU systems perform adequately before start-up.<sup>289</sup>

265. The CAISO replies that there is no need for a monthly MRTU status report, because the CAISO is subject to the quarterly reporting requirement. They also reply that the readiness activities that the CAISO already has planned to take place prior to MRTU implementation will be sufficient to address any testing issues.<sup>290</sup>

**Commission Determination**

266. The Commission disagrees that the CAISO should be required to continue to file monthly MRTU reports even after the initial MRTU implementation. In the September 2006 Order, the Commission indicated that these monthly status reports must continue only until MRTU implementation.<sup>291</sup> After MRTU implementation, the CAISO will begin submitting quarterly reports evaluating MRTU performance and operational issues during the first year, providing information on corrective actions. These quarterly reports will provide a reasonable assessment of the MRTU market and the functionality of

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<sup>287</sup> CPUC September 7, 2007 Comments and Limited Protest at 8.

<sup>288</sup> *Id.* at 8-9.

<sup>289</sup> *Id.* at 2-3.

<sup>290</sup> CAISO October 5, 2007 Reply at 110.

<sup>291</sup> *See* September 2006 Order, 116 FERC ¶ 61,274 at P 1415.

various design elements going forward, striking an appropriate balance between keeping the Commission informed of MRTU performance without being administratively burdensome. We therefore reject the CPUC's request to require additional reports on a monthly basis.

267. With respect to the CPUC's requests that the Commission and the CAISO allow ample time to perform a thorough testing before start-up, we find the Commission has already addressed concerns related to the CAISO's readiness. Specifically, the Commission directed the CAISO to file, at least 60 days prior to the effective date of MRTU Release 1, a statement certifying market readiness.<sup>292</sup> The CAISO's readiness activities should address the CPUC's concerns related to testing and the preparedness to perform functions necessary to support MRTU implementation.

268. To address the CPUC's concerns regarding the absence of a contingency plan, we direct the CAISO to include a description of a contingency plan in its readiness certification. The Commission has previously indicated that it is not necessary to require the CAISO to develop its contingency plan through a collaborative process.<sup>293</sup> However, we support the CPUC's suggestion that the CAISO should release its contingency plan to stakeholders prior to MRTU implementation because stakeholders will benefit from this information.

## ii. Real-Time LAP Price Computation

269. In Attachment K to the August 3, 2007 filing, the CAISO set forth its proposal to change the originally filed real-time LAP settlement methodology.<sup>294</sup> SoCal Edison objects to the proposal because the CAISO concludes that convergence bidding should not pay the real-time load-distribution factor uplift. SoCal Edison contends that the determination of whether virtual bids should be exempt from the load-distribution factor uplift can only be made in light of a specific convergence bidding design and, because the CAISO has not proposed such a design, it has inappropriately prejudged this issue. SoCal Edison asks the Commission to disregard the proposal at this time as premature.<sup>295</sup>

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<sup>292</sup> *Id.* P 1414.

<sup>293</sup> *See* April Rehearing Order, 119 FERC ¶ 61,076 at P 246.

<sup>294</sup> CAISO August 3, 2007 Modifications to MRTU, Docket Nos. ER07-1257 *et al.*, Volume 1A at 53-54 and Volume 3 at 366.

<sup>295</sup> SoCal Edison September 7, 2007 Protest at 5-6.

### **Commission Determination**

270. We agree with SoCal Edison that the Commission does not have enough information at this time to determine whether convergence bids should be allocated real-time load distribution factor uplift charges. The Commission will therefore defer ruling on this proposal until such time that the CAISO submits its convergence bidding design. We encourage the CAISO to continue to explore this issue with SoCal Edison and other stakeholders prior to submitting its convergence-bidding proposal.

#### **iii. Section 41.1 - Procurement of RMR Resources**

271. PG&E acknowledges that the CAISO did not propose any new tariff language under section 41.1 of the MRTU tariff relating to RMR resources, but points out that the tariff incorrectly references the Hunter's Point power plant to meet operating criteria associated with the San Francisco local reliability area. PG&E requests that the CAISO be directed to update this section by removing the reference.<sup>296</sup>

272. In its reply, the CAISO agreed to remove references to this plant from the MRTU tariff and also the *pro forma* RMR agreement as part of its deferred maintenance initiative.<sup>297</sup>

### **Commission Determination**

273. The Commission accepts the CAISO's commitment to include, as part of its deferred maintenance initiative, the revised tariff sheets to reflect the correction noted by PG&E.

#### **iv. Section 31.3.1.1-Market Clearing and Price Determination**

274. WPTF objects to the CAISO's addition of the phrase "[i] n addition, in Real-Time, resources are required to follow Real-Time Dispatch Instructions" to section 31.3.1.1 of the MRTU tariff. WPTF claims that this sentence is unrelated to IFM clearing and price determination and it imposes a real-time market requirement that may not apply to every entity that participates in the IFM. WPTF requests that the Commission direct the CAISO to move this sentence to another section of the MRTU tariff.<sup>298</sup>

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<sup>296</sup> PG&E September 7, 2007 Comments at 12.

<sup>297</sup> CAISO October 5, 2007 Reply at 109-110.

<sup>298</sup> WPTF September 7, 2007 Protest at 14.

275. The CAISO disagrees in its reply, arguing that the new language underscores the fact that units are committed in the day-ahead market and have to be prepared to start-up and meet that commitment in real-time. While the commitment is to be ready to deliver energy consistent with the day-ahead schedule in real-time (and that amount or even the commitment could change in real-time subject to the real-time dispatch), the resources are committed in the day-ahead schedule, and not in real-time, and there is no separate start-up instruction. The CAISO contends that this language is therefore appropriately included in the sections of the MRTU tariff relating to the day-ahead market.<sup>299</sup>

### **Commission Determination**

276. The Commission agrees with WPTF that the last sentence of section 31.3.1.1 is unrelated to the IFM. The MRTU tariff defines the IFM as the “pricing run conducted by the CAISO using the SCUC in the day-ahead market . . . which includes unit commitment, ancillary service procurement, congestion management and energy procurement based on supply and demand.”<sup>300</sup> While this language indicates that units committed in the day-ahead market must be prepared to start-up and meet their real-time obligation, it is more appropriate to highlight that point in a section of the MRTU tariff relating to the real-time market. We hereby direct the CAISO to resubmit revised tariff sheets reflecting this change in a future compliance filing within 30 days of the date of this order.

### **v. Metering Requirements**

277. Six Cities state that the CAISO has modified section 10.3.8 to permit scheduling coordinators to authorize the release of meter data for scheduling coordinator metered entities. According to Six Cities, the CAISO states that the purpose of the change is to clarify the distinction between CAISO metered entities and scheduling coordinator metered entities. Six Cities oppose the change because they believe that meter data is the property of the scheduling coordinator metered entity and, therefore, should not be available to third parties without its express permission.<sup>301</sup>

278. In its reply, the CAISO states that it is inherent in the provisions of the MRTU tariff that the scheduling coordinator for a scheduling coordinator metered entity must have the authority and responsibility to represent that metered entity in complying with

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<sup>299</sup> CAISO October 5, 2007 Reply at 66-67.

<sup>300</sup> See CAISO August 3, 2007 Modifications to MRTU, Docket Nos. ER07-1257 *et al.*, Volume 2 at 49.

<sup>301</sup> Six Cities September 7, 2007 Protest at 8-9.

the requirements of the tariff. The CAISO contends that it is incumbent on the scheduling coordinator and the scheduling coordinator metered entity to have an agreement between themselves regarding the scheduling coordinator's ability to authorize release of the meter data of the metered entity to a third party.<sup>302</sup>

### **Commission Determination**

279. We agree with the CAISO that scheduling coordinator metered entities authorize the release of meter data to scheduling coordinators upon the completion of a meter service agreement (MSA SC). We note that section 5.1 of the *pro forma* MSA SC for scheduling coordinators specifies that:

the Scheduling Coordinator shall list in the MSA SC the third parties authorized to have access to the Meter Data of the Scheduling Coordinator Metered Entities it represents, for which the Scheduling Coordinator is required by MSA SC section 5.1 to have obtained permission from the affected Scheduling Coordinator Metered Entities.<sup>303</sup>

Because each MSA SC allows the scheduling coordinator to list all of the third parties authorized to have access to the meter data of the metered entity that it represents, we find that the tariff modifications proposed by the CAISO are consistent with the procedures set forth in the MSA SC agreement and require no further changes.

### **vi. Scheduling Infrastructure Business Rules Design**

280. NCPA states that the proposed version of the Scheduling Infrastructure Business Rules (SIBR) design allows for modification of a participant's bid. While the market participant will be informed that the bid has been modified, NCPA asserts that the market participant will not receive a detailed description of what element of the original bid was modified. NCPA contends this is a fundamental issue because the modified bids may become financially binding. NCPA states that it will continue to actively participate in resolving this issue with the CAISO.<sup>304</sup>

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<sup>302</sup> CAISO October 5, 2007 Reply at 105.

<sup>303</sup> *See* CAISO October 5, 2007 Reply at 105.

<sup>304</sup> NCPA September 7, 2007 Protest at 21.

### **Commission Determination**

281. While the NCPA does not request specific Commission action regarding the SIBR design, we find that NCPA raises a legitimate concern with respect to the disclosure of information. Because the SIBR is the interface that accepts, validates, and modifies bids and trades for energy and then enters these bids and trades into a database for processing by other components of CAISO's management system, we believe the CAISO has the responsibility to adequately inform the market participant of any changes since these bids are financially binding at the close of the day-ahead market. Thus, we direct the CAISO to notify market participants of any bid changes with an explanation as to why the CAISO modified the bids and trades.

#### **vii. Start-Up and Minimum Load Costs**

282. In its compliance filing, the CAISO indicates that several additional filings may be made prior to the implementation of MRTU. In particular, the CAISO is considering, among other things, a proposal to provide limits to start-up and minimum load costs for suppliers that are eligible to recover such costs.<sup>305</sup>

283. PG&E supports a future amendment to the MRTU tariff to implement bid caps on start-up and minimum load costs. PG&E states that the CAISO's Department of Market Monitoring and market participants have held a number of stakeholder discussions in the development of bid caps to protect against the potential exercise of market power by suppliers. PG&E contends that this proposal should be included in the MRTU tariff prior to the implementation of MRTU.<sup>306</sup>

### **Commission Determination**

284. The CAISO recently filed a proposal to implement caps on start-up and minimum load cost bids of market participants and that the CAISO seeks Commission approval of

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<sup>305</sup> CAISO August 3, 2007 Modifications to MRTU, Docket Nos. ER07-1257, *et al.*, Volume 1A at 73. The CAISO also anticipates the following filings in preparation for MRTU implementation: (1) a backstop capacity procurement program; (2) a revision of the grid management charge; (3) station power modifications; (4) a restated comprehensive MRTU tariff incorporating into the MRTU tariff all relevant changes to the current ISO tariff approved by the Commission since the approval; and (5) readiness certification. The CAISO also proposes to change the current RMR *pro forma* contract to ensure consistently with the MRTU tariff. *Id.*

<sup>306</sup> PG&E September 7, 2007 Comments at 6-7.

this mechanism prior to MRTU implementation.<sup>307</sup> We will address the merits of the CAISO's proposal in that proceeding.

**viii. Settlement for Energy Purchased under System Emergency Conditions**

285. In our June 2007 Order, we directed the CAISO to revise Section 11.5.8 to provide more detail on the process and timeline for addressing submittals of cost justification information for emergency energy provided to the CAISO, including details as to how any dispute regarding the cost justification will be resolved.<sup>308</sup>

286. In its compliance filing, the CAISO proposes to amend section 11.5.8.1 to state that cost support information must be provided in writing to the CAISO within thirty (30) days following the date of the provision of emergency assistance and that the CAISO will provide notice of its determination whether to pay a higher price based on the cost support information within thirty (30) days after receipt of the information. The CAISO has also included dispute resolution procedures to address any disputes regarding the CAISO's payment determination. The CAISO claims that this treatment is consistent with the manner in which the CAISO handles other disputes arising under the CAISO's settlement provisions.<sup>309</sup>

**Comments**

287. State Water Project generally supports the CAISO's amendment to 11.5.8.1, but contends there is insufficient detail as to how the Commission or those who must pay the cost of emergency energy will determine whether the price is just and reasonable. State Water Project urges the Commission to take steps to provide that appropriate review will occur to ensure that such non-market, negotiated costs are in fact just and reasonable and consistent with the FPA protections.<sup>310</sup>

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<sup>307</sup> See CAISO October 19, 2007 Proposed Amendments to Implement MRTU, Docket No. ER08-73-000.

<sup>308</sup> June 2007 Order, 119 FERC ¶ 61,313 at P 89.

<sup>309</sup> CAISO August 3, 2007 Modifications to MRTU, Docket Nos. ER07-1257, *et al.*, Volume 1A at 27-48 and Volume 2 at 275-276.

<sup>310</sup> State Water Project September 7, 2007 Comments at 23-24.

288. WPTF asks the Commission to direct the CAISO to revise section 11.5.8.1 to make clear that the CAISO's normal process for handling settlement disputes will be invoked first and ADR invoked only if the normal settlement dispute process fails.<sup>311</sup>

289. In its reply, the CAISO states that it added this backstop provision at the request of the Bonneville Power Authority, which was the only intervenor that raised the issue in this proceeding. The CAISO does not consider it necessary or useful to create even more process for this unlikely case beyond the general provision for settlement of any excess costs that might be associated with the CAISO's purchase of emergency assistance. The CAISO states that any concerned market participant will have the right to dispute the CAISO's pass-through of any excess costs pursuant to section 11.5.8.1.1 consistent with its ordinary rights under the tariff's settlement dispute provisions.<sup>312</sup>

290. The CAISO also states that it is reticent to attempt to impose its normal settlement dispute process on utilities in other control areas for assistance provided pursuant to Section 11.5.8. The CAISO considers it more appropriate to attempt to impose the CAISO ADR Procedures for handling settlements disputes under this provision, as these procedures are more similar to dispute resolution processes with which utilities in other control areas may be familiar.<sup>313</sup>

### **Commission Determination**

291. The Commission agrees with the CAISO that the ADR Procedures are more appropriate to address disputes regarding emergency energy assistance given that such arrangements are with entities located outside of the CAISO control area. We also agree it is unnecessary to create any additional processes governing the review of payments for emergency energy assistance beyond the general provision for settlement of any excess costs associated with the CAISO's purchase of emergency assistance. As the CAISO notes, market participants have the ability to dispute the costs under the CAISO ADR Procedures or, if that process fails, to raise the issue directly with the Commission. We reject therefore requests to further modify section 11.5.8 as unnecessary.

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<sup>311</sup> WPTF September 7, 2007 Protest at 5-6.

<sup>312</sup> CAISO September 7, 2007 Reply at 6-7.

<sup>313</sup> *Id.* at 6.

**ix. Metered Subsystem Definitions**

292. In its protest, NCPA contends that the definitions of MSS Aggregation Net Measured Demand, MSS Deviation Band, and Net Negative Uninstructed Deviation need further clarification. First, the NCPA states that it is uncertain whether the term CAISO Demand in the definition of MSS aggregation refers to gross demand or net demand. NCPA contends that the gross demand is the appropriate reference. Second, NCPA believes the definition for MSS Deviation Band would be more accurate if the CAISO were to describe the term as “equal to three percent (3 percent) of an MSS Operator’s *gross* metered Demand in the MSS and exports from the MSS.”<sup>314</sup> Finally, NCPA proposes that the CAISO include, in Appendix A, a separate definition for “Net Negative Uninstructed Deviation” for a load-following MSS that is similar to section 11.7.4.<sup>315</sup>

293. In its reply, the CAISO states that, while it believes that its proposed definition for Net Metered CAISO Demand is clear since the term CAISO Demand already implies that it is gross CAISO demand, the CAISO does not object to the inclusion of the term “gross” demand in the definition. The CAISO similarly states that the term “gross” does not need to be added to the definition of MSS Deviation Band since the term metered Demand already implies that it is gross metered demand, but again does not object to the inclusion of the term “gross” in that definition. The CAISO also does not object to creating a new definition for MSS Net Negative Uninstructed Deviation, but states that it believes the definition would be unnecessary as section 11.7.4 already specifies that the MSS’s Net Negative Uninstructed Deviation includes load following energy.<sup>316</sup>

**Commission Determination**

294. The Commission agrees that it is appropriate to modify the definitions of Net Metered CAISO Demand and MSS Deviation Band to refer to gross demand, as proposed by NCPA. While the CAISO asserts that a definition is unnecessary for MSS Net Negative Uninstructed Deviation, we believe the inclusion of a precise definition will clarify the term and the purpose that it serves under section 11.7.4, as well as other parts of the MRTU tariff. We direct the CAISO to create a new definition for MSS Net Negative Uninstructed Deviation and modify the definitions of Net Metered Demand and MSS Deviation Band as discussed above and to submit revised tariff sheets reflecting these modifications in a compliance filing within 30 days of the date of this order.

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<sup>314</sup> NCPA September 7, 2007 Protest at 10-11 (emphasis in original).

<sup>315</sup> *Id.* at 12.

<sup>316</sup> CAISO October 5, 2007 Reply at 76-77.

x. **Section 34.18 - Qualifying Facilities**

295. WPTF notes that the CAISO deleted, in its entirety, section 34.18 of the MRTU tariff, which stated in part: “where a qualifying has entered into an agreement with a PTO before March 31, 1997 for the supply of energy to the PTO (an ‘Existing Contract’), the CAISO will follow the instructions provided by the parties to the Existing Agreement . . . and not require a QF to take any action that would interfere with the QF’s obligations under the Existing Agreement.” WPTF asks the Commission to require the CAISO to explain why it removed this section from the tariff. To the extent that this modification does not comply with a prior order, WPTF asks that the CAISO be required to reinstate this tariff language.<sup>317</sup>

296. In its reply, the CAISO indicates that market participants agreed to the deletion during a stakeholder process addressing the “deferred maintenance” issues that had previously been raised by representatives of qualifying facilities regarding the need for conformance of the tariff to the terms of the Commission proceedings on the *pro forma* Qualifying Facility Participating Generator Agreement (QF PGA).<sup>318</sup> The CAISO states that the deletion of section 34.18 was proposed in conjunction with the consolidation and expansion of the primary provisions of the MRTU tariff applicable to QFs into new section 4.6.3 and associated new defined terms based on the terms in the QF PGA. As the provisions of section 34.18 are now addressed in section 4.6.3 and the associated definitions, the CAISO explains that it is inappropriate to retain this isolated provision.<sup>319</sup>

**Commission Determination**

297. The Commission finds that the CAISO’s clarification in its reply adequately addressed WPTF’s concern. We therefore deny WPTF’s request to reinstate the deleted language, which the CAISO notes is expressed in a new section 4.6.3 of the QF PGA.

xi. **Section 34.9.3 - Transmission Related Modeling Limitations**

298. WPTF states that the CAISO added a sentence at the end of section 34.9.3, which states, in relevant part, that “[t]he CAISO shall also manually Dispatch resources in addition to or instead of resources dispatched by the RTM optimization software, during or prior to the Real-Time as appropriate.” WPTF contends that it is unclear how the

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<sup>317</sup> WPTF September 7, 2007 Protest at 17.

<sup>318</sup> CAISO October 5, 2007 Reply at 108.

<sup>319</sup> *Id.* at 109.

CAISO would dispatch a resource prior to real-time. WPTF requests that the CAISO clarify what it means by dispatching a unit prior to real-time.<sup>320</sup>

299. In its reply, the CAISO explains that it may at times be necessary to issue an exceptional dispatch instruction prior to real-time for energy to be delivered at the time it is required. The CAISO states that each exceptional dispatch instruction will identify the time-period for the energy or ancillary service that is required to be delivered.<sup>321</sup>

### **Commission Determination**

300. The Commission finds that the CAISO's answer adequately clarifies WPTF's concerns and therefore no further discussion is needed. We hereby accept the proposed modification.

### **xii. Appendix A of the MRTU Tariff – Master Definitions Supplement**

301. WPTF notes that the CAISO refers to Undispatchable Capacity in Section 31.5.7 of the MRTU tariff, but that the definition of Undispatchable Capacity in Appendix A applies to ancillary services, not RUC. WPTF asks the Commission to require the CAISO to resolve this discrepancy by making appropriate changes to section 31.5.7 or Appendix A.<sup>322</sup>

302. WPTF also suggests that the CAISO modify the definition of Emissions Eligible Generator, defined as a "Generator with a Generating Unit that is a BCR Eligible Resource." WPTF states that it has no alternative definition for this term because the tariff provides no clue about the distinction between an Emissions Eligible Generator and a Bid Cost Recovery Eligible Generator. WPTF contends that not all generators that are bid cost eligible are also emissions eligible.<sup>323</sup>

303. WPTF also argues that the CAISO should define the capitalized phrase Upward as used in section 11.10.6 or otherwise explain how the upward ancillary services are used

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<sup>320</sup> WPTF September 7, 2007 Protest at 16.

<sup>321</sup> CAISO October 5, 2007 Reply at 112-113.

<sup>322</sup> WPTF September 7, 2007 Protest at 15.

<sup>323</sup> *Id.* at 22-13.

in this section.<sup>324</sup> In addition, WPTF asks the CAISO to define the terms “Bid Cost Shortfall” and “Surplus” as used in section 11.8.5.<sup>325</sup>

304. AReM asserts that the lack of a comprehensive set of definitions has hampered review of the CAISO’s August 3 Filing and requests that the Commission order the CAISO to file a complete list of defined terms used in the MRTU tariff with its next compliance filing.<sup>326</sup>

305. In its reply, the CAISO states that WPTF’s suggested revisions to the definition of Undispatchable Capacity are not needed for a clearer understanding of the definition.<sup>327</sup> Additionally, the CAISO disagrees with WPTF’s suggestion that it modify the term Emission Eligible Generator. The CAISO states that all bid cost recovery eligible resources will be eligible for recovery of their emissions costs.<sup>328</sup> The CAISO also argues that WPTF’s claim regarding the use of the terms Bid Cost Shortfall and Surplus are misleading. According to the CAISO, the terms used in section 11.8.5 are IFM Bid Cost Shortfall and IFM Bid Cost Surplus, RUC Bid Cost Shortfall and RUC Bid Cost Surplus, and RTM Bid Cost Shortfall and RTM Bid Cost Surplus, which are all defined in Appendix A. Therefore, the CAISO contends that there is no need to generically define the terms requested by WPTF.<sup>329</sup>

306. With regard to the term Upward, the CAISO explains that the term refers to Upward Ancillary Service Costs, which is the “sum of Regulation Up, Spinning Reserve and Non-Spinning Reserve cost described in sections 11.10.2.2.1, 11.10.3.1 and 11.10.4.1.” The CAISO states that no further definitions or explanations are necessary.<sup>330</sup>

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<sup>324</sup> *Id.* at 7.

<sup>325</sup> *Id.* at 8.

<sup>326</sup> AReM September 7, 2007 Comments at 3-4.

<sup>327</sup> CAISO October 5, 2007 Reply at 104.

<sup>328</sup> CAISO September 7, 2007 Reply at 103.

<sup>329</sup> *Id.* at 99.

<sup>330</sup> *Id.* at 100.

307. Finally, the CAISO acknowledges AReM's concern and commits to a comprehensive review and correction of any inaccurate use of defined terms in the course of preparing the "clean-up" filing that it will make prior to MRTU implementation.<sup>331</sup>

### **Commission Determination**

308. The Commission denies WPTF's request to modify the proposed definitions discussed above, as the CAISO has adequately explained why the Commission should not require any further modifications to these definitions. For instance, we agree that the term Undispatchable Capacity applies to both ancillary service capacity and RUC capacity, as the definition, states in part: "Ancillary Service capacity that receives an AS Award . . . or capacity committed in RUC, that is not available for use due to a derate or outage of the resource." We believe the definition clearly indicates that the term also applies to RUC capacity.

309. We also find the CAISO's explanation regarding the terms Upward, Emission Eligible Generators, Bid Cost Shortfall and Surplus are reasonable. We therefore find that no further modifications are necessary. We accept, however, the CAISO's commitment to address AReM's request for a comprehensive review of the defined terms of the MRTU tariff as part of the "deferred maintenance" process.

### **The Commission orders:**

(A) The CAISO's March 20, 2007 and August 3, 2007 compliance filings are hereby conditionally accepted for filing, subject to further modification as discussed in the body of this order.

(B) The CAISO is hereby directed to make the compliance filings specified in this order, within the timeframes provided in the body of this order.

By the Commission. Commissioner Kelly dissenting in part with a separate statement attached.

( S E A L )

Kimberly D. Bose,  
Secretary.

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<sup>331</sup> *Id.* at 98-99.

UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

California Independent System Operator  
Corporation

Docket Nos. ER06-615-006  
ER06-615-011  
ER07-1257-000

(Issued June 20, 2008)

KELLY, Commissioner, *dissenting in part*:

I believe that the California Independent System Operator Corporation's (CAISO) existing negligence standard gives it the appropriate incentive to avoid negligent conduct and adhere to an appropriate standard of care. As I have written previously,<sup>332</sup> I also believe that appropriate liability limitation provisions can strike a proper balance between customer rates and the rights of harmed parties to seek recovery for certain acts by jurisdictional utilities. Here, however, the CAISO's proposal to modify its liability sections to reflect a gross negligence standard does not achieve such a balance.

The CAISO's limited liability provisions seem broad enough to cover both claims resulting from economic damages and from personal injury or death. I agree that there may be good reason to limit liability for economic damages that result from service provided under the tariff. However, I do not agree that the CAISO should be insulated from liability for personal injury or death directly caused by its actions. Therefore, I do not believe we should allow the CAISO to incorporate such ill-defined, sweeping protections against liability into its tariff.

Accordingly, I dissent in part from this order.

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Suede G. Kelly

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<sup>332</sup> See *Midwest Indep. Transmission Sys. Operator, Inc.*, 110 FERC ¶ 61,164 (Comm'r Kelly dissenting).